2017

Mill Creek and Walla Walla County Community Wildfire Protection Plan Update

Blue Creek Fire 2015

[This page intentionally left blank]

Acknowledgements

Thank you to the Community Wildfire Protection Plan Steering Committee who dedicated their time and effort to every aspect of this project. This Community Wildfire Protection Plan represents the efforts and cooperation of many working together to improve preparedness for wildfire and reduce community risk factors.

Walla Walla County Fire District #1
Walla Walla County Fire District #2
Walla Walla County Fire District #3
Walla Walla County Fire District #4
Walla Walla County Fire District #6
Walla Walla County Fire District #7
Walla Walla County Fire District #8

Unincorporated Communities
&
The Local Businesses and Citizens of Walla Walla County

To obtain copies of this plan contact:

Walla Walla County Emergency Management

Liz Jessee, Emergency Management Director
27 North 2nd Ave.
Walla Walla, Washington 99362

Office: 509-524-2900
Desk: 509-524-2902
Fax: 509-524-2910

[This page intentionally left blank]

Table of Contents

ACKNOWLEDGEMENTS ..... **III**

WALLA WALLA COUNTY COMMISSIONERS ..... **VIII**

SIGNATURES OF PARTICIPATION BY WALLA WALLA COUNTY FIRE PROTECTION DISTRICTS AND DEPARTMENTS ..... **IX**

SIGNATURES OF PARTICIPATION BY OTHER WALLA WALLA COUNTY CWPP STEERING COMMITTEE ENTITIES ..... **X**

INTRODUCTION **12**

MISSION, GOALS AND OBJECTIVES **17**

Mission Statement 17
Goals and Objectives 17

WILDLAND URBAN INTERFACE PLANNING **19**

Wildland-Urban Interface in Walla Walla County 19
Potential WUI Treatments and Approaches 23
Walla Walla County Plan Priorities 24
CWPP Committee Members 24
Walla Walla County 25
Mill Creek Watershed 25
Walla Walla County Fire District #1 26
Walla Walla - Columbia County Fire District #2: 27
Walla Walla County Fire District #3 28
Walla Walla County Fire District #4 28
Walla Walla County Fire District #6 32
Walla Walla County Fire District #7 34
Walla Walla County Fire District #8 34
Washington Department of Natural Resources 35
United States Forest Service 37
Community 38
Summary 38
Fire District Preparedness 38
Public Wildfire Awareness 39

MILL CREEK AND WALLA WALLA COUNTY CHARACTERISTICS **41**

COMMUNITY OUTREACH AND PARTICIPATION **47**

Public Participation 47
Outreach 48
News Releases 48
Public Meetings 49
The Planning Team 50
Steering Committee Meetings 50
Multi-Jurisdictional Participation 51
Documented Review Process 52
Public Comment Period 52
Continued Public Involvement 52
Summary 53

WILDFIRE RISK ASSESSMENTS **54**

Introduction 54

FIRE BEHAVIOR FACTORS **55**

Agriculture Lands 55
Sagebrush-Steppe/CRP Lands 57

Dry Forest – Heavy Loads 57
Moist Forest – Moderate Loads 57
Canopy Fuels 58

WILDFIRE HAZARD ASSESSMENT 59

HISTORIC FIRE OCCURRENCE 59
Rate of Spread and Crown Fire Potential 60
RELATIVE THREAT LEVEL MAPPING 60
Risk Categories 60
SUMMARY 62

CHAPTER 7 64

COMMUNITY AT RISK ANALYSIS AND WUI-ZONE RATINGS 64

INTRODUCTION 64

MILL CREEK WUIZ 65

Mitigation Activities 66
WILDFIRE POTENTIAL 67
FIRE PROTECTION 67

EUREKA FLAT WUIZ 68

Mitigation Activities 68
WILDFIRE POTENTIAL 69
FIRE PROTECTION 70

WALLA WALLA VALLEY 70

Mitigation Activities 71
WILDFIRE POTENTIAL 71
FIRE PROTECTION 71

TOUCHET 72

Mitigation Activities 72
WILDFIRE POTENTIAL 73
FIRE PROTECTION 73

WAITSBURG 74

Mitigation Activities 74
Burn Permits 74
WILDFIRE POTENTIAL 75
FIRE PROTECTION 76
COUNTY WIDE MITIGATION PLANS 76
Evacuation Plans 76
Accessibility 76
Fuels Reduction & Restoration 76
Emergency Response 77

CHAPTER 8 78

MITIGATION ITEMS AND PLAN MAINTENANCE 78

PLAN MONITORING AND MAINTENANCE 78
Annual Review Agenda 78
Five Year Re-evaluation Agenda 78
Continued Public Involvement 79
PRIORITIZATION OF ACTION ITEMS 79
Prioritization Scheme 80
JURISDICTIONAL MITIGATION STRATEGIES 81
COUNTYWIDE PROJECTS 81
MILL CREEK WUIZ 87
TOUCHET WUIZ 91

WALLA WALLA WUIZ 92
WAITSBURG WUIZ 93

CHAPTER 9 94

ACCOMPLISHMENTS AND CHALLENGES 94
Accomplishments 94
..... 97
CHALLENGES 98
Project Planning, Pace and Scale 98
Monitoring and Maintenance 98

APPENDIX A 99

AGENDAS & MEETING MINUTES 99
DECEMBER 2016 99
JANUARY 2017 101

COMMUNITY WILDFIRE PROTECTION PLAN (CWPP) STEERING COMMITTEE MEETING . 101

JANUARY 11, 2017, 10 AM – 12 PM 101
FEBURARY 2017 104
MARCH 2017 107
APRIL 2017 110
PUBLIC OUTREACH MEETINGS 116

Signature Pages

This Walla Walla County Community Wildfire Protection Plan Update has been developed in cooperation and collaboration with representatives of the following organizations and agencies.

Walla Walla County Commissioners

This Walla Walla County Community Wildfire Protection Plan has been developed in cooperation and collaboration with representatives of the following organizations and agencies.

James K. Johnson Walla Walla County Commissioner, District 1	Date
Todd L. Kimball, Walla Walla County Commissioner, District 2	Date
James L. Duncan, Chairman Walla Walla County Commissioner, District 3	Date

Signatures of Participation by Walla Walla County Fire Protection Districts and Departments

This Community Wildfire Protection Plan and all of its components identified herein were developed in close cooperation with the participating entities listed. These members of the CWPP steering committee formally recommended that this document be adopted by the Walla Walla County Commissioners.

Brent Tompkins, Chief Walla Walla County F. P. D. #1	Date
Jim Callahan, Chief Walla Walla County F. P. D. #2	Date
Jim Ruffcorn, Chief Walla Walla County F.P.D. #3	Date
Rocky Eastman, Chief Walla Walla County F.P.D. #4	Date
Michael Wickstrom, Chief Walla Walla County F.P.D. #5	Date
Larry Hector, Chief Walla Walla County F.P.D. # 6	Date
Tim Mayberry, Chief Walla Walla County F. P. D. #7	Date
Bob Clendaniel, Chief Walla Walla County F.P.D. #8	Date

Signatures of Participation by other Walla Walla County CWPP Steering Committee Entities

This Community Wildfire Protection Plan and all of its components identified herein were developed in close cooperation with the participating entities listed. These members of the CWPP steering committee formally recommended that this document be approved by the Walla Walla County Commissioners.

Mori Struve, City of Walla Walla	Date
Matt Hoehna, Oregon Department of Forestery	Date
Mattew James, U.S. Forest Service	Date
Devin Parvinen, Washington DNR	Date
Renee Hadley, Walla Walla County Conservation District	Date
Liz Jessee, Walla Walla County Emergency Manager	Date

{[This page intentionally left blank]

Chapter 1

Introduction

Plan Overview and Development

The process of developing a Community Wildfire Protection Plan (CWPP) can help a community clarify and refine its priorities for the protection of life, property, critical infrastructure, and ecosystem services in the wildland–urban interface on both public and private land. It also can lead community members through valuable discussions regarding management options and implications for the surrounding land base. Local fire service organizations help define issues that may place the county, communities, and/or individual homes at risk. Through the collaboration process, the CWPP steering committee discusses potential solutions, funding opportunities, and regulatory concerns in order to document their resulting recommendations in the CWPP. The CWPP planning process also incorporates an element of public outreach. Public involvement in the development of a CWPP not only facilitates public input and recommendations, but also provides an educational opportunity through interaction of local wildfire specialists and an interested public.

The idea for community-based wildland fire planning and prioritization is neither novel nor new. However, the incentive for communities to engage in comprehensive forest planning and prioritization was given new and unprecedented incentives with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003. This landmark legislation includes the first meaningful statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest

*The **Mill Creek and Walla Walla County Community Wildfire Protection Plan** was developed in 2017 by the Mill Creek & Walla Walla County CWPP committee, the City of Walla Walla, and the Oregon Department of Forestry, with project facilitation and support provided by Northwest Management, Inc. of Moscow, Idaho. Funding for the project was provided by the Oregon Department of Forestry. This Community Wildfire Protection Plan will be reviewed annually and updated at least every five years starting from the year of adoption. The Community Wildfire Protection Plan was developed in compliance with the Federal Emergency Management Agency requirements for a wildfire mitigation plan.*

management and hazardous fuel reduction projects. In order for a community to take full advantage of this new opportunity, it must first prepare a complete CWPP.

A countywide CWPP steering committee proposes general project recommendations based on overall wildfire risk, rather than focusing on individual landowners or organizations. Once the CWPP is approved by Walla Walla County Commissioners and the State Forester the steering committee will further refine the proposed projects, their feasibility, and continue public outreach as they use the document to seek funding for desired projects.

In 2017 the City of Walla Walla funded jointly by the Oregon Department of Forestry (ODF), City of Walla Walla, and Walla Walla County Emergency Management Department, contracted with Northwest Management, Inc. (NMI) to conduct an in-depth wildfire risk assessment for the County. Wildfire starts occur on an annual basis in Walla Walla County; thus, programs and projects that mitigate the impacts of this hazard are a benefit to residents, property, infrastructure, and the local economy. In December of 2016 the City of Walla Walla and ODF met with the CWPP Steering Committee to define their plans for updating the previous CWPP completed in 2006.

This new CWPP was intended to cover the Mill Creek Watershed and the entirety of Walla Walla County. It is the result of professional collaboration, analysis, wildfire risk mapping and other factors intended to reduce the threat of wildfire to people, structures, and infrastructure throughout the County as well as provide a plan to address concerns for the Mill Creek watershed as the primary source of drinking was for the City of Walla Walla. Agencies and organizations that participated in the planning process include:

- Communities of Walla Walla, Kooskooskie Commons, Touchet, Prescott, Waitsburg.
- Walla Walla County Citizens
- Walla Walla County Fire District #1, #2, #3, #4, #6, #7, #8
- Walla Walla County Emergency Management Department
- Walla Walla County Conservation District
- Whitman College
- Washington Department of Natural Resources
- Oregon Department of Forestry
- U.S. Forest Service

NMI assisted the steering committee by facilitating meetings, conducting assessments, authoring document, and ensuring compliance of the final documents to Federal and State standards. The guiding references for development and compliance of this CWPP are discussed in the following descriptions.

State and Federal Compliance

This CWPP includes compatibility with FEMA requirements for a Hazard Mitigation Plan, adherence to the guidelines of the National Fire Plan, and those set forth in the Healthy Forests Restoration Act (2003) as noted below.

- The National Fire Plan: A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan (December 2006).
- The Integrated Rangeland Fire Management Strategy (2015).
- Healthy Forests Restoration Act (2003).
- National Cohesive Wildland Fire Management Strategy (March 2011).
- The Federal Emergency Management Agency's Region 10 guidelines for a Local Hazard Mitigation Plan as defined in 44 CFR parts 201 and 206, and as related to a fire mitigation plan chapter of a Multi-Hazard Mitigation Plan.
- National Association of State Foresters – guidance on identification and prioritizing of treatments between communities (2003).

The objectives of combining these complementary guidelines was to facilitate an integrated wildland fire risk assessment, identify pre-hazard mitigation activities, and prioritize activities and efforts to achieve the protection of people, structures, the environment, and significant infrastructure in Walla Walla County while facilitating new opportunities for pre-disaster mitigation funding and cooperative projects. In addition this document is intended to be complementary to existing plans of surrounding counties and purposely modeled after the Union County, Oregon CWPP.

Wildfire and the U.S. Government Accountability Office

Since 1984, wildland fires have burned more than 850 homes each year in the United States and as more people move into fire-prone areas bordering wildlands this number is likely to increase. The responsibility of preventative measures to protect homes lies with each individual homeowner. Between 2003 and 2013 there were seven years that saw the largest property-loss

wildland fires in the United States, with five of these fires causing more than $400 million in damage.[1]

The United States Government Accounting Office (GAO) was asked to assess, among other issues, (1) measures that can help protect structures from wildland fires, (2) factors affecting use of protective measures, and (3) the role technology plays in improving firefighting agencies' ability to communicate during wildland fires.

According to the GAO the two most effective mitigation efforts for protecting structures from wildland fire are: (1) creating and maintaining a buffer, called defensible space, from 30 to 100 feet wide around a structure, where flammable vegetation and other objects are reduced; and (2) using fire-resistant roofs and vents. In addition to roofs and vents, other technologies such as fire-resistant windows and building materials, surface treatments, sprinklers, and geographic information systems mapping can help in protecting structures and communities, but these play a secondary role.

Although protective measures are available, many property owners have not adopted them because of the time or expense involved, competing concerns such as aesthetics or privacy, misconceptions about wildland fire risks, and lack of awareness of their shared responsibility for fire protection. Federal, state, and local governments, as well as other organizations, are attempting to increase property owners' use of protective measures through education, direct monetary assistance, and laws requiring such measures. In addition, some insurance companies have begun to direct property owners in high risk areas to take protective steps[2].

Update and Review Guidelines[3]

- *Deadlines and Requirements for Regular Plan Reviews and Updates*: In order to apply for a FEMA Pre-Disaster Mitigation (PDM) project grant or to receive Hazard Mitigation Grant Program (HMGP) funding for disasters declared on or after November 1, 2004, Tribal and local government entities must have a FEMA-approved mitigation plan. Additionally, this CWPP must be approved by County officials in order to qualify for non-emergency Stafford Act assistance (i.e., Public Assistance categories C-G, HMGP, and Fire Management Assistance Grants) for disasters declared on or after November 1, 2004. State mitigation plans must be

[1]National Fire Protection Association Fire Analysis and Research Division. Large-Loss Fires in the United States 2013. NFPA No. LLS10. November 2014.
[2] United States Government Accountability Office. Technology Assessment – Protecting Structures and Improving Communications during Wildland Fires. Report to Congressional Requesters. GAO-05-380. April 2005.

reviewed and reapproved by FEMA every three years. Local Mitigation Plans such as this CWPP must be reviewed and reapproved by FEMA every five years.

- *Plan updates*. In addition to the timelines referenced above, the Rule includes the following paragraphs that pertain directly to the update of State and local plans,
- §201.3(b)(5) [FEMA Responsibilities]…Conduct reviews, at least once every three years, of State mitigation activities, plans, and programs to ensure that mitigation commitments are fulfilled…
- §201.4(d) Review and updates. [State] Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval…every three years.
- §201.6(d) [Local] plans must be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for…project grant funding.
- Plan updates must demonstrate that progress has been made in the past three years (for State plans), or in the past five years (for local plans), to fulfill commitments outlined in the previously approved plan. This will involve a comprehensive review and evaluation of each section of the plan and a discussion of the results of evaluation and monitoring activities detailed in the Plan Maintenance section of the previously approved plan. FEMA will leave to State discretion, consistent with this plan update guidance, the documentation of progress made. Plan updates may validate the information in the previously approved plan, or may involve a major plan rewrite. In any case, a plan update is NOT an annex to the previously approved plan; it must stand on its own as a complete and current plan.

Summary

This Mill Creek / Walla Walla County CWPP update has been developed in accordance with the guidelines set forth by State and Federal regulation as well as input from the planning committee, public stakeholder meetings, and collaborative partners. This document was modeled after the neighboring Union County, Oregon CWPP, in an effort to unify adjacent jurisdictions for mitigation strategies and fire risk management of the Mill Creek Watershed.

Chapter 2

Mission, Goals and Objectives

The goals of the planning process include integration with the National Fire Plan, the Healthy Forests Restoration Act (HFRA), the Cohesive Wildland Fire Management Strategy (CWS), and the Disaster Mitigation Act. The plan utilizes the best and most appropriate science from all partners as well as local and regional knowledge about wildfire risks and fire behavior while meeting the needs of local citizens and recognizing the significance wildfire can have on the regional economy.

Increases in wildfire frequency, geographic extents, and severity have been increasing significantly over the last few decades, in part as a result of past management decisions that have led to increased fuels across the landscape, and in part to by a changing climate (Westerling, Hidalgo, Cayan, & Swetnam, 2006). In addition to the changes of wildfire activity, expansion of development in rural areas has increased the exposure of property, human life, and economic loss from wildfires. There is a need to assess the Wildland Urban Interface (WUI), where the natural environment meets human development, to understand the increasing risks we face in these areas. The goals of the CWS first seek to reduce the risk associated with wildfire to human life through risk management and public education about property mitigation efforts. Secondly, the CWS addresses the need to manage the landscape across multi-jurisdictional ownership boundaries to increase the resilience of the landscape to wildfires.

Overlooking ownership boundaries in accordance with the current strategies of the CWS, HFRA, etc. the WUI assessments within this plan have been consolidated into specific Wildland Urban Interface Zones (WUIZ), allowing for the identification, assessment and treatment/mitigation of high risk locations. This approach enables the communities to prioritize threats and apply mitigation efforts and grant monies more effectively and economically. This plan seeks to utilize the steps set forth by CWS and other National documents to improve the effectiveness of suppression teams, identify risks, educate homeowners and communities, and provide recommendations for mitigation efforts. The goals and objectives have been outlined by the planning committee and progressed through community collaboration and input. Outlined below are the goals of this plan broken into three categories; Identify Risks, Public Outreach, and Recommendations, with specific objectives under each goal.

Mission Statement

The mission of this plan is to assess wildfire hazards in and around the Mill Creek Drainage and Walla Walla County, and to identify options for reducing the risk of wildfire within the planning area and mitigate the impacts if a fire does occur.

Goals and Objectives

Identify Risk

Identify and map Wildland Urban Interface (WUI) boundaries.

Prioritize the protection of people, structures, infrastructure, natural resources, and unique ecosystems that contribute to our way of life and the sustainability of the local and regional economy.

Identify areas of inadequate fire protection, such as gaps in district coverage, and identify solutions.

Meet or exceed the requirements of the National Fire Plan and FEMA for a county level Community Wildfire Protection Plan.

Outreach

Educate communities about the unique challenges of wildfire in the wildland-urban interface.

Identify regulatory measures such as building codes and road standards specifically targeted to reduce the wildland fire potential and reduce the potential for loss of life and property.

Provide a plan that balances private property rights of landowners in Walla Walla County with personal safety and responsibility.

Improve county and local fire agency eligibility for funding assistance (National Fire Plan, Healthy Forest Restoration Act, FEMA, and other sources) to reduce wildfire hazards, prepare residents for wildfire situations, and enhance fire agency response capabilities.

Recommendations

Improve fire service organizations' awareness of wildland fire threats, vulnerabilities, and mitigation opportunities or options.

Address structural ignitability and recommend measures that homeowners and communities can take to reduce the ignitability of structures

Identify additional strategies for private, state, and federal lands to reduce hazardous fuel conditions and lessen the life safety and property damage risks from wildfires.

Identify and evaluate hazardous fuel conditions, prioritize areas for hazardous fuel reduction treatments, and recommend the types and methods of treatment necessary to protect communities.

Provide opportunities for meaningful discussions among community members and local, state, and federal government representatives regarding their priorities for local fire protection and forest management.

Chapter 3

Wildland Urban Interface Planning

Wildland-Urban Interface in Walla Walla County

Walla Walla County is located in the southern portion of the Palouse region of Washington that is prime agricultural lands. Large tracts of property are dedicated to agriculture, primarily wheat, throughout the county with dispersed sagebrush steppe and Conservation Reserve Program (CRP) lands intermixed. The City of Walla Walla accounts for the majority of the population with over 54 percent of the county's residence. Housing outside of Walla Walla proper is dispersed with an average of 43 people per square mile.

The (WUI) is defined as areas where residential housing and undeveloped wildland vegetation interact (Radeloff et al., 2005). Developments tend to be in areas where natural aesthetics are high and access and response times of emergency services are poor. While the USDA uses a broad-brush approach to defining the WUI as communities and residences that are near Federal lands that have a high risk of wildfire, state and local governments are able to provide a much more detailed inventory of communities and residences at risk of wildfire.

The Healthy Forests Restoration Act makes a clear designation that the location of the WUI is at the determination of the county or reservation when a formal and adopted Community Wildfire Protection Plan is in place. It further states that the federal agencies are obligated to use this WUI designation for all Healthy Forests Restoration Act purposes. The Walla Walla County Community Wildfire Protection Plan planning committee has evaluated a variety of different approaches to determining the WUI for the county and selected a WUI Zone approach. In addition to a formal WUI map for use by federal agencies, it is the goal that these maps will serve as a planning tool for the county, the state and local Fire Protection Districts.

In following this approach the planning committee identified five different wildland urban interface zones (WUIZ) given unique circumstances within each for wildfire mitigation and/or suppression efforts. The WUIZs are not indicative of a priority classification as each is equally valuable and in need of specific resources and activities. The WUIZ is a planning tool showing where homes, businesses, and critical environmental services are located and the density of those structures leading to identified WUI categories. The methods used for these maps are repeatable and easily updated to help communities adapt plan to need into the future.

Some priority areas south of the County in Oregon, but outside of the Mill Creek Watershed, have been included to highlight potential risk to the watershed and Walla Walla County from surrounding fire risk areas (Figure 1). The threat, risk and vulnerability analysis posed by these areas are outside the scope of this document, however the planning committee felt it was in the Counties best interest to identify this area for county residents given the potential for wildfires to originate in this zone and threaten Walla Walla and the Mill Creek Watershed. The WUIZ details for this area and risk assessments can be found in the Union County, Oregon CWPP for anyone interested in further understanding the potential risks of this area for Walla Walla County and the Mill Creek Watershed.

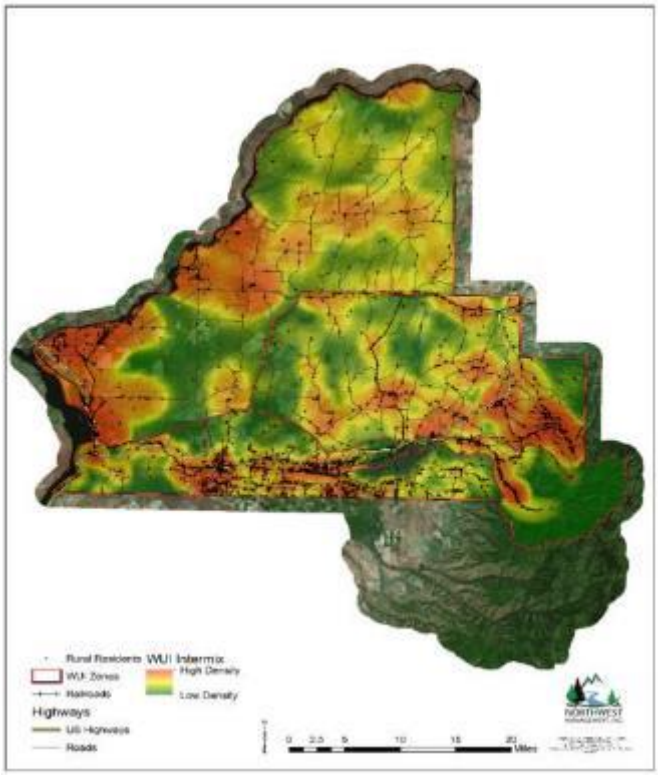


Figure 1. Map of Walla Walla County and the Mill Creek Watershed that identifies the Wildland Urban Interface (WUI) zones and risk ratings for County consideration. The lower portion of the map represents an area in Umatilla County, Oregon that was deemed to present a significant risk of fire to the residents and infrastructure of Walla Walla County and the Mill Creek Watershed. This area was not assessed for fire risk in this CWPP, however details of risk, resources and threat within this area can be found in the Umatilla County, Oregon CWPP currently available in the Oregon State website.

Wildland Urban Interface Zones were delineated by the committee to address fire frequency, emergency service response time, and highlight critical infrastructure. A key component in meeting the underlying need for protection of people and structures is the protection and treatment of hazards in the WUI. The WUI encompasses not only the interface (areas immediately adjacent to urban development), but also the surrounding vegetation and topography. Reducing the hazard in the WUI requires the efforts of federal, state, and local agencies as well as private individuals.[3] "The role of [most] federal agencies in the wildland-urban interface includes wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical experience. Structural fire protection [during a wildfire] in the wildland-urban interface is [largely] the responsibility of tribal, state, and local

[3] Norton, P. Bear Valley National Wildlife Refuge Fire Hazard Reduction Project: Final Environmental Assessment. Fish and Wildlife Services, Bear Valley Wildlife Refuge. June 20, 2002.

governments".[4] Property owners therefore share the responsibility of providing protection to their residences and businesses in order to minimize the threats fire poses and to create defensible areas and apply additional precautions to minimize the risk to their structures.[5] With treatment, a WUI can provide firefighters a defensible area from which to suppress wildland fires or defend communities against loss and be a first line of defense against conditions like a crown fire that either enters the area or originates within it. [6]

By reducing hazardous fuel loads, ladder fuels, and tree densities landowners and managers can create reinforced defensible spaces using the biological resources of an area and adjacent property owners to:

- Minimize the potential of high-severity ground or crown fires entering or leaving the area;
- Reduce the potential for firebrands (embers carried by the wind in front of the wildfire) to spread fire within the WUI and compound damages. Research indicates that flying sparks and embers (firebrands) from a crown fire can ignite additional wildfires as far as 1¼ miles away during periods of extreme fire weather and fire behavior;[7]
- Improve defensible space in the immediate areas needed for suppression efforts in the event of wildland fire.

In order to prioritize efforts there are three wildland-urban interface condition classes that have been identified by the federal government (Federal Register 66(3), January 4, 2001) for use in wildfire control efforts. These include the Interface Condition, Intermix Condition, and Occluded Condition. Each of these are described as follows:

- **Interface Condition** – a situation where structures abut wildland fuels. There is a clear line of demarcation between the structures and the wildland fuels along roads or back fences. The development density for an interface condition is usually 3+ structures per acre;
- **Intermix Condition** – a situation where structures are scattered throughout a wildland area. There is no clear line of demarcation; the wildland fuels are continuous outside of and within the developed area. The development density in the intermix ranges from structures very close together to one structure per 40 acres; and
- **Occluded Condition** – a situation, normally within a city, where structures abut an island of wildland fuels (park or open space). There is a clear line of demarcation between the

[4] USFS. 2001. United States Department of Agriculture, Forest Service. Wildland Urban Interface. Web page. Date accessed: 25 September 2001. Accessed at: http://www.fs.fed.us/r3/sfe/fire/urbanint.html
[5] USFS. 2001. United States Department of Agriculture, Forest Service. Wildland Urban Interface. Web page. Date accessed: 25 September 2001. Accessed at: http://www.fs.fed.us/r3/sfe/fire/urbanint.html
[6] Norton, P. Bear Valley National Wildlife Refuge Fire Hazard Reduction Project: Final Environmental Assessment. Fish and Wildlife Services, Bear Valley Wildlife Refuge. June 20, 2002.
[7] McCoy, L. K., et all. Cerro Grand Fire Behavior Narrative. 2001.

structures and the wildland fuels along roads and fences. The development density for an occluded condition is usually similar to that found in the interface condition and the occluded area is usually less than 1,000 acres in size.

In addition to these classifications established in the Federal Register, Walla Walla County has included four additional classifications to provide additional detail on county-specific conditions:

- **Rural Condition** – a situation where the scattered small clusters of structures (ranches, farms, resorts, or summer cabins) are exposed to wildland fuels. There may be miles between these clusters.
- **Ecological Services Areas –** areas that are outside human development but are critical to the infrastructure of the communities that they serve. Considered part of the WUI for analysis and mitigation efforts, despite the lack of structures.
- **High Density Urban Areas** – those areas generally identified by the population density consistent with the location of incorporated cities, however, the boundary is not necessarily set by the location of city boundaries or urban growth boundaries; it is set by very high population densities (more than 7-10 structures per acre).
- **Non-WUI Condition** – a situation where the above definitions do not apply because of a lack of structures in an area or the absence of critical infrastructure. This classification is not considered part of the wildland urban interface.

Interface WUI conditions for Walla Walla County were identified through the creation of a dataset based on identified structures at the edge of urbanized areas, and those outside city limits where a clear line of demarcation could be found between wildland fuels and urban areas. Intermix WUI conditions were identified using a GIS based kernel density of populations within each individual WUIZ. Focusing on each individual WUIZ rather than the entire project area allowed for the visualization of relative populations densities within each zone.

