XI. Emergency Management

Introduction

Regardless of protection authority, all lands in Wallowa County are susceptible to wildland fire. It has been important for local agencies to collectively agree upon how agencies will respond in providing mutual aid and cost effective fire protection for public lands, private lands, and surrounding communities. It is also important that community members are actively involved in risk mitigation preparations prior to a wildfire event.

Wallowa County hosts several emergency services with protection jurisdiction that play a key role in actively responding to, participating, or supporting wildfire events. Depending on incident size, involvement during fire emergencies are federal, state, city, rural firefighters, law enforcement, and emergency management, making saving lives their number one priority.

Wallowa County communities under an “average” occurrence of wildfire, are likely to have more than 10 percent of their populations and property affected, giving them a HIGH in community vulnerability (U of O 2014).

Fire protection capabilities are most often challenged during the summer months, when thunderstorms can initiate multiple fire starts over a matter of hours or days. This type of multi-occurrence quickly depletes available local resources, requiring out of area assistance. Unfortunately these storms often originate over east central Oregon, leaving numerous fire starts in their wake prior to reaching Wallowa County, resulting in limited available outside resources for assistance. Because of frequent multiple fire start events and limited fire suppression resources, a cooperative effort with landowners to protect their structures through mitigation measures will increase structure survivability.

Infrastructure

Infrastructure plays an important role not only in Wallowa County’s local economy, but is also critical during disasters and emergency events for proper functioning and response capabilities. Facilities such as police, fire, hospitals, and government are important to successful wildfire emergency response. Support infrastructures such as airports, utilities, and transportation systems provide an important role in the overall fire mission.

Damage to or loss of infrastructure services can negatively affect a community’s ability to cope, respond, and recover from a wildfire situation. Communication during wildfire events is key to coping with events and preparing for post situations. Wallowa County has one radio station and no television stations making cell phone and computers the highest forms of information flow. Highways are the primary means of shipping access in and out of the valley for goods and supplies. Protecting and maintaining infrastructures is essential for a higher degree of wildfire suppression success. Firefighting supplies often arrive via state and federal highways.
There are two key access highways into Wallowa County and one scenic byway that is open during the summer-fall season only. The two key highways are highway OR82 that connects Wallowa County with Union County to the west and highway 3 that travels from Enterprise north to Clarkston, Washington. Highway 82 is a two lane road that winds along the Wallowa River with steep inaccessible slopes on both sides. Highway 82 is the major arterial access route used for general and product transportation purposes. The Union-Wallowa County Line occurs at mile post 33. Oregon Department of Transportation (ODOT) 2015 traffic volumes for OR82 has an average daily use of anywhere from 1700 to 4000 between the county line and the town of Joseph. Based on the snow conditions in the winter and the level of recreation numbers recorded during the summer months the majority of traffic use occurs at the peak of fire season. Figure XI - 1 shows the annual average daily traffic use on Wallowa County highways according to ODOT.

Highway 3 is the second key access route in and out of Wallowa County. This route extends north out of Enterprise into Washington State. Highway 3 is a popular route used by many locals to access the towns of Lewiston, Idaho and Clarkston, Washington as well as visitors coming into the county from those areas. The two lane highway dissects the northern part of the county while meandering through general forest until it breaks off into Buford Grade in the breaks of the Grande Ronde River Canyon. Buford Grade is known for its remoteness, steepness, and negotiating curves as the highway descends from
4400 feet near Flora down to 1300 feet at the Grande Ronde River, all over a 10 mile stretch.

These two primary access routes are key infrastructure year round for Wallowa County with the highest traffic use occurring during the summer months coinciding with the highest fire potential.

Wallowa County has roughly 123 miles of state highway in both rural and urban Wallowa County.

There is 136 primary bridge infrastructures managed by the state, county, city with each agency having 66, 59, and 11 respectively. State bridge custodian consist of 3 State Park/First Reserve, 3 other State Agency with the remainder falling under Oregon State Highway Agency. The Forest Service has approximately 25 bridges associated with a variety of road access routes with the highest use routes in the Lostine Canyon, Chesnimus Creek area, and on the 3900 scenic byway route to Halfway, Oregon.

Wallowa County has approximately 120 miles of high power transmission lines that provide service to cities of Spokane, Washington and Boise, Idaho. Three companies that utilize the lines are: Avista lines run north of Imnaha to Spokane, Washington; Idaho Power utilizes the lines south of Imnaha into the Snake River going south and paralleling the 3900 scenic byway road both leading into Baker County eventually servicing Boise,
Idaho; and Pacific Power lines run between the Snake River west into Union County eventually connecting to Pendleton and Portland, Oregon.

