

Clearwater County, Idaho

Community Wildfire Protection Plan

2023

Adopted by the Clearwater County Board of Commissioners, May 2023



Clearwater County 2015 Fires



Orofino 7-25-2013

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Commissioners
Vince Frazier, Chairman
Mike Ryan
Richard Miller

Clearwater County Commissioners

Clearwater County Community Wildfire Protection Plan

5-15-23

The Clearwater County Board of Commissioners supports the updated Community Wildfire Protection Plan. The plan will be utilized as a guide for planning as related to National Fire Plan and the Idaho State Fire Plan as appropriate.

The Clearwater County Board of Commissioners appreciates the hard work that our local firefighters do in protecting Clearwater County property and citizens.

Therefore, the Clearwater County Board of Commissioners do hereby adopt, support, and will facilitate implementation of the updated Community Wildfire Protection Plan as deemed appropriate.

Vince Frazier, Chairman

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Mike Ryan, Member

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Richard Miller, Member

A blue ink signature of Richard Miller, written over a horizontal line.

Clearwater County, Idaho Community Wildfire Protection Plan 2023 Update

Signatures of Participation by Clearwater County Fire 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.



By: Bob Lewis, Chief
Evergreen Rural Fire District

5-10-2023

Date



By: Fred Allen, Chief
Grangemont Rural Fire District

5-10-2023

Date



By: Bart Jones, Chief
Orofino City and Rural Fire District

5-10-2023

Date



By: Richard Hull, Chief
Sunnyside Rural Fire District

5-10-2023

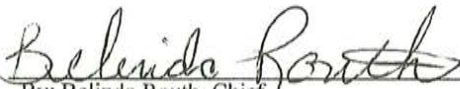
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By: Glenn Crockett, Chief
Twin Ridge Rural Fire District

5-10-2023

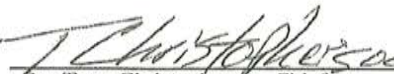
Date



By: Belinda Routh, Chief
Upper Fords Creek Rural Fire District

5-12-23

Date



By: Tony Christopherson, Chief
Weippe Volunteer Fire Department

5-12-23

Date



By: Tyrel Shaw, Chief
Pierce Fire Department

05/15/2023

Date

Dave Brown

By:
Elk River Volunteer Fire Department

5/11/23

Date

Kane

By: Kane Steinbruecker, Chief Fire Warden
Clearwater-Potlatch Timber Protective Association

05/11/2023

Date

Don Gardner

By: Don Gardner
Clearwater County Emergency Management

5-10-23

Date

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Forward

Developing a Community Wildfire Protection Plan (CWPP) helped Clearwater County clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland–urban interface on both public and private land. The project was funded by Clearwater County.

Local fire service organizations helped define issues that may place the county, communities, and/or individual homes at risk. Through the collaboration process, the CWPP planning committee discusses potential solutions, and regulatory concerns and documents their resulting recommendations in the CWPP. The CWPP planning process also incorporates an element for public outreach. Public involvement in the development of the document not only facilitates public input and recommendations, but also provides an educational opportunity through interaction of local wildfire specialists and an interested public.

A countywide CWPP planning committee generally makes project recommendations based on the issue causing the wildfire risk, rather than focusing on individual landowners or organizations. Thus, projects are mapped and evaluated without regard for property boundaries, ownership, or current management. Once the CWPP is approved by the county board of commissioners, the planning committee will begin further refining proposed project boundaries, feasibility, and public outreach as well as seeking funding opportunities

The Clearwater County Community Wildfire Protection Plan was originally drafted in 2005 through a partnership with the Clearwater RC&D and the Bureau of Land Management with project facilitation and support provided by Northwest Management, Inc. In 2007, Clearwater County’s CWPP planning committee and its partners completed an interim addendum to update proposed project information.

Then in 2011 Community Wildfire Protection Plan expanded on the wildfire chapter of the Clearwater County Multi-Hazard Mitigation plan.

In 2023 the Clearwater County’s CWPP planning committee and local fire departments, worked to update the plan. The 2023 update of the Community Wildfire Protection Plan is a full review of the document.

CLEARWATER COUNTY CHARACTERISTICS

Clearwater County, Idaho is in the north central part of the Idaho Panhandle and home to Idaho’s oldest courthouse. Major population centers in the area are Elk River, Orofino, Pierce, and Weippe. Clearwater County contains a diverse landscape that ranges from steep rugged mountains dissected by large canyons, to highly productive farmland with the main crops being wheat, barley, and peas. Woodland areas are mostly in the higher rainfall zones in the northern and eastern regions. The western part of Clearwater County includes the dune-like topography of the Palouse hills. Elevation ranges from about 1,000 feet above sea level along the Clearwater River near Orofino, to about 8,000 feet in the rugged mountainous region found throughout the eastern portion of the County.

Geography and Climate

Clearwater County is located in northern Idaho and covers about 2,461 square miles. The geography, topography, climate, and other natural attributes such as vegetation vary significantly across Clearwater County. The geographic diversity of Clearwater County is an important factor to consider in wildfire mitigation planning.

The climate in Clearwater County is moderate. The highest average daily temperature occurs in July and is approximately 85 degrees Fahrenheit (F). The lowest average daily temperature occurs in January and is approximately 20 degrees (F). The average annual rainfall is about 35 inches. Average monthly precipitation varies from about 1 inch in July and August to approximately 4.3 inches in November and December. Average annual snowfall ranges from about 26 inches near Orofino to approximately 110 inches near Elk River and Pierce.

Demographics

Clearwater County has a total population of 8,985 (2021) according to a recent Comprehensive Economic Development Strategy produced by the Clearwater Economic Development District. Clearwater County has four incorporated communities, Elk River (pop. 141), Orofino (pop. 3,275), Pierce (pop. 527), and Weippe (pop. 472).

The City of Orofino contains nearly 37% of Clearwater County’s total population. Other incorporated cities in Clearwater County contain approximately 13% of the County’s population.

Land Ownership

A relatively large percentage Clearwater County is federally owned. Private parcels are becoming more and more expensive as the population grows and more property is developed. This factor combined with the highly variable topography throughout the county is expected to produce significantly higher demands on privately held land in the future.

Ownership Categories.		
Landowner	Acres	Percent
Bureau of Land Management	3,517	0%
Bureau of Indian Affairs	8,969	1%
City of Elk River	51	0%
City of Orofino	102	0%
City of Pierce	9	0%

City of Weippe	13	0%
Clearwater County	185	0%
Idaho Fish and Game	4	0%
Private	495,815	32%
Railroad	0	0%
State of Idaho	232,729	15%
Idaho Transportation Department	32	0%
United States	6,231	0%
U.S. Army Corp of Engineers	29,863	2%
U.S. Forest Service	794,726	51%

Natural Resources

Clearwater County is a diverse ecosystem with a complex array of vegetation, wildlife, and fisheries that have developed with, and adapted to fire as a natural disturbance process. Nearly a century of wildland fire suppression coupled with past land-use practices (primarily timber harvesting and agriculture) has altered plant community succession and has resulted in dramatic shifts in the fire regimes and species composition. As a result, some forests in Clearwater County have become more susceptible to large-scale, high-intensity fires posing a threat to life, property, and natural resources including wildlife and plant populations. High-intensity, stand-replacing fires have the potential to seriously damage soils, native vegetation, and fish and wildlife populations. In addition, an increase in the number of large, high-intensity fires throughout the nation's forest and rangelands has resulted in significant safety risks to firefighters and higher costs for fire suppression.

Vegetation in Clearwater County is a mix of forestland, riparian, and agricultural ecosystems. An evaluation of satellite imagery of the region provides some insight to the composition of the vegetation of the area. The most represented vegetated cover type is a Mixed Mesic Forest type at approximately 17% of the County's total area. The next most common vegetation cover type represented is a warm mesic shrubs cover type at 13% of the total area. Douglas-fir cover is the third most common plant cover type at 9%. A Douglas-fir / grand fir mixed forest represent approximately 9% of the total as well. Agricultural lands represent approximately 2% of the area of the county

Vegetative Cover Types.	Acres	Percent
Mixed Mesic Forest	271,712	17%
Warm Mesic Shrubs	211,577	13%
Douglas-fir	146,695	9%
Douglas-fir/Grand Fir	146,062	9%
Western Red Cedar/Grand Fir Forest	138,574	9%
Grand Fir	121,075	8%
Ponderosa Pine	85,893	5%
Lodgepole Pine	63,049	4%
Mixed Subalpine Forest	55,989	4%
Foothills Grassland	49,109	3%
Agricultural Land	28,295	2%

Western Red Cedar	27,777	2%
Mixed Xeric Forest	26,185	2%
Douglas-fir/Lodgepole Pine	25,041	2%
Montane Parklands and Subalpine Meadow	23,426	1%
Western Red Cedar/Western Hemlock	18,548	1%
Water	17,529	1%
Western Larch/Douglas-fir	15,440	1%
Subalpine Fir	14,462	1%
Exposed Rock	13,844	1%
Engelmann Spruce	12,795	1%
Western Larch	12,790	1%
Shrub Dominated Riparian	9,761	1%
Western Hemlock	9,526	1%
Western Larch/Lodgepole Pine	8,325	1%
Needleleaf Dominated Riparian	7,679	0%
Mixed Needleleaf/Broadleaf Forest	6,176	0%
Graminoid or Forb Dominated Riparian	4,174	0%
Mixed Barren Land	3,810	0%
Mixed Riparian (Forest and Non-Forest)	3,357	0%
Cottonwood	3,260	0%
Needleleaf/Broadleaf Dominated Riparia	2,034	0%
Mixed Non-forest Riparian	1,800	0%
Broadleaf Dominated Riparian	1,436	0%
Urban	1,055	0%
Disturbed Grassland	879	0%
Curlleaf Mountain Mahogany	585	0%
Mixed Whitebark Pine Forest	481	0%
Cloud Shadow	408	0%
Shoreline and Stream Gravel Bars	308	0%
Perennial Ice or Snow	61	0%
Rabbitbrush	7	0%
Cloud	6	0%
Total	1,590,998	

Hydrology

Clearwater County is within one of Idaho's fastest growing regions and depends heavily on groundwater for private wells, public drinking water, irrigation, industrial operations, and other beneficial uses.