Following dataset organization a GIS-based kernel density population model that uses object locations and statistical analysis was applied to produce concentric rings or areas of consistent density around urban areas to facilitate visualization of the WUI fire risk areas. To graphically identify relative population density across the county, structure locations are used as an estimate of population density. Aerial photography was used to identify structure locations in 2013 using 2009 and 2011 NAIP imagery and Douglas County's cadastral data. The resulting output identified the extent and level of population density throughout the county. By evaluating structure density in this way, WUI areas can be identified on maps by using mathematical formulae and population density indices. The resulting population density index is then used to create concentric circles showing high density areas, interface, and intermix condition WUI, as well as the rural condition WUI, as defined above. This portion of the analysis allows us to "see" where the highest

concentrations of structures are located in reference to relatively high risk landscapes, limiting infrastructure, and other points of concern.

Potential WUI Treatments and Approaches

The identification and mapping of the WUI are the creation of a planning tool to identify where structures, people, and infrastructure are located in reference to each other. This analysis does not include a component of fuels risk. There are a number of reasons to map and analyze these two components separately (population density vs. fire risk analysis). Primary among these reasons is the fact that population growth often occurs independent from changes in fire risk, fuel loading, and infrastructure development. Thus, making identification of the WUI dependent on all of them would eliminate populated places with a perceived lower level of current fire risk, which may not be the case in time due to forest health issues or other factors.

By examining these aspects separately, the planner is able to evaluate layers of information to identify where population density overlays areas of high current relative fire risk and then propose mitigation actions to reduce the fuels, improve readiness, directly address factors of structural ignitability, improve initial attack success, mitigate resistance to control factors, or (more often) a combination of these and other approaches.

It should not be assumed that an area identified as being within the WUI will automatically qualify it for treatment on this factor alone. Nor should it be assumed that all WUI area treatments should be treated with the same prescription. Instead, each location targeted for treatment must be evaluated on its own merits: factors of structural ignitability, access, resistance to control, population density, resources and capabilities of firefighting personnel, and other site-specific factors.

It should also not be assumed that WUI designation on national or state forest lands automatically equates to a treatment area. The Forest Service, Bureau of Land Management, and Washington Department of Natural Resources are obligated to manage lands under their control according to the standards and guidelines listed in their respective forest or resource management plans (or other guidance documents). The adopted forest plan has legal precedence over the WUI designation until such a time as the forest plan is revised to reflect updated priorities.

Before treatments can be applied many tasks will be preceded by a site or home evaluation, to identify the specific factors of structural ignitability (roofing, siding, deck materials) and vegetation within the treatment area to be considered. However, treatments in less populated

areas and on rural lands may be more focused on access (two ways in and out of a location) and communications through means other than land-based telephones. Conversely, a subdivision with closely spaced homes surrounded by forest and underbrush, may receive more time and effort implementing fuels treatments beyond the immediate home site to reduce the probability of a high-intensity fire entering the subdivision.

Walla Walla County Plan Priorities

In accordance with the federal CWS, this plans prioritization of mitigation efforts across jurisdictional boundaries is an effort to protect; first firefighter and emergency personnel life, and second to provide protection of infrastructure and ecologically important areas. Mitigation projects laid out by this plan provide suggested best management approaches to accomplishing these goals; addressing wildfire risk throughout the County and the Mill Creek Watershed, and; aid in the acquisition of funding that can improve the counties ability to increase resilience in the face of wildfire risk.

CWPP Committee Members

The City of Walla Walla and Walla Walla county Emergency Management Department along with Oregon Department of Forestry (ODF) provided funding for the CWPP and were active members of the planning committee. Other entities that were involved in the planning committee included; U.S. Forest Service, Natural Resources Conservation Service, Walla Walla Fire Districts, Washington DNR, and representatives from various communities throughout the county. Monthly planning meetings were held from December of 2016 through June of 2017, with multiple community outreach projects throughout the planning process.

Wildfire Prepardness Resources

Walla Walla County

Walla Walla County Emergency Management (WWEM) uses and maintains, an Emergency Notification System (ENS) from Everbridge. The emergency notification system is able to alert residents about severe weather, fires, floods, toxic environmental issues, radiological events and other emergencies.

Messages can be sent to residents on any communication path desired – cell phone, home phone, email, text messaging, fax, pager, PDA and more – ensuring that residents receive life-saving emergency information and important public service announcements in minutes. Citizens listed in the County's white-pages landline phone database will be automatically subscribed to emergency alerts by phone, though any citizen may also self-register their cell phone, VOIP phone, email, text message device, fax, and pager at www.wwemd.info. The notification system allows Emergency Managers to notify citizens based on a geographical area designated by Emergency Management Services.

Mill Creek Watershed

The watershed of Mill Creek plays a vital role to the citizens of Walla Walla and surrounding communities as the main provider of drinking water. Currently Washington DNR is extending the shaded fuel break along portions of the watersheds perimeter. Pre-planning of additional mitigation efforts is vital to the sustained ecosystem service that Mill Creek delivers to the residence of Wall Walla. Coordinated efforts between the Federal, State and the CWPP committee is necessary to maximize the effort and expenditures to protect the watershed. The watershed encompasses over 36

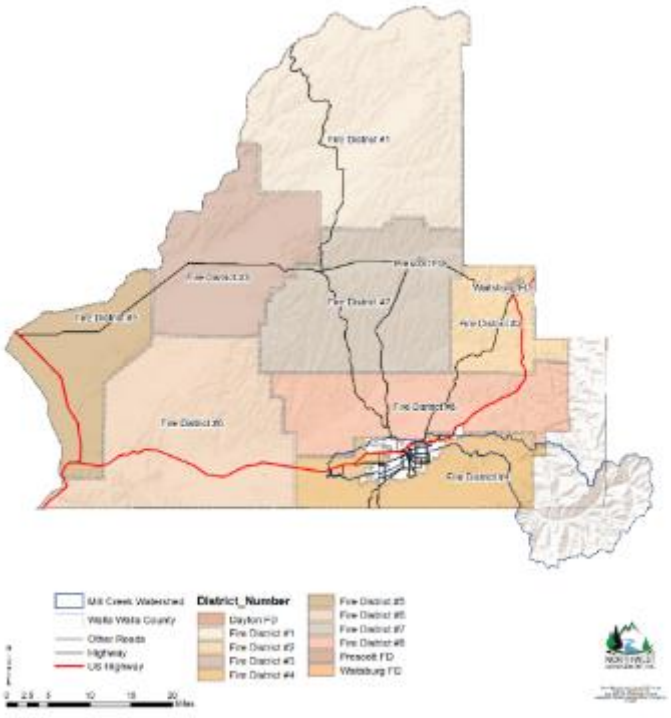


Figure 2. Walla Walla County Fire Districts (WWFD) map detailing the jurisdictional boundaries of each district. The Blue Mountains, Southeastern portion of the map, is serviced by WA DNR, and U.S. Forest Service, with a mutual aid agreement from WWFD #4 & #8.

square miles and has roughly 300 residences within its borders, primarily located along Mill Creek Road. Washington DNR, US Forest Service, and Oregon Department of Forestry all share responsibility for suppression within the watershed boundary with support from local Fire Districts #4 and #8. Due to designated roadless area fuels management and suppression efforts within the watershed are difficult and expensive both in monetary and labor cost. During the risk analysis, satellite imagery identified 255 fires within the boundary of the watershed from 2000 to 2017.

The USFS employees a single person at Table Rock lookout during the fire season to ensure quick response to ignition within the watershed. Funding for another seasonal worker hired through the Forest Service is provided by the City of Walla Walla. Oregon Department of Forestry has responsibility for the portion of the watershed that extends into Oregon and USFS shares responsibility on Federal lands in both Washington and Oregon. Walla Walla County Fire Districts #4 & #8 share responsibility for fire suppression in and around the watershed boundaries within the county boundary.

The system also has the capability of sending messages to groups or individuals set up on a separate section of the system. This capability can be implemented for a callout during an event or to disseminate information for an organization. WWEM offers the service to first responders and other interested parties.

Effective in 2017, WWEM has acquired IPAWS/WEA capability and is able to use the Everbridge ENS to communicate alerts and notifications over the Integrated Public Alert and Warning System (IPAWS).

Walla Walla County Fire District #1

District Summary: Fire District #1 is the large district in the county covering 310 square miles. It currently has only 90 residents and contains large areas of CRP with very few natural fire breaks. As with most Fire Districts in the County, District #1 relies on volunteer fire personnel and has experienced difficultly in recruiting and retaining firefighters who are reliably able to respond to calls.

Being an agricultural area, there is a daily influx of seasonal workers and with this volume of traffic and resource use comes an increase in the potential for more human caused fires during the summer and fall.

District Needs: Fire District #1 needs updated trucks, more volunteers in rural areas and new or improved fire breaks in large CRP tracks of ground.

Walla Walla - Columbia County Fire District #2:

***District Summary*:** Fire District #2 located in Waitsburg, Washington provides fire and EMS services to both Walla Walla and Columbia County. This area covers over 66 square miles in Walla Walla county and is mostly rural farmlands.

***Residential Growth*:** Most residential growth is taking place within the city limits.

***Communications*:** Need to improve coverage of some areas of the district due to terrain dead spots.

***Education and Training*:** At this time, the district is working with chiefs in the surrounding districts and the cities of Walla Walla and College Place to jointly train and share knowledge and experience on wildland and structural firefighting techniques.

Cooperative Agreements: Fire District #2 has mutual aid agreements with districts and municipalities in Columbia, Walla Walla, Benton, and Franklin Counties.

***District Needs*:** Expansion of the existing station or construction of a new station for staff and resource space and function.

Current Resources: The resources of this district include in Table 1 below.

Table 1. Walla Walla County Fire District #2 Inventory List

Type	Description	Tank Capacity	Pump Capacity
Equipment	Fire Engine (Type II) (Pumper)	1000 Gal	1500 GPM
Equipment	Fire Engine (Type II) (Pumper)	750 Gal	1250 GPM
Equipment	2002 Fire Engine (Type III)	1275 Gal	300 GPM
Equipment	1994 Fire Engine (Type III)	1050 Gal	300 GPM
Equipment	2005 Fire Engine (Type V)	400 Gal	300 GPM
Equipment	2001Fire Engine (Type V)	550 Gal	150 GPM
Equipment	Water Tender (Type II) (Tanker)	3280 Gal	850 GPM
Equipment	Water Tender (Type II) (Tanker)	2500 Gal	300 GPM
Equipment	Water Tender (Type III) (Tanker)	1800 Gal	300 GPM
Equipment	Water Tender (Type III) (Tanker)	1600 Gal	300 GPM
Equipment	1994 Aid Vehicle (Limited – Rescue Vehicle)	AID	
Equipment	Ambulance (Type IV) (Ground)	BLS	
Equipment	Ambulance (Type IV) (Ground)	BLS	

Walla Walla County Fire District #3

District Summary: Fire District #3 encompasses 137 square miles and includes 775 residents. It contains large areas of CRP with very few natural fire breaks.

Issues of Concern: Every year it gets harder to find firefighters who are consistently able to respond to calls. Being an agricultural area, there is a daily influx of seasonal workers that increases the potential for more human caused fires during the summer and fall.

District Needs: Fire District #3 needs updated trucks, more volunteers in the rural areas and new or improved fire breaks in many of the large CRP tracks of ground.

Walla Walla County Fire District #4

***District Summary*:** Walla Walla County Fire District #4 protects an area of approximately 125 square miles surrounding the cities of Walla Walla and College Place, serving a population of approximately 9,500 residents. Located within the District are heavily populated residential areas, commercial and industrial complexes, educational facilities, agricultural areas, wildland areas, and complex zones of interfaces between urban and wildland/agriculture uses. To provide timely service to this diverse area, there are currently five fire stations strategically located to provide efficient protection.

Operating as a combination fire department, District #4 has 10 career staff and 65 dedicated volunteer firefighters, officers, EMT's, First Responders, and support personnel. The equipment utilized by the department is included in Table 2. Inventory of Equipment for Fire District #4 Walla Walla CountyThe District average's 725 calls for service yearly, with 60 percent of those calls for EMS services and the remainder for fire. The District is comprised of a significant wildland urban interface area with many permanent homes and critical infrastructure contained within its boundaries. Additionally, we have large areas of dry land wheat which poses a high fire danger during the summer months. The potential for the District to host a substantial wildland fire is high.

Issues of Concern

***Wildland Urban Interface and Residential Growth*:** The fire district has many permanent homes in the WUI and each year the WUI is being expanded in size and complexity as more homes are built. Defensible space and fire adapted community conditions are extremely important for the safety of these homes along with the safety of the residents and our firefighters. However, at

times, it is challenging to motivate home and property owners to take the initiative to make their home better prepared to withstand a wildland fire.

Creating fire breaks on lands within the Conservation Reserve Program (CRP) is one goal for area fire chiefs. We have had a number of large fires on CRP lands due to large tracts of continuous fuels with no natural or manmade fire breaks.

***Communications*:** The District is part of a county wide Dispatch center (WESCOM) that is responsible for dispatching all fire (both city and county) and police (both city and county) personnel as well as the city of College Place fire department resources. Within the past year, WESCO has increased its service to Columbia county fire districts 1 & 3 and parts of Umatilla County in Oregon by utilizing a single Computer Aided Dispatch (CAD) system for all parties. WESCOM has a rather sophisticated, intricate, and somewhat temperamental – repeater simulcast micro wave system. Although the system has gone through a major equipment update and fine tuning, the service area due to topography continues to have areas where radio communications between Dispatch and Fire/EMS responders is difficult or impossible.

***Residential and Agricultural Burning*:** All open burning, other than some special situations such as small areas of fence rows or irrigation ditches, require a 'Burn Permit' and are confined to designated 'Burn Days'. Agricultural open field burning is permitted and regulated by the State Department of Ecology. At times a residential burn day has been authorized even though conditions are favorable for increased fire activity and fire growth. A better system for determining burn days is needed.

Other: As with most volunteer agencies, The District continues to seek ways to improve its ability to recruit and retain good firefighters and EMS personnel.

***Cooperative Agreements*:** The District is part of a strong Quad County mutual aid agreement that has developed a dispatch matrix that allows us to put a large amount of resources on an incident in a very short period of time. This has proven to be very successful; we are able to control potentially large incidents from getting out of control and additionally reduce the need to call for State Mobilization Assistance. In addition to the Quad County mutual aid agreement, the District also has mutual aid agreements with; WA DNR, ODF, and the USFS. The District also participates in a County Strike Team that responds as an initial attack team to our neighboring counties, and in the Statewide Fire Mobilization Plan.

District Needs/Wish List

***Wildland Urban Interface Defensible Space*:** The fire district has a current contract with the Department of Corrections to utilize their work crew to create defensible space around structures in the WUI areas. This program has been very successful since the Blue Creek Fire. We wish to continue to use this program and maximize the use of our staff time to meet with property owners and educate them on the value of defensible space. Funding for staff time is a need of the fire district to enhance this program and complete structural assessments every five years.

***Fire Breaks*:** Changes in the CRP rules that would allow fire breaks down to the dirt without a negative financial impact to the property owner would be beneficial.

***Rural Water Supplies*:** Continue to seek and develop water supply systems in our rural areas for assistance in fire suppression.

***Residential and Agricultural Burning*:** Educate the public and the agricultural producers of the area on the requirements to legally and safely conduct all open burning and field burning practices.

***Others*:** As with most volunteer agencies, the District continues to seek ways to improve its ability to recruit and retain good firefighters and EMS personnel.

Table 2. Inventory of Equipment for Fire District #4 Walla Walla County

Walla Wall County Fire District #4				**2016 Apparatus Inventory**			
2251 South Howard St., Walla Walla, WA 99362							
Fed ID #91-1520091							
Unit #	**Year**	**Make**	**Tank Size**	**Type**	**GPM**	**Other Information**	**Available for Mob.**
Station #41 (2251 S. Howard)							
UT341	2015	Chverolet Tahoe				Command	Yes
UT342	2009	Chverolet Tahoe				Command	Yes
UT343	2012	Ford F250				Command	
UT346	1992	Ford Ranger					
UT347	1975	Cevrolet 1 Ton					
E3411	2015	Rosenbauer	1000	Type 1 Engine	1500	Structure w/ Foam	Yes
E3416	1999	Freightliner	1000	Type 1 Engine	1500	Structure w/ Foam	Yes
E3451	2001	Ford	425	Type 5 Engine	700	Brush w/ Foam	
E3456	2001	Ford	425	Type 5 Engine	700	Brush w/ Foam	Yes
Water Tender 3431	2006	Chevrolet	2000	Type 3 Tender	500	Tender w/ Pump	Yes
A3421	2016	Dodge		Ambulance			
Rescue 3441	2003	Ford		Ambulance			
Cribbing 341	2009	Roseburg		Cribbing Trailer			
Transport 341	1998	Freightliner		Dozer Transport			

Dozer 3421	2016	John Deere 700K		Dozer		Tractor/Bulldozer	Limited
Dozer 3426	1980	Case		Dozer		Tractor/Bulldozer	Limited
Dozer Trailer	1971	Hyster Lowboy		Dozer Trailer			
Station #42 (675 Wallula Rd)							
E3412	2006	International	1000	Type 1 Engine	1500	Structure w/ Foam	Yes
E3452	2009	Ford	400	Type 5 Engine	500	Brush w/ Foam	
Water Tender 3422	2009	International	2500	Type 2 Engine	500	Tender w/ Pump	Yes
Station #43 (1945 E Alder)							
E3413	1999	Freightliner	1000	Type 1 Engine	1500	Structure w/ Foam	
E3453	2003	Ford	425	Type 5 Engine	700	Brush w/ Foam	
Water Tender 3423	2009	International	2500	Type 2 Engine	500	Tender w/ Pump	Yes
Water Tender 3433	1997	Chevorlet	2000	Type 3 Engine	350	Tender w/ Pump	
Station #44 (2327 Old Milton Hwy)							
E3414	1997	Freightliner	1000	Type 1 Engine	1500	Structure w/ Foam	
E3454	2009	Ford	400	Type 5 Engine	500	Brush w/ Foam	
Station #45 (6549 Mill Creek Rd)							
UT345	1993	Ford F450	750	Type 1 Engine		ATV Transport	
E3415	2013	International	425	Type 5 Engine	1250	Structure w/ Foam	
E3455	2003	Ford	2000	Type 3 Engine	700	Brush w/ Foam	
Water Tender 3435	1997	Chevorlet	90		350	Tender w/ Pump	
ATV345	2008	Polaris 6x6			100	ATV	Yes

Walla Walla County Fire District #6

***District Summary*:** Walla Walla County Fire District #6 is located in the SW portion of Walla Walla County and services 220 square miles. The area consists mostly of dryland farming, CRP, rangeland and some irrigated acres. The District has mutual aid agreements with all the Districts within Walla Walla County, the DNR, and the Federal Fish and Wildland agencies. The Fire District operates under the name of 'Walla Walla County Fire District #6' and is staffed by 30 volunteer members. The District has eight EMT's, eight EMR's, 19 structural certified personnel, 17 Red carded and 26 EVAP certified personnel. The District has two stations; one (S61) located in Touchet and one (S62) located in Lowden. Equipment used by the district can be found in Table 3. Walla Walla County Fire District #6 Inventory ListThe District average's 180 calls for service per year and 40 percent of those calls are for fire. There are many areas within the District that have a high natural cover fuel load and the potential for a substantial wildland fire is high.

Issues of Concern

***Residential Growth*:** With the completion of SR-12 the District feels the Touchet area will continue to grow as a bedroom community for the cities of Walla Walla and the Tri-Cities. With this continued growth the District expects to see individual and small housing developments continue to increase. This will cause a shift in the demand for EMS from less traffic accidents to an increase in medical responses. And on the fire side a need to triage, mitigate and provide more wildland structure protection during large scale incidents.

***Communications*:** The District is part of a county wide Dispatch center (WESCOM) that is responsible for dispatching all fire (both city and county) and police (both city and county) personnel as well as the city of College Place fire department resources. Within the past year, WESCO has increased its service to Columbia county fire districts 1 & 3 and parts of Umatilla County in Oregon by utilizing a single Computer Aided Dispatch (CAD) system for all parties. WESCOM has a rather sophisticated, intricate, and somewhat temperamental – repeater simulcast micro wave system. Although the system has gone through a major equipment update and fine tuning, the service area due to topography continues to have areas where radio communications between Dispatch and Fire/EMS responders is difficult or impossible.

***Burn permit Regulations*:** All open burning, other than some special situations such as small areas of fence rows or irrigation ditches require a 'Burn Permit' and are allowed only on designated 'Burn Days'. Agricultural open field burning is permitted and regulated by the State Department

of Ecology. The establishment of the regulations and the enforcement of the rules are the responsibility of the County and DOE. When the District is dispatched to an unauthorized 'Control Burn' it will provide information to the responsible individual and inform Dispatch of the situation.

Other: As with most all-volunteer agencies, The District continues to seek ways to improve its ability to recruit and retain good firefighters and EMS personnel.

***Cooperative Agreements*:** The District is part of an 'All County' mutual aid agreement that has developed a dispatch matrix that allows us to put a large amount of resources on an incident in a very short period of time. This has proven to be very successful; we are able to control potential large incidents from growing out of control and are reducing the need to call for State Mobilization Assistance. The District has mutual aid agreement with; the DNR, the Federal Fish & Wildlife Service, and boarding counties. Additionally, the District participates in a County Strike Team that responds as an initial attack team to our neighboring counties. Unfortunately, because all our members are volunteers and have day jobs we are unable to participate in the Statewide Fire Mobilization Plan.

District Needs/Wish List

As a rural area, the District continues to look for and develop water supply systems to assist in fire suppression. In the irrigated areas during irrigation season the growers are very accommodating and willing to provide the District with a water source. But during the off season and in the dryland areas water can be a challenge. The District continues to work with the land owners in developing strategic locations for water supply. This is mainly accomplished by spotting portable 10,000 gallon waters tanks during the high demand months that can be filled from an existing well.

The District's short range plans (next five years) are to replace its type 6 engine with a type 4 engine and to build a new station for vehicle storage in the Lowden area. The District's long range goals are to continue to upgrade its equipment and PPE as well as increase its ability to recruit and retain good firefighters.

Table 3. Walla Walla County Fire District #6 Inventory List

Walla Wall County Fire District #6				**2016 Apparatus Inventory**			
656 4th St., Touchet, WA 99360							
Fed ID #03-578157							
Unit #	**Year**	**Make**	**Tank Size**	**Type**	**GPM**	**Other Information**	**Available for Mob.**
Station #61 Touchet							
UT361	2004	Chevrolet Tahoe				Command	
UT362	2000	Ford Explorer				Command	
E3611	1998	Pierce Saber	750	Type 1 Engine	1500	Structure w/ Foam	
E3613	1994	Pierce Dash	750	Type 1 Engine	1500	Structure w/ Foam	Yes
E3661	1997	Chevrolet Cheyenne	310	Type 6 Engine	100	Grass/Foam	
E3652	1996	Chevrolet Cheyenne	400	Type 5 Engine	100	Grass	
E3654	2015	Ford F-550	400	Type 5 Engine	150	Grass/Foam	Yes
W3621	1992	Freightliner M916A1	3000	Type 2 Engine	750	Water Tender	Yes
W3622	1995	GMC Topkick	3000	Type 2 Engine	750	Water Tender	Yes
R3641	2001	Freightliner FL60		Type 4 Tender		Rescue/BLS	
Station #62 Lowden							
E3653	2011	Ford F-550	400	Type 5 Engine	150	Structure w/ Foam	Yes
E3612	1981	Ford C-8000	500	Type 1 Engine	1100	Brush w/ Foam	

Walla Walla County Fire District #7

District Summary: Fire District #7 is a large district with 188 square miles and approximately 192 residents. It contains large areas of CRP with very few natural fire breaks.

Issues of Concern: Every year it has been more difficult to find firefighters who are willing and able to respond to calls. Being an agricultural area, there is a daily influx of seasonal workers that increases the potential for more human caused fires during the summer and fall due to vehicle traffic and equipment.

District Needs: Fire District #7 is in need of updated trucks and more volunteers in rural areas as well as established fire breaks in areas with large tracks of CRP ground.

Walla Walla County Fire District #8

District Summary: Walla Walla County Fire District #8 covers 145 square miles of South East Walla Walla County. The district has two fire stations; one in Dixie, and one just south of the Walla Walla Airport in a leased building. There are approximately 30 volunteer firefighters in the district. A large majority of the district is comprised of dryland farming (primarily wheat). The

eastern portion of the district is mixed with heavy timber as well as areas of wildland urban interface along Lewis Peak Road. These structures are both recreational homes as well as permanent residences. There are an estimated 300 homes within the district's coverage area.

Issues of Concern: Being in an area with approximately 18 inches of annual rainfall, all of the vegetation becomes tinder dry throughout July, August, and September. These are typically the months when the district receives the greatest number of calls. Walla Walla County also experiences sporadic lightning storms during these months further adding to the fire threat. The Lewis Peak area has experienced significant growth in the number of structures being built on the grass/timbered ridgetop and ingress and egress are an issue for many of the housing developments here and throughout the district as there is only typically one way in and out of these areas. Water access is limited in many of the rural areas; thus, water tenders are required to shuttle water to supply any firefighting efforts in these locations. As a 100% volunteer department, personnel are limited during the heavy fire season due to vacations, weekends with the family, and their regular employment commitments.

District Needs: A wildland urban interface truck is needed as residential growth continues. The district also needs to build/acquire a fire/EMS station on the west side of the fire district.

Washington Department of Natural Resources

Equipment: Four type-5 engines with 1 engine leader and 3 fire fighters each.

District Summary: The four Blue Mountains Counties are managed as part of the Blue Mountain Unit. This ranges throughout the counties of the southern tier in the State of Washington including Asotin, Garfield, Columbia, and Walla Walla Counties. DNR fire protection consists of 270,000 acres in the four Blue Mountain Counties. Fire resources are spread throughout this area due to normal workloads and traditional fire risk occurrence. In the case of additional needs the DNR has the flexibility to move additional resources into the area. These can be regional resources as well as outside resources brought in for short periods of time. DNR, Washington Fire Services (WFS) and the United States Forest Service (USFS) work jointly to supply adequate resources for prevention and suppression activities.

Residential Growth: Residential growth affects the firefighting capabilities of the DNR from the standpoint of those who purchase properties outside of fire districts and then assume that we automatically protect them. This is not the case. Unless the DNR is receiving forest fire patrol

assessments (FFPA), the DNR does not assist or take fire suppression measures. Over time this action has become more and more scrutinized. DNR only assesses and protects un-improved forest property. We do not protect structures or agricultural property. The DNR has mutual aid agreements with the fire districts to assist them in areas where they have jurisdictional control. DNR will also assist agencies where we have mutual aid agreements if the fire is within a reasonable distance of DNR protected lands.

Communications: Communications for the area are handled through the statewide radio system which does have weak areas in the Blue Mountains. Radio communications are handled through the Blue Mountain Interagency Dispatch center in La Grande, Oregon.

Fire Management: Fire Management, more commonly referred to as fire overhead, assigned to the Blue Mountain Unit comes from the Clarkston or Dayton areas. When required, additional fire overhead can be ordered and supplied from anywhere in the state depending on availability.

Elevated fire risk: When fire danger reaches a certain increased level of risk due to weather conditions and forecasted scenarios, the DNR has the flexibility to move additional resources into specific areas.

Burn Permit Regulations: On lands within the DNR fire jurisdiction, DNR administers the silvicultural burn regulations and ensures compliance with the Clean Air Act.

Effective Mitigation Strategies: The Community Wildfire Protection Plans (CWPP) process is one of the best forms of mitigation strategies used to educate the communities on risks and assist them in the formulation of goals and objectives suited for their specific area. The DNR can assist in finding funding sources for mitigation projects that are outlined or to address needs identified in CWPP documents. The DNR is supportive of firewise.org and believes that the FIREWISE principles are very effective education, planning, and mitigation tools and strategies.

Education and Training: Education and training is an ongoing process. The DNR supplies community support through use of education opportunities such as FIREWISE and community level assistance. We are also able to supply one-on-one landowner assistance through Stewardship planning as well as forest practices assistance. Cooperation with local agency offices provides for boarder educational opportunities.

Current Resources: While the DNR maintains four type 5 engines from June 15 –September 15, the resources assigned to the area can change due to predictions of fire behavior and weather conditions. Additional resources can be staged in predetermined areas to assist in the

suppression as needed, which can include additional department overhead personnel, crews, engines, dozers and/or aircraft resources.

Future Considerations: The DNR has added 2 permanent fire staff positions and 2 engines in the last 5 years. Staffing has reached a good management level. Future staffing considerations will likely not change much.

Needs: There are areas in Asotin County that are not under the protection of a fire district. Many of these areas do not have any form of formal protection through any fire suppression entity. As stated before, the Department's legislated responsibility lies with protection of unimproved forested lands as well as assisting other agencies and local fire districts.

The areas of any county which are not protected are commonly known as "no-man's land". As with all other fire suppression entities DNR seems to be expected to respond to these fires. In most cases, the Department works cooperatively with other fire suppression agencies to keep all fires small, but there is no assurance that any entity will respond to those "no man's land" incidents if there are no threats to protected lands or if the Department is involved in a multiple fire start situation. This creates a situation where there is a need for the local residents to recognize that **they do not have fire protection**. The residents need to look at their options and determine what will work best to provide themselves with adequate fire protection.

United States Forest Service

District Summary:

The USDA Forest Service has responsibility for management of National Forest System lands within Walla Walla County. These lands are administered by the Walla Walla Ranger District which is part of the Umatilla National Forest. Headquarters for the Ranger District is in the City of Walla Walla. The District is approximately 384,000 acres.