Wallowa County hosts a number of other miscellaneous type infrastructures that are primarily situated in forested areas. These are often located either at a high point where fire will burn rapidly uphill toward its location, or in a narrow canyon where fire will be funneled due to surrounding terrain and wind patterns. These areas often have limited access, making evacuation and firefighting difficult. These areas include:

- Fire detection lookouts in use: Harl Butte (FS), Hat Point (FS), Howard Butte (ODF), Long Ridge (private coordinated with ODF), and Courtney Butte (private), Oregon Butte (Umatilla NF – Wenaha), Lookout Mountain (Umatilla), Mule Peak (Eagle Cap Wilderness)
- Communication Repeaters include Howard Butte, Courtney Butte, Tope Lookout, Buckhorn, Sheep Ridge
- Fire detection Lookouts not in use: Buckhorn (FS), Redhill (FS),
- Fish Hatcheries: Wallowa Hatchery along Spring Creek in Enterprise, Big Canyon at confluence of Deer Creek and Wallowa River, and Little Sheep Creek along Imnaha Highway and a Fish Weer located just off 3900 road on the upper Imnaha River
- Multiple developed campgrounds: Wallowa Lake State Park, Upper Imnaha – multiple camp sites, 12 – overnight campgrounds Hells Canyon/Wallowa Valley; 21 overnight campgrounds in Wallowa Mountains/Eagle Cap Area (Forest Service, 2017)
- Numerous scattered farm/ranch communities and grazing allotments
- Guard Stations: Lick Creek, Billy Meadows, Sled Springs
- Hells Canyon Dam and facility, Pacific Power Hydro – head of Wallowa Lake

Wallowa County has a numerous variety of communication methods (166) located throughout the county in the form of AM/FM, Land Mobiles to cell towers. Listed below is the type and number identified by the West Wide Risk Assessment (WWRA) data:

<table>
<thead>
<tr>
<th>Communication Source</th>
<th>Number of Licensee</th>
<th>Communication Source</th>
<th>Number of Licensee</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>1</td>
<td>Land Mobile - Private</td>
<td>86</td>
</tr>
<tr>
<td>Antenna Structure Registration (ASR)</td>
<td>7</td>
<td>Microwave</td>
<td>55</td>
</tr>
<tr>
<td>Cellular</td>
<td>3</td>
<td>Paging</td>
<td>2 Asotin/Troy</td>
</tr>
<tr>
<td>FM</td>
<td>5</td>
<td>TV</td>
<td>6</td>
</tr>
<tr>
<td>Land Mobile – Commercial</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table XI – 1. Listing of Wallowa County communication types and number of licenses issued.
Fire Protection

Wallowa County recognizes the importance of interagency efforts in wildland fire situations. Wildland fire protection is included in the county’s Emergency Operations Plan, section 4.2 that addresses the phases of emergency management: (1) mitigation and prevention; (2) preparedness; (3) response; and (4) recovery.

In 2009 the Wallowa County Emergency Services updated the Wallowa County Emergency Operations Plan. There are identified agencies for Emergency Support and Emergency Incident extensions. In the Emergency Operation Plan chapter 3 outlines the roles and responsibilities of the different agencies that may be involved in an urban/wildland interface fire, with the main goal of protecting life of emergency responders, members of the public, then prevention and mitigation of major property damage that present an immediate danger to human life (WCEOP 2009).

In Wallowa County fire protection falls within two categories of protection:

1. Wildland Protection – wildlands are protected from human and natural fire starts by either Forest Service, Oregon Department of Forestry, or rural fire departments with assistance of city fire departments. When structures are threatened that are outside of city-rural protection boundaries or not under a protection contracts with the city departments a conflagration act may be initiated.

2. Dual protection occurs where rural fire protection districts overlay with wildland fire protection from the Oregon Department of Forestry. The city and rural fire departments have primary responsibility when structures are involved. Current training qualifications do not allow for Federal and State fire resources to engage a building on fire.

Wildland Protection

Wallowa County fire protection has changed since the original CWPP. In 2010, there was a large re-classification of lands resulting in an additional 200,000 acres to wildland fire protection. In 2015 a five year review was conducted looking at the interior area that was classified as Forestland but previously not assessed. The County Commissioners and Emergency Services recommended moving to wildfire land protection within the center of the county. The results were to classify and assess forestland. A total of 131,000 acres were added to wildland protection as forestland. This resulted in ALL Forest land in the county falling under some type of wildland fire protection.

Structure protection is provided within agency protection areas for City and Rural Fire Departments. Areas outside the city limits residence must complete a subscription for service for city to respond to structures. Enterprise, Lostine, and Joseph both have structure contracts for individual homeowners.
These lands are delineated in Figure XI – 4, displaying areas of unprotected, single protection, and dual protection.

![Wallowa County Wildfire Protection Plan](image)

**Figure XI – 4. Wallowa County Protection Authority. Geographic coverage for Wallowa County fire protection agencies. Types of coverage include land only, structure only, and dual protection of both land and structures. All lands within Wallowa County are under some type of protection.**

### Land Protection Without Structure Protection

Properties without structural protection are primarily private lands; while federal lands are without structure protection there are few buildings in comparison to private lands. Both, however, encompass the largest contiguous blocks of land in the county. One of the overlying issues facing the county is these lands have unincorporated small communities scattered throughout with no structure protection, as well as some scattered farm and ranch dwellings without structure protection. Lack of structure protection is compounded by response distance and time for structure protection resources to assemble, travel, and take action in these areas. An example is the Grizzly Fire in 2015 that began on the Umatilla National Forest during a multiple ignition thunderstorm event. Initially the fire spread was kept in check and priorities had to be made, however as weather conditions worsened the fire grew significantly threatening the towns of Troy and Flora. Response times to this area exceeded an hour from Enterprise.