The Idaho Water Resource Board (IWRB) is charged with the development of the Idaho Comprehensive State Water Plan. Included in the State Water Plan are the statewide water policy plan and component basin and water body plans which cover specific geographic areas of the state. The IWRB has not designated any ground water management or critical ground water areas in Clearwater County.

Air Quality

The primary means by which the protection and enhancement of air quality is accomplished is through implementation of National Ambient Air Quality Standards (NAAQS). These standards address six pollutants known to harm human health including ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxides.

The Clean Air Act, passed in 1963 and amended in 1977, is the primary legal authority governing air resource management. The Clean Air Act provides the principal framework for national, state, and local efforts to protect air quality. Under the Clean Air Act, the Organization for Air Quality Protection Standards (OAQPS) is responsible for setting the NAAQS standards for pollutants which are considered harmful to people and the environment. OAQPS is also responsible for ensuring these air quality standards are met, or attained (in cooperation with state, Tribal, and local governments) through national standards and strategies to control pollutant emissions from automobiles, factories, and other sources.

Smoke emissions from fires potentially affect an area and the airsheds that surround it. Climatic conditions affecting air quality in Central Idaho are governed by a combination of factors. Large-scale influences include latitude, altitude, prevailing hemispheric wind patterns, and mountain barriers. At a smaller scale, topography and vegetation cover also affect air movement patterns. In Clearwater County, winds are predominantly from the southwest but occasionally blow from the west to northwest. Air quality in the area and surrounding airshed is generally good to excellent. However, locally adverse conditions can result from occasional wildland fires in the summer and fall, and prescribed fire and agricultural burning in the spring and fall. All major river drainages are subject to temperature inversions which trap smoke and affect dispersion, causing local air quality problems. This occurs most often during the summer and fall months and would potentially affect all communities in Clearwater County.

Smoke management in Clearwater County is managed by the Idaho/Montana Airshed Group. Much of the county is in Airshed Unit 12B; however, the southernmost region falls into Airshed Unit 13 and the westernmost region is in Airshed Unit 12A. An airshed is a geographical area which is characterized by similar topography and weather patterns (or in which atmospheric characteristics are similar, e.g., mixing height and transport winds). The USDA Forest Service, Bureau of Land Management, and the Idaho Department of Lands are all members of the Montana/Idaho State Airshed Group, which is responsible for coordinating burning activities to minimize or prevent impacts from smoke emissions. Prescribed burning must be coordinated through the Missoula Monitoring Unit, which coordinates burn information, provides smoke forecasting, and establishes air quality restrictions for the Montana/Idaho Airshed Group. The Monitoring Unit issues daily decisions which may restrict burning when atmospheric conditions are not conducive to good smoke dispersion. Burning restrictions are issued for airsheds, impact zones, and specific projects. The monitoring unit is active March through November. Each Airshed Group member is also responsible for smoke management all year.

Wildland Fire

An informed discussion of fire mitigation is not complete until basic concepts that govern fire behavior are understood. In the broadest sense, wildland fire behavior describes how fires burn; the manner in which fuels ignite, how flames develop and how fire spreads across the landscape. The three major physical components that determine fire behavior are the fuels supporting the

fire, topography in which the fire is burning, and the weather and atmospheric conditions during a fire event. At the landscape level, both topography and weather are beyond our control. We are powerless to control winds, temperature, relative humidity, atmospheric instability, slope, aspect, elevation, and landforms. It is beyond our control to alter these conditions, and thus, impossible to alter fire behavior through their manipulation. When we attempt to alter how fires burn, we are left with manipulating the third component of the fire environment; fuels which support the fire. By altering fuel loading and fuel continuity across the landscape, we have the best opportunity to determine how fires burn.

A brief description of each of the fire environment elements follows in order to illustrate their effect on fire behavior.

Weather

Weather conditions contribute significantly to determining fire behavior. Wind, moisture, temperature, and relative humidity ultimately determine the rates at which fuels dry and vegetation cures, and whether fuel conditions become dry enough to sustain an ignition. Once conditions are capable of sustaining a fire, atmospheric stability and wind speed and direction can have a significant effect on fire behavior. Winds fan fires with oxygen, increasing the rate at which fire spreads across the landscape.

Weather is the most unpredictable component governing fire behavior, constantly changing in time and across the landscape.

Topography

Fires burning in similar fuel conditions burn dramatically different under different topographic conditions. Topography alters heat transfer and localized weather conditions, which in turn influence vegetative growth and resulting fuels. Changes in slope and aspect can have significant influences on how fires burn. Generally speaking, north slopes tend to be cooler, wetter, more productive sites. This can lead to heavy fuel accumulations, with high fuel moistures, later curing of fuels, and lower rates of spread. In contrast, south and west slopes tend to receive more direct sun, and thus have the highest temperatures, lowest soil and fuel moistures, and lightest fuels. The combination of light fuels and dry sites lead to fires that typically display the highest rates of spread. These slopes also tend to be on the windward side of mountains. Thus these slopes tend to be “available to burn” a greater portion of the year.

Slope also plays a significant role in fire spread, by allowing preheating of fuels upslope of the burning fire. As slope increases, rate of spread and flame lengths tend to increase. Therefore, we can expect the fastest rates of spread on steep, warm south and west slopes with fuels that are exposed to the wind.

Fuels

Fuel is any material that can ignite and burn. Fuels describe any organic material, dead or alive, found in the fire environment. Grasses, brush, branches, logs, logging slash, forest floor litter, conifer needles, and buildings are all examples. The physical properties and characteristics of

fuels govern how fires burn. Fuel loading, size and shape, moisture content and continuity and arrangement all have an affect on fire behavior. Generally speaking, the smaller and finer the fuels, the faster the potential rate of fire spread. Small fuels such as grass, needle litter and other fuels less than a quarter inch in diameter are most responsible for fire spread. In fact, “fine” fuels, with high surface to volume ratios, are considered the primary carriers of surface fire. This is apparent to anyone who has ever witnessed the speed at which grass fires burn. As fuel size increases, the rate of spread tends to decrease, as surface to volume ratio decreases. Fires in large fuels generally burn at a slower rate, but release much more energy, burn with much greater intensity. This increased energy release, or intensity, makes these fires more difficult to control. Thus, it is much easier to control a fire burning in grass than to control a fire burning in timber.

When burning under a forest canopy, the increased intensities can lead to torching (single trees becoming completely involved) and potentially development of crown fire (fire carried from tree crown to tree crown). That is, they release much more energy. Fuels are found in combinations of types, amounts, sizes, shapes, and arrangements. It is the unique combination of these factors, along with the topography and weather, which determine how fires will burn.

The study of fire behavior recognizes the dramatic and often-unexpected affect small changes in any single component has on how fires burn. It is impossible to speak in specific terms when predicting how a fire will burn under any given set of conditions. However, through countless observations and repeated research, some of the principles that govern fire behavior have been identified and are recognized.

Wildfire Hazard Assessment

Clearwater County, Idaho was analyzed using a variety of models, managed on a Geographic Information System (GIS) system. Physical features of the region including roads, streams, soils, elevation, and remotely sensed images were represented by data layers. Field visits were conducted by specialists from Northwest Management, Inc. and others. Discussions with area residents and local fire suppression professionals augmented field visits and provided insights into forest health issues and treatment options. This information was analyzed and combined to develop an objective assessment of wildland fire risk in the region.