Walla Walla Ranger District has initial attack responsibility for Forest Service lands within Walla Walla County. The District's suppression organization is as follows: One Fire Management Officer, two Assistant Fire Management Officers, three type-6 engines (3-4 personnel), one hand crew (10 personnel), one watershed patrolmen and 3 staffed lookouts. During fire season, when available, the fire management officer on duty has other regional and national ground and aerial resources to consider.

These resources could include both aerially delivered, engine and hand crews. Aviation resources could include air tankers and helicopters of varying types to support ground resources. The district utilizes a contracted fixed wing single engine detection plane through the fire season, this asset is used on a case by case basis, depending on fire conditions and lightning events.

Community

Communities in Eastern Washington experience the impacts of wildfire on an annual basis. Its citizens are directly affected by the smoke, vegetation loss, and the loss of property, followed by the secondary occurrences of erosion, loss of biodiversity, and economic loss. In 2015 there were a total of 364 structures lost due to wildfires, the Okanogan Complex claiming 195 buildings and caused three casualties. Walla Walla County is no stranger to wildfire on the landscape having three wildfires over 6,000 acres since 2005. The Eureka Fire (2010) and Walker Canyon Fire (2005) both exceeded 20,000 acres. Currently a partnership with the Department of Corrections work crew and funded through a Pre-disaster Mitigation Grant program, has enabled the residents of Walla Walla County access to an inexpensive method for building a defensible space around structures. At this time 80 residences have utilized the grant and work crew to build defensible spaces around their homes. Most of the participants are located within the foothills of the Blue Mountains, with markedly less owners taking advantage in the areas of agricultural and CRP lands.

Summary

Fire District Preparedness

Volunteer Firefighter Recruitment

The rural fire departments in Walla Walla County are predominantly dependent on volunteer firefighters. The trend for several years, in many volunteer fire departments, is that membership has continued to decrease. This can be attributed to several reasons including the need for two wage earners in a household to support their family, lack of desire from today's generation, and the tremendous amount of time spent in training to satisfy the ever-increasing regulations from state and federal agencies. Whether it be job and family commitments combined with hobbies or competition with other volunteer organizations, it comes down to the fact there is very little time left for being a volunteer firefighter. This is exacerbated by the added stress of emergencies and inherent dangers of the job, further complicated by society's general lack of support and/or appreciation for the commitment and sacrifices made by volunteer firefighters.

Today's fire departments, career and volunteer, find themselves in a position where there is an increasing demand for their services, similarly increasing operational costs and overall limited available resources. In the rural setting where resources are most this can spell a recipe for risk because fire services are few for larger areas. In particular, many departments have difficulty maintaining volunteers available during regular work day hours (8am to 5pm).

Conservation Reserve Program

Since the introduction of the CRP by the federal government, many formerly crop producing fields have been allowed to return to native grasses. CRP fields are creating a new fire concern throughout the west as thick grasses are allowed to grow year after year leading to the buildup of dense mats of fine fire fuels. These conditions lead to a continuous fuel bed allowing fires in CRP fields to burn with greater intensities and long flame lengths that can often spread across roads or other fire barriers, particularly under the influence of wind. Many landowners and fire personnel are researching allowable management techniques to deal with this increasing problem.

Communication

There are several communication issues needing to be addressed within Walla Walla County. Due to the diverse topography, many of the emergency responders have identified areas of poor reception for both radios and cell phones. The lack of communication between responders as well as the limitations of the central dispatch significantly impairs responders' ability to effectively and efficiently do their job and additionally poses a greater risk to their safety.

Public Wildfire Awareness

As the potential fire risk in the wildland-urban interface continues to increase, it is clear that fire service organizations cannot be solely responsible for protection of lives, structures, infrastructure, ecosystems, and all of the intrinsic values that go along with living in rural areas. Public awareness of the wildland fire risks as well as homeowner accountability for the risk on their own property is paramount to the protection of all the resources in the wildland-urban interface and the Mill Creek Watershed. Some informational resources available to the public area include before for further reading.

FIREWISE Communities Program encourages local solutions for safety by involving homeowners in taking individual responsibility for preparing their homes from the risk of wildfire

Fire Adapted Communities incorporates people, buildings, business, infrastructure, cultural resources and natural areas into the effort to prepare for the effects of wildland fire.

Wildfire Community Preparedness Day is an excellent opportunity for neighborhoods and fire agencies to work together to make communities a safer place to live. Efforts raise wildfire awareness and help protect homes, neighborhoods, and entire communities, while increasing safety of wildland firefighter or could lessen current post-fire impacts.

The national **Ready Set Go! Program**, managed by the International Association of Fire Chiefs (IAFC), works to develop and improve dialogue about wildland fire awareness and action between local fire departments and the residents they serve. It is designed to be complimentary and collaborative with FIREWISE and other wildland fire public education efforts.

NFPA Fire Prevention Week offers information and tools to help public educators teach all audiences about important fire and life safety issues.

FEMA's America's PrepareAthon! Is an opportunity for individuals, organizations, and communities to prepare for specific hazards, including wildfire, through drills, group discussions, and exercises.

The continued development of mechanisms and partnerships to increase public awareness regarding wildfire risks and promoting "do it yourself" mitigation actions is a primary goal of the CWPP steering committee as well as many of the individual organizations participating on the committee.

Chapter 4

Mill Creek and Walla Walla County Characteristics

Walla Walla County is located on the Columbia Plateau and has been included as part of the Palouse ecoregion, which has loess covered basalt plains, modified by glacial action and scoured by repeated floods during the Miocene and Pliocene eras. This includes features such as plateaus, buttes, and channels. Channels are made up of outwash terraces, bars loess islands and basins. The plateaus contain circular mounds of loess (biscuits) surrounded by cobble-size fragments of basalt. Soils generally consist of Palouse loess with varying amounts of rock or gravel, and basaltic rock outcroppings. Generally, the soils along on the Southeastern most portion of the county are derived from the local parent material, which includes granite and basalt. Located on the western edge of the Blue Mountains, the highest peak in Walla Walla County is Lewis Peak at 4,888 ft above sea level. The lowest point in the county lies along the Columbia River at 393 ft elevation[8].

Figure 3. Aerial Map of Walla Walla County and Mill Creek Watershed

Table 4. Ownership by Acreage and Percentage

Land Owner	Acreage	Percent
Private	1,249,949	89%
US Forest Service	101,197	7%
State	20,607	2%
Water	2,317	<1%
Bureau of Land Management	3547	<1%
Washington Fish and Wildlife Service	610	<1%

Land Use

The predominant land use in Walla Walla County is agriculture, in the form of dryland and irrigated fruits, berries, grain crops, CRP and livestock grazing. As of 2012 Walla Walla County had 943 farms covering 645,121 acres which represented 82% of

[8] Palouse Prairie Foundation, www.palouseprairie.org/ppfdescription.html

the total land area in the county. The average farm size is 734 acres[9]. Irrigated agricultural practices occur on approximately 92,438 acres while dryland agriculture occurs on the remaining approximately 550,000 acres. The 2012 Agriculture Census ranked Walla Walla County as fifth in Washington State for volume of agriculture sales, with a total of $344.5 million in 2012 and an average of total of $361,772 in annual sales per farm. Recently there has been an increase of vineyards in the area leading to increased tourism. The largest urban population is located in the county seat of Walla Walla with roughly 32,000 people or 54% of the total county population. Walla Walla is also the home of two higher education establishments, Whitman College and Walla Walla Community College.

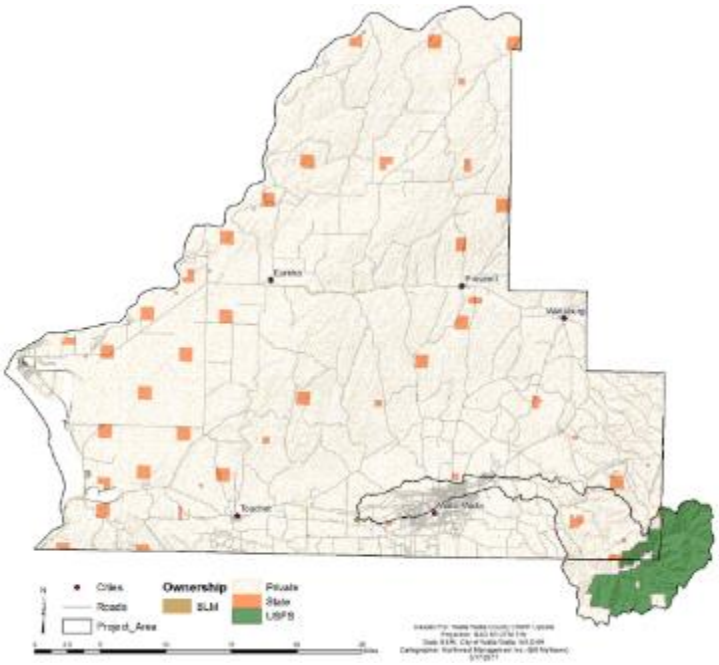


Figure 4. Ownership map for Walla Walla County and the Mill Creek Watershed

Climate

According to the Koppen-Geiger classification system Walla Walla Washington is a hot Mediterranean, dry-summer climate. The average monthly temperature varies from a low of 34 degrees Fahrenheit to a high of 75 degrees in July, averaging 53 degrees. There is an average of 205 frost-free days in the growing season with annual precipitation averaging 20 inches.[4] Rainfall in Walla Walla County averages around 16.5 inches a year, with an additional 12 inches of snowfall a year on average, and 107 days of precipitation.

Population and Demographics

The 2010 Census established the Walla Walla County population at 58,781, which shows an increase from a population of 55,180 in 2000. There are 10 incorporated cities within Walla Walla County, and Since 1890, the population of Walla Walla County has been steadily increasing with

[9] U.S. Department of Agriculture's National Statistics Service 2012 Census of Agriculture: Washington State and County Data. Available online at: http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Washington/wav1.pdf. Accessed January 2017.

the only decrease in population occurring between 1910 and 1920. The U.S. Census Bureau estimates that Walla Walla County has only experienced a 2.6% increase in population since 2000 compared to a 6.6% increase statewide. Walla Walla County's increase in population is largely changes to the urban areas, such as the City of Walla Walla, and other outlying communities, with minor changes in the amount of wildland urban interface. The Census Bureau also reported that there were 257 private nonfarm establishments and 4,457 households. The median income for a household in Walla Walla County is $47,946, which is less than the statewide median of $61,062.[10]

Table 5. Walla Walla Counties incorporated cities population data.

City	Population	Percentage
Walla Walla	31,731	54 %
College Place	8,765	15 %
Waitsburg	1,217	2 %
Touchet	421	<1 %
Prescott	318	<1 %
Dixie	197	<1 %
Wallula	179	<1 %

Fire History

To protect the water quality, Mill Creek Watershed has long been managed to suppress the natural fire regime, or the frequency at which fire returned to the landscape and the severity of fire on vegetation. The Fire Regime Condition Class (FRCC), a dataset measuring the departure from historic natural fire regime, classifies the Mill Creek Watershed at 60%t Condition Class 2 or moderate departure from normal and 10% as Condition Class 3, or high departure. Fire behavior and effects for Condition Class 3 can result in a loss of key ecosystem components.

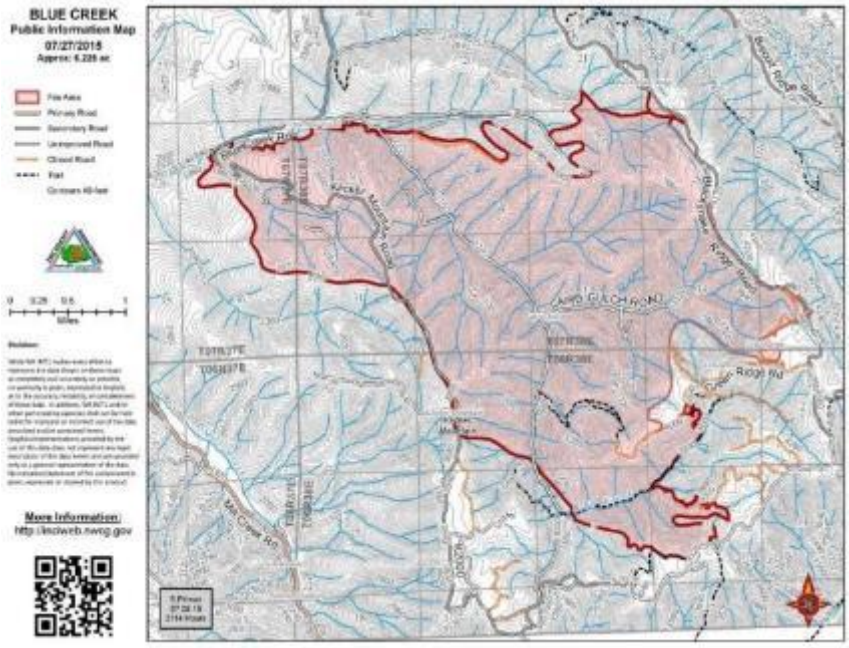


Figure 5. Blue Creek Fire map curtesy of InciWeb

[10] U.S. Census Bureau. State & Quick Facts: http://quickfacts.census.gov/qfd/states/53/53043.html. Accessed January 2017.

In 2015 the Mill Creek Watershed was threatened by the Blue Creek Fire that started on July 20th, northwest of the Mill Creek Watershed, and burned up to its western boundary about 10 miles east of Walla Walla. Due to excessively dry conditions and high temperatures during the 2015 summer the fire had been ignited by harvest equipment during a wheat harvest. The Blue Creek Fire encompassed 5,992 acres before it was contained and was estimated to cost more than $10 million in suppression funding alone. Other recent large fires near the Mill Creek Watershed include; School – 2005, Columbia Complex – 2006, Eureka – 2010, Monumental – 2014, Grizzly Bear Complex – 2015, and the Tucannon – 2015.

On August 5th of 2005 the School Fire started when a dead tree fell into a powerline and ignited the dry grass below. The following day the fire had grown to 30,000 acres due to dry and windy conditions and ultimately burned more than 50,000 acres before being contained, making it the largest in the lower 48 states that year. The direct cost of the School Fire reached $9 million, which included suppression efforts and damage estimates to over 100 residences.

Figure 6. Post fire image of a high severity fire in the area, photo from NIFC website.

The following year, lightning started the Columbia Complex which burned northwest of City of Walla Walla and consumed 132,048 acres of predominantly forested land. The suppression cost for this fire was over $35 million. With an unknown loss in timber value and six residences destroyed the true cost of the Columbia Complex has been estimated well in excess of the initial $35 million.

The Grizzly Bear Complex in 2015 was a combination of 18 lightning starts, and burned 83,418 acres east of Mill Creek Watershed. Similar to the Columbia Complex, the Grizzly Bear Complex burned largely forested lands in the Umatilla National Forest and in the Wenaha – Tucannon Wilderness areas with a suppression cost of $22.4 million.

The Mill Creek Watershed

Covering roughly 36 square miles of the Blue Mountains the Mill Creek Watershed is situated in Southeastern Washington and Northeastern Oregon. The headwaters of Mill Creek begin in Umatilla and Wallowa counties in Oregon before traveling through Columbia and Walla Walla counties in Washington. The watershed has been designated as a Roadless area by the US Forest Service and has remained a protected watershed since 1918. The management of the watershed exemplifies the multijurisdictional management of lands and fuels for fire management that is laid out in the National Cohesive Wildland Fire Management Strategy (CWS). While outside their jurisdictional bounds both Fire District #4 and #8 provide fire suppression support in the area with aide from the WA DNR and the U.S. Forest Service. The watershed provides an important ecosystem service to the city of Walla Walla and the neighboring communities as the primary municipal water source. The quality of Mill Creek water is such that it is used unfiltered. To maintain this unfiltered water source for a community there are strict regulations set by the State to provide for safe drinking water. Some of the key criteria are listed below.

- Turbidity of less than 5.0 NTU (Nephelometric Turbidity Units).
- Fecal coliform density less than 20/100mL in 90% of samples.
- Virus and Giardia inactivation met 11 months out of 12.
- Distribution system residual maintained.
- Municipal Watershed control program implemented.
- System meets Total Coliform Rule.
- System meets Stage 1 DBP (Disinfection Byproduct) Rule.

Over 300 homes lay along Mill Creek Road which is the primary access road within the watershed. Additionally, the municipal water intake facility for the City of Walla Walla is positioned at the end of road approximately 16 miles from the Walla Walla city limits. The intake facility is managed and maintained by a city employee that resides on site. In addition to facility management and maintenance the employee patrols the watershed to enforce the no trespassing ordinance.

There are a number of homes in the area have taken advantage of a grant that provided funding for defensible space creation around structures. The City of Walla Walla partnered with Oregon Department of Forestry to create a 200 ft defensible space around all city owned structures at the intake site. Washington DNR has plans to construct a 10 miles long, 200 ft wide shaded fuel breaks along portions of the Western edge of the watershed. Previous efforts by the U.S. Forest

Service have also increased access to the area along Forest Roads 64 and 65 to the west, south, and eastern of the watershed.

Access to the watershed is granted by permit only and restricted to official business and a handful of big game hunters in the fall. The city of Walla Walla has provided funding for a Forest Service employee to patrol the perimeter of the watershed and an additional employee to occupy the Table Rock Lookout tower throughout the fire season.

Summary

Fire history in and around the Mill Creek Watershed and Walla Walla County has shown that the area experiences frequent fires. Therefore given the current fuel load levels, coupled with hotter and drier summer conditions and an extended fire season, these fires can be expected to increase in size, frequency and severity as compared to those that experienced in the past. Wildfire suppression has been successful to date in containing wildfires that threaten the Mill Creek Watershed, but without proper mitigation efforts that trend will not be sustainable. A wildfire within the watershed boundary would force the City of Walla Walla to rely on a limited supply of water from a well until the Mill Creek water quality recovered to Federal and State drinking water standards this could take years or even decades depending on fire impact. A wildfire within the boundaries of the Mill Creek Watershed is inevitable as was demonstrated by the Blue Creek Fire in 2015. While the Blue Creek Fire did not affect the water quality of the Mill Creek Watershed, it did heighten the awareness of the public to increase fire mitigation efforts in and around the watershed. Any fire within Mill Creek that alters the water quality enough to require filtration would place severe economic strain on the City of Walla Walla in its responsibility to provide drinking water to its citizens.

Chapter 5

Community Outreach and Participation

Introduction

Walla Walla County is roughly 90% private lands and the remaining 10% divided up between multiple State and Federal agencies. With respect to the 90% of private landowners, who are largely farmers that work the land and are therefore very familiar state of vegetation across the county, public outreach was viewed as a vital part of the planning process. While public involvement is required in the planning process, (44 CFR, Section 201.6(b)(1)), the planning committee recognized the value and benefit of collaboration with the public and encouraged involvement in the planning process of the CWPP document. Multiple methods of public involvement and awareness were implemented through the planning process, with public meetings provided across the county and CWPP committee presence at local fire related presentation "Era of Megafires". Advertisement for public outreach events was accomplished through the use of multiple media formats including; Emergency Management Services website and Facebook page, email distributions, flyers at local businesses and colleges.

Public outreach meetings were designed to incorporate a diversity of points of view on the planning process, mitigation projects, community needs, and risk assessment. Planning committee members were present and meetings were facilitated by Northwest Management Inc.

Public Participation

The meetings were conducted to provide those present with updates, new information and to obtain feedback from attendees. A holistic approach toward community fire protection through partnership was the desired outcome. Using the new National Cohesive Wildfire Strategy, the committee incorporated its three key goals as the foundation in achieving a synergistic, planned approach in the new CWPP.

The focus of the meetings was to share information about current CWPP committee activities regarding plan development, current county fire risks, ongoing collaborative efforts, fire organization and landowner responsibilities, and ways to get involved in the process. Meetings were also designed to build new and improve existing partnerships with the community. Through the meetings, we provided tools, methods, and opportunities for playing an active role in risk reduction measures. Emphasis was put on using community input to help develop portions of the CWPP and design a plan that encouraged landowner involvement in wildfire risk reduction

Era of Megafires Presentation

Dr. Paul Hessburg presented a talk on the current state of wildfires, looking at management activities, climate change, public perception, and what needs to happen to create resilient forests and communities. The planning committee attended the event with a booth set up with information about the update of the previous Mill Creek Watershed CWPP to a county wide CWPP, along with information on creating defensible spaces and creating firewise communities. The event was facilitated and housed at Whitman College, and was well attended by the local community. While public input was not incorporated within the CWPP planning, concern over the Mill Creek Watershed were evident by the post talk questions and answers.

Figure 7. Era of Megafires Presentation Flyer

Public meetings were scheduled in strategic locations during the wildfire risk assessment phase of the planning process to share information on the Plan, obtain input on the details of the wildfire risk assessments, and discuss potential mitigation treatments. Attendees at the public meetings were asked to give their impressions of the accuracy of the information generated and provide their opinions of potential treatments.

Outreach

Several avenues were used to incorporate local communities into the CWPP process. Media outlets, such as Facebook and local web sites, were used to reach out to the public. These were found to be the best source in linking local citizens to the CWPP process. Use of the Emergency Services Facebook page provided the ability to see the number of times the information was shared and an avenue for directly responding to questions.

News Releases

Under the direction of the steering committee, periodic press releases were submitted to the various print and online news outlets that serve Walla Walla County. Informative flyers were also distributed around town and to local offices within the communities by the committee members. Additional methods in reaching out to citizens and cooperators included newspaper articles,

postal service mailed letters sent out to cooperators, and email messages. Included in outreach materials and announcements were: intent of meetings and dates, opportunities to be locally involved, and local contacts for more information.

Public Meetings

Public meetings were scheduled in strategic locations during the wildfire risk assessment phase of the planning process to share information on the Plan, obtain input on the details of the wildfire risk assessments, and discuss potential mitigation treatments. Attendees at the public meetings were asked to give their impressions of the accuracy of the information generated and provide their opinions of potential treatments. The public meeting announcement was sent to the local newspapers and committee members were asked to post the flyer shown in Figure 8. Public Meeting Flyeraround their communities.

The schedule of public presentation meetings in Walla Walla County included three locations: Mill Creek, Walla Walla, and Touchet, Washington, to provide adequate opportunity for members of every community to attend without considerable travel. The Mill Creek public meeting was attended by four individuals on the committee and thirteen from the general public. Fire start and fire history information and how it was included within the plan was of concern from multiple citizens. The need to differentiate lightning starts from human caused starts was addressed to accurately assess the risk to the watershed. The information on fire starts, while not presented within the maps, is provided within the GIS data and used during the final risk assessment. In addition to the fire start concern, there was a question about the information behind the structure locations around the Mill Creek Watershed. Address locations were provided by the county and the gaps within the data may detail an expansion within the WUI that needs to be addressed.

Figure 8. Public Meeting Flyer

The Walla Walla meeting was held and Fire Station #45 and was well attended with, thirteen residents and five of the committee members. Discussion around plan development was minimal with no input from the public to any portion of the plan or assessments. The Touchet meeting was attended by three committee members and eight residents. Multiple projects were proposed by the citizens, which will be included within Chapter 8, and include roadside spraying of vegetation along highways, increased accessibility along Black Snake Ridge Road. Education about funding sources and other resources available to homeowners to better protect homes from wildfire. Fires starting on unprotected private lands in Oregon have posed significant risk to communities in Washington. The Oregon citizens refuse protection from Oregon and Washington Fire Districts, which leads to fires growing past a manageable state as they enter Washington, placing stresses on the local districts staff and resources. Currently no solution was evident, suggestion of increased communication between Walla Walla County Washington and Umatilla County Oregon were proposed in attempts to find a solution.

The Planning Team

City of Walla Walla and Oregon Department of Forestry provided funding for the creation of this plan. Emergency Management Services facilitated the Community Wildfire Protection Plan meetings. Stakeholders involved in the meetings included representatives from local communities, Walla Walla County Conservation District, Oregon Department of Forestry, Fire Protection Districts, federal and state agencies, and local organizations with an interest in the county's fire safety.

The planning philosophy employed in this project included the open and free sharing of information with interested parties. Information from federal, state, and local agencies was integrated into the database of knowledge used in this project. Meetings with the committee were held throughout the planning process to facilitate a sharing of information between participants. When the public meetings were held, many of the committee members were in attendance and shared their support and experiences and their interpretations of the results.

Steering Committee Meetings

The following people participated in steering committee meetings, volunteered time, or responded to elements of the Walla Walla County Community Wildfire Protection Plan's preparation.

NAME **ORGANIZATION**

- Liz Jessee .....Walla Walla County, Emergency Management
- Mori Struve .....City of Walla Walla, Public Works

- Matt Hoehna.....Oregon Department of Forestry
- Devin Parvinen.....Washington DNR
- Spencer Slyfield.....Washington DNR
- Rocky Eastman.....Walla Walla County Fire District #4
- David Winder.....College Place Fire Department
- Larry Hector.....Walla Walla County Fire District #6
- Bob Carson.....Whitman College
- Bob Yancey.....Walla Walla Fire Department
- Patrick Purcell.....Walla Walla County Emergency Management
- Matt James.....U.S. Forest Service
- Joseph Sciarrino.....U.S. Forest Service – Umatilla National Forest
- Judith Johnson.....Kooskooskie Commons Resident
- Renee Hadley.....Walla Walla County Conservation District
- Brad Tucker.....Northwest Management, Inc.
- Bill Mathews.....Northwest Management, Inc.
- Mark Corrao.....Northwest Management, Inc.

Multi-Jurisdictional Participation

44 CFR §201.6(a)(3) calls for multi-jurisdictional planning in the development of Hazard Mitigation Plans which impact multiple jurisdictions. In addition to the participation of federal agencies and other organizations, the following local jurisdictions were actively involved in the development of this Community Wildfire Protection Plan:

- City of Walla Walla
- Kooskooskie Commons
- Washington DNR
- Oregon Department of Forestry
- Walla Walla County Fire District
- U.S. Forest Service
- Natural Resources Conservation Service
- Walla Walla Emergency Management

These jurisdictions were represented on the steering committee and in public meetings either directly or through their servicing fire department or district. They participated in the development of hazard profiles, risk assessments, and mitigation measures. The steering committee meetings were the primary venue for authenticating the planning record.

Committee Meeting Minutes

Committee meetings were scheduled and held from December, 2016 through June, 2017. These meetings served to facilitate the sharing of information and to lay the groundwork for the Walla Walla County & Mill Creek CWPP. Northwest Management, Inc. as well as other planning

committee leadership attended the meetings to provide the group with regular updates on the progress of the document and gather any additional information needed to complete the Plan. Steering committee meeting minutes are included in Appendix 2.

Documented Review Process

The opportunity to review and comment on this plan has been provided through a number of avenues for the committee members as well as the members of the general public. During regularly scheduled committee meetings in the winter and spring of 2016-2017, the committee met to discuss findings, review mapping and analysis, and provide written comments on draft sections of the document. During the public meetings, attendees observed map analyses and photographic collections, discussed general findings from the community assessments, and made recommendations on potential project areas. The first draft of the document was prepared after the public meetings and presented to the committee in May 2017 for a full committee review.

Public Comment Period

A public comment period was conducted from May 19th to June 9nd of 2017 to allow members of the general public an opportunity to view the full draft plan and submit comments and any other input to the committee for consideration. A press release was submitted to the local newspapers on May 19th announcing the comment period, the locations of the Plan for review, and instructions on how to submit comments. An electronic version of the plan was made available online at http://www.consulting-foresters.com/?id=clients.

Continued Public Involvement

Walla Walla County is dedicated to involving the public directly in review and updates of the Community Wildfire Protection Plan and Wildfire Risk Assessment. The planning committee, working with the Emergency Management, will be responsible for review and update of the plan as recommended by the governing documents.

The public will have the opportunity to provide feedback annually on the anniversary of the adoption of this plan, at an open meeting of the steering committee. Copies of the Walla Walla County Wildfire Protection Plan will be catalogued and kept at Emergency Management's and the City of Walla Walla's websites. A public meeting will also be held as part of each annual evaluation or when deemed necessary by the steering committee. The meetings will provide the public a forum for which they can express its concerns, opinions, or ideas about the Plan. The County Department of Emergency Management will be responsible for using county resources

to publicize the annual public meetings and maintain public involvement through the webpage and various print and online media outlets.

Programs

Current work to build defensible space around residences within Walla Walla County is supported by Pre-Hazard Mitigation Grant from FEMA and utilizes a Department of Corrections work program to provide inexpensive labor for individual landowners. To date a total of 80 residence have taken part in the grant with many them along the Mill Creek road.

Firewise Communities Program encourages local solutions for safety by involving homeowners in taking individual responsibility for preparing their homes from the risk of wildfire.

The national **Ready Set Go!** Program, managed by the International Association of Fire Chiefs (IAFC), works to develop and improve dialogue about wildland fire awareness and action between local fire departments and the residents they serve. It is designed to be complimentary and collaborative with Firewise and other wildland fire public education efforts.

Summary

Several attempts were made to reach out and obtain local public involvement. The highest response came from the local residents in the Mill Creek drainage meeting and the City of Walla Walla meeting. They provided valuable information both general and specific to meeting the needs of the CWS goals. Consideration of how to use other educational opportunities within communities may prove valuable. This could provide interaction from both fire response managers and local community members in a joint effort to meet the CWS goals. All stakeholders must be responsible for supporting communication, informing, and joining in the formal and informal communication networks across organizations (CWS 2014).