Travel to some populated communities at risk without structure protection are listed in the figure below, listing the point of origin as the closest responding City or Rural Fire
Department with structure protection capabilities. Not included are home clusters spread out around the county that lack a community name. Access to some areas may be on gravel or dirt roads, steep grades, and/or windy roads so times may differ even though distances are similar.

<table>
<thead>
<tr>
<th>Closest city/rural Fire Dept.</th>
<th>Destination Community/area</th>
<th>Distance (miles)</th>
<th>Estimated drive time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise / Joseph</td>
<td>Alder Slope</td>
<td>3 - 5</td>
<td>15 - 25</td>
</tr>
<tr>
<td>Lostine</td>
<td>Allen Canyon / Bear Ck</td>
<td>2 - 5</td>
<td>15 - 30</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Davis Creek</td>
<td>15</td>
<td>25 - 35</td>
</tr>
<tr>
<td>Joseph</td>
<td>Divide / Prairie Creek</td>
<td>5 - 10</td>
<td>20 - 35</td>
</tr>
<tr>
<td>Wallowa</td>
<td>Dry Creek</td>
<td>7 - 18</td>
<td>30 -</td>
</tr>
<tr>
<td>Enterprise/Wallowa</td>
<td>Flora</td>
<td>37</td>
<td>50 - 70</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Hurricane / Enterprise Watershed</td>
<td>2 - 5</td>
<td>15 - 25</td>
</tr>
<tr>
<td>Joseph</td>
<td>Imnaha Corridor</td>
<td>30 - 50</td>
<td>45 - 90</td>
</tr>
<tr>
<td>Lostine</td>
<td>Lostine Canyon</td>
<td>1 - 6</td>
<td>15 - 30</td>
</tr>
<tr>
<td>Wallowa</td>
<td>Power Meadows</td>
<td>7 - 18</td>
<td>40 - 60</td>
</tr>
<tr>
<td>Wallowa</td>
<td>Promise</td>
<td>15 - 30</td>
<td>45 - 90</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Troy / Bartlett – Eden Bench</td>
<td>50 - 60</td>
<td>120 - 180</td>
</tr>
<tr>
<td>Joseph / Wallowa Lake</td>
<td>Ski Run (portion of Wallowa Lake – Ski Run)</td>
<td>2 - 6</td>
<td>15 - 40</td>
</tr>
</tbody>
</table>

Table XI - 2. Response time estimates are average travel only. Times may vary depending on road surface conditions, or other circumstances.

The majority of the small, unincorporated communities have very few population statistics available except at the county level. Many areas increase in population during the peak of the summer months as a result of tourism.

**Oregon Department of Forestry Protection (ODF)**

All rural - city structure protection and the bulk of the non-protected structures are located within the ODF wildland protection jurisdiction. Non-federal Forestlands are protected by statute by ODF. Oregon Department of Forestry has the largest block of single land protection that is not publicly owned. These non-federal owned lands are within the Wallowa Unit, Oregon Department of Forestry’s protection jurisdiction.

Non-federal forestlands extends from the Washington state line north of Troy southwest into the Minam River canyon then east over to Zumwalt Prairie. These private lands takes into account much of the valley’s foothills, agricultural lands, and grass prairies and overlaps with all city and rural protection areas accounting for 741,808 acres of wildland protection.
WUI Zone coverage for ODF includes the majority of the northern WUI Zone (75% - 136,030 acres) and 238,997 acres (55%) of the southern WUI Zone. The southern WUI Zone has 141,150 acres of wildland - structure protection overlap.

ODF protected lands with unprotected structures are primarily located in Troy and Flora and the Imnaha Corridor. Some additional areas include:

- Davis and Dry Creek areas
- Griffith Creek area of the Divide / Prairie Creek CAR
- The Elk Mountain, Crow Creek, and a pepper of structures from Crow Creek east to Zumalt Prairie.

The State of Oregon also provides access to 10 person inmate crews to assist with wildfires. The closest inmate crew is located in Baker City, Oregon. These crews work within a 90 mile radius of the institution, are considered low risk, and provide a service while receiving job skills. These crews are often used on contained fires that have little likelihood of escaping containment. Utilizing these crews makes regular fires crews available for new assignments.

**Forest Service Protection**

The Forest Service protected public lands include the Wallowa-Whitman and Umatilla National Forests with approximately 1,043,140 and 123,714 acres respectively, of which 35,907 acres of Umatilla N.F. lands are within the northern WUI Zone area. These public lands are dissected with rivers, deep canyons, and ridge top plateaus primarily surrounding the Wallowa Valley agricultural lands. Forest Service protection extends from the foothills near communities into large forested land blocks that included the Eagle Cap Wilderness, Hells Canyon National Recreation Area, Hells Canyon Wilderness and the Umatilla National Forest west of Troy. Structures within the public lands are primarily associated with administrative sites, Tramway Restaurant, privately owned small land parcels, and such areas as developed campsites, guard stations, lookouts, and communication facilities.