Historic Fire Regime

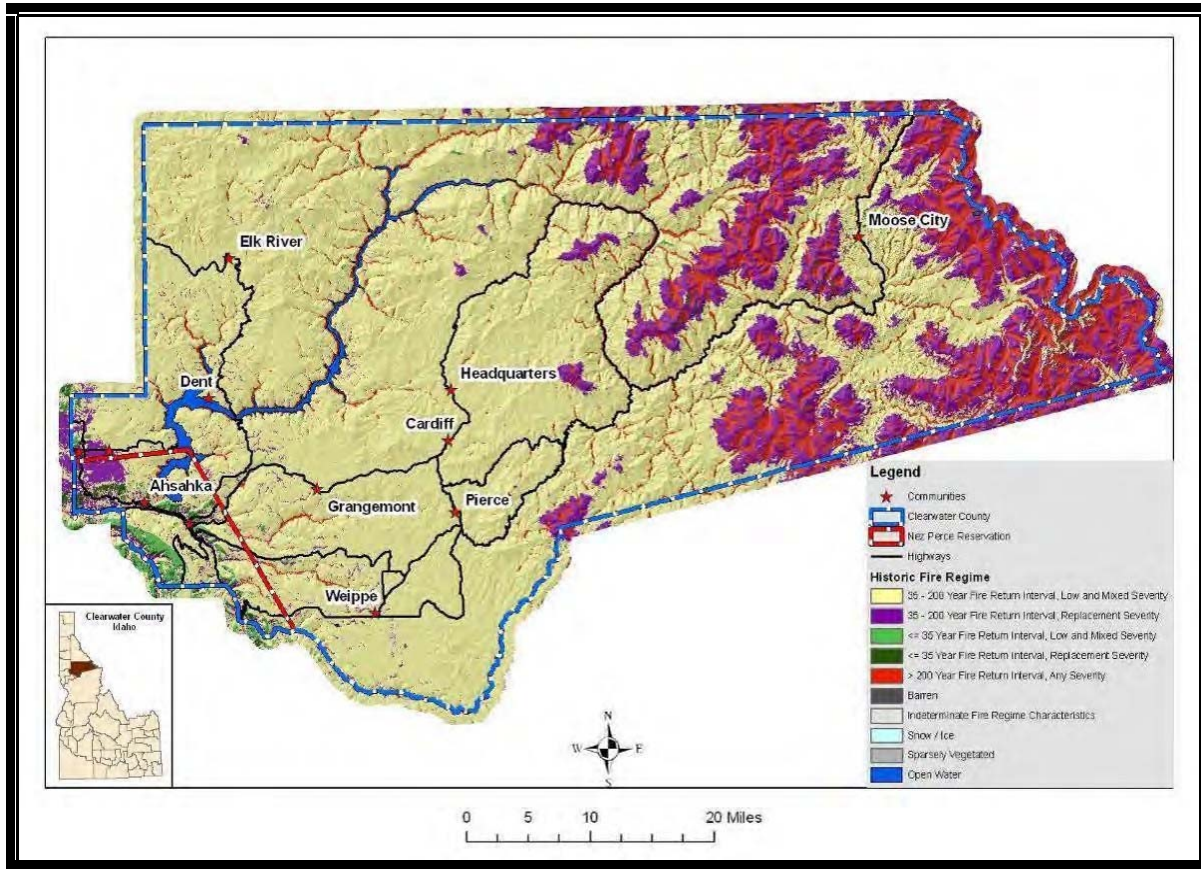
Historical variability in fire regime is a conservative indicator of ecosystem sustainability, and thus, understanding the natural role of fire in ecosystems is necessary for proper fire management. Fire is one of the dominant processes in terrestrial systems that constrain vegetation patterns, habitats, and ultimately, species composition. Land managers need to understand historical fire regimes, the fire return interval (frequency) and fire severity prior to settlement by Euro-Americans, to be able to define ecologically appropriate goals and objectives for an area. Moreover, managers need spatially explicit knowledge of how historical fire regimes vary across the landscape.

Many ecological assessments are enhanced by the characterization of the historical range of variability which helps managers understand: (1) how the driving ecosystem processes vary from site to site; (2) how these processes affected ecosystems in the past; and (3) how these processes might affect the ecosystems of today and the future. Historical fire regimes are a critical component for characterizing the historical range of variability in fire-adapted ecosystems. Furthermore, understanding ecosystem departures provides the necessary context for managing sustainable ecosystems. Land managers need to understand how ecosystem processes and functions have changed prior to developing strategies to maintain or restore sustainable systems. In addition, the concept of departure is a key factor for assessing risks to ecosystem components. For example, the departure from historical fire regimes may serve as a useful proxy for the potential of severe fire effects from an ecological perspective.

Historic Fire Regimes in Clearwater County.		Description	Acres	Percent
Fire Regime Group I	<= 35 Year Fire Return Interval, Low and Mixed Severity		8,025	1%
Fire Regime Group II	<= 35 Year Fire Return Interval, Replacement Severity		4,564	0%
Fire Regime Group III	35 - 200 Year Fire Return Interval, Low and Mixed Severity		1,158,725	74%
Fire Regime Group IV	35 - 200 Year Fire Return Interval, Replacement Severity		201,132	13%
Fire Regime Group V	> 200 Year Fire Return Interval, Any Severity		168,897	11%
Water	Water		14,729	1%
Snow or Ice	Snow or Ice		18	0%
Barren	Barren		13,936	1%
Sparsely Vegetated	Sparsely Vegetated		0	0%
Indeterminate Fire Regime Characteristics	Indeterminate Fire Regime Characteristics		5,014	0%

The table above shows the amount of acreage in each defined fire regime in Clearwater County. The historic fire regime model in Clearwater County shows that much of the landscape throughout the County historically had an approximate 35-200 year fire return interval and typically experienced low and mixed severity fires (Fire Regime Group III). The remote mountainous terrain found in the eastern portion of the County, however, contained areas where differing historic fire regimes were found adjacent to one another. In this area, historic fire regime groups indicated that a much longer fire return interval with variable intensity fires was more common. In addition, fire regimes with shorter return intervals were present near the Clearwater River and along the western edge of the County.

Clearwater County Historic Fire Regime.



Fire Regime Condition Class

A natural fire regime is a general classification of the role fire would play across a landscape in the absence of modern human mechanical intervention, but including the influence of aboriginal burning.

A fire regime condition class (FRCC) is a classification of the amount of departure from the historic regime. The three classes are based on low (FRCC 1), moderate (FRCC 2), and high (FRCC 3) departure from the central tendency of the natural (historical) regime. The central tendency is a composite estimate of vegetation characteristics (species composition, structural stages, stand age, canopy closure, and mosaic pattern); fuel composition; fire frequency, severity, and pattern; and other associated natural disturbances. Low departure is considered to be within the natural (historical) range of variability, while moderate and high departures are outside.

An analysis of Fire Regime Condition Classes in Clearwater County shows that a significant portion of the county (73%) that is not in agriculture is moderately departed from its historic fire regime and associated vegetation and fuel characteristics. In most scenarios, the more departed an area is from its natural fire regime, the higher the wildfire potential; however, this is not true 100% of the time.

Fire Regime Condition Classes in Clearwater County.

Condition Class	Acres	Percent
Fire Regime Group I	8,025	1%
Fire Regime Group II	4,564	0%
Fire Regime Group III	1,158,725	74%
Fire Regime Group IV	201,132	13%
Fire Regime Group V	168,897	11%
Water	14,729	1%
Snow or Ice	18	0%
Barren	13,936	1%
Sparsely Vegetated	0	0%
Indeterminate Fire Regime Characteristics	5,014	0%

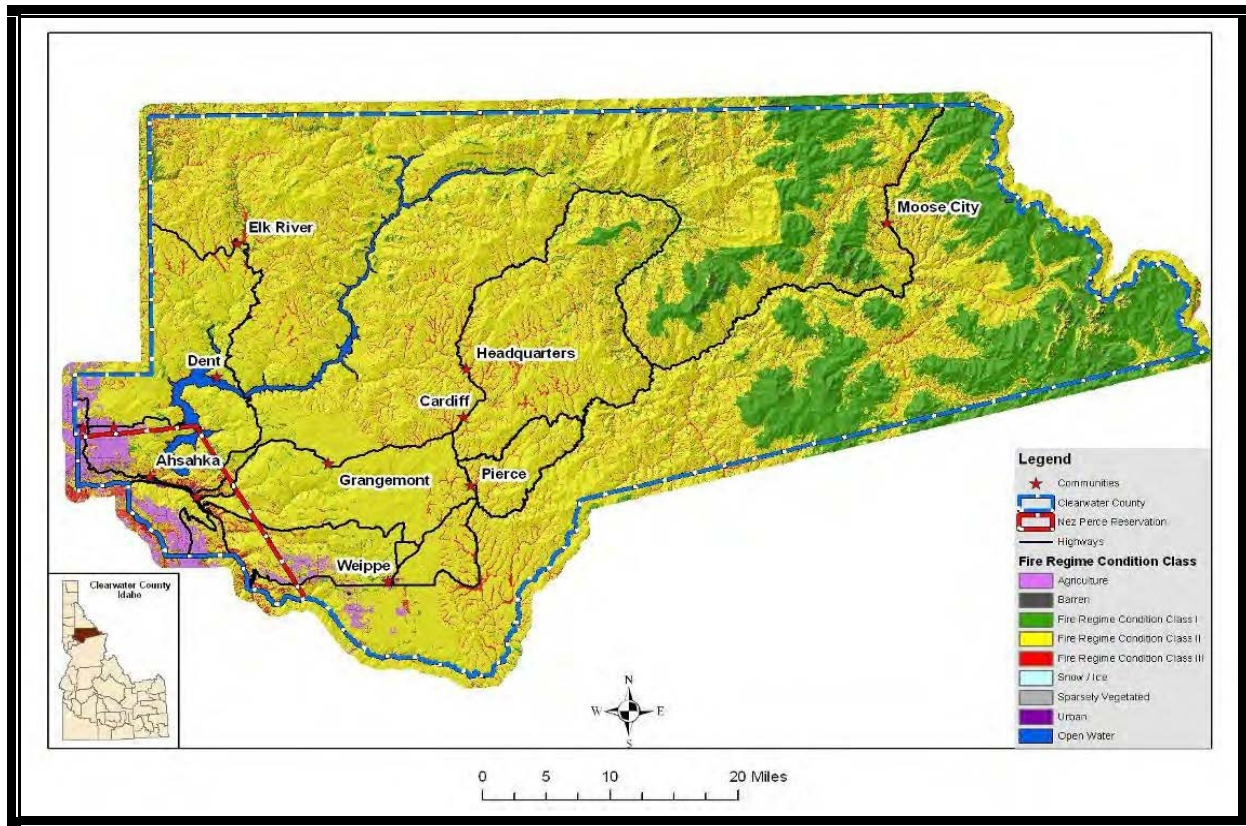
Most of the forestlands in Clearwater County are in Condition Class II likely due to aggressive fire suppression activities since the early 1900s. Much of the mountainous region in the eastern portion of the county is considered a Condition Class I. This area is primarily owned by the United States Forest Service. This area shows very little departure from its natural fire regime because of the longer historic fire return interval.