Chapter 6

Wildfire Risk Assessments

Introduction

Essential to the success of this plan is to improve efforts to work on a landscape-level and better employ science and technology to target areas of high priority for preventing, suppressing, and restoring fire-impacted landscapes using a risk-based approach. A landscape-scale approach to management is one that emphasizes sustainability of entire ecosystems, integrates stakeholder collaboration, and addresses the present and possible future conditions of lands across ownerships. Through application of the "All Hands, All Lands" management, increased collaboration among Federal, State, Tribal, and local officials, natural resources managers, and the fire community can improve the efficiency and effectiveness of the overall fire management effort. The increasing frequency and intensity of wildland fires and the accumulation of fuels throughout ecosystems including invasive annual grasses poses a major threat to ranchers, local communities, and others who live and work in and depend on these lands and resources to sustain their livelihoods and quality of life.

The mild climate, abundance of solar irradiance and low annual and timing of precipitation results in an environment that is potentially very prone to wildland fire. Although much of the native grasslands have been converted for agricultural purposes, there are many areas of native vegetation and fallow farm land that cures early in the summer and remains combustible until winter. If ignited, these areas burn rapidly, potentially threatening people, homes, and other valued resources.

Not every acre can be effectively treated to prevent rangeland fires throughout the lowlands in Walla Walla County, nor can every acre impacted by fire be restored. Setting priorities for prevention, suppression, and restoration is essential to increase the efficiency of operations and the efficacy of treatments. The use of risk-based, landscape-scale assessments, help prioritize treatment areas to reduce fire risk as well as set priorities to strategically guide the allocation and pre-positioning of resources for fire suppression. In order to facilitate a mutual understanding of wildfire risks specific to commonly known areas in the county, the landscape-level wildfire risk assessments in the following sections are based on five predominant landscapes types that exhibit distinct terrain and wildland fuels. The four landscapes identified from the Fire Regime Condition Class data for the assessments are: agricultural lands, Shrub/Steppe, Dry Forest

with heavy fuel loads, and Moist Forests with moderate loads. These landscapes, although intermixed in some areas, exhibit specific fire behavior, fuel types, suppression challenges, and mitigation recommendations that make them unique from a planning perspective.

Fire Behavior Factors

Weather

Weather has a direct influence on both fire starts and fire behavior, with fuel moisture changing as a factor of relative humidity, precipitation and temperature ranges. The fuel classes; 10-, 100-, and 1000-hour fuels are based on the amount of time it would take for 2/3rd of the dead fuel to regulate to the atmospheric conditions. Fuels within the 10-hour classification, such as grasses and dead leaf materials, respond to the atmospheric conditions with a 10-hour lag, and likewise 100-hour fuels have a respective time lag. Additionally, weather can contribute to fire behavior as a driver of extreme fire conditions such as wind led active crowning events, and the distance fire brands can be cast.

Topography

The vast majority of Walla Walla County has a rolling topography that is primarily used for agriculture. Fuels (which are typically thermally thin and require little energy to drive out moisture) and weather are the driving factors for fire behavior within the agriculture and sagebrush-steppe systems, while topography plays a minor role in fire behavior. Moving into the Blue Mountains on the other hand topography plays a major role in fire behavior. Radiant energy from fuels burning downslope pre-conditions upslope fuels by driving out moisture, and as the fire move forward less energy is needed for ignition increasing the rate of spread. Increased slopes not only influence fuel moisture but also make it more difficult on suppression efforts.

Fuels

Agriculture Lands

The gentle terrain and soils that dominates Walla Walla County facilitates extensive farming. Agricultural fields occasionally serve as fuel for fire after curing; burning in much the same manner as low grassy fuels. Fires in grass and rangeland fuel types tend to burn at relatively low intensities with moderate flame lengths and only short-range spotting. Common suppression techniques and resources are generally quite effective in this fuel type. Homes and other improvements can be easily protected from direct flame contact and radiant heat through adoption of precautionary measures around structures. Sagebrush-Steppe landscapes with a significant shrub component will have much higher fuel loads with greater spotting potential than

grass and agricultural fuels. Although fires in agricultural and rangeland fuels may not present the same control problems as those associated with large, high intensity fires in timber, they can cause significant damage if precautionary measures have not been taken prior to a fire event.

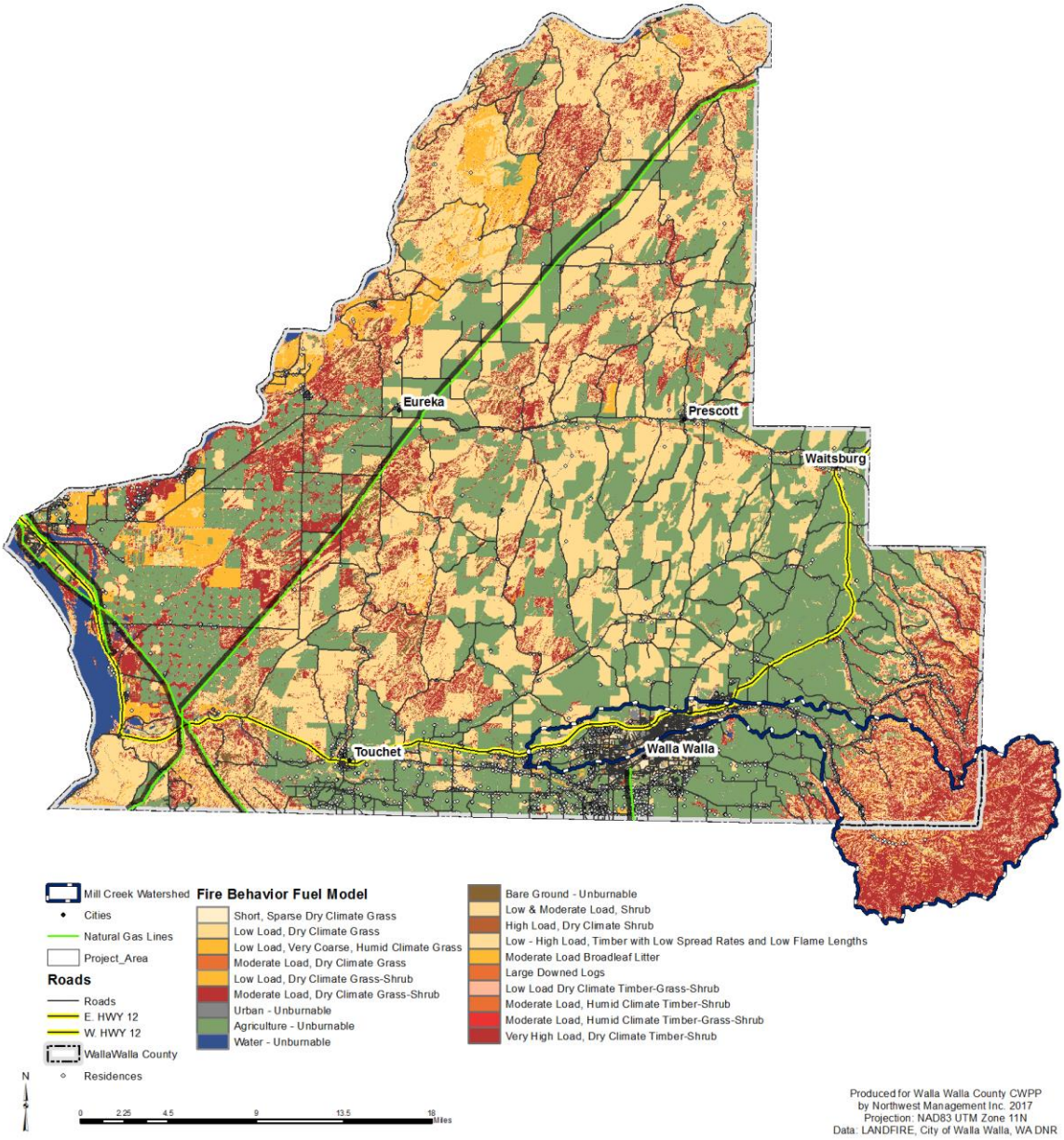


Figure 9. Fire Behavior Fuel Model for the Project Area

Wind driven fires in these fuel types spread rapidly and can be difficult to control. During extreme drought and when pushed by high winds, fires in agricultural and rangeland fuels can exhibit extreme rates of spread, which complicates suppression efforts.

Sagebrush-Steppe/CRP Lands

The presence of invasive annual grasses has increased the fuel continuity throughout the CRP and sagebrush-steppe landscapes. Historic fires throughout the prairie landscape are difficult to determine the extent and severity, but are believed to be much more frequent and less severe than the fire regime that currently exists. Change in fire regimes is in large part due to the increased fuel continuity, but also can be attributed to the characteristics of the change in fuels. Invasive grasses green up and become desiccated much earlier than native species altering the fire seasons and modifies the plant communities to favor the invasive.

Dry Forest – Heavy Loads

Forested systems within the project area are located in the Mill Creek Watershed and along the Blue Mountains north of the watershed boundary. The exclusion of fire, for over 100 years, from the watershed and suppression of fire on Federal lands within the project boundaries has resulted in an increase in fuel loads. Dry forests (encompassing 2/3rd of the total forested acres of the project area) within the Blue Mountains historically experienced fire on a mean return interval of 20 years and experienced low to moderate severity fires that were rarely stand replacing. Current fuel loads and distribution has created a situation that promotes stand replacing fire, with increased ladder fuels, fuel continuity (both surface and canopy fuels), and the collection of woody debris on the forest floor. Fire behavior in the Dry Forest with increased fuel loadings can be extreme with active crown fires occurring under certain climatic conditions. Suppression of wildfires during extreme conditions is nearly impossible and exceedingly dangerous.

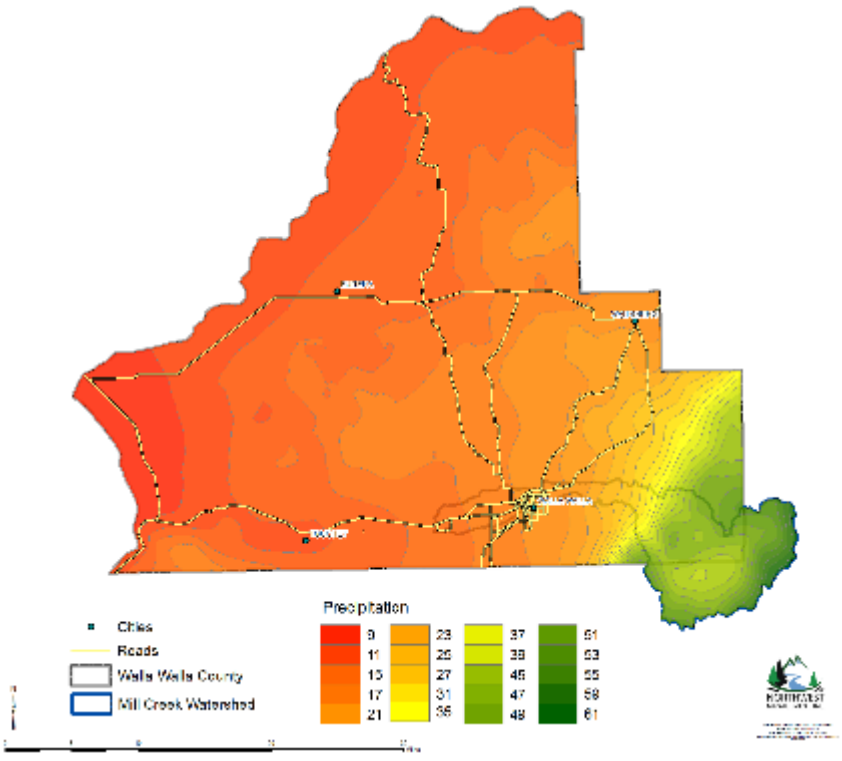


Figure 10. Walla Walla County Precipitation Data from the PRISM model

Moist Forest – Moderate Loads

Classification of moist forests in and around the Mill Creek

Watershed resulted in an estimated 1/3rd of the total forested acres. Forest within this classification historically experienced a 40-year mean fire return interval, and experienced low to moderate severity with stand replacement occurring between every 40 to 200 years. Fire behavior is typically less extreme than fires occurring in the Dry Forest system. While passive crowning may occur, only under extreme climatic condition will active crown fires occur.

Canopy Fuels

While surface fires dominate fire activity within the project area ladder fuels and canopy characteristics can lead to crown fires. Passive crown fires, or a single tree catching fire and burning, are common in a forested system with increased fuel loads. Active crown fires need to have, ladder, crown fuels and weather conditions that promote fire progression through the forest canopy. Canopy fuel continuity is a major driver for active crown fires, and wind can propel crown fires to become independent from the surface fires through increased flame deflection, essentially increasing fuel continuity within the crown (Van Wagner, 1977).

Wildfire Hazard Assessment

Historic Fire Occurrence

Fire locations were collected using the MODIS sensor, on the TERRA and AQUA satellites, for fire observations from 2000 through 2017. The MODIS sensors acquire 4 images a day for each location on the ground, fires that were ignited and suppressed in between observations are not included within the fire start locations. Likewise, small fires that emit a low amount of energy, i.e. burning of ditch banks and small pile burnings, may not be seen by the satellite. The fire starts data identified a total of 255 fires located within the boundary of the Mill Creek Watershed and an additional 2885 fires throughout the rest of Walla Walla County, between the years of 2000 and 2017.

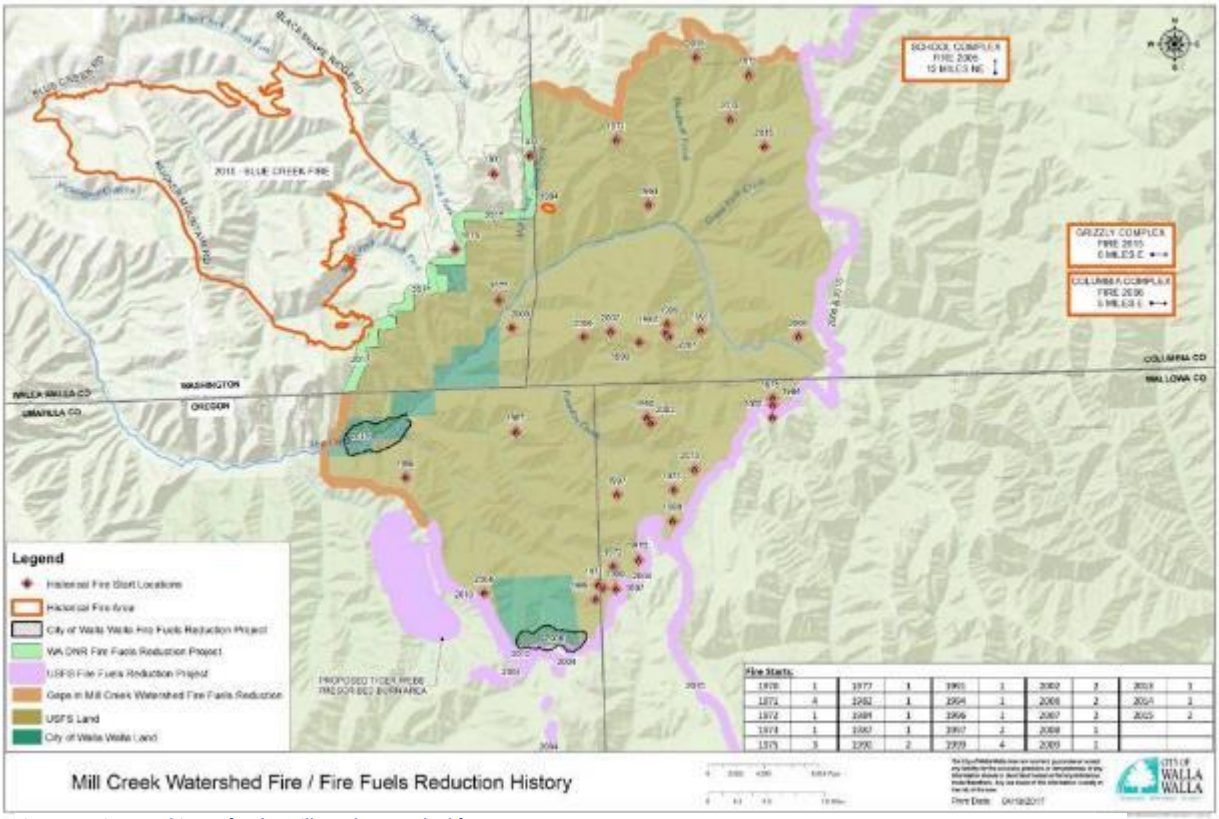


Figure 11. Fire start history for the Mill Creek Watershed from 1970 to 2015

Rate of Spread and Crown Fire Potential

There are many factors that determine both the rate of spread that the potential that a fire will become either an active or passive crown fire. Rate of spread is determined by the surface area to volume of fuels, fuel moisture content, wind speed, horizontal fuel continuity, topography, among other factors. Fire propagation models allow for the calculation of fire spread rates by incorporating all the necessary factors and typically users are allowed to adjust certain variables like wind speed and fuel moisture contents. Understanding how a fire will move across the landscape can aid in the suppression efforts and maintaining the safety of firefighters and the public. Similarly the modeling of a surface fire progressing to a crown fire requires the inclusion

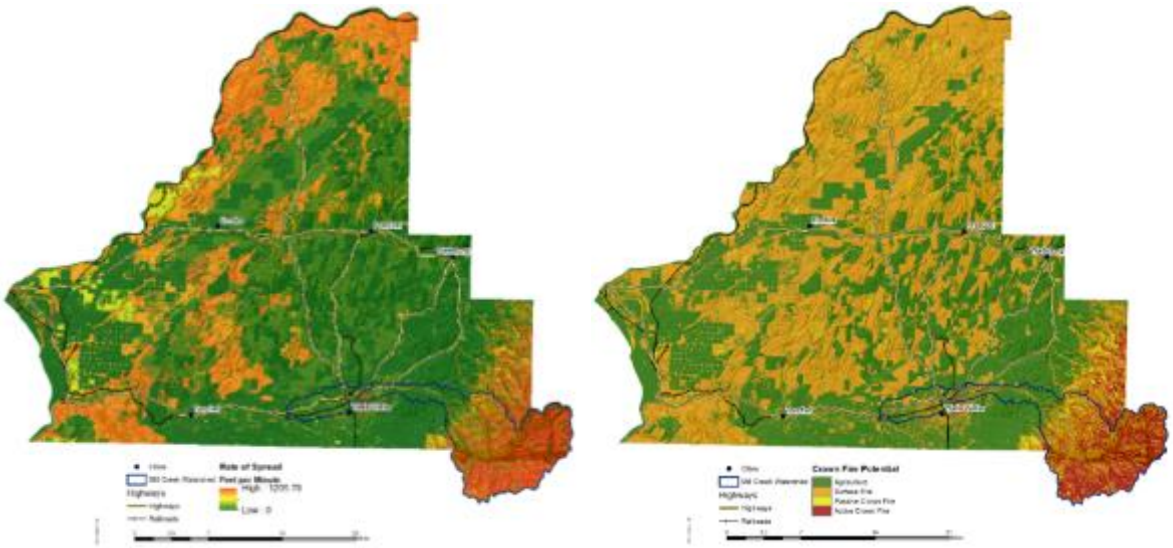


Figure 12. Rate of Spread with 30 mph winds and mid-summer average fuel moisture. Crown Fire Potential from FlamMap under 30 mph winds and mid-summer average fuel moisture contents within FlamMap.

of multiple factors including; vertical fuel continuity, fuel moisture content, surface fire energy output, wind speed, and more. During the analysis process using the FlamMap model, multiple variants for weather and fuel moisture levels were used to determine rates of spread and crown fire potential under multiple scenarios.

Relative Threat Level Mapping

Risk Categories

Based on analysis of the various modeling tools, existing historical information, and local knowledge, an assessment of potentially high wildfire risk areas was completed. This assessment prioritized areas that may be at higher risk due to non-native or high fire risk vegetation, fire history profile, and high risk fuel models.

Risk categories included in the final Relative Threat Level analysis were slope, aspect, weather and climate, fuel models, flame length, crown fire potential, and rate of spread. The various categories, or layers, were ranked based on their significance pertaining to causal factors of high wildland fire risk conditions or protection significance. The ranked layers were then analyzed in a geographical information system to produce a cumulative effects map based on the ranking. Following is a brief explanation of the various categories used in the analysis and the general ranking scheme used for each.

- Environmental Factors – slope, aspect and weather all can have an enormous impact on the intensity of a wildfire. Therefore, areas with steep slopes, dry aspects, or lesser

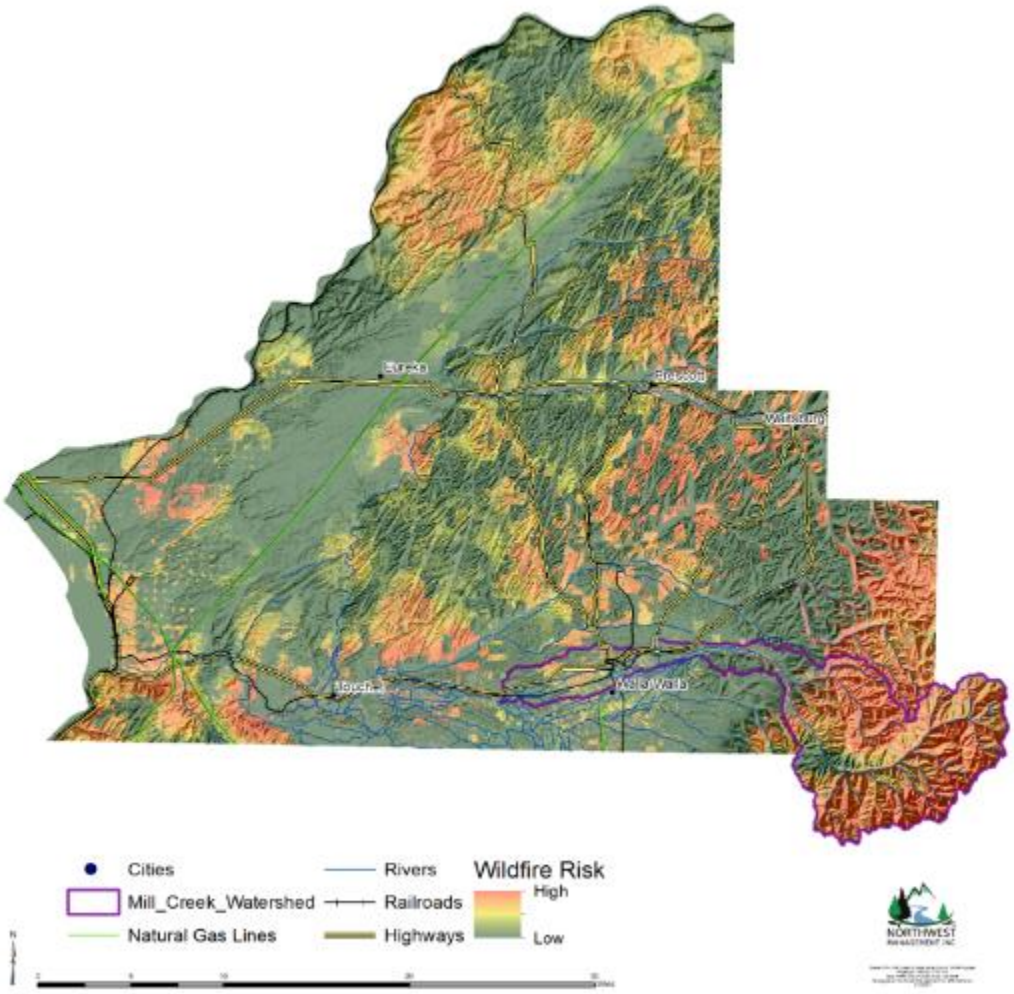


Figure 13. Risk map for Walla Walla County and the Mill Creek Watershed. Fire threat analysis is the precursor to risk analysis and includes physical features such as slope and aspect, along with vegetative factors as in fuel loads, fuel moisture content, and weather factors, such as wind speed, relative humidity, etc. Risk assesses the when the threat of wildfire coincides with human development and important ecosystem services, for instance the Mill Creek Watershed that provides drinking water to the citizens of the city of Walla Walla.

amounts of precipitation, relative to Walla Walla County, were given higher threat rankings.

- Vegetation Cover Types – certain vegetation types are known to carry and produce more intense fires than other fuel types. For Walla Walla County, forest types (shrub understory) fuel models and shrub / grass fuel models were given the higher rankings followed by short grass / agriculture.
- Fire Behavior – areas identified by fire behavior modeling from FlamMap as having high rate of spread potential or high fire intensity were given a higher threat level ranking.

Each data layer was developed, ranked, and converted to a raster format using ArcGIS 10.1. The data layers were then analyzed in ArcGIS using the Spatial Analyst extension to calculate the cumulative effects of the various threats. This process sums the ranked overlaid values geographically to produce the final map layer. The ranked values were then color coded to show areas of highest threat (red) to lowest threat (green) relative to Walla Walla County.

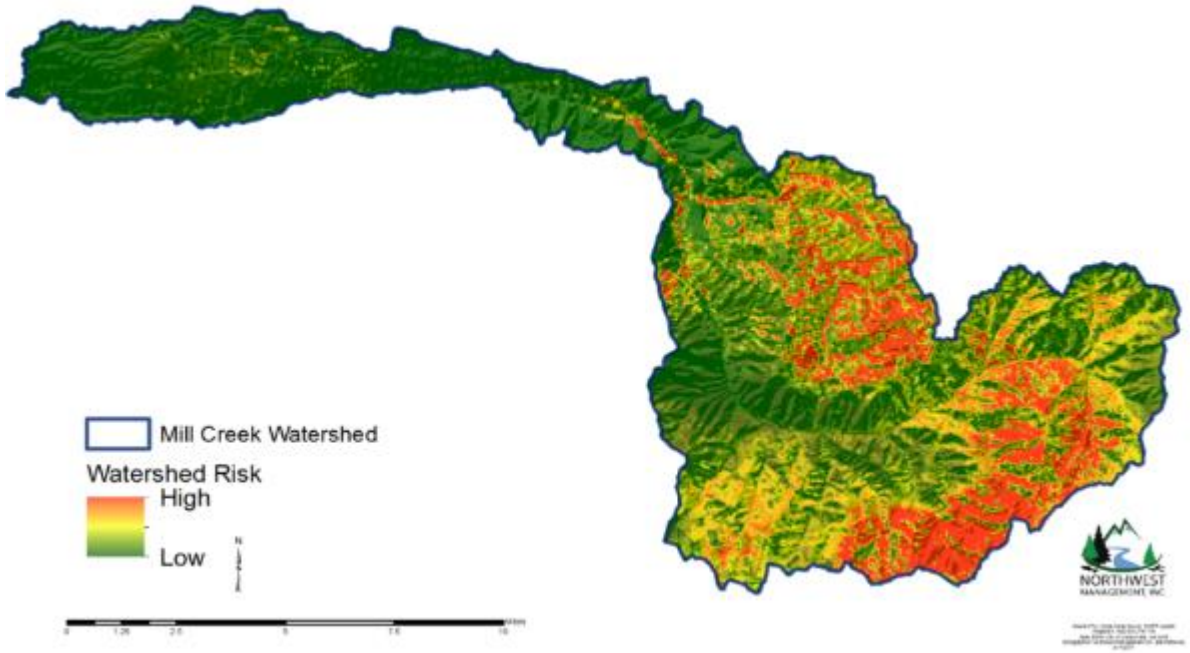


Figure 14. Mill Creek Watershed Risk Analysis, based on fuel loads, flame lengths, and crown fire potential under moderate late summer and early fall conditions.

Summary

Walla Walla County contains over 90% agriculture lands with scattered sagebrush steppe and CRP land intermixed throughout the prairie, the eastern edge of the county rises into the Blue Mountains with the transition from sagebrush to a conifer forest system. Development in the prairie is scattered with farm houses and farming structures dispersed throughout with very low density, structures within the prairie can be long distances from EMS assistance. Development

within the Blue Mountains front range is more concentrated and occurs along drainage bottoms and ridgelines, structures within these areas are typically long distances from emergency management services and have poor access. This poor access and long travel distances requires some effort on the property owner to mitigate against wildfires.

Creating a community that is resilient to wildfires begins with identifying where the threat of wildfire may occur and mitigating against the risk of wildfires against property, life, and infrastructure. In the process of mitigation, when mitigation is focused on a landscape scale, creates healthy ecosystems and more resilient communities.

A wildfire threat analysis and mapping provides firefighters and managers with an idea of where wildfire may occur under various physical and environmental conditions. The threat analysis includes fire start locations (Data from: 2000 - 2017), fuels, fuel moisture, rate of spread, flame length, crown fire potential, and historic fire locations. Risk analysis and mapping takes the threat of wildfire and assesses where the threats coincides with infrastructure, cultural and environmental resources, and residences within the wildland urban interface.

Risk analysis showed that the southwestern corner and the northern portion of Walla Walla County, with scattered areas between Eureka Flats and the City of Walla Walla, were more at risk than others across the prairie landscape. This is due to the number of fire starts, proximity to EMS, Fuels, Fire History, and locations of developed properties in these areas.

Fire suppression within the Mill Creek Watershed over the last century has led to a deviation from the historical ecosystem norms producing an accumulation of fuels. The lack of access within the watershed make mitigation and suppression efforts difficult. Mill Creek Watershed is more at risk in the timbered portions of the WUIZ, where the majority of the increased fuel loads are found, which leads to increased flame lengths and a higher potential for crown fires. The increased potential for crown fires leads to a higher probability for stand replacement/higher severity events, which in turn leads to secondary fire effects such as; erosion, alteration of site productivity, latent mortality of trees and wildlife, and the change in wildlife habitat.