Forest Service lands in the northern WUI Zone include 35,907 acres of Umatilla and 10,310 acres of the Wallowa-Whitman National Forest. Public lands under Forest Service protection coverage in the southern WUI Zone total 234,288 acres with no overlapping of structural protection agencies. The southern WUI Zone extends into the Eagle Cap wilderness and accounts for 22,110 acres.

Unprotected structures are scattered throughout the WUIZ with the Imnaha Corridor supporting the highest concentration and most extreme fire risk out of all the non-protected structures.
Protection Capabilities

Structure Protection

Structure protection is provided within each agency’s protection jurisdictions for City and Rural Fire Departments with agreements in place to assistance neighboring departments when needed. Areas outside the city limits residence must complete a subscription for structure protection service by individual landowners entering into a protection contract. These contracts in effect expand structural protection response districts. There is currently roughly 500 residences in the county under contracts for structure protection.

As of 2010 Wallowa County and its sub-areas had 4,108 housing units (PSU 2016), this equates to approximately 12% of local homeowners under a protection contract. The two protection districts that have structure protection contracts available to homeowners are Enterprise and Lostine.
Dual Protection Areas

Dual protection ONLY occurs where a Rural fire Protection District (Wallowa and Wallowa Lake) overlap with ODF jurisdiction. These blocks of land are primarily associated with the rural and city protection areas.

Wallowa Lake and Wallowa Rural are the only true mutual aid protection areas covered by tax districts. The remainder of the county is under full wildland protection and a more centralized structure protection within Wallowa Valley.

Wallowa County has a vast landscape of forest and a finite amount of fire protection resources. The limited resources challenge local fire managers because of extended response times, the need to prioritize during multiple ignitions, and putting a higher emphasis on pre-fire mitigation treatments. There are a total of 3,152 square miles in Wallowa County with 5 rural/city fire protection districts, with ODF and Forest Service providing the primary wildland protection. The county’s vastness results in less than one fire station per 450 square miles. Structure protection facilities are all located in the Wallowa Valley proper. There are currently no substations located outside the valley for structure protection. Response times range from 15 minutes to two hours, depending on availability of personnel, proximity to station, single or multiple fire starts, draw down levels of local resources and the availability of resources outside the county.

Additionally, the US Forest Service (USFS) and the Oregon Department of Forestry (ODF) provide strictly fire protection for wildland ignitions. These agencies resources include engines, dozers, and fire hand crews. The Forest Service protection in Wallowa County includes Wallowa-Whitman National Forest and the Umatilla National Forest. Walla Walla and Pomeroy Ranger Districts on the Umatilla both overlap into the northwest corner of Wallowa County. The numbers in Table VI - 4 reflect both districts. The paid part time employees include both permanent seasonal (PSE) and temporary firefighters.

Though many rural fire protection districts are certified in wildland firefighting, wildland firefighters are not equipped or trained in structural protection. The Bureau of Land Management (BLM) also manages land in Wallowa County, but is in agreement with the USFS for initial attack responsibilities on BLM land.

Protection capabilities are influenced by both response time and staffing issues. The County’s five rural fire departments (RFD) are 100 % fully staffed by volunteer firefighters. State and Federal firefighters are either permanent full time year round employees, permanent part-time employees, or part-time seasonal employees which are brought on particularly for a specific time frame such as fire season. (Table XI - 3).

The following table lists Wallowa County’s Fire Resources, their protection area, number of staff, and pay status at each protection district.
<table>
<thead>
<tr>
<th>Fire Department/Agency</th>
<th>Protection Area in Sq. Miles</th>
<th>No. of Stations</th>
<th>Number of Staff</th>
<th>Estimated Structure Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Firefighters (FF)</td>
<td>Non-FF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PFT</td>
<td>PPT</td>
</tr>
<tr>
<td>Enterprise City</td>
<td>116</td>
<td>1</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Joseph City</td>
<td>69</td>
<td>1</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Lostine RFD</td>
<td>33</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Wallowa RFD</td>
<td>62</td>
<td>1</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Mutual Aid Protection with ODF</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallowa Lake RFD</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umatilla N.F. Pomeroy</td>
<td>193</td>
<td>1</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walla Walla</td>
<td></td>
<td>2</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon Dept. Forestry</td>
<td>3</td>
<td>5</td>
<td>19</td>
<td>1-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallowa-Whitman N.F. Wallowa Fire Zone</td>
<td>1624</td>
<td>1*</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table XI - 3. Non-government firefighters consist of 100 percent non-pay status volunteers. * Numbers do not reflect nationally shared resources such as hotshots, helitack rappel crews, seats. PFT = Paid Full Time, PPT = Paid Part-time, V = Volunteer, P = Paid, 1 – D = dozer. Forest Service and ODF numbers include fire hand crew personnel. See chapter IV for city populations. RFD sq. miles include mutual protection with ODF.