In 2015 Clearwater County declared a Drought Emergency. June of 2015 Orofino had 20 straight days where the temperatures were over 100°. In August of 2015 Clearwater County and the region had catastrophic fires burning down over 70 homes.



Clearwater residents taking pictures overlooking Lolo during the 2015 Fires

Clearwater County Fire Regime Condition Class.



Wildland Urban Interface

The wildland-urban interface (WUI) has gained attention through efforts targeted at wildfire mitigation; however, this analysis technique is also useful when considering other hazards because the concept looks at where people and structures are concentrated in any particular region.

A key component in meeting the underlying need for protection of people and structures is the protection and treatment of hazards in the wildland-urban interface. The wildland-urban interface refers to areas where wildland vegetation meets urban developments or where forest fuels meet urban fuels such as houses. 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 wildland-urban interface requires the efforts of federal, state, and local agencies and private individuals. “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 governments”. The role of the federal agencies in Clearwater County is and will be much more limited. Property owners share a responsibility to protect their residences and businesses and minimize danger by creating defensible areas around them and taking other measures to minimize the risks to their structures. With treatment, a

wildland-urban interface can provide firefighters a defensible area from which to suppress wildland fires or defend communities against other hazard risks. In addition, a wildland-urban interface that is properly treated will be less likely to sustain a crown fire that enters or originates within it.

By reducing hazardous fuel loads, ladder fuels, and tree densities, and creating new and reinforcing existing defensible space, landowners can protect the wildland-urban interface, the biological resources of the management area, and adjacent property owners by:

- minimizing the potential of high-severity ground or crown fires entering or leaving the area;
- reducing the potential for firebrands (embers carried by the wind in front of the wildfire) impacting the WUI. 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;²¹
- improving defensible space in the immediate areas for suppression efforts in the event of wildland fire.

Three wildland-urban interface conditions have been identified (Federal Register 66(3), January 4, 2001) for use in wildfire control efforts. These include the Interface Condition, Intermix Condition, and Occluded Condition. Descriptions of each are 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 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 detailed in the Federal Register, Clearwater County has included three additional classifications to augment these categories:

- **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.
- **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.

In summary, the designation of areas by the Clearwater County planning committee includes:

- Interface Condition: WUI
- Intermix Condition: WUI
- Occluded Condition: WUI
- Rural Condition: WUI
- High Density Urban Areas: WUI
- Non-WUI Condition: Not WUI, but present in Clearwater County

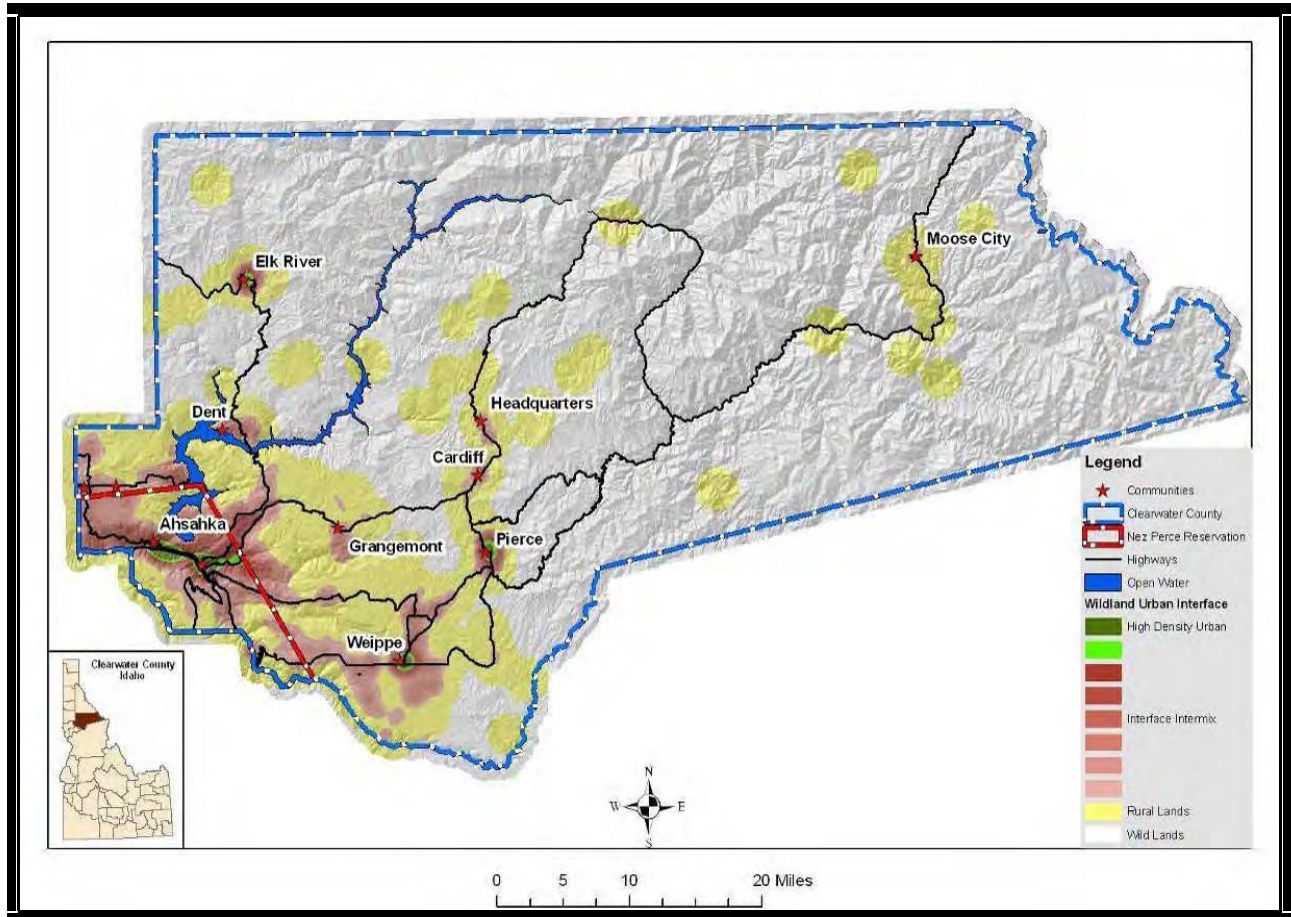
Clearwater County's wildland-urban interface (WUI) is based on population density. Relative population density across the county was estimated using a GIS based kernel density population model that uses object locations to produce, through statistical analysis, concentric rings or areas of consistent density. 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 2020.

The resulting output identified the extent and level of population density throughout the county. The updated and revised population density model output was adopted as the WUI for Clearwater County, Idaho

By evaluating structure density in this way, WUI areas can be identified on maps by using mathematical formulae and population density indexes. The resulting population density indexes create concentric circles showing high density areas, interface, and intermix condition WUI, as well as 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.

The WUI, as defined here, is unbiased and consistent, allows for edge matching with other counties, and most importantly – it addresses all of the county, not just federally identified communities at risk. It is a planning tool showing where homes and businesses are located and the density of those structures leading to identified WUI categories. It can be determined again in the future, using the same criteria, to show how the WUI has changed in response to increasing population densities. It uses a repeatable and reliable analysis process that is unbiased. 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 Clearwater County Community Wildfire Protection Plan planning committee evaluated a variety of different approaches to determining the WUI for the county and selected this approach and has adopted it for these purposes. In addition to a formal WUI map for use with the federal agencies, it is hoped that it will serve as a planning tool for the county, the IDL, and local fire districts.

Wildland Urban Interface in Clearwater County, Idaho.



Potential WUI Treatments

The definition and mapping of the WUI is the creation of a planning tool to identify where structures, people, and infrastructure are located in reference to each other. This analysis tool 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 the definition of the WUI dependent on all of them would eliminate populated places with a perceived low level of fire risk today, which may in a year become an area at high risk due to forest health issues or other concerns.

By examining these two tools separately, the planner is able to evaluate these layers of information to see where the combination of population density overlays areas of high current relative fire risk and then take mitigative 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 many approaches.

It should not be assumed that just because an area is identified as being within the WUI, that it will therefore receive treatments because of this identification alone. Nor should it be implicit

that all WUI treatments will be the application of the same prescription. Instead, each location targeted for treatments 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 Idaho Department of Lands are still obligated to manage lands under their control according to the standards and guides listed in their respective forest plans. 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.

Most treatments may begin with a home evaluation, and the implicit factors of structural ignitability (roofing, siding, deck materials) and vegetation within the treatment area of the structure. However, treatments in the low population areas of rural lands (mapped as yellow) may look closely at access (two ways in and out) and communications through means other than land-based telephones. On the other hand, a subdivision with densely packed homes (mapped as brown – interface areas) surrounded by forests and dense underbrush, may receive more time and effort implementing fuels treatments beyond the immediate home site to reduce the probability of a crown fire entering the subdivision.