Chapter 7

Community at Risk Analysis and WUI-Zone Ratings

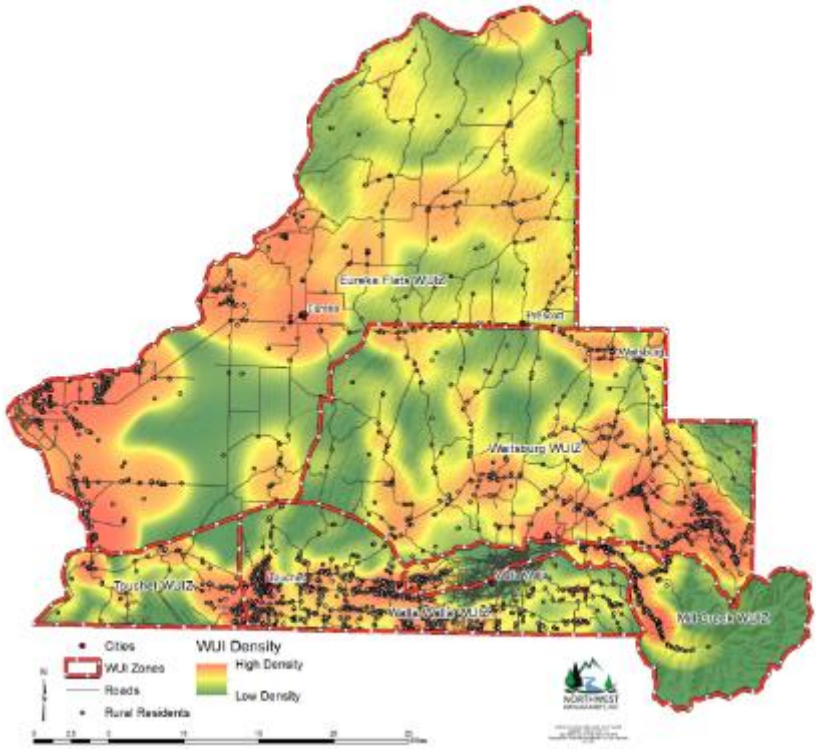


Figure 15. Wildland Urban Interface, based on each individual WUI Zone.

Introduction

Fire was once an integral function within the majority of ecosystems in Washington. The seasonal cycling of fire across most landscapes was as regular as July, August and September lightning storms. Depending on the plant community composition, structure, and buildup of plant biomass, fire ignitions and fires of varying intensities and extent have been a part of this landscape. Shorter return intervals between fire events often resulted in less dramatic changes in plant composition.[11] These fires occurred every 1 to 47 years with most at 5- to 20-year intervals.[12] Infrequent return intervals mean plant communities can burn more severely and be replaced by vegetation different in composition, structure, and age.[13] For example, native plant communities in this region have developed under the influence of fire and adaptations to fire are evident at the species, community, and ecosystem levels across the landscape.

Fire history data for Walla Walla County is largely unknown. Local knowledge suggests that Native Americans frequently used fire on the landscape which would have played an important role in shaping the vegetation throughout County. The Bureau of Land Management is currently helping to fund research targeted at identifying the fire history in central Washington through fire scars

[11]Johnson, C.G. 1998. Vegetation Response after Wildfires in National Forests of Northeastern Oregon. 128 pp.
[12]Barrett, J.W. 1979. Silviculture of ponderosa pine in the Pacific Northwest: the state of our knowledge. USDA Forest Service, General Technical Report PNW-97. Pacific Northwest Forest and Range Experiment Station, Portland, OR. 106 p.
[13]Johnson, C.G.; Clausnitzer, R.R.; Mehringer, P.J.; Oliver, C.D. 1994. Biotic and Abiotic Processes of Eastside Ecosytems: the Effects of Management on Plant and Community Ecology, and on Stand and Landscape Vegetation Dynamics. Gen. Tech. Report PNW-GTR-322. USDA-Forest Service. PNW Research Station. Portland, Oregon. 722pp.

and charcoal deposits. Within this plan the detailed records of Walla Walla County fire ignitions were collected from satellite imagery and used in the threat analysis process. A total of 3,061 ignitions were recorded by satellites within the project area between 2000 and 2016.

These ignitions include agricultural burns, prescribed burns, and other uses of fire as well as natural fire as the satellite has no ability to differentiate between fire-type. Recent, 1990 – current, public fire records were also used to determine the potential of a fire occurring within Walla Walla County and/or the Mill Creek Watershed. This chapter looks at the individual WUIZs, examines the risk to communities, and assesses the potential mitigation projects that would help make residences and communities more resilient to wildfire.

Mill Creek WUIZ

The Mill Creek Watershed spans 73,000 acres and contains approximately 300 homes along Mill Creek and Blue Creek Roads. The successful suppression of wildfires within the boundaries of the watershed over the last 100+ years has led to an accumulation of fuels that typically result in more intense and uncontrollable fires. Fire-start data shows that the watershed received 37 fire ignitions between 1970 and 2015. Access to the watershed is extremely limited due to the watershed's roadless area designation since 1918. Mill Creek Road extends into the lower reaches of the watershed, giving access to the City's water-intake facility. U.S. Forest Service Roads 64 and 65 line the boundary of the upper portion of the watershed along the western, southern, and eastern edges. Table Rock lookout houses a Walla Walla City-funded U.S. Forest Service employee that monitors the watershed for ignitions during

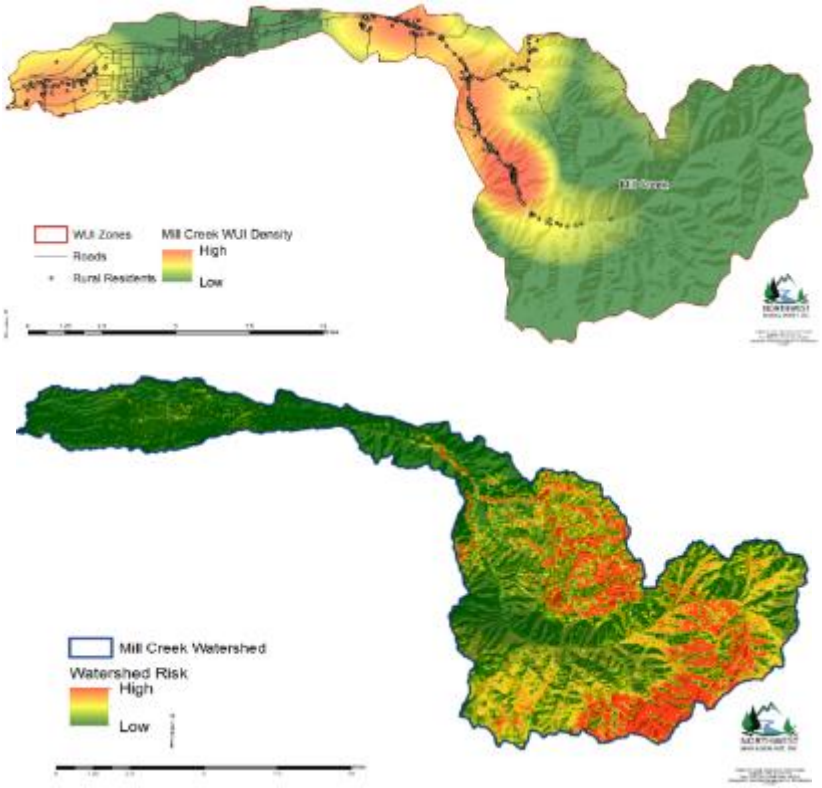


Figure 16. Top) Mill Creek WUI, showing the density of structures within the Mill Creek WUIZ, and Bottom) The risk of wild fire occurring within the watershed based on the threat analysis.

the fire season. Additionally, the watershed is patrolled by one Forest Service employee and one City employee, that is housed at the intake facility.

Fire fuel modeling efforts show over 23,000 timbered acres as having extensive and at-risk fuel load levels for what is considered a dry forested system as well as similar fuel risk levels across nearly 10,000 acres of shrub/grass ecosystem type lands. Fire behavior in both these ecosystems commonly exhibits extreme behavior of severity and spread under typical climate factors during a fire season.

Mitigation Activities

Burn Permits

The Washington DNR burn permits regulate silvicultural burning. Washington Department of Ecology (DOE) is the primary agency issuing burn permits for improved property and agricultural lands. All DOE burn permits are subject to fire restrictions in place with WA DNR and local Fire Protection Districts. Washington DNR has a general burning period referred to as "Rule Burn" wherein a written burn permit is not required in low to some moderate fire dangers. The annual period for Rule Burning is from October 16th to June 30th. Washington DNR allows debris piles for Rule Burns to be ten foot (10') tall forest, yard, and/or garden materials. From July 1st to October 15th if Rule Burns are allowed they are limited to four foot (4') piles.

Defensible Space

During the Columbia Complex and Grizzly Bear Complex multiple shaded fuel breaks were constructed along stretches of the upper boundary of the watershed on Forest Roads 64 and 65. Additionally, during the spring and summer of 2017 the Washington DNR has provided funding and awarded a contract for an additional shaded fuel break along the northwestern portion of the upper watershed. Cooperation between the Department of Corrections and Walla Walla County Fire Districts provided an inexpensive means for land owners to create defensible spaces around homes and structures using the Department's work crew. At the time of this plan over 80 landowners have used the fuels reduction program to create defensible space, and the majority of these landowners are in or around the Mill Creek Watershed.

Accessibility

As a designated roadless area access to the upper portions of the Mill Creek watershed are limited to Forest Service roads 64 and 65 that run along the eastern, southern, and western borders of the watershed. Mill Creek Road extends into the watershed approximately 16 miles from the City of Walla Walla and terminates at the City's water-intake facility. Access roads and driveways are a limiting factor for firefighter response time and a potential bottle neck if evacuations were required.

Fuels Reduction and Restoration

Landscape scale restoration and fuel reduction within the watershed is largely cost prohibitive and time consuming at the current time due to the lack of roads and maintained trails within the watershed. Fuels reduction projects to date have focused on the perimeter, with a limited number of minor projects occurring within the watershed itself. These have all been in attempts to keep fires from entering the watershed from outside.

Wildfire Potential

The removal of fire from the ecosystems within the Mill Creek Watershed has led to increased fuel loads and the lack of access has made initial attacks of fire starts difficult and costly. Fire start histories show that there have been numerous fire starts within the watershed each year since 2000. The combination of attributes such as increased fuel loads, numerous fire starts, limited access, and dryer conditions does put the watershed and WUI Zone at risk for a potentially severe and forest-replacing fire that would severely impact the water supply infrastructure for the City of Walla Walla.

Fire Protection

Walla Walla Count Fire Districts 4 and 8 are responsible for the structures within the Mill Creek watershed and share the responsibility for forest fires on the Washington side with the WA DNR and the Forest Service. The Oregon Department of Forestry is responsible for the watershed areas across the border in Oregon. District 4 has 10 career staff members and 65 volunteer firefighters, officers, EMT's, First Responders, and support personnel. District 4 responds to roughly 300 fire events annually that include both structural and wildland fires. District 8 has approximately 30 volunteer firefighters, and as a volunteer department struggles to staff fires during the fire season as the volunteers are often overcommitted.

Eureka Flat WUIZ

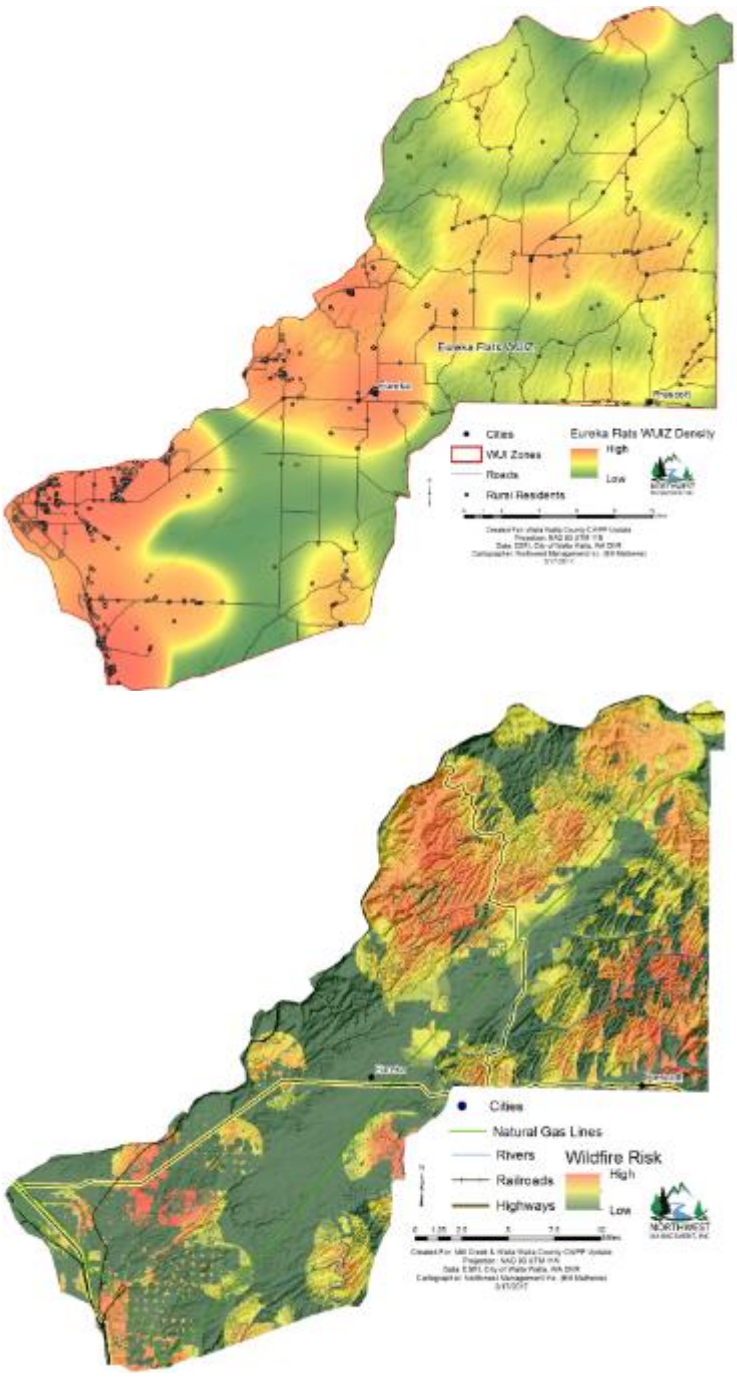


Figure 17. Eureka Flat WUIZ, Top) Wildland Urban Interface based on structure density, and Bottom) a map of fire risk across the WUIZ.

Eureka Flat developed from glacial outwash that created a depressional plain that acted as a depositional area for flood and eolian sediment. Typical vegetation found throughout this landscape is grass, mixed shrub and sagebrush with areas of wetlands, cultivated crops, and Conservation Reserve Program (CRP) fallow fields. The area is primarily privately owned with some State-owned lands throughout.

Mitigation Activities

Defensible Space

Effective mitigation strategies begin with public awareness and campaigns designed to educate homeowners of the risks associated with living in a flammable environment. Residents of Walla Walla County must be aware that home defensibility starts with the homeowner. Once a fire has started and is moving toward a structure or other valued resources, the probability of that structure surviving is largely dependent on the structural and landscaping characteristics of the home and its surrounding proximity. "Living with Fire, A Guide for the Homeowner" is a nationally available set of information and an excellent tool for educating homeowners as to the steps to take in order to create an effective defensible space. Residents of Walla Walla County should be encouraged to work with local fire departments and fire management agencies within the county

to complete individual home site evaluations. Home defensibility steps should be enacted based on the results of these evaluations. Beyond the homes, forest management efforts must be considered to slow the approach of a fire that threatens a community.

Accessibility

Accessibility in the Eureka Flat WUIZ is limited with few developed road systems. Many undeveloped gravel roads spider web through and around the exiting private structures and landownerships. State Highway 124 cuts across the middle of the flat before turning South and connecting with Highway 12. Lyons Ferry Road follows the Flat form its junction with 124 until it connects back up with Highway 261 and Lyons Ferry State Park.

Fuels Reduction and Restoration

The Flat is primarily agriculture lands that border large tracts of Conservation Reserve Program (CRP) lands on either side of the Flat in the typical rolling hills of the Palouse. Much of the land north of the Flat is currently in CRP lands, which pose a significant risk for fire control as there are continuous fire fuels and no existing fire breaks. Tilling of CRP land for a fire break removes it from the program and reduces the amount of compensation a landowner receives for keeping the land out of production. This creates a disincentive to the homeowner, for some and poses a greater fire risk to others. Mitigation efforts such as tilling are in direct competition with revenue desired by local landowners so there is a need to alter or modify CRP regulations to allow for fire breaks.

Wildfire Potential

North of Eureka Flat exhibits the geology of the typical rolling hills on the Palouse, the land in this area is predominantly enrolled in the CRP program. Historic fire occurrence and the fire risk analysis places the majority of the wildfire potential in the CRP land north of Eureka Flat and mix of fire risk levels in the CRP/Farming lands south of Eureka Flat. The mixed fuels and steep, variable terrain across this landscape are very conducive to rapidly spreading wildfires. During a wildfire event, families in threatened structures would have very little time to protect their homes and evacuate. Due to the location of fire suppression services, response times would be slow compared to other areas within the County. Response may also be limited in many areas due to inadequate access roads and water supplies. Therefore, it is critical that a defensible space is established and maintained around structures prior to any ignition. Keeping a clean and green yard and using fire resistant construction materials on homes and other structures will significantly reduce the risk of loss to fire and increase the resilience of structures to sparks.

Fire Protection

Walla Walla County Fire District 1 covers 310 square miles of the Eureka Flat WUIZ in the Northern area of the County. With only 90 residents this Fire District struggles to maintain an active volunteer base able to respond to calls. Fire District 1 encompasses large tracts of CRP land with little or no fire breaks. The agricultural aspect of the area brings in large groups of seasonal workers thereby increasing the likelihood of accidental human caused fires. Fire District 3 faces similar struggles as District 1 in that it is staffed by volunteers that are required to cover 137 square miles of land where large tracts of CRP, with very few natural fire breaks, dominate. This District also struggles to maintain a large enough volunteer base to respond to all the calls. Covering the Southwestern tip of Walla Walla County Fire District 5 also relies on volunteers, but the demand is much less as the majority of the land in the District is active agriculture, both dryland and irrigated crops.

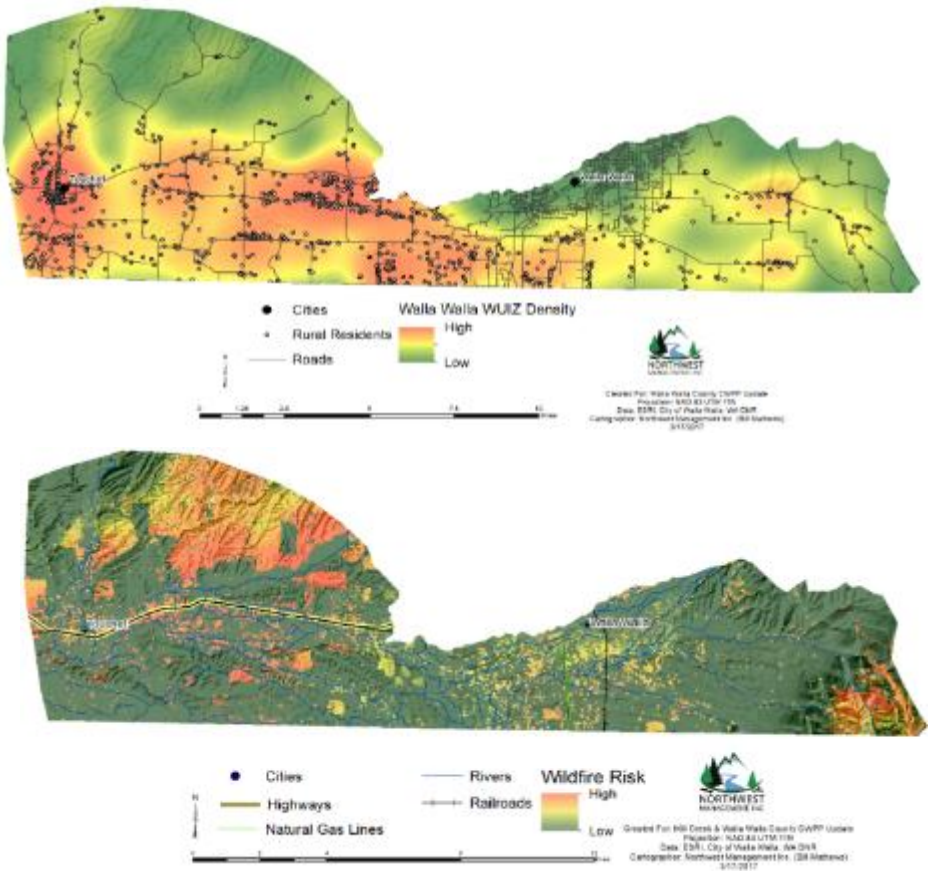


Figure 18. Walla Walla WUIZ Top) Wildland Urban Interface Bottom) Fire risk for Walla Walla Valley WUIZ

Walla Walla Valley

Walla Walla Valley WUIZ contains portions of the City of Walla Walla and outlying residential areas. Roughly 90% of the land in this WUIZ, outside of the urban developed areas, is active agriculture with a small percent of CRP land North of Touchet. This WUIZ landscape transitions into the foothills of the Blue Mountains in the Southeastern corner.

Mitigation Activities

Accessibility

Highway 12 cuts through the Western half of the WUIZ. Access in and around Walla Walla is well developed due to the largely urban setting. Access in the CRP land and the foothills of the Blue Mountains is more limited than the other areas within this WUIZ.

Fuels Reduction and Restoration

The CRP lands and the foothill areas in the Southeastern corner of the WUIZ are predominantly undeveloped or not actively farmed. Fire breaks within the CRP lands would help control wildfires that occur in that area. Due to the low density of residents in this area, construction of fuel breaks along CRP land would protect a handful of homes and may be more easily accomplished. Citizen education, defensible space mitigation activities such as those presented by FIREWISE, and the use of fire resistant construction materials for homes would increase the areas resilience to fire where fuel breaks are not present. In the Blue Mountain foothills areas, in the southeastern corner, shrub and grasslands on Southern aspects slopes and timber/brush vegetation on the Northern aspects should be monitored and managed as needed to maintain a spacing and fuel load similar to fire adapted ecosystems to aid fire suppression efforts.

Wildfire Potential

The potential of a wildfire from the threat and risk analysis identifies the greatest risk of wildfire within the CRP lands and in the foothills of the Blue Mountains. The lesser risk of fire within the developed land and active agricultural areas is a result of less flammable material use and active cultivation. The relatively isolated and less developed rural and wildland areas surrounding Walla Walla provide potential ignition points for wildfires and the potential of those fires to travel into the developed areas of the WUIZ.

Fire Protection

Walla Walla Valley WUIZ receives fire support from both Fire District 4 and 6. District 4 has 10 career staff members and 65 volunteer firefighters, officers, EMT's, First Responders, and support personnel. District 4 responds to roughly 300 actual fire events, both structural and wildland. District 6 is staffed by 30 volunteer and covers 220 square miles of mostly dryland farming, Conservation Reserve Program (CRP) and rangeland with some irrigated acres.

Touchet

The Touchet WUIZ contains a mixture of dry and irrigated agricultural land and natural sagebrush steppe ecosystem. Touchet WUIZ is bordered on its western side by the Columbia River, and it shares its Southern border with Oregon. It also lies at the Southern border of the Eureka Flat geological formation. A wind farm runs from Washington into Oregon, South of Highway 12, with over 200 wind turbines on the Washington side.

Mitigation Activities

Accessibility

Highway 12 forms a portion of the Northern border for the WUIZ and Highway 730 runs along the Columbia River on the Western border. Hatch Grade Road gives access to the wind farm, agricultural land, and the natural vegetation conditions that exist along the Washington-Oregon border.

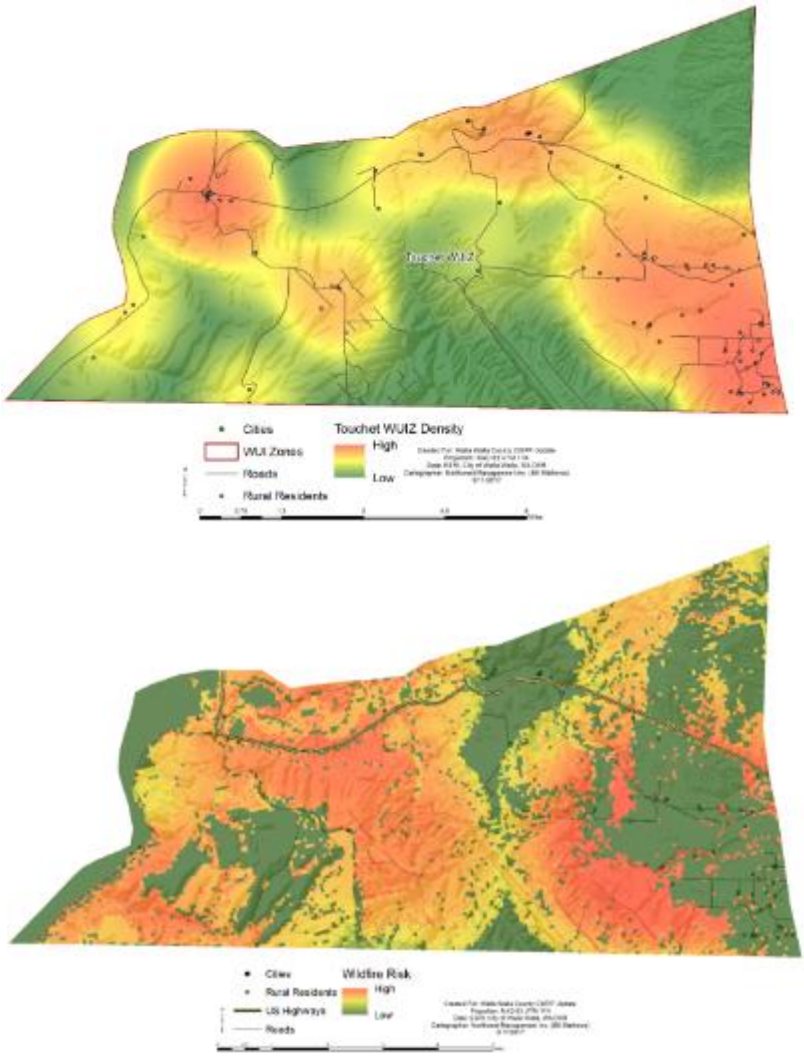


Figure 19. Touchet WUIZ, Top) Wildland Urban Interface map based on structure density. Bottom) Fire risk for Touchet WUIZ

Fuels Reduction and Restoration

Fire breaks around the wind turbines, and other structures would help mitigate wildfire risk from fires that occur in that area. Due to the low density of residents in this area education and defensible space construction would add a significant level of protection and security where fuel breaks are not feasible and where response times of fire suppression resources are lengthened.

Wildfire Potential

The risk of wildfire in this WUIZ is high due to the fuel conditions and the natural composition a sagebrush steppe ecosystem that traditionally experiences fire on a 5 to 20 year rotation. With the introduction of invasive species such as cheatgrass, the naturally short fire return interval can be further reduced and fires can be larger in extent and burn at higher rates of speed and with greater intensitiy.

Fire Protection

Walla Walla County Fire District 6 is located in the SW portion of Walla Walla County and services 220 square miles. The area consists mostly of dryland farming, CRP, and rangelands with a limited extent of irrigated acres. The District has mutual aid agreements in place with all the Districts throughout Walla Walla County, with the DNR, and the Federal Fish and Wildlife agencies. The District has eight EMT's and eight EMR's as well as 19 structural, 17 Red carded and 26 EVAP certified personnel. The District has two stations; one (S61) located in Touchet and one (S62) located in Lowden.

The District average's 180 calls for service per year and 60 percent of those calls are for EMS service and 40 percent are for fire. This WUIZ area has a high natural-cover fuel load and the potential for a substantial wildland fire.

Waitsburg

The Waitsburg WUIZ contains large tracts of agricultural lands across the Palouse with smaller parcels of CRP land intermixed with active farms. The Western edge of the WUIZ extends up into the Blue Mountains where vegetation shifts from grasslands and agriculture to open grassy faces on the Southern aspects, and timbered draws on the Northern facing aspects. Topography is similar to that of the Mill Creek Watershed making it difficult to apply fuel treatments and orchestrate fire suppression efforts without adequate roads or established and maintained access trails.