In rural Oregon, when fires occur in woodlands near homes, those first to arrive are often friends and neighbors acting as volunteer firefighters. Oregon rural areas, particularly Wallowa County, is dependent on volunteer firefighters to maintain service to the local communities. However, recruitment both nationally and in Oregon has fallen. Between 2005 and 2010, Oregon’s volunteer firefighting numbers were in line with a national decrease of 12 percent. Oregon has 10,000 firefighters, of which approximately 8,000 (four-fifths) are volunteers (Oregonlive.com 2011). A 12 percent drop in volunteers would reduce the numbers by 960 individuals.
Volunteer firefighter retention is difficult due to the lack of pay, outside responsibilities, and changes in population demographics. Portland State University sees a change in Wallowa County population age from 2016 to 2035. It is expected the population 65 or older will grow from roughly 29 percent to about 42 percent (PSU 2016). The aging population base is partly due to a transition of individuals from the age group of 15 – 64 years of age, which is expected to drop by nearly 10 percent over the same time period.

Change in workforce age and volunteer numbers is being felt in other states leaving fire departments with the inability to respond to calls. Pennsylvania in the mid-1970s had about 300,000 volunteer firefighters, that number is down to 50,000 resulting in an 80% drop according to Tim Solobay, Pennsylvania fire commissioner and former Washington County state senator (FireRescue1 2016). The average age of Pennsylvania firefighter is 45, most families require both parents to hold full time jobs, and fire departments are responding to as many as 4 times more medical calls making volunteer recruitment difficult.

According to the Oregon Volunteer Firefighter Association (OVFA) there are also a number of issues facing it's program and emergency services as a group:

- funding,
- meeting legislative requirements without adequate funding, and
- time required for individuals to continue as a volunteer (OVFA 2017).

Additionally, many of the current volunteer firefighters in Wallowa County are required to maintain full time jobs elsewhere, resulting in fire delayed responses or inability to fully staff at optimum levels. Wallow Lake Community has a fire house but has no personnel to staff it and the community has an agreement with the City of Joseph for protection services.

A variety of topics surfaced during the meeting with county fire chiefs. A complete list on needs and concerns is provided in Appendix A and mitigation actions for these can be found in Chapter VIII. The following is a brief list of key items.

1. Staffing of personnel and equipment is needed. Multiple positions must be filled and protocols followed to meet safety standards for firefighting, i.e.: pump operator, incident commander, safety officer, span of control, work rest protocol, etc.
2. Not all volunteers can respond to all individual calls for service
3. 72 to 80 hours minimum of training for entry-level. If training is typically during the week, causing the volunteer to miss paid work, but a weekend would require the volunteer to forgo home responsibilities.
4. Interface technology equipment for emergency response would be helpful: mapping, home assessments.
5. An Emergency Operations center (mobile or stationary) would be highly beneficial and service all emergency incidents.
6. Troy, Imnaha, Promise are in need of structure protection – sub-stations would fit this need.
7. The county has multiple ingress/egress issues for both evacuation and emergency equipment access. Areas such as: Lostine Canyon, Bear Creek, south end of Wallowa Lake, inadequate driveways/turn arounds.

8. Improvements on Public Communication, Education and Involvement

In an attempt to attract new firefighters from the local area, this CWPP identified it as a mitigation measure with corresponding action items in Chapter VIII, to develop a firefighting recruitment program to increase level of interest. The firefighting capacity is not commensurate with the local fire workload and risks levels posed by wildfire in Wallowa County. Investments into new equipment and increased firefighting workforce in conjunction with wildfire mitigations must occur to improve firefighter and public safety and successful initial attack efforts.

**Protection Compliance**

Should a wildfire reach the threshold for declaring a conflagration (per the Oregon Conflagration Act), the Wallowa County fire chief will request assistance and support for structure protection. The Governors Conflagration Act allows for movement of structure protection resources, however, the conflagration act is designed for land within a structure fire protection district, and typically conflagration requests occur when a fire is already posing a serious threat to the communities. In order to meet the criteria in 2016 Fire Service Mobilization Plan set forth by the Office of the State Fire Marshall for conflagration declaration, Wallowa County is currently compiling this plan in accordance with the following:

5. FEMA National Fire Plan
6. The 10-year Comprehensive Strategy
7. Regional Natural Hazard Mitigation Plan (Baker, Grant, Union, and Wallowa Counties)
8. Wallowa County Emergency Operations Plan
9. Federal Register, 2001 listing High Risk WUI Communities
Wallowa county protection resources work closely together to provide the highest level of protection possible. There are times during fire season that multiple fire starts and active fire behavior near communities warrant the need for outside aid. Since 2000, Oregon’s Governor has declared 3 conflagration fires in Wallowa County.

<table>
<thead>
<tr>
<th>Wildfire Name</th>
<th>Community Threatened</th>
<th>Date</th>
<th>Acres</th>
<th>Structures Threatened</th>
<th>Structures Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll Creek</td>
<td>SE Joseph &amp; Thompson Meadows</td>
<td>8/28/2000</td>
<td>3179</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Horse Creek</td>
<td>Imanha</td>
<td>8/17/2001</td>
<td>16,456</td>
<td>25 +</td>
<td>0</td>
</tr>
<tr>
<td>Grizzly Bear Complex</td>
<td>Troy &amp; Flora</td>
<td>8/20/2015</td>
<td>76,475</td>
<td>405 - residence 98 - misc. structures</td>
<td>25</td>
</tr>
</tbody>
</table>

Table XI - 4. Wallowa County conflagration acts since 2000. All conflagrations occurred mid-late August.