Clearwater County Conditions

Clearwater County is characterized by relatively mild winters and warm, dry summers. Although infrequent, fires in the forest fuel types present throughout much of the County have the potential to result in large, intense and damaging fires such as the 1910 Fire or the Sundance Fire. Past timber harvest operations have created a mosaic of stand conditions that is evident from almost any viewpoint. The fire risk associated with these activities is highly variable depending on a plethora of factors, some of which include the amount of timber volume removed (i.e. number and size of trees left standing), treatment of slash post-harvest, reforestation success, use of equipment, and many site specific factors such as aspect. Generally, treatment of slash by prescribed burning or pile burning can significantly reduce the risk of intense wildfire by removing hazardous fuels in the understory.

Clearwater County has been experiencing steady growth, particularly in and around Orofino. At the same time, the number and value of resources at risk is on the increase, as more and more homes are built in the midst of fire prone fuels. Human use is strongly correlated with fire frequency, with increasing numbers of fires as use increases. The combination of frequent ignitions and flammable vegetation has greatly increased the probability that incendiary devices will find a receptive fuel bed, resulting in increased fire frequency. Discarded cigarettes, tire fires, and hot catalytic converters have increased the number of fires experienced along roadways. Careless and unsupervised use of fireworks also contributes their fair share to unwanted and unexpected wildland fires. Further contributing to ignition sources are the debris burners and “sport burners” who use fire to rid ditches of weeds and other burnable materials.

Vegetative structure and composition in Clearwater County is closely related to elevation, aspect and precipitation. Relatively mild and moist environments characterize the undulating topography of the region which transitions from the Palouse prairie plant communities of the northwest region to the forest ecosystems that characterize the vast majority of the land area in Clearwater County. These forest communities contain high fuel accumulations that have the

potential to burn at moderate to high intensities. Highly variable topography coupled with dry, windy weather conditions typical of the region is likely to create extreme fire behavior.

At higher elevation mountainous regions, moisture becomes less limiting due to a combination of higher precipitation and reduced solar radiation. Vegetative patterns shift toward forested communities dominated by ponderosa pine, western larch, grand fir, and Douglas-fir at the lower and mid elevations, transitioning to lodgepole pine and subalpine fir at the higher elevations. Engelmann spruce and western red cedar are commonly found in moist draws and frost pockets. These forested conditions possess a greater quantity of both dead and down fuels as well as live fuels. Rates of fire spread tend to be lower than those in the grass and shrub lands, however, intensities can escalate dramatically, especially under the effect of slope and wind. These conditions can lead to control problems and potentially threaten lives, structures and other valued resources.

As elevation and aspect increase available moisture, forest composition transitions to moister habitat types. Increases in moisture keep forest fuels unavailable to burn for longer periods during the summer. This increases the time between fire events, resulting in varying degrees of fuel accumulation. When these fuels do become available to burn, they typically burn in mosaic pattern at mid elevations, where accumulations of forest fuels result in either single or group tree torching, and in some instances, short crown fire runs. At the highest elevations, fire events are typically stand replacing, as years of fuel accumulation fuel large, intense wildfires.

Many lower elevation forested areas throughout Clearwater County are highly valued for their scenic qualities as well as for their proximity to travel corridors. These attributes have led to increased recreational home development and residential home construction in and around forest fuel complexes. The juxtaposition of highly flammable forest types and rapid home development will continue to challenge the ability to manage wildland fires in the wildland urban interface.

Fire suppression often depends on two important factors: availability of fire suppression resources and access. Fire suppression resources include firefighting personnel, equipment and apparatus as well as water and chemical fire suppressants. The greater the availability of fire suppression resources, the more likely it is that a given fire will be contained quickly. Fire suppression also depends on access. Fires in remote areas without ground access are more difficult to fight and thus harder to contain than are fires in roaded areas. Access and effective response is partially a function of land management objectives. Lands managed for natural conditions where roads have not been built or the existing roads have been obliterated tend to have a much poorer fire suppression response than commercial forestlands where road systems are maintained.

Because wildland fires are being effectively suppressed, the patterns and characteristics of fires are changing. Vegetation that historically would have been minimized by frequent fires has become more dominant. Over time, some species have also become more susceptible to disease and insect damage, which leads to an increase in mortality. The resulting accumulation of dead wood and debris creates the types of fuels that promote intense, rapidly spreading fires.

Decades of logging and fire suppression have also changed the characteristics of forests, trending towards younger forest stands. Mature forests are typically less dense, and contain larger more fire-resistant trees. Young forests are denser with larger numbers of small, less fire-resistant trees. Younger trees have thinner bark and may sustain more economic damage than an older stand.

Areas subject to wildland urban interface fires have very different fire hazard characteristics. The defining characteristic of the wildland urban interface area is that structures are built in areas with essentially continuous (and often high) vegetative fuel loads. When wildland fires occur in such areas, they tend to spread quickly and structures in these areas may, unfortunately, become little more than additional fuel sources for wildland fires. The placement of homes in wildland urban interface settings has also changed over time. Historically pioneering families built their homes in low lands, close to water and the fields they intended to work. Within the last 50 years, rural homes have increasingly been built in locations chosen because of the view or other amenities. Thus, many newer homes are in locations more difficult to defend against wildland fires.

Fire risk to structures and occupants in wildland urban interface areas is high due to high vegetative fuel loads and limited fire suppression resources compared to urban or suburban areas. Homes in wildland urban interface areas are most commonly on wells rather than on municipal water supplies, which limits the availability of water for fire suppression. Less availability of water resources makes it more likely that a small wildland fire or a single structure fire will spread before it can be extinguished.

In many areas of Clearwater County, narrow winding roads, dead end driveways, and inadequate bridges impede access by firefighting apparatus. As with water supplies, the lower availability of firefighting personnel and apparatus and longer response times increase the probability that a small wildland fire or a single structure fire will spread.

Developments in wildland urban interface areas often face high fire risk because of the combination of high fire hazard (high vegetative fuel loads) and limited fire suppression capabilities. Unfortunately, occupants in many wildland urban interface areas also face high safety risks, especially from large fires that may spread quickly. The safety risks in interface areas are often exacerbated by limited numbers of roads (in the worst case only one access road) that are often narrow and winding and subject to blockage by a wildland fire.

Potential safety issues within interface areas are often increased by homeowners' reluctance to evacuate homes quickly. Instead, homeowners often try to protect their homes with whatever fire suppression resources are available. Such efforts generally have very little effectiveness. Unfortunately, homeowners who delay evacuation often place themselves in jeopardy.

Developments in rural wildland urban interface areas face a range of risk factors. Developments that have all or most of the following attributes are at the highest level of risk:

- 1) Location in or surrounded by heavy fuel loads with a high degree of continuity (i.e. few significant firebreaks). Risk may be particularly high if the fuel load is grass, brush, and smaller trees subject to low moisture levels in short duration drought periods.
- 2) Steep slopes, which cause fires to spread more rapidly.
- 3) Limited fire suppression capacity including limited water supply capacity for fire suppression purposes, limited firefighting personnel and apparatus, and typically long response times for fire alarms.
- 4) Limited access for firefighting apparatus and limited evacuation routes for residents at risk.
- 5) Construction of structures to less than fully fire-safe practices,
- 6) Lack of maintenance of firebreaks and defensible zones around structures.

Overall, the threat of wildland fire appears moderate to high for Clearwater County. Communities at lower elevations are at risk from frequent lower intensity fires. The higher elevation communities are typically at risk from infrequent, but much more intense wildfires. Nevertheless, higher levels of rain and snowfall in these areas help minimize the period of time they are most susceptible to severe wildfires.

Overall Mitigation Activities

There are many actions that will help improve safety in a particular area; there are also many mitigation activities that can apply to all residents and all fuel types. General mitigation activities that apply to all of Clearwater County are discussed below while area-specific mitigation activities are discussed within the strategic planning area assessments.

Prevention. The safest, easiest, and most economical way to mitigate unwanted fires is to stop them before they start. Generally, prevention actions attempt to prevent human-caused fires. Campaigns designed to reduce the number and sources of ignitions can be quite effective and can take many forms. Traditional “Smokey Bear” type campaigns that spread the message passively through signage can be effective. Interpretive signs that remind folks of the dangers of careless use of fireworks, burning when windy, and leaving unattended campfires can also be effective.

Active prevention techniques can involve mass media, radio, and the local newspapers. Fire districts in other Counties have contributed to the reduction in human-caused ignitions by printing a weekly “run blotter,” similar to a police blotter, in the paper. The blotter briefly describes the fire response calls for the week and is followed by a “tip of the week” to reduce the threat from wildland and structure fires. The federal government and the Idaho Department of Lands have been champions of prevention, and could provide ideas for such tips. When fire conditions are high, brief public service messages could warn of the hazards of misuse of fire or any other ignition sources.

Limiting Use. Areas within the IDL protection district boundary are also subject to public use restrictions, referred to as “Regulated Use”, during fire season in an attempt to limit, or manage use of activities known to cause fires. Fire departments typically observe the State of Idaho’s closed fire season between May 10 and October 20. During this time, an individual seeking to conduct any type of burning shall obtain a permit to prescribe the conditions under which the burn can be conducted and the resources that need to be on hand to suppress the fire, from a State of Idaho fire warden.

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 Clearwater County must be made aware that home defensibility starts with the homeowner. Once a fire has started and is moving toward a structure, the probability of that structure surviving is largely dependent on the structural and landscaping characteristics of the building. “*Living with Fire, A Guide for the Homeowner*” is an excellent tool for educating homeowners on the steps to take in order to create an effective defensible space. Residents of Clearwater 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.