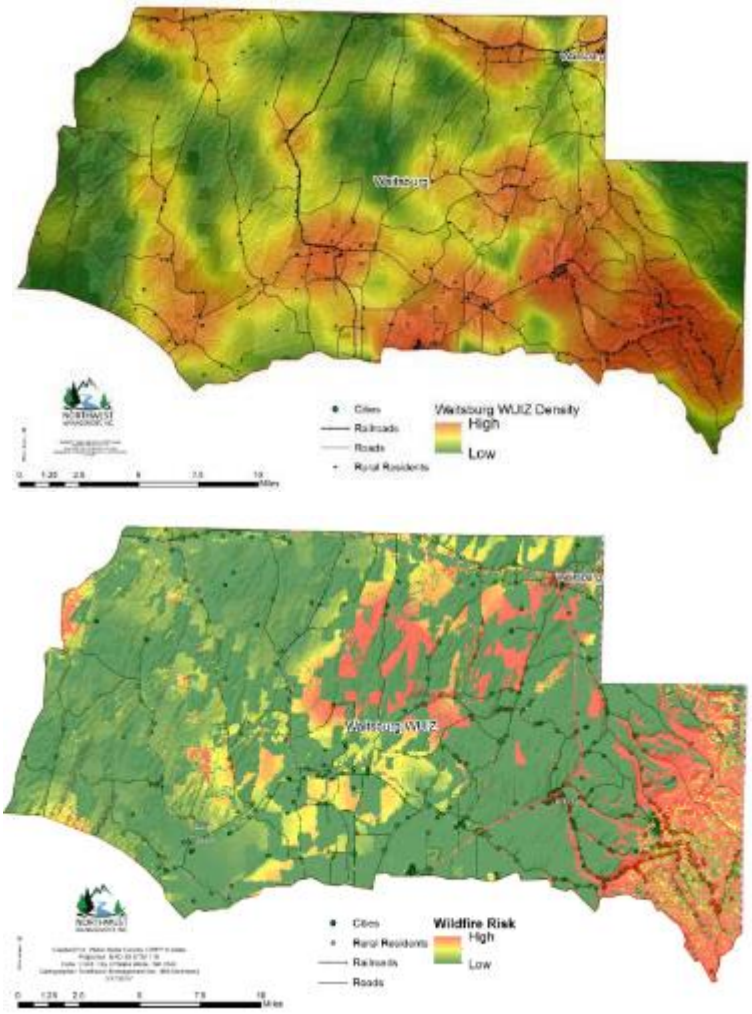


Figure 20. Waitsburg WUIZ, Top) Wildland Urban Interface delineation based on structure density. Bottom) Fire Risk for the Waitsburg WUIZ

Mitigation Activities

Burn Permits

The Washington DNR burn permits regulate silvicultural burning. Washington Department of Ecology (DOE) is the primary agency issuing burn permits for improved property and agricultural lands. All DOE burn permits are subject to fire restrictions in place with WA DNR and local Fire Protection Districts. Washington DNR has a general burning period referred to as "Rule Burn" wherein a written burn permit is not required in low to some moderate fire dangers. The window of use for the Rule Burn permits is from October 16th to June 30th. Washington DNR allows for Rule Burns to cover a ten foot (10') pile of forest, yard, and garden debris. From July 1st to October 15th Rule Burns may be allowed on a season-by-season basis and are limited to four foot (4') piles of the same materials.

Defensible Space

Effective mitigation strategies begin with public awareness campaigns designed to educate homeowners of the risks associated with living in a flammable environment. Residents of Walla Walla County must be made aware that home defensibility starts with the homeowner. Once a fire has started and is moving toward a structure or other valued resources, the probability of that structure surviving is largely dependent on the structural and landscaping characteristics of the home and its surrounding areas. "Living with Fire, A Guide for the Homeowner" is an excellent public access tool for educating homeowners as to the steps to take in order to create an effective defensible space. Residents of Walla Walla County should be encouraged to work with local fire departments and fire management agencies within the county to complete individual home site evaluations. Home defensibility steps should be enacted based on the results of these evaluations. Beyond the homes, vegetation management efforts must be considered to slow the approach of a fire that threatens a community.

Accessibility

Highway 12 and 125 runs North-South through the WUIZ and Highway 124 runs East-West across the Northern boundary. A network of roads runs throughout the agriculture areas providing reasonable access in most locations. Roads within the Blue Mountains are located in the bottom of drainages and on top of ridgelines providing some access for fuels treatments and fire suppression efforts.

Fuels Reduction and Restoration

Fire breaks within the CRP lands would help control a wildfire that occurs in that area. Currently, the population surrounding these CRP lands has a low density and is widely dispersed. Due to the low density of residents in this area construction of fuel breaks along CRP land would protect a handful of homes. Citizen education programs and defensible space awareness and construction would increase the resilience of buildings to fire and provide an increased level of protection where fuel breaks are not present.

Wildfire Potential

The greatest risk and potential for wildfire to occur in this WUIZ is located in the Blue Mountains due to intimately burned patches of timber and brush that has experienced increased mortality since the Blue Creek fire and in some areas presents an increased fuel load for future fires. There is a patchwork of high to low probability fire areas within the CRP land in the valley. Historically fires have occurred at a multi-decade rotation (20+ years) within the forested areas of the Blue Mountains and more regularly in the valley (5 to 20 years). The accumulation of fuels in the Blue Mountains creates the potential for a severe fire with extreme fire behavior and increased burn

severity. Access here is not as limited as that in the Mill Creek Watershed providing firefighters more options for fire suppression efforts and forest-fuels management.

Fire Protection

Washington DNR is the first responder in the Blue Mountains with Walla Walla County Fire Districts 2 and 8 providing assistance. Districts 2, 7, and 8 are first responders throughout the rest of the WUIZ.

County Wide Mitigation Plans

Evacuation Plans

Development of a community evacuation plan is necessary to assure an orderly evacuation in the event of a wildland fire. Designation and posting of escape routes would increase efficient mobilization of people and more effective evacuations for fleeing residents. Community safety zones should also be established in the event of compromised evacuations. Efforts should be made to educate homeowners through existing homeowners associations or the creation of such organizations to act as conduits for this information.

Walla Walla County Emergency Management has developed and is extending a notifications system that alerts residents based on geographic location in the event of an evacuation order. Education and awareness of the program would allow the program to reach more of the community and be a more effective resource.

Accessibility

Accessibility of homes to emergency services within the WUI is critical. If a home cannot be protected safely, firefighting resources will not be jeopardized and the lives of fire protection personnel will not be risked to protect a structure. The fate of every home is dependent on the landowner and will largely be determined by homeowners' actions prior to the event. In many cases the protection of a home can be greatly enhanced by following a few simple guidelines that increase accessibility, such as widening or pruning driveways and creating a turnaround area for large vehicles.

Fuels Reduction & Restoration

Reducing fuels, particularity the rapid spread of invasive species such as cheatgrass, is a critical part of the strategy for reducing future rangeland fires and protecting important native of desired wildland ecosystems. In addition to the installation of firebreak features wherever feasible, it is important that vegetation management, both forest and rangeland, and habitat restoration be

in an integral part of the process. Recreational facilities such as campgrounds and roadsides should be kept free of excessive natural fuels and maintained.

In order to mitigate the risk of an escaped campfire, escape proof fire rings and barbeque pits should be installed and maintained. Better management of rangeland vegetation and reversing the spread of invasive non-native grasses such as cheatgrass is critical to slowing the spread of a fire and decreasing the frequency and intensity of rangeland fires. By planning projects at the landscape scale to reduce and control invasive species and rapidly restore lands impacted by fire to native vegetation, progress in protecting and restoring Walla Walla County's unique ecosystems for the benefit of all can occur. Vegetation inventories, treatments, and preventative measures will reduce the risk of wildland fire and can be achieved through practices such as the appropriate use of herbicides, biological controls, biocides; prescribed fire, green-stripping, fuel breaks, and the prioritization of restoration to fire-adapted landscapes.

Emergency Response

Once a fire has started, how much and how large it burns is dependent on the fuels it has access to, the weather conditions and often the availability of suppression resources. In most cases, rural fire departments are the first to respond and have the best opportunity to halt the spread of a wildland fire; however lacking resources, training and staffing can be a challenge in more remote areas of a county or where districts do not overlap coverage. For many districts, the ability to meet suppression objectives is largely dependent on the availability of functional resources and trained individuals. Increasing the capacity of departments through funding and equipment acquisition as well as access and fuel reduction practices throughout a county will improve response times and subsequently reduce the risk of loss.

Chapter 8

Mitigation Items and Plan Maintenance

Plan Monitoring and Maintenance

As part of the policy of Walla Walla County in relation to this planning document, this entire Community Wildfire Protection Plan should be reviewed annually from the date of adoption. It is recommended that a special meeting of a joint planning committee open to the public and involving all jurisdictions should be established to review, update and confirm action items, priorities, budgets, and modifications. Walla Walla County Emergency Management (or an official designee of the joint committee) is responsible for the scheduling, publicizing, and leadership of the annual review meeting. During this meeting, participating jurisdictions will report on their respective projects and identify needed changes and updates to the existing Plan. Maintenance to the Plan should be detailed at these meetings, documented, and attached to the formal plan as an amendment or appendix to the Community Wildfire Protection Plan. Re-evaluation of this plan should be made on the 5th anniversary of its acceptance, and every 5-year period following.

Annual Review Agenda

The focus of the joint planning committee at the annual review meeting should include at least the following topics:

- Update historical fire events record based on any events in the past year.
- Review county profile and individual community assessments for each WUIZ and note any major changes or mitigation projects that have altered the condition of each entity.
- Add a section to note accomplishments or current mitigation projects.
- Identify existing cost share programs with the ability to help citizens with defensible space or other relevant tasks related to WUI zone protection and education. Include these with appropriate links or reference in the review document materials.
- Notify the public of the review meeting outcomes and where the meeting findings can be viewed.

All meeting minutes, press releases, and other documentation of revisions should be kept on record by Walla Walla County Emergency Management.

Five Year Re-evaluation Agenda

The focus of the planning committee at the five year re-evaluation should include all of the topics suggested for the annual review in addition to the following items:

- Update County demographic and socioeconomic data.
- Address any new planning documents, ordinances, codes, etc. that have been developed by the County or cities that influence the WUI and WUI Zones specifically.
- Review listed communication sites and tools.
- Review Mill Creek resource conditions and all projects completed and planned for the watershed and the county as a whole.
- Redo all risk analysis modeling and mapping to incorporate new information such as land use changes, population expansions, and changing risk potentials.
- Update county risk profiles, potential project lists and resource needs based on new information.

All meeting minutes, press releases, and other documentation of revisions should be kept on record by Walla Walla County Emergency Management.

Continued Public Involvement

Walla Walla County is dedicated to involving the public directly in review and updates of Community Wildfire Protection Plan. The Emergency Management Director, through the planning committee, is responsible for the annual review and update of the Plan as recommended in the "Plan Monitoring and Maintenance" section below.

The public will have the opportunity to provide feedback about the Plan annually on the anniversary of the adoption at a meeting of the County Board of Commissioners. Copies of the Plan can be viewed on the Walla Walla County Emergency Management and City of Walla Walla's Websites. The Plan also includes contact information for the Emergency Management Director, who is responsible for tracking public comments.

A public meeting should be held as part of each annual evaluation or when deemed necessary by the planning committee and the Emergency Management Director. The meetings will provide the public a forum for which they can express concerns, opinions, or ideas about the Plan. The County Commissioner's Office in conjunction with Emergency Management will be responsible for using County resources to publicize the annual meetings and maintain public involvement through respective webpages, social media and local newspapers as appropriate.

Prioritization of Action Items

The prioritization process includes a special emphasis on benefit-cost analysis review. The process identifies a key component of funding decisions is a determination of project value based on the idea that a project will provide an equivalent or greater benefit to the community

throughout the life of a project when compared to costs. Projects will be administered by local jurisdictions with overall coordination provided by the Emergency Management Director.

County Commissioners and the elected officials of all jurisdictions have evaluated opportunities and established their own unique priorities to accomplish mitigation activities where existing funds and resources are available and there is community interest in implementing mitigation measures. If no federal funding is used in these situations, the prioritization process may be less formal. Often the types of projects a county can afford to do, on their own, are in relation to improved codes and standards, department planning and preparedness, education, and local cooperation. Walla Walla County will use this Community Wildfire Protection Plan as guidance when considering pre-disaster mitigation proposals brought before the Board of Commissioners by department heads, city officials, fire districts, and local civic groups.

When federal or state funding is available for hazard mitigation, there are usually requirements that establish a rigorous benefit-cost analysis as a guiding criterion in establishing project priorities. Walla Walla County understands the basic federal grant program criteria which will drive the identification, selection, and funding of the most competitive and worthy mitigation projects. FEMA's three grant programs (the Hazard Mitigation Grant Program, the Flood Mitigation Assistance Program, and Pre-Disaster Mitigation Program) that offer federal mitigation funding to state and local governments all include the benefit-cost and repetitive loss selection criteria.

The prioritization of new projects and update/deletion of completed projects will occur annually and be facilitated by the Emergency Management Director and the steering committee. All mitigation activities, recommendations, and action items mentioned in this document are dependent on available funding and staffing.

Prioritization Scheme

All of the action items and project recommendations made in this Plan were prioritized by each respective jurisdiction within the WUI Zones in coordination with their governing bodies. Each jurisdiction's representative on the planning committee met with their governing bodies and prioritized their own list of projects and mitigation measures through group discussions. Projects were ranked on a "High", "Moderate", or "Low" scale with emphasis on project feasibility and the anticipated benefit/cost outcomes. Once compiled, the individual jurisdiction rankings were discussed and approved at the committee level.

Jurisdictional Mitigation Strategies

The following tables outline all of the participating jurisdictions' wildfire mitigation strategies and potential projects for the next five year period and in some cases beyond five years where appropriate. All of the action items from the previous 2006 Mill Creek Plan have been incorporated into this updated document. The committee then completed a thorough review and discussion of each new and previously-proposed project, and in some cases, chose to revise the action item or delete it altogether. The following tables detail proposed projects for the next 5-year planning period for which this plan is to guide.

Countywide Projects

Action Item	Update Fire Districts equipment, provide additional training, and recruit more volunteers.
Mitigation #1	**Preparedness**
Priority	High
Process	1. Seek funding sources including the Rural Fire Assistance (RFA) and Volunteer Fire Assistance (VFA) for each Fire District in the WUIZ to upgrade firefighting equipment and for training.
Rationale	All Districts supplied the steering committee with a list of the current assets along with a list of equipment and infrastructure needs to better serve their communities within the District. Proper equipment and training help enables firefighters to better handle emergencies and reduces the risk to life and property.
Desired Condition	A well-equipped and trained firefighting staff and volunteers.
How to implement and apply concepts	a. Identify gaps in equipment and training for each district. b. Seek funding for equipment and training.
Timeline	On-going

Action Item	Fire Districts experience gaps in communication with dispatch throughout the county.
Mitigation #2	**Preparedness**
Priority	High
Process	1. Identify areas of gaps in the current communication coverage throughout the WUIZ. 2. Develop a system that covers the current communication gaps.
Rationale	Communication is a key in the event of a disaster, it enables firefighters to react quickly to changes during a disaster and provide services to citizens. It is a necessity for firefighter and citizen safety.

Desired Condition	A communication system that provides county wide service without dead spots.
Timeline	Short Term (1-2 years)

Action Item	Vegetation management along roadways to reduce fire starts from vehicles.
Mitigation #3	**Fuels Reduction**
Priority	High
Process	1. Secure funding for removal of vegetation along roadways, either through spraying herbicides or mechanical removal. 2. Work with Washington Transportation Department to maintain roadways. 3. Solicit and hire contractors to perform fuels reduction when needed.
Rationale	Human caused fires are the leading cause of wildfires, removal of fuels along roadways reduces the likelihood of fire starting from vehicles.
Desired Condition	A buffer around roadways that minimize the likelihood of a fire starting from vehicles.
Timeline	On-going maintenance.

Action Item	New home development and remodeling structures within the WUI
Mitigation #4	**County Fire Siting Standards**
Priority	High
Process	1. Consistent standards between the three counties within the Mill Creek WUIZ 2. Develop standards which meet, or exceed, those in the National Fire Siting Code with emphasis on providing adequate access for firefighting apparatus and evacuation, water source, and defensible space. 3. Strong and consistent enforcement policies.
Rationale	Umatilla, Walla Walla, and Columbia Counties should review and revise their fire siting standards for new home development and remodeling.
Desired Condition	Structures that meet or exceed those in the National Fire Siting Code.
How to implement and apply concepts	a. Develop fire siting standards for new structures. b. Design standards for road access to structures. c. Develop a primary and secondary fuel break area and maintain adequate access to structures for firefighting equipment.
Timeline	Short Term (1-2 years)

Action Item	Public Utilities
Mitigation #5	**Underground Public Utilities**
Priority	Moderate
Process	1. Work with PP&L to evaluate and prioritize above ground electric utilities for wildfire hazards. 2. Determine which lines should be buried and seek funding to accomplish. 3. Remove hazard trees and vegetation near all above ground power lines.

	4. Update the county zoning code to avoid future problems with above ground power lines.
Rationale	Protect critical infrastructure in the event of a wildfire.
Desired Condition	A power grid that is resilient to wildfires.
Timeline	Long Term (3+ years)

Action Item	Provide information and funding to homeowners for the creation of defensible spaces around structures.
Mitigation #6	**Defensible Space**
Priority	High
Process	1. Seek funding to continue the defensible space assistance project begun for the Oregon homes by the ODF. Place priority on homes on China Canyon Lane, Neotoma Lane, Reynolds Drive, and Emigh Lane. 2. Seek funding to expand defensible work by home-owners on the Washington side of the WIUZ. Place high priority on homes that are classified as having an Extreme or High Hazard from vegetation. 3. Use NFPA 1144 standards for establishing defensible space around home sites.
Rationale	Provide a space between wildland fuels and existing structures to reduce the vulnerability of the structures to wildfires.
Desired Condition	Structures that have minimal risk from wildfires due to the lack of fuels surrounding the structures.
How to implement and apply concepts	a. Apply for grants through the National Fire Plan and other grant programs to assist homeowners with the cost of completing defensible space around their homes. b. Work with homeowners to show the importance of completing this effort on their own. c. Provide technical assistance to identify how defensible space can be achieved and maintained.
Timeline	On-going

Action Item	Complete an evacuation plan for private homeowners in coordination with the Fire Districts and Emergency Management.
Mitigation #7	**Evacuation Plan**
Priority	Moderate
Process	1. Develop an evacuation plan, and utilize Emergency Management's notification system to aid in evacuations. 2. Provide public outreach and education about the plan and notification system.
Rationale	Protect life in the event of a disaster through preparation and education on evacuation measures.
Desired Condition	A citizenry that is knowledgeable on when and how best to remove themselves from a wildfire.
Timeline	Short Term (1-2 years)

Action Item	Emergency Preparedness
Mitigation #8	**Emergency Response Projects**

Priority	Moderate
Process	1. Create and strengthen mutual aid agreements between the Fire Districts and the Washington DNR, ODF, and the Forest Service. 2. Maintain easy to read house numbers on all homes within the planning area. 3. Develop water sources and agreements with landowners to use existing sourcs for fire use as appropriate. This would include an "Incidental Take Permit" of waters from Mill Creek by pump to fight wildfires. This would not be part of a surface water permit.
Rationale	Provide the necessary information and resources for firefighters and emergency services to perform the work efficiently.
Desired Condition	Preparedness in response to wildfires.
Timeline	On-going

Action Item	Update Washington home-site assessments for structural vulnerability
Mitigation #9	**Structure Vulnerability Assessments**
Priority	High
Process	1. Acquire funding for additional personnel or contractors to perform home assessments. 2. Provide home site assessments to home owners. 3. Perform a follow up survey to home sites that were assessed in 2002 to determine the changes following the original site assessment. 4. Apply the NFPA 1144 criteria and standards.
Rationale	While creation of a defensible space around a structure reduces the chance of a fire from burning up to a structure. Changing the building materials that are used on a home reduces the structures vulnerability to fire, should a fire occur.
Desired Condition	Structures and property that are more resilient to wildfire.
Timeline	Short Term (1-2 years)

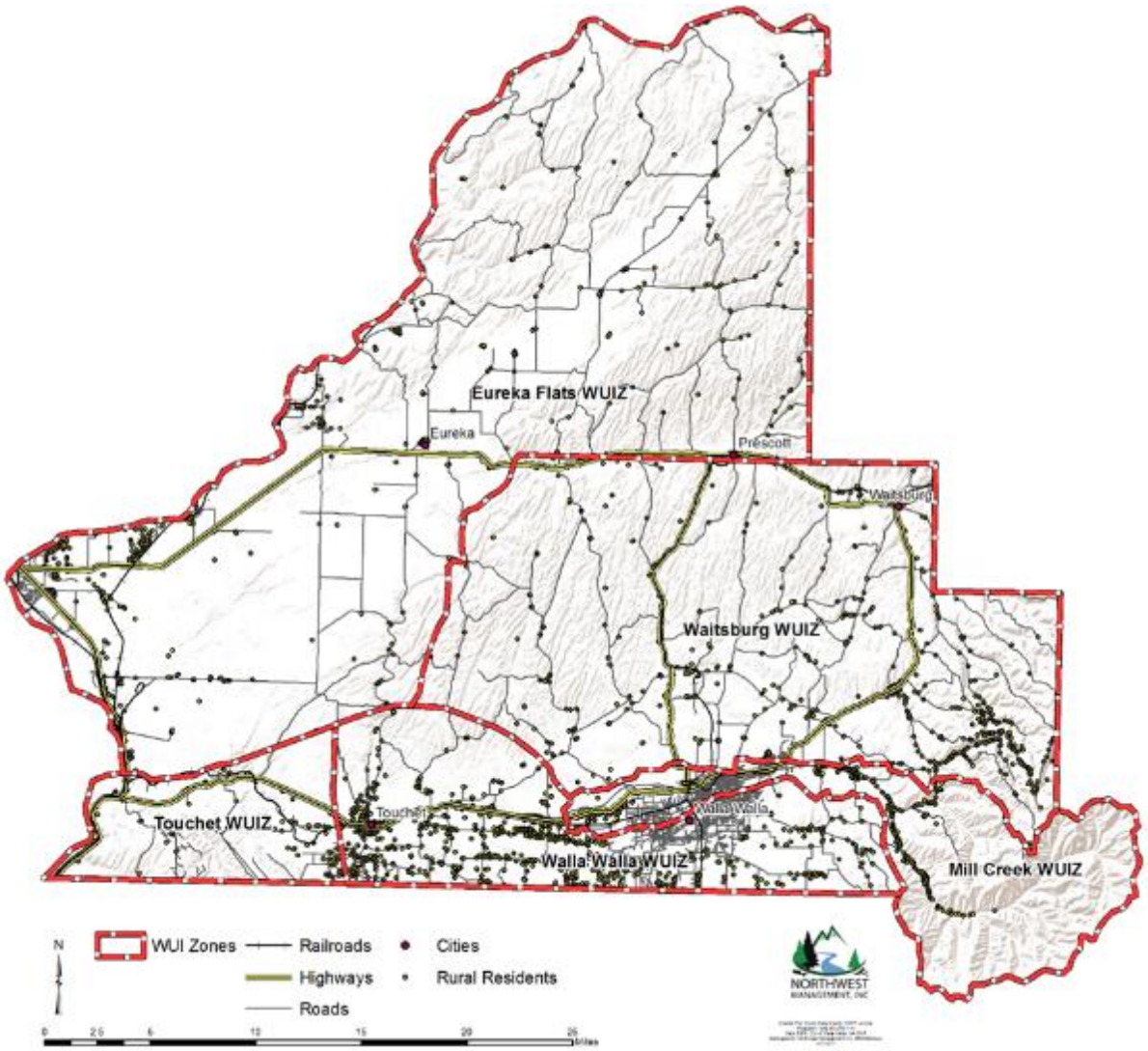


Figure 21. Delineation of WUIZ throughout Walla Walla County.

Eureka Flat WUIZ

Action Item	Fuel breaks within the large tracts of CRP lands.
Mitigation #1	**Fuel Breaks**
Priority	High
Process	1. Identify strategic areas within the CRP land that enables for the suppression of wildfires in a safe and controlled situation. 2. Work with land owners and NRCS to come up with a solution to the removal of land from CRP without the loss of revenue to the landowner. 3. Design system to input data accumulated for easy GIS access.
Rationale	Increase safety and fire suppression capabilities for firefighters.
Desired Condition	Fuel breaks that provide a safe and manageable position for fire suppression within the CRP lands, with no financial impact to the landowners for removal of lands from the program.
Timeline	Long Term (3+ years)

Action Item	Fire Districts within the Eureka WUIZ manage large tracts of lands with very few residents. It is difficult to maintain or recruit interested volunteers with such a low population base.
Mitigation #2	**Preparedness**
Priority	High
Process	1. Identify and secure funding sources that allow for the development of a training and recruitment program to better staff the local Fire Districts.
Rationale	The Fire Districts that service the Eureka WUIZ operate on a volunteer basis. The Districts have stated a lack of interest from local citizens to volunteer in the program.
Desired Condition	Have a fully staffed and trained volunteer base that is able to serve the public within the WUIZ.
Timeline	Short Term (1-2 years)

Action Item	Invasive plant control pre- and post-fire
Mitigation #3	**Vegetation Control**
Priority	High
Process	1. Acquire funding for Vegetation Control. 2. Work with landowners to apply landscape scale vegetation management. 3. Perform vegetation surveys and build GIS database on vegetation distribution. 4. Use data to prioritize weed management projects.
Rationale	Following a disturbance event, such as a wildfire, invasive species have a high probability of spreading and dominating a site. Sagebrush Steppe has seen multiple invasive species that are favored following a fire, i.e. cheat grass, medusa head, ventenata dubia, among others.
Desired Condition	Restoration across the landscape to the historical norm for vegetation and fire regime conditions.
Timeline	On-going

Mill Creek WUIZ

Action Item	Fuel reduction around Mill Creek Watershed
Mitigation #1	**Reduce Hazardous Fuels**
Priority	High
Process	1. Identify areas around the Mill Creek Watershed that have an accumulation of fuels. 2. Construct shaded fuel breaks along the sides of roads on the Mill Creek Watershed perimeter. 3. Construct shaded fuel breaks along roads with homes in Mill Creek. Place high priority on China Canyon Lane, Neotoma Lane, and Emigh Lane. 4. Encourage hazard fuel reduction measures on private lots in the Mill Creek drainage with priority on the 115 homes rated as extreme or high in Washington and the China Canyon Lane, Neotoma Lane, Reynolds Drive and Emigh Lane in Oregon. 5. Maintain travel corridors and cut-banks to minimize available fuels in the form of weeds and brush.
Rationale	Maintain a defensible space and reduce the likelihood of extreme fire behavior along the watershed perimeter.
Desired Condition	A perimeter around the watershed that has reduced fuels that controls fire behavior so that external threats of wildfire can be suppressed with minimal risk to firefighter safety. Continued monitoring and fuel reduction projects as needed to maintain a defensible perimeter.
How to implement and apply concepts	a. Acquire funding for proposed fuel breaks and fuel reduction projects. b. Solicit contractors to perform work on the shaded fuel break. c. Create an assessment for monitoring the accumulation of fuels within the shaded fuel break on an annual basis, with the intent to maintain the fuel break.
Timeline	Short Term (1-2 years) followed by ongoing projects.

Action Item	Improve access for firefighting equipment and evacuation
Mitigation #2	**Adequate road access for firefighters and evacuation.**
Priority	High
Process	1. Perform Assessments of current access throughout the Mill Creek WUIZ and prioritize roads through a cost-benefit analysis. 2. Seek funding for road widening and the creation of acceptable turnarounds. 3. Solicit contractors for implementing proposed projects.
Rationale	While creation of a defensible space around a structure reduces the chance of a fire from burning up to a structure. Changing the building materials that are used on a home reduces the structures vulnerability to fire, should a fire occur.
Desired Condition	Structures and property that are more resilient to wildfire.
Timeline	Develop a proposed timeframe for the road access analysis and road construction projects following the adoption of the updated CWPP.