**Mitigation Action Plan for Emergency Services**

The focus of this section is Wallowa County’s Emergency Services participation and efforts regarding wildland fire. County led efforts are centered on fire fighter and public safety; increasing opportunities to promote community awareness and involvement; collaboratively working with local agencies to improve emergency response.

**Information Dissemination**

Wallowa County has many public information options today designed to educate the public on several emergency fronts, including wildland fire. Emergency Services has set up a system called AlertSense that issues texting alerts and reverse 911 system. This alert system detects all cell phones that have utilized local cell towers and those phones receive the emergency message. Individuals and organization can now sign up for the service to alert their own staff on any changing conditions.

Wallowa County web site, [http://co.wallowa.or.us](http://co.wallowa.or.us), has a link to Emergency Services under the menu tab of Public Safety that provides access to the a number of documents and links including the Northwest Interagency Coordination Center that provides Oregon State large fire situation and map information, resources committed to these fires, and a variety of other useful information.

A blog site called, Blue Mountain Fire Information has been established for information regarding current wildfire activity in the Blue Mountains areas of northeast Oregon and southeast Washington. This site is hosted by the Blue Mountain Interagency Dispatch Center, Oregon Department of Forestry’s Northeast Oregon District, Umatilla National Forest, and Wallowa-Whitman National Forest. This site provides recent news releases.
as well as real time forest fire conditions, local and regional wildfire conditions, current activities planned, and links to several agencies’ Facebook pages and websites.

Northeast Oregon Department of Forestry and Wallowa Fire Department both have Facebook pages providing up to date fire information in the local area.

Wallowa County emergency services and fire agencies use a variety of additional methods to get information out to the local residents. The county, when necessary, will conduct public service announcements, hold public meetings, post message boards, and issue news releases in order to reach the highest number of residence and visitors as possible.

**County Wide Fire Simulation Scenarios**

County emergency and fire management agencies, along with local cooperators, have been proactive in preparing for wildfire events. In May of 2016, Emergency Services hosted a wildfire simulation event with 80 individuals in attendance. The simulation involved a variety of attendees such as: 7 cadre members, 4 simulation command staff, 9 community leaders, 7 public information officers, 41 emergency services personnel, and 12 observers of which 7 were from neighboring counties. Emergency services personnel consisted of 21 support or infrastructure representatives leaving the remaining 20 individuals representing search and rescue, medical, fire, or law-enforcement. A complete list of attendees can be found in Appendix H.

The simulation provided opportunities to filter out potential issues in advance of an actual wildfire threat. Simulations are planned to occur every three years, with the expectation of increased cooperator involvement at each mock event.

**Wallowa County Planning Commission**

During the CWPP development process a representative of the Wallowa County Planning Commission was present at all CWPP meetings with the intent of utilizing the new assessment information as a supporting document to the Natural Disaster and Hazards Mitigation Plan and the Wallowa County Comprehensive Plan.

The updated county Comprehensive Plan was designed to support a number of Fire Management Policies/Plans regarding wildfire such as: the Northeast Regional Natural Hazards Mitigation Plan, 2017 Community Wildfire Protection Plan, Oregon Department of Forestry’s “Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads.

In April of 2017 the Wallowa County Planning Department presented a memorandum of recommendations for amendments to the Wallowa County Zoning Ordinance. It was presented at a public hearing held by the Wallowa County Planning Commission. The amendment was #17-01 with a proposal to amend Article 25 of the Wallowa County Zoning Ordinance to create a new Wildfire Hazard Overlay (WHO) zone, and further
amend the Wallowa County Comprehensive Plan – Chapter VII Natural Disaster and Hazards to include wildfire hazards. The new WHO criteria would replace existing wildfire hazard regulations in other articles of the Zoning Ordinance (Winterowd, 2017).

The primary focus for the new zoning and standards is the CAR and WUI Zone identified in this CWPP document. The purpose of the WHO would be to minimize wildfire risk to life and property and to implement the wildfire policies in Chapter VII Areas Subject to Natural Disasters and Hazards the Wallowa County Comprehensive Plan. The WHO zone is proposed to apply to the CWPP’s CAR and the WUI Zone unincorporated areas.

This supports the Cohesive Wildfire Strategy that emphasizes a need for assessing urban interface growth, land development, and zoning laws where communities can be proactive in developing defensible space and wildland fire risk reduction actions during new development (CWS 2014). Maintenance of previously completed fire risk reduction should also be an important topic during zoning assessments (CWS 2014).

Fire Siting/Zoning Standards information

Wallowa County Planning Department has added Section 25.090 Wildfire Hazard Overlay Zone to its document. The purpose of this WHO is to minimize wildfire risk to life and property and to implement wildfire policies in Chapter VII Areas Subject to Natural Disasters and Hazards based on this CWPP document (Winterowd, 2017). These changes are consistent with the Cohesive Wildfire Strategies (CWS 2014) success factor: Growth Management, Land Development, and Zoning Laws which states:

“There is a need for growth management, land development, and zoning laws that require defensible space and wildland fire risk reduction actions as communities develop; and the maintenance of wildland fire risk reduction practices, e.g., defensible space, fire-resistant construction, hazard reduction, etc. “

The proposal identifies several 07. Level 1 Fire Safety Design Standards identifies the following standards shall apply to (a) all new private businesses and dwellings, (b) to accessory structures greater than 1000 square feet, and (c) public and private infrastructure projects (Winterowd, 2017).