Evacuation. Development of community evacuation plans is necessary and critical to assure an orderly evacuation in the event of a threatening wildland fire. Designation and posting of escape routes would reduce chaos and escape times for fleeing residents. Community safety zones should also be established in the event safe evacuation is impossible and ‘sheltering in place’ becomes the better option. Efforts should be made to educate homeowners through existing homeowners associations or citizen participation organizations.

Access. Also of vital importance is the accessibility of homes to emergency apparatus. The fate of a home will often be determined by homeowner actions prior to the event. A few simple guidelines such as widening or pruning along driveways and creating a turnaround area for large vehicles, can greatly enhance home survivability.

Facility Maintenance. Recreational facilities near communities or in the surrounding forests such as parks or natural areas should be kept clean and maintained. In order to mitigate the risk of an escaped campfire, escape-resistant fire rings and barbeque pits should be installed and maintained. In some cases, restricting campfires during dry periods may be necessary. Surface fuel accumulations in nearby forests can also be kept to a minimum by periodically conducting pre-commercial thinning, pruning and limbing, and possibly controlled burns.

Fire District Response. Once a fire has started, how much and how large it burns is often dependent on 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. For many districts, the ability to reach these suppression objectives is largely dependent on the availability of functional resources and trained individuals. Increasing the capacity of departments through funding and equipment acquisition can improve response times and subsequently reduce the potential for resource loss.

Development Standards. Furthermore, county policies can be revised to provide for more fire conscious techniques such as using fire resistant construction materials; improved road, driveway, and bridge standard, establishment of permanent water resources, and adoption of a WUI building code.

Other Mitigation. Other actions to reduce fire hazards are thinning and pruning timbered areas, creating a fire resistant buffer along roads and power line corridors, and strictly enforcing fire-use regulations. Ensuring that areas beneath power lines have been cleared of potential high risk fuels and making sure that the buffer between the surrounding forest lands is wide enough to adequately protect the poles as well as the lines is imperative.

Overview of Fire Protection System

Mutual aid agreements have been made between each of the local fire districts and the Idaho Department of Lands to supplement resources of a fire agency or district during a time of critical need. Mutual aid is given only when equipment and resources are available. On wildland fires, fire districts typically provide initial attack resources until the Idaho Department of Lands assumes command of the incident.

Clearwater County has a single-point dispatch center located on the top floor of the Clearwater County Courthouse and within the Sheriff’s Office. Clearwater County Sheriff’s Office (CCSO) provides dispatch services for all first responding agencies and during the summer also notifies Clearwater-Potlatch Timber Protection Association (C-PTPA) of wildfire issues. The Clearwater County dispatch center is also the answering point for all 911 and business calls for the Sheriff’s

Office and Orofino Police Department. The dispatch center has two fully functional consoles and CAD systems that provide backup in case of a system failure. An additional radio with tone generator is also available as backup.

CCSO has the ability to communicate with all local response agencies within the County. In addition, CCSO is able to communicate with the surrounding fire departments and has the ability to communicate with the State Police using a UHF radio located in the dispatch center. CCSO utilizes the State Communications Center, which can patch communication lines for CCSO to other agencies throughout the state.

Local Fire Department and District Summaries

The firefighting resources and capabilities information provided in this section is a summary of information provided by the fire chiefs or representatives of the wildland firefighting agencies listed. Each organization completed a survey with written responses. Their answers to a variety of questions are summarized here. Included they provided a complete equipment list for each of the following fire service organizations and a summary of goals they have set for their department

Orofino City and Rural Fire District

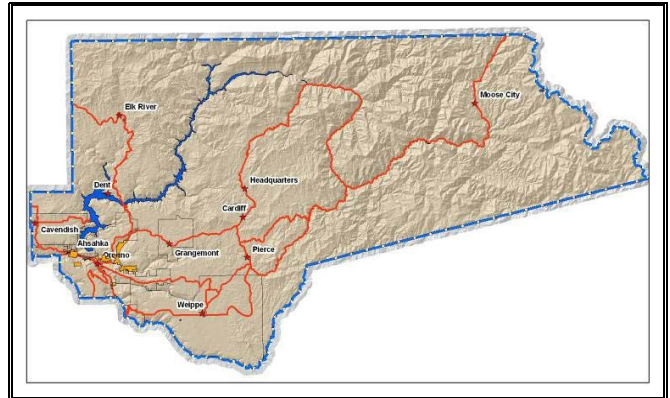


District Summary: Orofino City and Rural Fire District is a city-based volunteer organization housed in two 2-bay buildings. Orofino City Fire is managed by the City Council. Orofino Rural Fire District is managed by three elected fire commissioners and an elected fire chief. Orofino responds to structural and wildland fires and performs rescue extrication for Clearwater County. Currently, the incident capacity is two single-family dwellings and the recovery requirements are at least one hour.

Orofino Rural Fire District finished constructing a 2-bay fire station in the northeast corner of the District’s coverage area where growth is increasing.

Issues of Concern: Risk in the Orofino area is, to a large extent, a result of the wildland fuels that lay adjacent to residential development on the banks of the Clearwater River canyon. Access to some homes may be difficult due to narrow roads and lack of adequate turn-arounds. Orofino Rural has grown due to the annexation of adjacent lands.

The recruitment of volunteers has been low over the past 5 years. The current volunteer level puts existing firefighters at additional risk.



Orofino City and Rural Fire District

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallons	Special Equipment
Duty Officer	Command		Y	OFD Command	1st out	2020	Dodge	3500	100	
Station 1	Rescue		Y	Rescue 3	1st out	2011	Ford	F550	Dry Chem	
Station 1	Engine	1	Y	E-55	1st out	2015	International	MX 9	750	6 SCBA
Station 1	Tender	1	Y	T-52	1st out	1989	Ford		2600	2 SCBA
Station 1	Wildland Engine	6	Y	B-56	1st out	2014	Dodge	5500	300	4 SCBA
Station 2	Engine	1	Y	E-54	2nd out	1997	International		750	6 SCBA
Station 2	Engine	1	Y	E-51	2nd out	1995	International		600	4 SCBA
Station 2	Rescue/Wildland	6	Y	Rescue 33	2nd out	2008	Dodge	550	300	
Station 2	Tender		Y	T-58	2nd out	1989	Ford	L 9000	2800	
Station 3	Structure/ Wildland	2	Y	E-53	2nd out	1990	KMC		600	

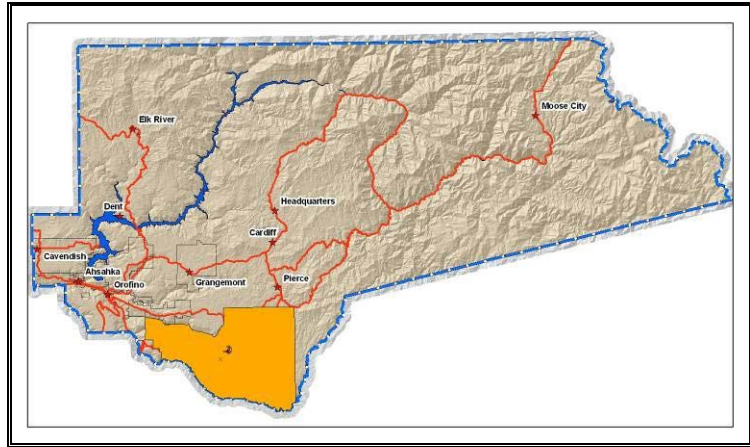
Action Items			Orofino		
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief’s Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress

Weippe Volunteer Fire Department

District Summary: Weippe Volunteer Fire Department is a city-based volunteer organization housed in a 3 bay building and managed by a board of directors. Weippe responds to structural and wildland fires. Currently, the incident capacity is two single-family dwellings with an approximate recovery requirement of at least one hour.

Issues of Concern: There is scattered development outside the community of Weippe. Homes' defensibility in these areas could be improved; however, there are few highly hazardous areas. Many of the access roads in the coverage area are too narrow and have inadequate turnarounds for fire apparatus. Address markers in rural areas are often difficult to see or missing.

There are individual homes that are at much higher risk to wildland fire loss largely due to use of ignitable materials in home construction or because of the lack of defensible space surrounding the home.



Weippe Volunteer Fire Department

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallon	Special Equipment
Station	Command	VI	Y	Unit 401		2004	Dodge	3500	250	Wildland Equipment
Station	Engine	VI	Y	Unit 41		1997	Ford	Fsuperduty	500	Wildland Equipment
Station	Engine	III	Y	Unit 42		1983	International		1200	Structural/Wildland
Station	Engine	III	Y	Unit 43		1982	International		800	Structural/Wildland
Station	Engine	III	Y	Unit 44		1990	M923A2	5.5 Ton	750	Wildland Equipment
Station	Tender	III	Y	Unit 45		1998	Freighliner		2400	Wildland Equipment
Station	Tender	III	Y	Unit 46		1973	International		4000	Structural/Wildland

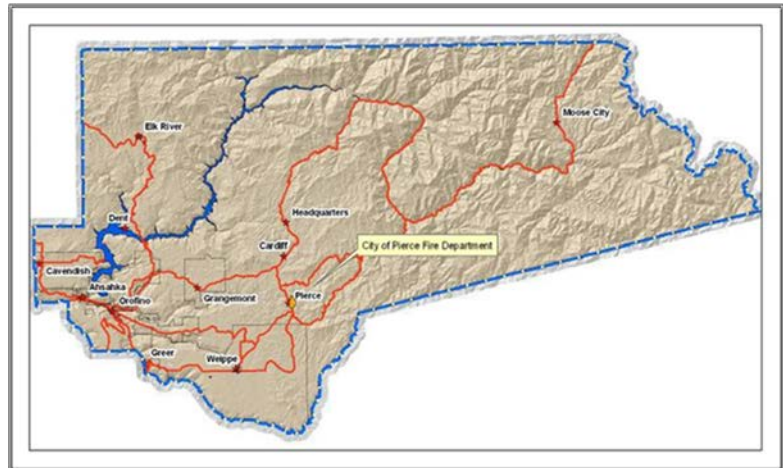
Action Items				Weippe	
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress



Pierce Fire Department

District Summary: Pierce Volunteer Fire Department is a city-based volunteer organization housed in a two bay building and managed by fire department officers, which report to the City Council and Mayor.