Action Item	Fire Districts experience gaps in communication with dispatch throughout the county.
Mitigation #3	**Improve communication network to cover gaps within the county.**
Priority	**High**
Process	1. Identify areas of gaps in the current communication systems. 2. Develop maps of the coverage gaps and assess how best to increase system efficiency and coverage. 3. Seek funding for improving communication coverages throughout the county and WUIZ.
Rationale	Communication is a vital part of any emergency situation. Wildfires are no exception, communication is a needed tool when dealing with wildfire.
Desired Condition	County wide communication ability, to keep firefighters in direct contact with dispatch.
Timeline	Short Term (1-2 years)

Action Item	Public involvement
Mitigation #4	**Education, Prevention, and Community Outreach**
Priority	High
Process	1. Provide workshops and written information about living in the WUI and with wildfires.
Rationale	Equip local citizens with the information needed to make educated decisions concerning wildfires and owning a home within the WUI.
Desired Condition	Citizens that are aware and proactive in mitigation activities that help reduce the vulnerability of structures to wildfires.
How to implement and apply concepts	a. Sponsor and promote Firewise Workshops. b. Distribute written material such as the Living with Fire newsletter. c. Conduct events to coordinate with the Oregon and Washington Wildfire Awareness Week each year (usually in May). Utilize the Media Toolkit developed by the Oregon State Fire Marshall's Office. d. Conduct house-to-house prevention visits and promote defensible space and other hazard reduction ideas. e. Continue to implement Public Use Restrictions to address human-caused ignitions. f. Promote safe debris burning activities. g. Install and maintain an information kiosk.
Timeline	On-going

Action Item	Trail access for fire suppression
Mitigation #5	**Trail Access on National Forest Lands for Fire Suppression Purposes**
Priority	High

Process	1. Re-evaluation of opening and maintaining approximately 40 miles of trails annually to a standard suitable for firefighter foot trabel to and from the Mill Creek area for fire suppression purposes.
Rationale	Protect critical infrastructure in the event of a wildfire.
Desired Condition	Increased ability for fire suppression within the Mill Creek Watershed.
Timeline	On-going

Action Item	Filtration Plant for City Water
Mitigation #6	**Filtration Plant**
Priority	High
Process	1. The City of Walla Walla, with support from and in cooperation with other agencies/organizations, will seek support and funding to construct a filtration plant for its municipal water supply system from the Mill Creek Municipal Watershed.
Rationale	Provide water to the citizens of Walla Walla.
Desired Condition	Provide consistent drinking water in a cost effective, efficient and timely manner even in the event of a loss of ambient water quality within the watershed do to fire or other natural causes.
Timeline	Long Term (3+ years)

Action Item	Continued agreements between the City of Walla Walla and the U.S. Forest Service for fire suppression in the Mill Creek Watershed.
Mitigation #7	**Wildfire Prevention Actions**
Priority	High
Process	1. Continue the existing cooperative agreements between the City of Walla Walla and the Forest Service. 2. Expand forest management and silviculture efforts in the watershed based upon pilot project results and best available science. 3. Maintain funding for Table Rock lookout. 4. Continue patrols by the Forest Service and City of Walla Walla for fire prevention and trespass purposes. 5. Keep entry permit requirements. 6. Maintain signage on the perimeter of the Municipal Watershed to prevent trespass. 7. Continue the current policy of aggressive suppression of all wildfires in and near the Municipal Watershed. 8. Emphasize fire prevention with visitor contacts for people using the Municipal Watershed under permitted purposes (elk hunting) and for recreation use along the perimeter.
Rationale	Fire suppression is a key to maintaining the water quality of the Mill Creek Watershed.
Desired Condition	Joint effort to maintain and improve the ability of the Forest Service to provide protection from wildfires within the watershed.
Timeline	On-going

Action Item	Table Springs prescribed burn

Mitigation #8	**Prescribed Burn**
Priority	High
Process	1. Meet the environmental and smoke conditions necessary to implement the burn plan. 2. Provide the staff and equipment necessary to safely execute the project.
Rationale	Prescribed burns would begin the ecosystem restoration process and remove excess fuels.
Desired Condition	A landscape scale restoration of the ecosystem that would return the fire behavior to the historical norms and improve the suppression opportunities.
Timeline	Short Term (1-2 years)

Action Item	Tiger Web prescribed burn
Mitigation #9	**Prescribed Burn**
Priority	High
Process	1. Meet the environmental and smoke conditions necessary to implement the burn plan. 2. Provide the staff and equipment necessary to safely execute the project.
Rationale	Prescribed burns would begin the ecosystem restoration process and remove excess fuels.
Desired Condition	A landscape scale restoration of the ecosystem that would return the fire behavior to the historical norms and improve the suppression opportunities.
Timeline	Short Term (1-2 years)

Action Item	Rural Fire Protection along Mill Creek Rd. that is outside the jurisdictional boundaries of Fire District #4 & #8.
Mitigation #10	**Establishment of a Rural Fire District**
Priority	High
Process	1. Assess the interest and availability of residences outside of District #4's service area for the creation of a rural fire district. 2. Seek funding to provide equipment, training, and a facility for a rural fire district.
Rationale	Protection of life and properties.
Desired Condition	Complete fire protection coverage throughout the Mill Creek Watershed.
Timeline	Long Term (3+ years)

Touchet WUIZ

Action Item	Fuel breaks within the large tracts of CRP lands.
Mitigation #1	**Fuel Breaks**
Priority	High
Process	1. Identify strategic areas within the CRP land that enables for the suppression of wildfires in a safe and controlled situation. 2. Work with land owners and NRCS to come up with a solution to the removal of land from CRP without the loss of revenue to the landowner. 3. Design system to input data accumulated for easy GIS access.
Rationale	Increase safety and fire suppression capabilities for firefighters.
Desired Condition	Fuel breaks that provide a safe and manageable position for fire suppression within the CRP lands, with no financial impact to the landowners for removal of lands from the program.
Timeline	Long Term (3+ years)

Action Item	Develop a working relationship with residents and Fire District within Oregon to reduce the potential for fire starts in Oregon that spread uncontrolled into Washington.
Mitigation #2	Preparedness
Priority	High
Process	1. Work with local residence and Oregon Fire Districts to produce a plan that enables the suppression of wildfires in Oregon's dead zones.
Rationale	Jurisdictional boundaries prevent Fire District #6 to provide suppression support to residents in Oregon that are currently without Fire District coverage. Fire starts that begin in Oregon but progress to Washington have in the past grown to an unmanageable state, when an initial attack could have prevented the fire spread.
Desired Condition	An agreement with local residents to enable District #6 the ability to suppress fires or give support to suppression activities that would otherwise endanger lives and property in Washington.
Timeline	On-going

Walla Walla WUIZ

Action Item	Work with land developers, private landowners, and governing officials to provide better access and connectivity of the roadway systems.
Mitigation #1	Preparedness
Priority	**High**
Process	1. Provide information and education to the public on the requirements for accessibility of emergency service vehicles.
Rationale	Road connectivity reduces response times and accessibility enables emergency responders to quickly provide services and evacuate the area when needed.
Desired Condition	Adequate road connectivity and accessibility for emergency services throughout the WUIZ.
Timeline	Short Term (1-2 years)

Action Item	Provide visible house markers for better response times
Mitigation #2	Preparedness
Priority	Low
Process	1. Work with homeowners and landowners to provide visible address markers throughout the WUIZ.
Rationale	Many rural residences are poorly identified, making locating the site of an emergency difficult.
Desired Condition	Easily identified address locations for rural residences to reduce response times.
Timeline	Short Term (1-2 years)

Waitsburg WUIZ

Action Item	Vegetation management along roadways to reduce fire starts from vehicles.
Mitigation #1	**Fuels Reduction**
Priority	High
Process	1. Secure funding for removal of vegetation along roadways, either through spraying herbicides or mechanical removal. 2. Work with Washington Transportation Department to maintain roadways. 3. Solicit and hire contractors to perform fuels reduction when needed.
Rationale	Human caused fires are the leading cause of wildfires, removal of fuels along roadways reduces the likelihood of fire starting from vehicles.
Desired Condition	A buffer around roadways that minimize the likelihood of a fire starting from vehicles.
Timeline	On-going maintenance.

Action Item	Public involvement
Mitigation #1	**Education, Prevention, and Community Outreach**
Priority	High
Process	1. Provide workshops and written information about living in the WUI and with wildfires.
Rationale	Equip local citizens with the information needed to make educated decisions concerning wildfires and owning a home within the WUI.
Desired Condition	Citizens that are aware and proactive in mitigation activities that help reduce the vulnerability of structures to wildfires.
How to implement and apply concepts	a. Sponsor and promote Firewise Workshops. b. Distribute written material such as the Living with Fire newsletter. c. Conduct events to coordinate with the Oregon and Washington Wildfire Awareness Week each year (usually in May). Utilize the Media Toolkit developed by the Oregon State Fire Marshall's Office. d. Conduct house-to-house prevention visits and promote defensible space and other hazard reduction ideas. e. Continue to implement Public Use Restrictions to address human-caused ignitions. f. Promote safe debris burning activities. g. Install and maintain an information kiosk.
Timeline	On-going

Chapter 9

Accomplishments and Challenges

Accomplishments
Mill Creek Watershed

In accordance with Cohesive Wildfire Strategy priorities mitigation efforts completed throughout the Mill Creek watershed and some of the surrounding areas have been focused on fuels breaks at the perimeter and ultimate protection of life, property and water quality. The goal of this plan update was to extend this Plan to the entire count of Walla Walla. In doing so it was decided to focus the planning efforts, needed resource requests and risk assessments on WUI Zones throughout the county as well as the Mill Creek watershed in its entirety regardless of portions of the watershed overlapping the Oregon State boarder. Following the adoption of the 2006 CWPP for the Mill Creek Watershed, the City of Walla Walla in cooperation with Oregon Department of Forestry (ODF) implemented a fuel reductions project on many of its parcels along Mill Creek and at the City of Walla Walla's intake facility. These projects focused on the reduction of surface fuels and removal of brush and fine fuels that can connect ground fire with canopy fire (ladder fuels). Additionally, these efforts worked in conjunction with the Department of Corrections work crew and Fire District #4 to aid more than 80 homeowners throughout their

Figure 22. City of Walla Walla fuel reduction projects within their properties along Mill Creek and their intake facility.

jurisdiction with creation of defensible space on their property. Figures 23 and 24 highlight the properties that were part of the defensible space program.

An active FIREWISE outreach program has been working throughout the County for a number of years, however NRCS funding for most recant grant is ending in July of 2017. Walla Walla County Emergency Management has been able to establish an emergency notification system for evacuation and emergency notification purposes via phone, text and email for anyone who signs up. This system and network is described in Chapter 3 in greater detail and funding for these efforts is through a Homeland Security grant award to County Emergency Management. There is a need throughout the County and the Mill Creek watershed to increase public outreach and education for the development of fire adapted communities.

Due to the increases in digital communication, availability or lack-there-of for social media and often increased access to resources in areas of greater population densities; there is a need to reach out to the rural areas within the WUI Zones to promote awareness of wildfire resilient home and property conditions and how that provides a benefit and increased resilience to areas downwind or up-slope of their location. To continue to maintain and improve the contact system Emergency Management has developed there is a need to seek diverse and a more-continuous funding source outside of the Homeland Security grant, which expires in 2017.

At the federal level within Walla Walla County the U.S. Forest Service was able to increase access to some locations within the sounding areas of the Mill Creek watershed and complete road improvements on forest roads 64 and 65. These improvements provide emergency response vehicles and personnel greater access to the exterior of the Mill Creek watershed and can act as a fuel break in some areas.

Similarly, the Washington Department of Natural Resource (DNR) has been working to create shaded fuel breaks along the exterior of the Mill Creek watershed and is currently overseeing a new fuel break contract along the Northern portion of the watershed boundary. Currently the U.S. Forest Service has two proposed prescribed burns located around the exterior of the watershed, the Tiger Webb and Table Springs. Both projects are planned to cover roughly 12,000 acres. Tiger Webb prescribed burn would cover approximately 7,500 acres along the Southwestern corner of the watershed, and the Table Springs prescribed burn would cover 4,500 acres along the Eastern edge of the watershed.

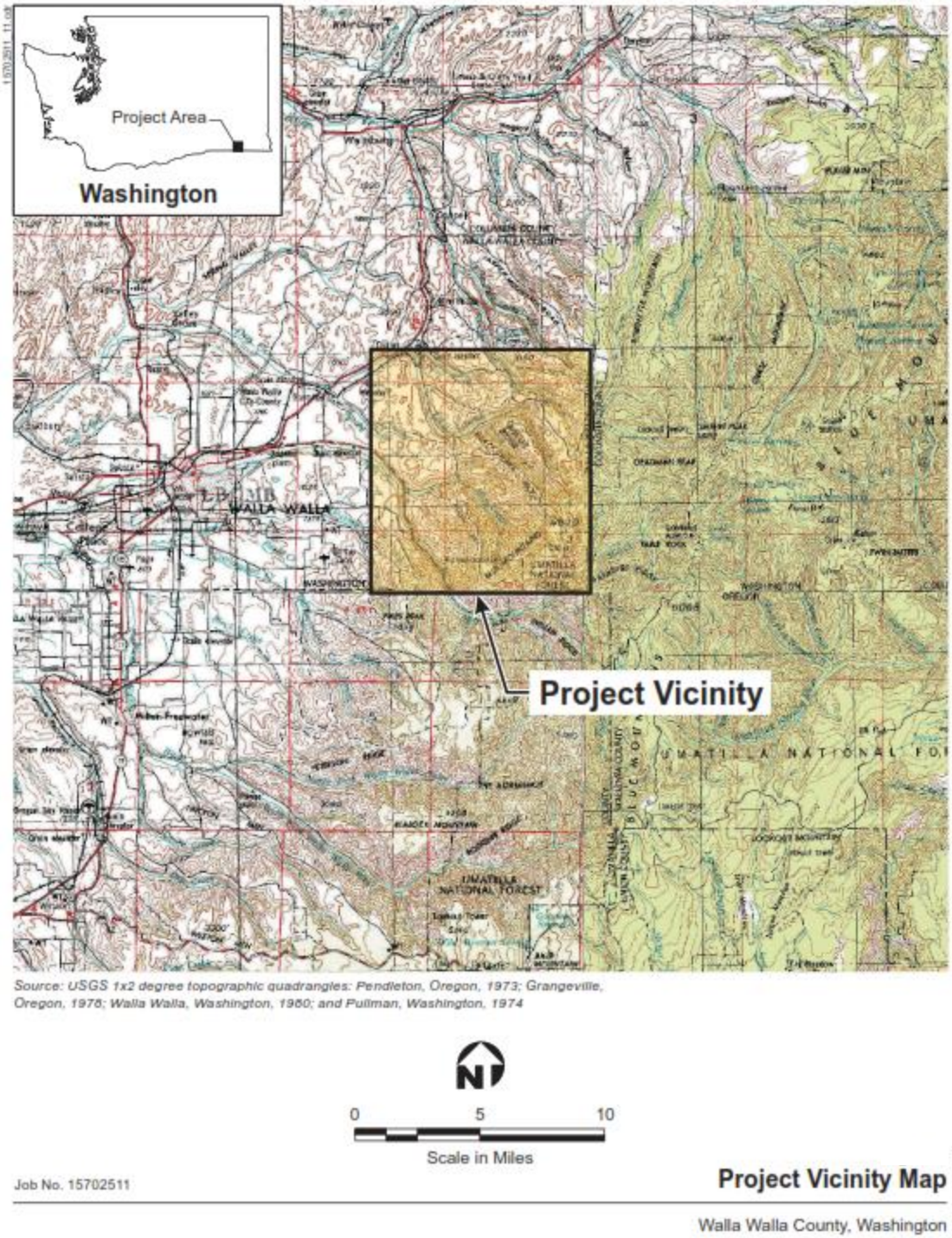


Figure 23. Project area for the Pre-Disaster Mitigation Grant. Defensible spaces were created within this area around residences.

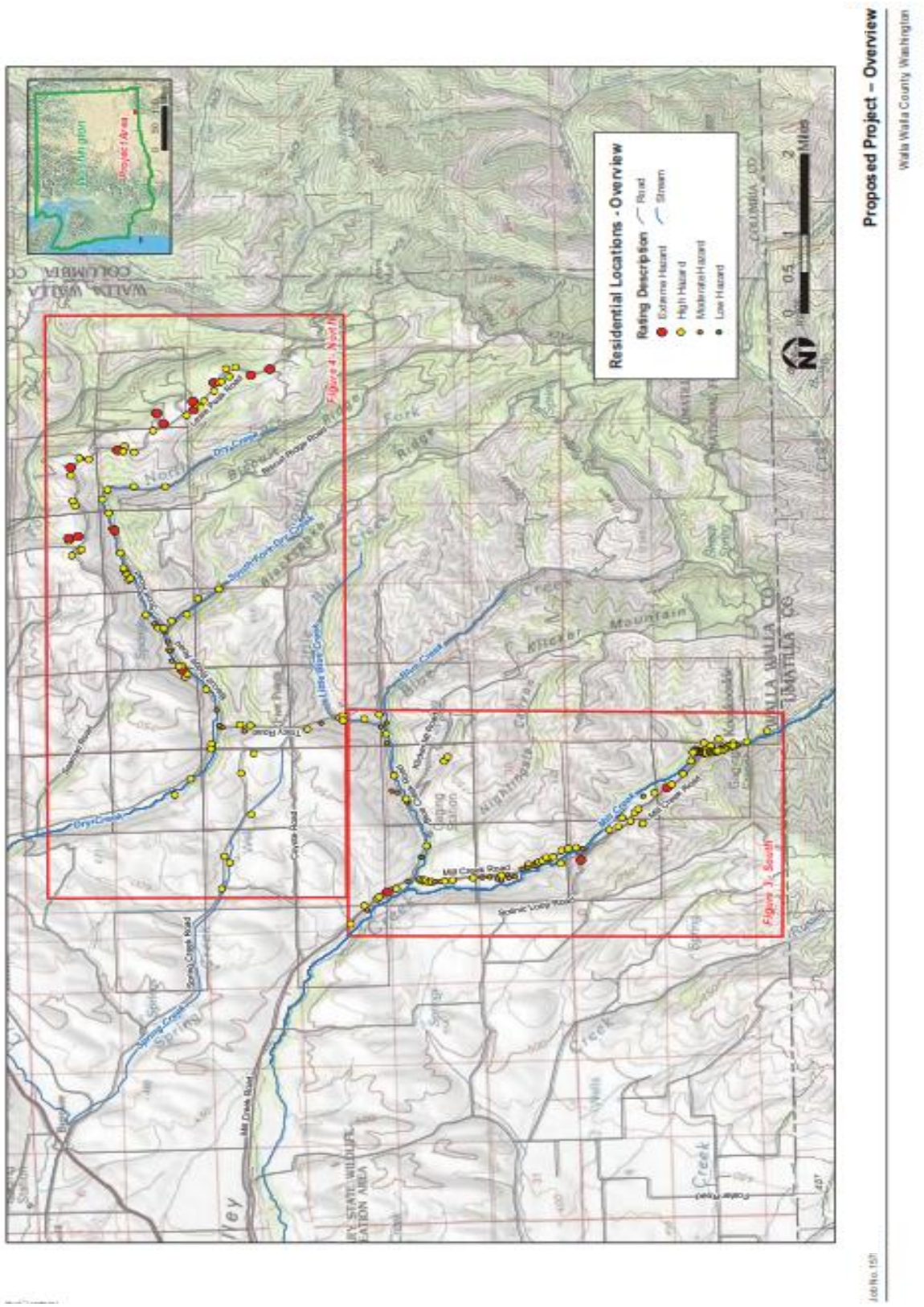


Figure 24. Fire hazard ratings for residences within the project area.

Challenges

Project Planning, Pace and Scale

While the type of projects needed to create fire resilient landscapes and conditions that can accommodate a balance of human presence and natural ecologic function are needed on a landscape scale, the funding, personnel and social license to accomplish this will require extensive investments in time and education as well as communication. Each project works through an evaluation and cost benefit analysis by the committee followed by a lengthy funding, environmental assessment and implementation process. The pace at which these projects are approved are lagging compared to the acres of forests that burn every year. Additional challenges that were identified by agency officials, were sustained stakeholder participation throughout the process and responding to litigations (GAO-15-398, Forest Restoration).

Monitoring and Maintenance

Monitoring and proposed maintenance should be a line item for review by the steering committee during annual plan revision meetings for the CWPP. This will maintain the function of this CWPP in accordance with the Healthy Forest Restoration Act (HFRA) Section 102(g)(8). Additionally, section 102(g)(5), of HFRA requires that monitoring and maintenance of projects be a collaborative process that includes all interested stakeholders.

Whether monitoring efforts take on a more scientific approach by actually measuring the fuel loading changes, and environmental conditions post treatment, or an informal approach that simply monitors the project area from a proprietor approach, these efforts will provide necessary feedbacks into the feasibility of mitigation efforts. Long-term monitoring will provide a measure of cost-benefit analysis, in addition to providing the opportunity to maintain the initial cost of the project.

Appendix A

Agendas & Meeting Minutes

December 2016

Minutes

Community Wildfire Protection Plan Steering Committee Meeting
Walla Walla County Fire District #4, Station 41
2251 S. Howard Street
Walla Walla, WA 99362
December 12, 2016

Present:

Bob Yancey, City of Walla Walla, Fire Department
Brett Thomas, U.S. Forest Service – Walla Walla District
Matt Hoehna – Oregon Department of Forestry – Pendleton
Mori Struve, City of Walla, Walla Public Works Department
Judith Johnson, Kooskooskie Commons
Liz Jessee, Walla Walla County Emergency Management Department
Rocky Eastman, Walla Walla County Fire District #4
Bob Carson – Whitman College
Brad Tucker – Northwest Management, Inc.
Bill Mathews – Northwest Management, Inc.
Alyssa Wells – EMD, EMS, Coroner

Minutes:

Call to Order

The meeting was called to order by Liz Jessee at 10:18 AM at Walla Walla County Fire District #4's Fire Station 41. Introductions were made. Liz gave an overview of the purpose of the meeting.

U.S. Forest Service

Brett Thompson gave a presentation on fire prevention that has been done in the area already. He highlighted the areas that were still in need of work and the costs involved.

Suggested showing the movie "Era of Megafires" that would educate the public on how we burn the forest. Alissa Cordner, Environmental Studies at Whitman College, has offered to coordinate a showing at Maxey Hall on campus. In the interest of having a good turnout Whitman will advertise in their newsletter. EMD will post to Facebook and possibly a letter to editor. City of Walla Walla will post to their website.

Washington Department of Natural Resources

Washington Department of Natural Resources was unable to attend. On their behalf, Mori Struve reported that they are moving forward with plans for the fuel break project, which will cover an area 10 miles long and 200 ft. wide, along the watershed.

Northwest Management, Inc.

Brad Tucker gave a presentation highlighting plans they had done for other agencies.

January 2017

AGENDA

Community Wildfire Protection Plan (CWPP) Steering Committee Meeting

January 11, 2017, 10 AM – 12 PM

WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

Opening Remarks and Introductions	Liz Jessee – Walla Walla County Emergency Management Dept.
Hosting 'Era of Megafires' Presentation Update	Liz Jessee – WWEM Bob Carson – Whitman College
CWPP Plan Revision: • Review Table of Contents • Mission, Goals and Objectives • Public Involvement Strategy • Fire District Summaries and Resource Lists • Map Presentation	Mori Struve – City of Walla Walla Brad Tucker – Northwest Management, Inc. Bill Mathews – Northwest Management, Inc.
Roundtable Discussion	All
Adjourn	

Minutes

Community Wildfire Protection Plan Steering Committee Meeting
Walla Walla County Fire District #4, Station 41
2251 S. Howard Street
Walla Walla, WA 99362
January 11, 2017

Present:

Brett Thomas, U.S. Forest Service – Walla Walla District
Mori Struve, City of Walla, Walla Public Works Department
Gayle Sanders, Rocky Mountain Elk Foundation
Matt Hoehna, Oregon Department of Forestry
Joseph Sciarrino, U.S. Forest Service
Larry Hector, Walla Walla County Fire District 4 & 6
Liz Jessee, Walla Walla County Emergency Management Department
Rocky Eastman, Walla Walla County Fire District #4
Bob Carson, Whitman College
Brad Tucker – Northwest Management, Inc.
Bill Mathews, Northwest Management, Inc.
Tom Schoenfelder, Washington State Department of Natural Resources
Renee Hadley,Walla Walla County Conservation District
Mark Corrao, Northwest Management, Inc.
Patrick Purcell, Walla Walla County Emergency Management Department

Minutes:

Call to Order

The meeting was called to order by Liz Jessee at 10:15 AM at Walla Walla County Fire District #4's Fire Station 41. Introductions were made. Liz gave an overview of the purpose of the meeting.

Northwest Management Inc.

Representatives of Northwest Management Inc. gave a presentation on the work to date on the CWPP covering the following areas.

Table of Contents: Noted its flexibility and that it is directly modeled on the Union Country CWPP. A digital copy will be distributed for committee member consideration and input.

Mission, Goals and Objectives: Asked for input from the committee on any additions. Representative stated that examples of Union County Mission, Goals and Objectives would be provided to the committee for consideration. A committee member questioned the absence of input from utility and rail companies operating in the proposed project area. It was agreed that steps would be taken to try and incorporate their representation in future meetings.

Public Involvement Strategy: NWI representative opened a point of discussion on ways to involve the country Public Information Officer, (PIO) in helping to broaden the scope of public input into development of the CWPP. Chief Eastman suggested that the cities of Burbank and

Waitsburg should be considered as possible locations for future public meetings. Further discussion among the committee consisted of possible methods of advertising and providing a public information table during the upcoming presentation, "Era of Mega Fires" scheduled for March 1st at Whitman University. It was also decided that Northwest Management Inc. will attend the next county "Chiefs" meeting in order to present/discuss the CWPP with all county fire department leadership. This meeting will take place at District 4 on 6 February at 5:00 PM.

CWPP Threat Maps: Using maps aligned with the proposed project borders Northwest Management Inc. representatives demonstrated the ability to display a variety of information governing wildfire threat. There was discussion among the committee concerning the scope of displayed project borders and it was agreed to narrow the displayed map information back to Walla Walla county, the Mill Creek watershed and a narrow border along the periphery of the county. Representatives requested address location information which could also be displayed by map for consideration when determining threat areas within the county.

Roundtable Discussions:

- Tentatively the next meeting will be held on February 22, 2017 @ 10:00am. Location will be Fire district 4, station 41.
- There was discussion about using NCRS assistance to help offset the cost of private landowner fire break construction.
- There was a suggestion bought to the attention of the committee about the possibility of mailing out survey to solicit input from the public.
- Liz Jessee asked if there were any further questions or comments and adjourned the meeting at 1130 AM.

Feburary 2017

Agenda

Community Wildfire Protection Plan (CWPP)
Steering Committee Meeting
February 22, 2017, 10 AM – 12 PM

Opening Remarks and Introductions
Review Table of Contents
Fire District Summaries, Resource List and Fire History
Public Outreach Plan • Mega Fire Presentation
Chapter 1 – Introduction
Chapter 2 – Mission, Goals & Objectives
Chapter 4 – County Characteristics
Determination of County's Wildland Urban Interface (or methodology)
Roundtable
Establish Next Meeting Date
Adjourn

Minutes

Community Wildfire Protection Plan Steering Committee Meeting
Walla Walla County Fire District #4, Station 41
2251 S. Howard Street
Walla Walla, WA 99362
February 22, 2017

Present:

David Winter, College Place Fire Department
Devin Parvinen, Washington State Department of Natural Resources (DNR)
Rocky Eastman, Walla Walla County Fire District 4
Larry Hector, Walla Walla County Fire District 6
Renee Hadley, Walla Walla County Conservation District
Joseph Sciarrino, U.S. Forest Service (USFS) – Umatilla National Forest
Judith Johnson, Kooskooskie Commons
Lisa Caldwell, Columbia County Emergency Management
Anne Higgins, Columbia County Emergency Management
Bob Yancey, Walla Walla Fire Department
Bob Carson, Whitman College
Matt James, U.S. Forest Service

Bill Mathews, Northwest Management, Inc.
Mark Corrao, Northwest Management, Inc.
Matt Hoehna, Oregon Department of Forestry (ODF)

Minutes:

Call to Order

The meeting was called to order by Liz Jessee at 10:15 AM at Walla Walla County Fire District #4's Fire Station 41. Introductions were made.

Review Table of Contents & Chapters 1, 2 & 4

There were no comments about the Table of Contents. The information is there for Chapters 1 and 3 but fire district information is still needed. Chapter 4 is pretty solid.

It was noted that the draft CWPP, some of which was on today's agenda, was sent this morning and not everyone received a copy. Liz noted that there were issues sending the document, due to its size. Northwest Management, Inc.(NMI), agree to send the Table of Contents (TOC)/and draft chapters separately for review. They will send the TOC and Chapters, 1, 2 & 4 (today's portions for review) along with the draft chapters for the next steering committee chapters to list for forwarding. They will send it in Microsoft Word and asked that if anyone has any changes that they make the changes on the document with 'Track Changes' on.

Fire District Summaries

So far Rocky has District Summaries for Fire Districts 6 and 4. NMI stated that they need the summaries before they can proceed with Chapter 3 and it is an important part of the chapter. Summaries will feed into goals and objectives along. While we are still on schedule, it is very important that summaries be submitted. Rocky has a consolidated resource list for the fire districts from Emergency Management that he will forward to NMI.

NMI also needs summaries from DNR, ODF and USFS.

Public Outreach Plan

As discussed at the last meeting, organizations are encouraged to participate in the upcoming Era of Megafires presentation. Bob Carson will arrange for Whitman College to provide some tables for use in the foyers. Emergency Management committed to bringing wildfire mitigation information to the presentation.

After some discussion, a public outreach meeting to take around the county, though not a requirement, is a good idea.

Determination of County's Wildland Urban Interface

A map was displayed and it was discussed what factors/methodology should be used to determine WUI areas. It was decided that home density, fire history/frequency, fuel type, and available resources were among the factors that would be used. The group gathered around the map and drew tentative WUI areas.

Next Meeting

The next meeting will be March 22, 2017 at WWFD 4 (same location).

Adjournment

The meeting adjourned at 11:35.

March 2017

AGENDA

Community Wildfire Protection Plan (CWPP)
Steering Committee Meeting

March 22, 2017, 10 AM – 12 PM

WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41

2251 S. HOWARD ST., WALLA WALLA

Opening Remarks and Introductions
Confirmation of WUI Zones
Public Outreach Meetings **~ Structure Group Discussion** **~ Dates**
Risk Assessment Process
Mitigation Assessment Chapter **~ Which priority projects to include**
Previous Meeting Chapter Review Comments **~ Chapter 2 – Mission, Goals & Objectives** **~ Chapter 4 – County Charteristicss**
Introduction of New Draft Chapters **~ Chapter 3 – Wildland Urban Interface Planning** **~ Chapter 1 - Introduction**
Roundtable
Establish Next Meeting Date
Adjourn

Minutes

Community Wildfire Protection Plan Steering Committee Meeting
Walla Walla County Fire District #4, Station 41
2251 S. Howard Street
Walla Walla, WA 99362
March 22, 2017

Present:

Dave Reller, Columbia REA
Devin Parvinen, Washington State Department of Natural Resources (DNR)
Larry Hector, Walla Walla County Fire District 6
Bob Yancey, Walla Walla Fire Department
Matt James, U.S. Forest Service
Bill Mathews, Northwest Management, Inc.
Mark Corrao, Northwest Management, Inc.
Matt Hoehna, Oregon Department of Forestry (ODF)
Spencer Slyfield, Washington State Department of Natural Resources (DNR)
Mori Struve, City of Walla Walla Public Works

Patrick Purcell, Walla Walla County Emergency Management

Minutes:

Call to Order

The meeting was called to order by Mark Corrao at 10:10 AM at Walla Walla County Fire District #4's Fire Station 41. Introductions were made.