- Access roads and driveways to accommodate all fire equipment passage and turn around according to 07. Level 1 Fire Safety Standards, (A).
- Dwelling, business or public buildings shall have more than one functioning entrance/exits to the structure 07. Level 1 Fire Safety Standards, (A).
- Primary structures of 100 square feet or greater shall meet the requirements of the primary and secondary fuel break dimensions unless the Planning Director sees the need to meet the International Fire code Institute Urban Wildland Interface Code according to 07. Level 1 Fire Safety Standards, (C).
- No structures on slopes 40 percent or greater 07. Level 1 Fire Safety Standards, (C) (5).
New or expanded structures shall have roofs of non-flammable material, screened vents, and chimney spark arrestors 07. Level 1 Fire Safety Standards, (D).

A dwelling shall be located upon a parcel within a fire protection district or shall be provided with fire protection by contract 07. Level 1 Fire Safety Standards, (E).

Fire siting standards are just one of the tools this CWPP identifies to meet its goals and provide support for many action items proposed in Chapter VIII’s mitigation measures. Interlinking the agency documents regarding fire protection is key to an all hands all lands concept and promotes a more collaborative approach to reducing wildfire risks in Wallowa County.

**Defensible Space**

Defensible space is an area designed to improve structures’ chances of surviving a wildfire. Defensible space provides an area that increases options for firefighting resources during a wildfire event. It includes areas in which vegetation has been altered or reduced in an effort to modify fire behavior, reduce structure ignition, and increase opportunities for firefighters to defend structures or critical infrastructure. It often increases the probability of structure survivability, even at times when fire conditions limit engagement of firefighting tactics.

There are four primary objectives when considering developing defensible space:

1. Create safer locations for firefighters to engage wildfires.
2. Modify fire behavior through modifications of vegetation characteristics and type.
3. Design projects that provide opportunities to stop fire spread prior to reaching communities, in effect reducing fire size, values lost, and commitment of firefighting resources.
4. Take a landscape “middle ground” approach to fragmenting vegetation continuity, which in effect accomplishes the first three mentioned above.

Residential defensible space takes many forms that could include planting and maintaining a lawn, thinning/clearing underbrush and dense stands, and providing adequate road access for firefighting equipment. Residential defensible space is often in close proximity to structures. Different treatments and maintenance can occur depending on location, existing conditions, and guiding policies. The size of a defensible space will vary, and is dependent on many factors such as slope, fuels, climate, and fire history.

The 2017 updated Fire Siting Standards – Wildland Fire Implementation #6 identifies that a primary and a secondary fuel break should be required around new structures (Winterowd, 2017). This reinforces the need for creating a more effective area of defense for structure protection, improve safety of personnel, and increase survivability of structures.

Defensible space in the middle ground can also provide advantages to firefighting by changing fire behavior well outside the residential areas in an effort to avoid direct threats to communities. The primary purpose of a fuel treatment is to modify fire behavior in the
event a wildfire should enter a fuel-altered zone, thus lessening the fire impact to communities as well as ecosystems. This change in fire behavior is often quantified as a reduction in flame length (intensity) or fire spread. Additionally, by changing vegetation structure with a fuels reduction approach fire severity (overstory mortality) is typically lowered, particularly when ladder and surface fuels are reduced.

Changing landscape fire spread is best achieved by fragmenting the fuel complex and repeatedly disrupting or locally blocking fire growth, thus increasing the likelihood that suppression will be effective or until weather conditions change (Finney 2001). In other words, by treating areas on the landscape in order to break up the fuel continuousness of both standing live and dead down material, these treated areas will disrupt the wildfire behavior and modify the fire growth to allow suppression resources to be effective. Vertical and horizontal vegetation treatments, vegetation modification along primary roads, and strategically placing treatments as part of a defensible plan all provide a means of fragmenting the fuels to disrupt fire spread. The focus of mitigation measures in Chapter VII's goals of Fire Adapted Communities and Restore and Maintain Landscapes provides a number of action items designed to work together to achieve defensible space.

Structures with properly maintained defensible space usually require less resource commitment times and result in lower negative impacts to important values. Wallowa County is prone to multiple lightning fire starts and has the potential for a major fire in a WUI, thus, supporting resource efforts through creation of defensible space will be a priority in an effort to defend as much property as possible.

Interoperability Between Dispatch Centers

The county currently has two primary dispatch centers that notify emergency resources, including wildland fire, of needed assistance at an incident. The Blue Mountain Interagency Dispatch Center (BMIDC) is designed with wildland fire in mind. The Dispatch Center employs personnel from both the U.S. Forest Service and ODF, who handle both wildfire initial attack dispatching and wildfire logistical support.

The Communications Division for Wallowa County includes the emergency 9-1-1 center for dispatching both emergency and non-emergency calls for service including Enterprise Police Department, all Fire and Ambulance and Wallowa County Law Enforcement Offices. The 9-1-1 Center is the 9-1-1 Public Safety Answering Point (PSAP) for all of Wallowa County and provides emergency dispatch services for Enterprise Police S, SO, FED FS Law Enforcement, Fire and EMS agencies throughout the County.