Pierce responds to structural fires and has a mutual aid agreement for wildland fire response. Currently, the incident capacity is two incidents with an approximate recovery requirement of two hours.



Pierce Fire

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallon	Special Equipment
Timberline DR	Tender		Y	WT-57		1979	Kaiser		1200	
Timberline DR	Tender		Y	WT-2		1972	Kaiser		2500	
Fire Station	Structural Eng		Y	ENG-55		1976	Ford LF		600	
Fire Station	Structural Eng		Y	ENG 81		2005	Freightliner		800	6-SCBA Monitor

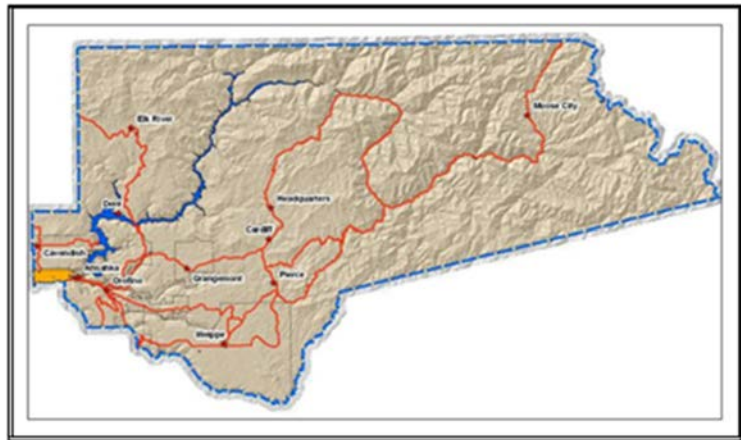
Action Items			Pierce Fire		
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
New Projects 2023					
SCBA refill station upgrade	High	Lead: Pierce Fire District	1 Month	–	AWAITING DELIVERY OF TANKS
SCBA replacement	High	Lead: Pierce Fire District	In progress	–	AWAITING DELIVERY OF TANKS
Turnout Upgrade	Moderate	Lead: Pierce Fire District	In progress	–	Halfway Complete
Install two Fire Danger Signs	Moderate	Lead: Pierce Fire District	In progress	–	Halfway Complete

Sunnyside Rural Fire District



District Summary: Sunnyside Fire District is a county tax-based volunteer organization. The District is managed by elected fire commissioners who choose a fire chief. Sunnyside responds to structural, wildland, agricultural, and vehicle fires. The District covers 10 square miles including approximately 660 people and over 300 structures. Currently, the incident capacity is one single-family incident and the recovery requirements are to replenish water supplies on engines and tenders. Sunnyside Fire District has mutual aid agreements with: Nez Perce County Fire, Idaho Department of Lands, Nez Perce Tribe, Clearwater-Potlatch Timber Protective Association, and all other Clearwater County Fire Districts. Sunnyside also contracts with IDL to the US Forest Service for off-district fire suppression.

Issues of Concern: The population within the District is growing. Additional staff and suppression resources are needed. Water storage and supplies are also inadequate to meeting the growing need. The Sunnyside District is working on improving defensible space around homes through fuel mitigation projects; however, the need for these types of programs is ongoing. Brush and yellow star thistle are abundant in the area and needs mitigated.



Road and driveway access into homes throughout most of the District is problematic due to the steep slope and one-way in, one-way out roads with few or nonexistent turnouts or turnaround areas.

Following the 2020 “Whitetail Fire” and the “Clover Fire” the efficacy of pre-planning and fuels mitigation around homes was made clear. Due to the District’s reliance on volunteer help, maintaining a viable work force is always difficult. New recruits are rare and the availability of day time responders is limited.

Sunnyside Rural Fire District

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallons	Special Equipment
Station1	Wildland Eng.	6	Y	E-91	1st Out	2000	Ford	F 450 4x4	200	Wildland equip.
Station1	Structure Eng	2	Y	E-93	1st Out	2000	Freightliner	FL 120 4x4	1000	4 SCBA, Deck Gun
Station1	Structure Eng	2	Y	E-95	2nd out	1984	Ford	GRUMMAN 4x4	1000	4 SCBA, Deck Gun
Station1	Tender	2	Y	T-96	1st out	1992	Freightliner	FL120 4x4	3000	Spray Bard
Station1	Tender	2	Y	T-92	1st out	1996	International	4800 4x4	1500	Monitor
Sunnyside Bencd Rd	Tender	2	Y	T-94	Reserve	1984	Ford	L9000	3000	

Action Items				Sunnyside Fire	
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Obtain funding to build a larger main station to house all equipment with showers, larger restrooms, and a lounge/training area for the Sunnyside Rural Fire District.	High	Lead: Sunnyside Fire	4 years	New Project	No viable funding
Obtain funding to build a second station for the Sunnyside Rural Fire District	High	Lead: Sunnyside Fire	6 years	New Project	No viable funding
Obtain funding to purchase an all wheel drive water tender for the Sunnyside Rural Fire District.	High	Lead: Sunnyside Fire	3 years	New Project	Completed

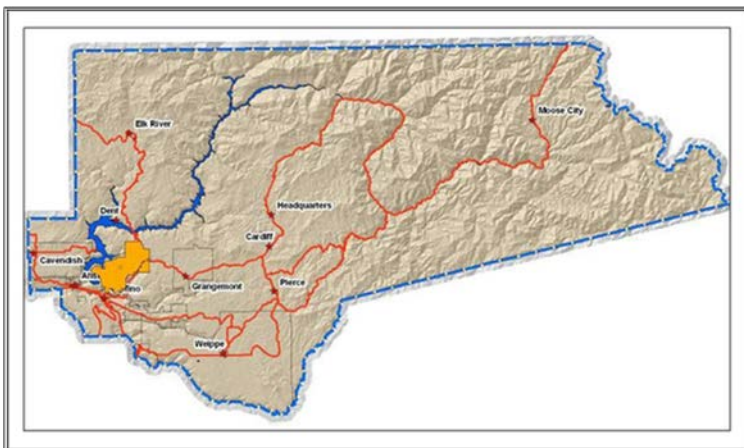
Twin Ridge Rural Fire District



District Summary: The Twin Ridge RFD covers about 26 square miles. The District contains approximately 310 dwellings with about 550 structures. The District supports 1 main fire station, which houses 4 fire apparatus. The Fire District also positioned three shelters in outlying areas to house a Type 6 rapid response vehicle each.

Twin Ridge RFD has a mutual aid agreement with all local fire departments and the State of Idaho through the Clearwater-Potlatch Timber Protective Association.

Issues of Concern: The Fire District has seven subdivisions. Two of the subdivisions contain over 20 parcels each and are currently being developed. One of these subdivisions has serious road access and water supply issues. Current growth in the district is estimated to be 5 new dwellings annually. An equal or greater number of out-buildings are also being constructed annually.



The Fire District needs to continue the development of water sources across the District. Currently, the only water sources are drafting ponds of which we have developed 10 ponds sites throughout the district Residential structure defensible space needs to be promoted. Approximately 30% of the homes currently meet defensible space criteria.

Twin Ridge RFD is currently implementing fire control lines consisting of fuel breaks and interconnected defensible space to support wildland firefighting Point of Defense tactics. Twin Ridge RFD will continue to pursue grants to complete this work throughout the District, along with grants to support defensible space within subdivisions and residential land development areas.

Twin Ridge Rural Fire District

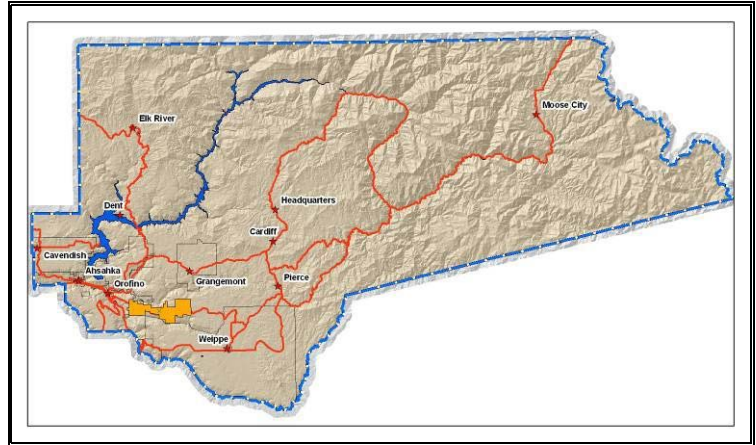
Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallon	Special Equipment
Shelters	Bruch Truck	6	Y	141		2000	Ford	F550	300	
Shelters	Bruch Truck	6	Y	142		2000	Ford	F550	300	
Shelters	Bruch Truck	6	Y	143		2003	Ford	F550	400	
Station	Tender		Y	144		1988	AMCO	50K	2000	
Station	Structure Engine	1	Y	145		1998	KME		750	
Station	Tender		Y	146		1988	AMCO	50K	2000	
Station	Structure Engine	1	Y	147		1990	Amertrek		660	
Shelters	Bruch Truck	6	Y	148		1986	Chevrolet		300	

Action Items				Twin Ridge Fire	
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
New Projects					
Seek grants to Implement fire control lines consisting of fuel breaks and interconnected defensible space to support wildland firefighting Point of Defense tactics	High	Lead: Local Fire District	Ongoing	N/A	In progress

Upper Fords Creek Rural Fire District

District Summary: The Upper Fords Creek Rural Fire District is located 4 miles northeast of Orofino, Idaho. The District encompasses 13.6 square miles of urban/wildland interface environment servicing approximately 110 residents. The District contains 31 miles of roadway, of which 79% are unpaved gravel roads and driveways. Almost all of the unpaved miles are private roads which are not maintained by the County Road Department. The elevation of the District's coverage area ranges from approximately 1800' above sea level to almost 3300' above sea level. Over 40% of the District contains productive timber. Water sources, mostly seasonal ponds, are scarce in the summer and difficult to reach in the winter. There are no hydrants within the district.