Confirmation of the Wildland Urban Interface (WUI)

Mark Corrao gave a short overview of the current depiction of the draft WUI zones being considered, and suggested that as soon as they were confirmed it would set the stage for other aspects of the study. Mark asked if there were any challenges to the current colors and boundaries currently being represented on the draft.

It was brought up in discussion that the southern area falling into the adjoining county be removed and a paragraph describing this area be placed into the study. The lack of risk delineation in this area raised questions as to why it was being maintained and might cause confusion to someone viewing the map. It was decided that the area would either be removed or grayed out and a written explanation of that area would be provided. There were no other objections and it was decided that they would consider the WUI areas confirmed and proceed.

Bill Mathews gave a short explanation of the layers currently on the WUI zone and Fire Risk map and contrasted what was currently displayed with information that would be added.

Dave Reller from Columbia REA asked if there would be any indication of utility lines or assets on the map. Bill explained that they had no current GIS information that they could overlay to provide that information. Dave replied that he has information and will provide it for inclusion.

Mori Struve asked about displaying lightning strike and historical fire information on the map. In discussion it was determined that it will be displayed and that additional data is available from Walla Walla County Emergency Management Department the United States Forest Service and other sources which will further delineate lightning strikes and historical fire starts.

Public Outreach Plan

Mark Corrao communicated to the group that with four sections circulated and the WUI zones confirmed it was a good time to discuss public outreach so that community concerns can be addressed.

After discussion it was decided that 3 public meetings would be held, on April 17, 18, 19, at Mill Creek, Walla Walla and Touchet. These meetings will be held at fire stations located within the identified areas. Meetings will be held at 7 to 9 PM with the exception of Touchet which will be held from 6-8 PM. Mark added that he and Bill would also be available for site visits during that time should areas be free of snow and accessible. It was decided that it would be better to conduct the site visits at the end of May-first week of June in order to have more certain access to pertinent locations.

Mori Struve asked about the possibility of conducting a survey to elicit public comments prior to the meetings and expand the base from which public comments can be drawn. He will work with Mark to create questions which can be sent out with utility mailings.
Mark Corrao requested pictures of fire damage and mitigation projects from the committee members in order to be able to incorporate them into the presentations being created for the public meetings.

Mitigation Assessment Chapter

Bill Mathews said that they will be requesting Mitigation Assessments from local jurisdictions/agencies within WUI zones. They are more familiar with the challenges they face locally and with any mitigation required, planned or completed. These will be incorporated into the Mitigation Assessment Chapter in order to provide a voice to all parties. Further, this demonstrates an understanding of what risks exist and defines what is possible to mitigate under realistic budgetary constraints. This is also an educational piece directed at the public audience to manage expectations.

Introduction of New Draft Chapters

Chapter 1: Introduction
Chapter 2: Wildland Urban Interface Planning

Roundtable Discussion

No more discussion at this time

Next Meeting

The next meeting will be 26 April, 2017 at WWFD 4 (same location).

Adjournment

The meeting adjourned at 11:35.

April 2017

AGENDA

Community Wildfire Protection Plan (CWPP)
Steering Committee Meeting

April 26, 2017, 10 AM – 12 PM

WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41 2251 S. HOWARD ST., WALLA WALLA

Opening Remarks and Introductions

CWPP Plan Discussion Points

1. Wish-list of projects, resources, educational/training needs anywhere within the county, across all folks (private, city, county, state etc.)
2. Any information on projects/needs that were listed in the 2006 plan that DID get accomplished. We can transfer the list of projects that were identified from the old plan to the new one, to start that, but it would be good to have some examples of what has been accomplished.
3. If the steering committee could develop and provide us with their desired schedule for plan updates/revisiting for the future so we can include that in the last chapter.
4. Discuss where and how we would like to make folks aware of the document when it is ready for their review; who to field questions and gather responses to not duplicate efforts, but also to maximize the inclusion of feedback.
5. What type of language is, most helpful/least limiting, to the group for the "disclaimer" that will be included in the document identifying the non-regulatory nature of this plan. Is there something specific or is template language sufficient?
6. Other? Any other questions or concerns that the committee believes may need to be included.

Public Outreach

Discuss feedback from April 17 – 19, 2017 Public Outreach meetings

Roundtable

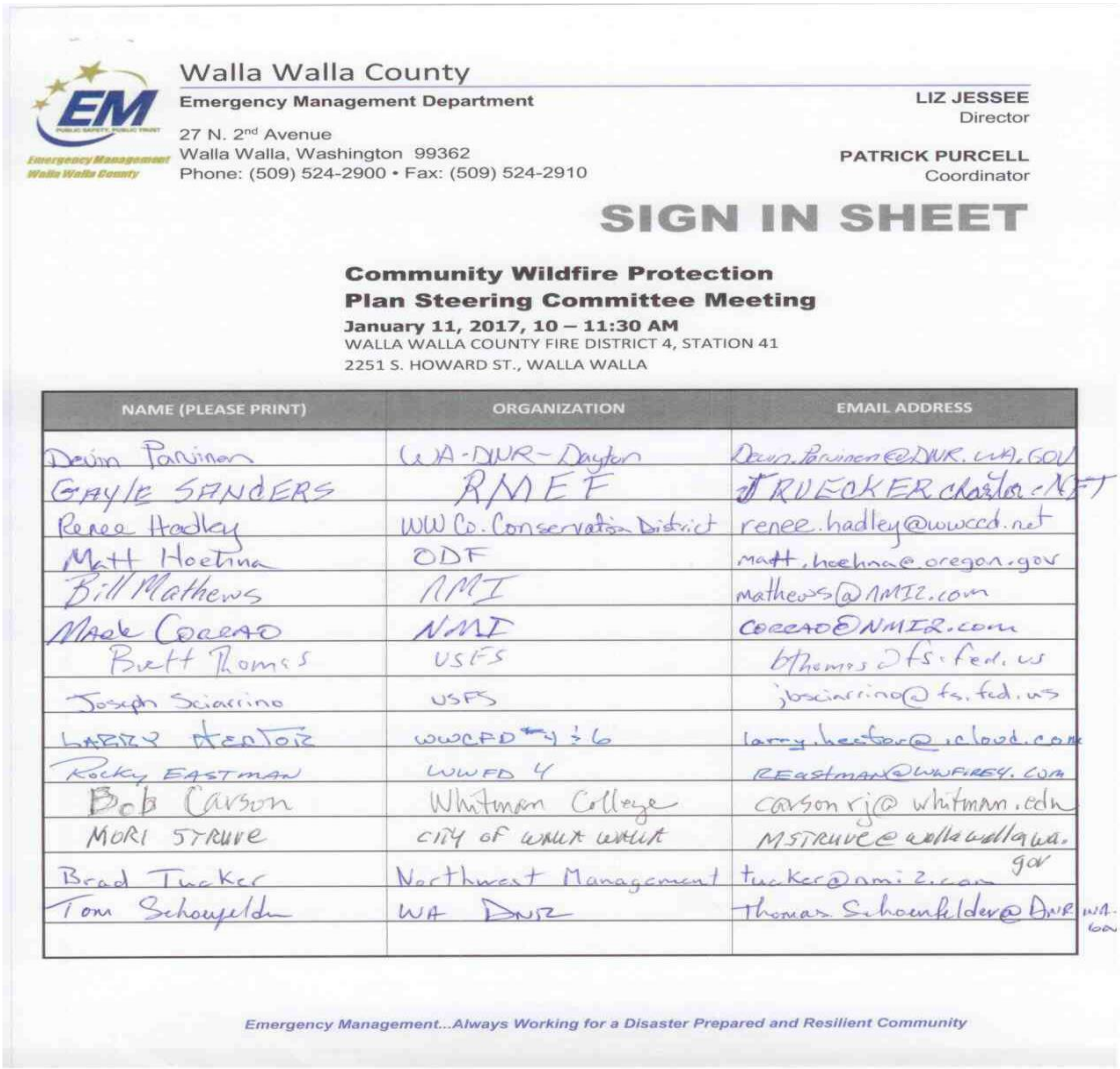
Establish Next Meeting Date

Adjourn

Appendix B

Planning Committee and Public Outreach Meetings Sign in Sheets

Committee Meetings



Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director

PATRICK PURCELL
Coordinator

SIGN IN SHEET

Community Wildfire Protection Plan Steering Committee Meeting
January 11, 2017, 10 – 11:30 AM
WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

NAME (PLEASE PRINT)	ORGANIZATION	EMAIL ADDRESS
Devin Parviner	WA-DNR-Dayton	Devin.Parviner@DNR.WA.GOV
GAYLE SANDERS	RMEF	JTRUECKER chester-MT
Renee Hadley	WW Co. Conservation District	renee.hadley@wwccd.net
Matt Hoetina	ODF	matt.hoetina@oregon.gov
Bill Mathews	NMI	mathews@NMIR.com
Mark Corcao	NMI	CORCAO@NMIR.com
Brett Thomas	USFS	bthomas2@fs.fed.us
Joseph Sciarrino	USFS	jbsciarrino@fs.fed.us
LARRY HEATER	WWCCD	larry.heater@icloud.com
Rocky EASTMAN	WWFD 4	REastman@WWFIRE4.com
Bob Carson	Whitman College	carsonrj@whitman.edu
MORI STRUVE	CITY OF WALLA WALLA	MSTRUVE@wallawallawa.gov
Brad Tucker	Northwest Management	tucker@nmi2.com
Tom Schoenfelder	WA DNR	thomas.schoenfelder@DNR.WA.GOV

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director

PATRICK PURCELL
Coordinator

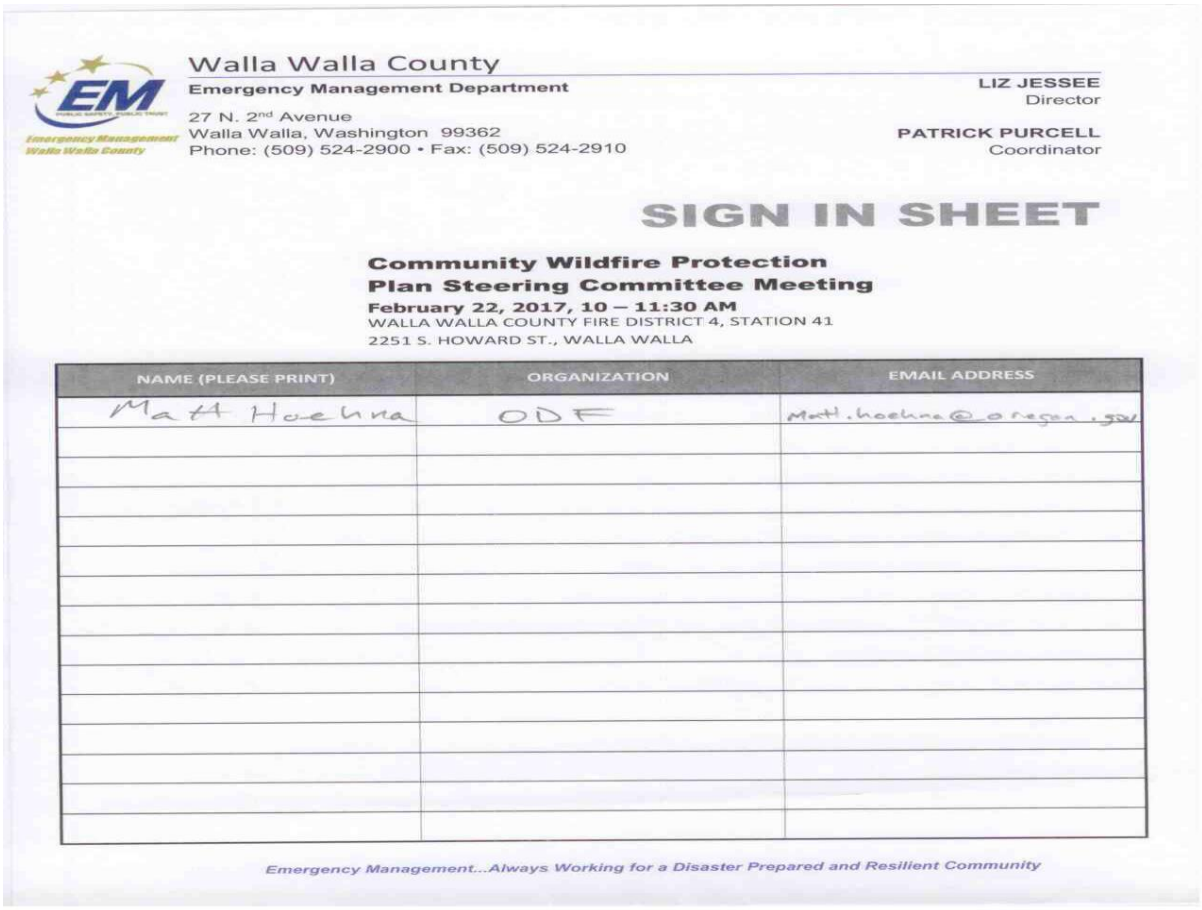
SIGN IN SHEET

Community Wildfire Protection Plan Steering Committee Meeting

February 22, 2017, 10 – 11:30 AM
WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

NAME (PLEASE PRINT)	ORGANIZATION	EMAIL ADDRESS
Liz Jessee	WWEMD	
DAVID WINTER	CPFD	
Dain Paninen	WA DNR	
Rocky EASTMAN	WWFD4	
LARRY HECTOR	WWFD6	
Renee M Hadley	WW Co. Conservation District	renee.hadley@cowwcd.net
Joseph R Sciascia	USFS - UMATILLA N.F.	
Judith Johnson	Kooskooskie Commons	jsj@bmi.net
Lisa Caldwell	Columbia Co DEM	
Anne Higgins	" " "	
Bob Yancey	WWFD	
Bob Carson	Whitman College	
Matt JAMES	USFS	
Bill Mathews	NMI	
Mark Conrad	NMI	

Emergency Management...Always Working for a Disaster Prepared and Resilient Community



Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director

PATRICK PURCELL
Coordinator

SIGN IN SHEET

Community Wildfire Protection Plan Steering Committee Meeting
February 22, 2017, 10 – 11:30 AM
WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

NAME (PLEASE PRINT)	ORGANIZATION	EMAIL ADDRESS
Matt Hoehna	ODF	Matt.hoehna@oregon.gov

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director

PATRICK PURCELL
Coordinator

SIGN IN SHEET

Community Wildfire Protection Plan Steering Committee Meeting

March 22, 2017, 10 – 11:30 AM
WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

NAME (PLEASE PRINT)	ORGANIZATION	EMAIL ADDRESS
Mark Conrad	NMI	mconrad@NMI2.com
Bob Yuneen	WWFR	
Dave Reller	Columbia REA	dreller@columbiarea.coop
Bill Mathews	NMI	mathews@NMI2.com
Mori Struve	City of WW PW	MStruve@wallawallawa.gov
Larry Hector	D4 #6	larry.hector@icloud.com
Matt James	USFS	mjames01@fs.fed.us
Devin Parviainen	WA DNR	Devin.Parviainen@DNR.WA.GOV
Spencer Slyfield	WA DNR	Spencer.Slyfield@DNR.WA.GOV
Matt Hoehna	ODF	matt.hoehna@oregon.gov
Patrick Purcell	WWEM	ppurcell@co.walla-walla.wa.us

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director

PATRICK PURCELL
Coordinator

SIGN IN SHEET

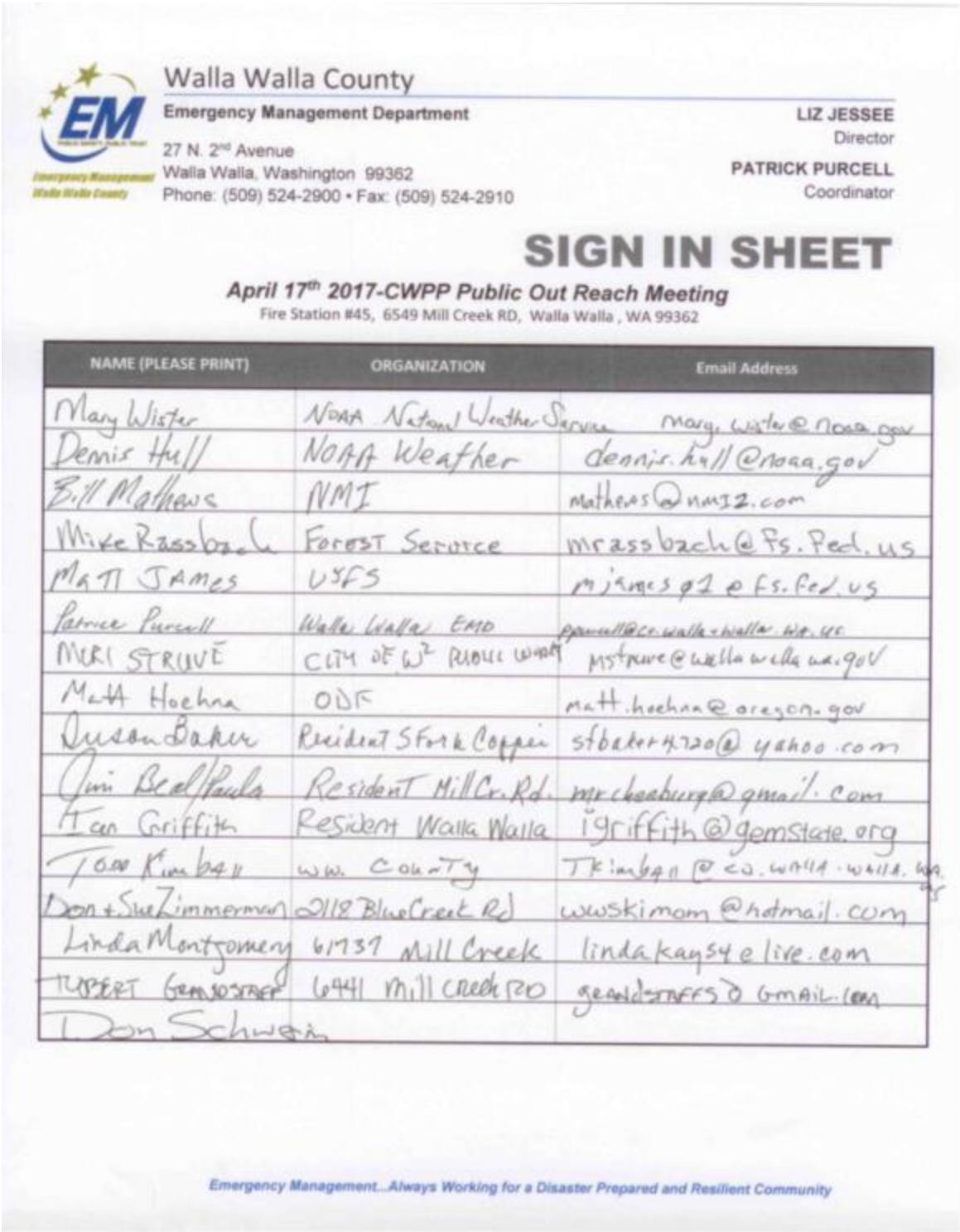
Community Wildfire Protection Plan Steering Committee Meeting

April 26, 2017, 10 – 11:30 AM
WALLA WALLA COUNTY FIRE DISTRICT 4, STATION 41
2251 S. HOWARD ST., WALLA WALLA

NAME (PLEASE PRINT)	ORGANIZATION	EMAIL ADDRESS
Ricky EASTMAN	WWFD # 4	
Judith Johnson	Kooskooskie Commons	
Joseph B. Sciarrino	USFS @ WWRD	
Bill Mathews	Mathews@nwi2.com	
[illegible]	DNR WA	
Reece Hadley	Walla Walla Co Conservation District	
Patrick Purcell	Walla Walla EMD Coordinator	
LIZ Jessee	Walla Wall EMD Director	
David Winters	College Place Fire chief	
Matt James	USFS	
Mori Struvi	City of Walla Walla Public Works Operations Manager	

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Public Outreach Meetings



Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

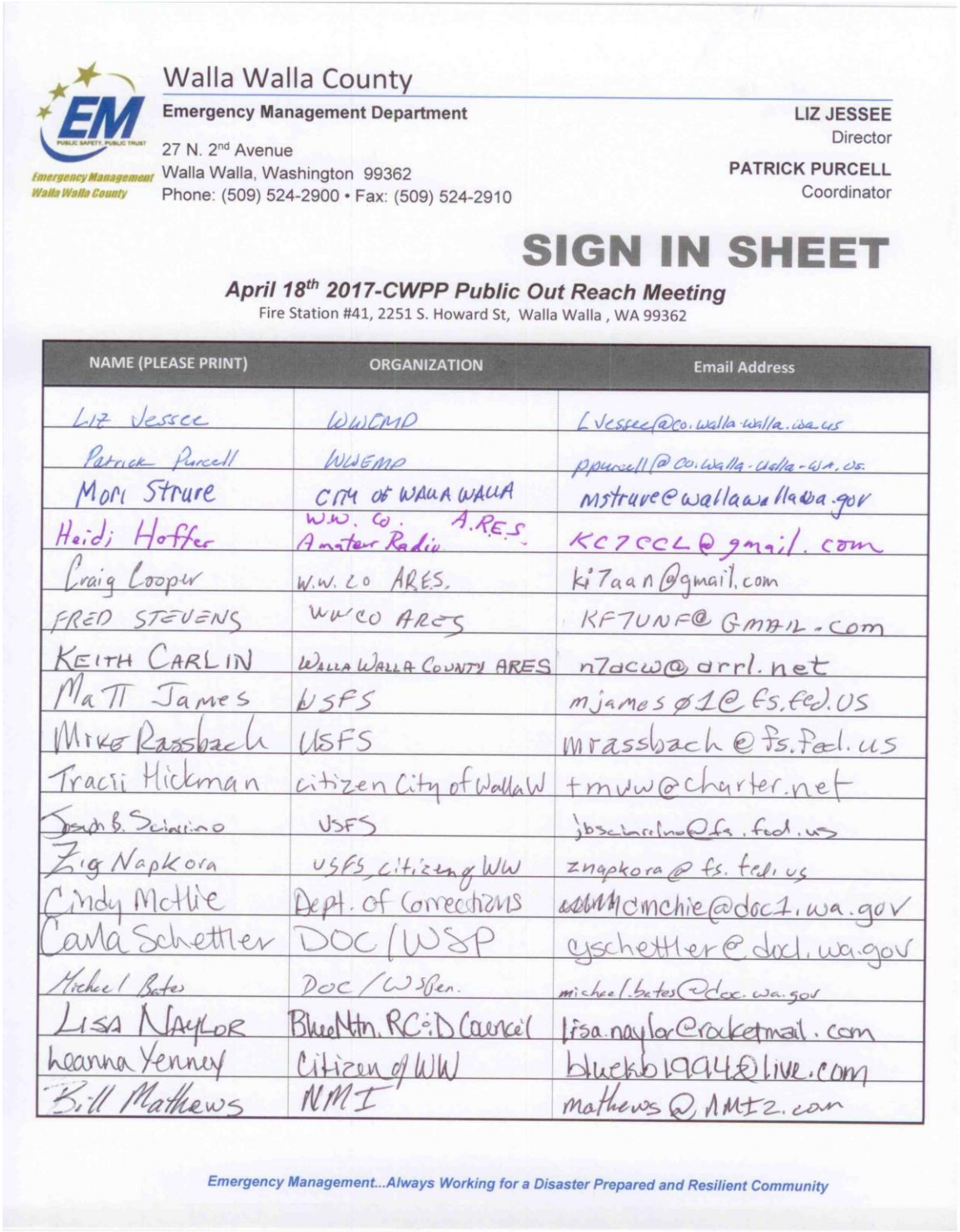
LIZ JESSEE
Director
PATRICK PURCELL
Coordinator

SIGN IN SHEET

April 17th 2017-CWPP Public Out Reach Meeting
Fire Station #45, 6549 Mill Creek RD, Walla Walla, WA 99362

NAME (PLEASE PRINT)	ORGANIZATION	Email Address
Mary Wister	NOAA National Weather Service	mary.wister@noaa.gov
Dennis Hall	NOAA Weather	dennis.hall@noaa.gov
Bill Mathews	NMI	mathews@nmi2.com
Mike Rassbach	Forest Service	mrassbach@fs.fed.us
Matt James	USFS	mjames01@fs.fed.us
Patrice Purcell	Walla Walla EMD	ppurcell@co.walla-walla.wa.us
Meri Strieve	City of W2 Public Works	mstrieve@wallawalla.wa.gov
Matt Hoehna	ODF	matt.hoehna@oregon.gov
Duson Baker	Resident S Fork Coppei	sfbaker4720@yahoo.com
Jim Beal/Paula	Resident Mill Cr. Rd.	mrcheaburg@gmail.com
Ian Griffith	Resident Walla Walla	igriffith@gemstate.org
Todd Kimball	WW County	Tkimball@co.walla-walla.wa.us
Don + Sue Zimmerman	2118 Blue Creek Rd	wwskimom@hotmail.com
Linda Montgomery	61737 Mill Creek	lindakay54@live.com
Robert Gemstater	6441 Mill Creek RD	gemstaters@gmail.com
Don Schwein		

Emergency Management...Always Working for a Disaster Prepared and Resilient Community



Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director
PATRICK PURCELL
Coordinator

SIGN IN SHEET

April 18th 2017-CWPP Public Out Reach Meeting

Fire Station #41, 2251 S. Howard St, Walla Walla , WA 99362

NAME (PLEASE PRINT)	ORGANIZATION	Email Address
Liz Jessee	WWCMD	LJessee@co.walla-walla.wa.us
Patrick Purcell	WWEMD	ppurcell@co.walla-walla-wa.us
Mori Struve	CITY OF WALLA WALLA	MStruve@wallawallawa.gov
Heidi Hoffer	W.W. Co. A.R.E.S. Amateur Radio	KC7CCL@gmail.com
Craig Cooper	W.W. Co ARES.	ki7aan@gmail.com
FRED STEVENS	WW CO ARES	KF7UNF@GMAIL.com
KEITH CARLIN	WALLA WALLA COUNTY ARES	n7dcw@arrl.net
Matt James	USFS	mjames01@fs.fed.us
Mike Rassbach	USFS	mrassbach@fs.fed.us
Tracii Hickman	citizen City of WallaW	tmww@charter.net
Joseph B. Sciarrino	USFS	jbsciarrino@fs.fed.us
Zig Napkora	USFS, citizen of WW	znapkora@fs.fed.us
Cindy McClie	Dept. of Corrections	cmchie@doc1.wa.gov
Carla Schettler	DOC/WSP	cyschettler@doc1.wa.gov
Michael Bates	DOC/WSPen.	michael.bates@doc.wa.gov
LISA NAYLOR	BlueMtn. RC&D Council	lisa.naylor@rocketmail.com
Deanna Yenney	Citizen of WW	blueskb1994@live.com
Bill Mathews	NMI	mathews@NMI2.com

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director
PATRICK PURCELL
Coordinator

SIGN IN SHEET

April 18th 2017-CWPP Public Out Reach Meeting

Fire Station #41, 2251 S. Howard St, Walla Walla , WA 99362

NAME (PLEASE PRINT)	ORGANIZATION	Email Address
Mark Conrad	NMI	MConrad@nmi2.com

Emergency Management...Always Working for a Disaster Prepared and Resilient Community

Walla Walla County
Emergency Management Department
27 N. 2nd Avenue
Walla Walla, Washington 99362
Phone: (509) 524-2900 • Fax: (509) 524-2910

LIZ JESSEE
Director
PATRICK PURCELL
Coordinator

SIGN IN SHEET

April 19th 2017-CWPP Public Out Reach Meeting

795 McKay Rd, Touchet , WA 99360

NAME (PLEASE PRINT)	ORGANIZATION	Email Address
MORI STRUVE	CITY OF WALLA WALLA PUBLIC WORKS	MSTruve@wallawallawa.gov
Lance Longmire	local resident	llongmire@wwps.org
Nathan Black	Local Resident	nathan.d.black@gmail.com
BRIAN JONES	WWCFPD #4	brian_j@pocketinet.com
Liz Jessee	WWCO EMD	
Rusty Waite	WWCFD #6	rm.waite@hotmail.com
LARRY HECTOR	WWCFD #6	tfd6@owisp.net
GENE CURCIO	LAND OWNER/BLUE CREEK	~~gdb~~ gdbuzzard@gmail.com (YOU HAVE THIS IN SYSTEM)
Wyatt Borgens	Land Owner WWCFD #6	wborgens@columbia.net.com
Lauri R Lehtinen	land owner	Jackylehtinen@charter.net
Cathy Schaeffer	Rep. Cathy McMorris Rodgers	cathy.schaeffer@mail.house.gov

Emergency Management...Always Working for a Disaster Prepared and Resilient Community