A Computer Aided Dispatch (CAD) link between dispatch centers does not currently exist, and as wildland fire response continues to evolve to include more interagency involvement CAD connections are needed at a minimum. The development of compatible computer systems and/or software between Wallowa County and the Blue Mountain Interagency Dispatch Center will assist emergency services in a number of ways.

- Allows for real time information between Emergency 911 and wildland fire dispatch offices.
Provides for a centralized data base where all information can be obtained

- Increases efficiency in communication between the county, state, and federal agencies.
- Disseminates consistent information between dispatch centers and fire response agencies.

## Training

Wildland fires occur either on State protected private lands or Federal lands, which often results in reciprocal agreements between agencies on training requirements to qualify for wildland firefighting. This provides consistent training qualifications for wildland fires. The Forest Service and ODF offer a variety of opportunities to help rural firefighters with wildland fire training. The National Fire Protection Association (NFPA) training is crosswalked with reference to Northwest Fire Training qualifications and standards to ensure that rural fire departments stay current in their wildland credentials. Local county rural fire personnel are trained through ODF and FS to improve wildland fire response capabilities.

The State of Oregon has the Department of Public Safety Standards and Training that serves career and volunteer structural fire fighters, providing entry-level, specialized, leadership, and maintenance training to Oregon’s fire service professionals (Oregon State 2016).

The U.S. Forest Service, BLM, and ODF provide a wide range of courses for wildland fire professionals to update their knowledge and skills. Many of these courses are interagency in nature and can be conducted at the local level (300 level and down) if agency instructor qualifications are met. The Federal and ODF both recognize the training standards and guidelines found at https://nationalfiretraining.nwcg.gov. The Oregon Department of Forestry Fire section also provides links to the Federal Wildfire Coordination Group and the Pacific Northwest Interagency Training Center.

Oregon State has additional direction for fire personnel under Division 9 Fire Service Professionals. Section 259-009-0062 provides the requirements needed to be certified as a fire service professional including training needs for various wildland fire fighting positions.

Rural Fire Departments are hired for fire response and training under the State of Oregon because no avenue exists for the Forest Service to develop a mutual response agreement with Rural fire departments. Currently, Rural Fire departments cannot be hired directly by the Forest Service which creates obstacles when Rural Fire departments are the closest resource for initial attack on public lands, resulting in inefficient uses of resources, slowed response times, and more acres burned.

Rural fire departments are trained by qualified instructors from either the Forest Service or ODF or they may get sponsors to conduct classes or pay for classes at local community colleges. This requires time and money for individuals who are also holding down other full-time jobs. Local trainings where rural departments can maintain and
increase their qualification benefits the local, state, and federal partners. Designing a program through the Northwest Coordination Training Group (NWCG) to include rural firefighters would be highly beneficial during fire responses.

Wallowa County fire response may differ depending on agency and burnable material involved, however, to assist on publicly owned lands, federal wildland fire standards for training must be met. This training provides consistent safety procedures, language, processes, and knowledge.

**Summary**

There is potential for significant consequences if highway access were closed due to a wildfire. Wallowa County has two key access routes as ways in and out of the area. Highway 82 is the most often used route with up to 2000 vehicles per day and the section just north of the town of Joseph supporting up to 4000 vehicles per day. The only other access route maintained year round is highway 3 north to Clarkston. Although less used, Highway 3 averages 390 vehicles daily. State highways cover approximately 123 miles with 62 state bridges in rural and urban areas.

Part of Wallowa County infrastructure is 120 miles of high power transmission lines that provide service to a number of large cities throughout the northwest. Impacts to these infrastructures within the county can have a significant ripple effect felt as far away as Portland, Oregon.

The size of Wallowa County, its access issues, remote communities and relative fire risk compared to the rest of the state along with its popularity for tourism reinforces the need to increase fire response and structure protection capabilities. The larger percentage of infrastructure and communities are centered within Wallowa Valley and its surrounding foothills all within close proximity to land and structure protection resources, while the outlying communities currently have no structure protection or have emergency response times that increase chances for a negative result. The lack of structure protection in Wallowa County is of high concern particularly where areas of extreme fire risk support both communities and key infrastructure (Imnaha Corridor).

The only structure protection in Wallowa County is provided by 5 city and rural fire departments that are 100% staffed with volunteers. Oregon Department of Forestry and the Forest Service are all paid employees and provide the highest level of wildland protection with assistance from city and rural fire. Taking efforts to improve protection capabilities brought forward by the county fire chiefs can address a number of issues facing fire response resources in the county.

Building on collaborative efforts to educate, assist, and partner with homeowners prior to a wildfire event will decrease the likelihood of an adverse outcome to personal safety, structures, and infrastructures. Several opportunities exist through this CWPP that will improve fire emergency response capabilities. Collaboratively working together to advance information sharing, fire siting, communications, and training can save lives and provide property protection.
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Web Links:

Fire Department.net. http://www.firedepartment.net/nearest-fire-department#location=Wallowa+County%2C+OR