The Department has county-wide mutual aid agreements and 66% of the Department's responses are to mutual aid events. The Department's average response time is 20 minutes.



Issues of Concern: The Upper Fords Creek District's operational concerns include the lack of water resources, difficult access, lack of nearby mutual aid on the east end of the District.

Upper Fords Creek Rural Fire District

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallon	Special Equipment
	Wildland Engine	6	Y	171		1983	Chevy		250	
	Wildland Engine	6	Y	172		1988	GMC		300	
	Structural Engine	2	Y	173		1982	Mack		1000	
	Rescue Engine		Y	174		1987	GMC	High Rise 4x4	500	
	Tender	2	Y	175		1969	Jeep	5 ton	2500	
	Lowboy Truck		Y	176		2010	American General			
	Trailer			176		1995	Dynaweld	50 ton		
	Dozer		Y	176		2004	Case	1150E		6 way blade & winch
	Water Tractor & Trailer		Y	177		2009	Freighliner / Etny		6000	4" Pump
				179		1993	Oshkosh	8x8		3" Pump

Action Items			Upper Fords Fire		
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Obtain funding to build a fire station in the Upper Fords Rural Fire District (District owns the land).	High	Lead: Upper Fords Fire	5 years	New Project	Project Finished
Obtain funding to purchase office supplies, furniture, computers, and other basic equipment for the Upper Fords Creek Rural Fire District station.	High	Lead: Upper Fords Fire	3 years	New Project	Project Finished

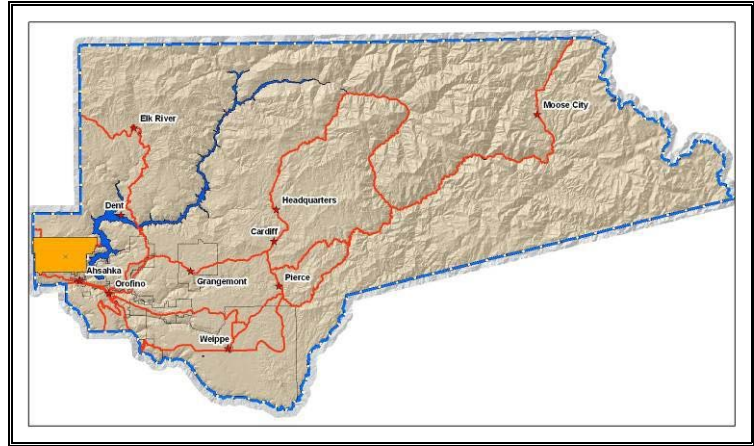
Evergreen Rural Fire District.

District Summary: Evergreen Rural Fire District is a county-based volunteer organization housed in a 3 bay building and managed by elected fire commissioners who choose a fire chief. The District was established in 1981 and has provided a protection Class 8 and 9 since 1992. Evergreen responds to both structural and wildland fires, but is mainly protects agricultural and rural forested home sites. Currently, the incident capacity is one single family incident or one class C wildland fire with an approximate recovery time of one hour for a structural incident and eight hours for a wildland incident. Evergreen Rural Fire District has made agreements with the IDL and CPTPA for mutual aid and fire equipment.

Issues of Concern: The Freeman Creek area is expanding with 5 acre and larger parcel subdivisions. The fire dispatch repeater coverage from Norton Knob is limited.

Inadequate access into new and existing structures in the rural area continues to be problematic for the District, particularly the lack of standards and a maintenance program for private bridges.

Due to the District’s reliance on volunteer help, maintaining a viable work force is always difficult. New recruits are rare and the availability of daytime responders is limited.



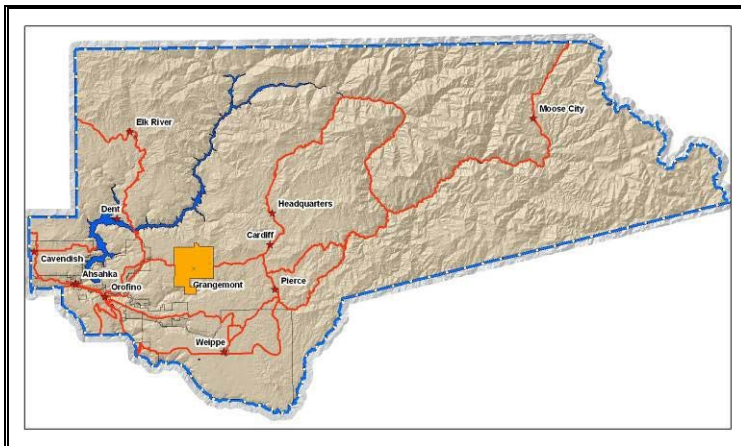
Evergreen Rural Fire District.

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallons	Special Equipment
	Structural Engine	Type 6	Y	E-31		1968	Dodge	D 300 4x4	200	4 SCBA
	Structural Engine	Type 2	Y	E-32		1972	Ward Lafrance	6x6	500	2 SCBA
	Water Tender	Type 2	Y	T-33		1992	Western Star	3964F	4200	Monitor
	Wildland Engine	Type 6	Y	E-34		1968	Dodge	D 300 4x4	200	Wildland Equip.
	Water Tender	Type 2	Y	T-35		1987	Western star	3964F	4000	Field Fire spray
	Water Tender	Type 2	Y	T-36		1970	Dodge	D 1000	4000	
	Wildland Engine	Type 6	Y	E-37			Chevy	3500	250	
	Wildland Engine	Type 6	Y	E-38			Chevy	2500	150	

Action Items				Evergreen Fire	
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Obtain funding to update apparatus and equipment, personal protective gear, and fire shelters for the Evergreen Rural Fire District	High	Lead: Evergreen Fire	Ongoing	New Project	In progress
Install an underground water tank at Freeman Creek.	Moderate	Lead: Evergreen Fire	2 years	New Project	In progress

Grangemont Rural Fire District

District Summary: Grangemont Rural Fire District is a county-based volunteer organization located about 16 miles from Orofino. The District is managed by three elected fire commissioners who choose a fire chief. Grangemont RFD responds to structural fires. Currently, the incident capacity is one single-family dwelling with an approximate recovery time of two hours. Grangemont’s coverage area consists of meadow land, timber land, and farm land (mostly hay) with a deep canyon bordering one side. The roads are primarily gravel with the exception of Grangemont Road, which is paved and Rudo Road, which is partially paved with asphalt grindings. The District has many one lane driveways accessing 2 or more residences. Rudo Road is narrow and winds down into the canyon. There are approximately 95 residences in the District.



Issues of Concern: Inadequate access into new and existing structures in the rural area continues to be problematic for the District, particularly the lack of turnouts and/or turnaround areas. Rudo Road requires a significant amount of time to negotiate due to the steep grade.

Due to the remoteness of the area, it may take an hour or so for mutual aid assistance to arrive from other fire departments.

There is also a lack of water sources in the District. Currently, the primary water supply is a dry hydrant on a pond next to the station.

Grangemont Rural Fire District

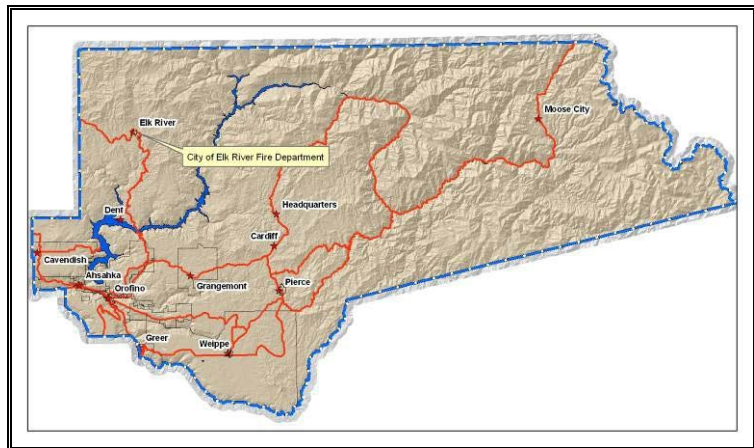
Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallons	Special Equipment
	Engine	2	Y			1970	American General 6x6		1100	
	Water Tender	2	Y			1966	Kaiser		1200	
	Engine	6	Y			1975	Dodge		200	
	Engine	1	Y			1985	Oshkosh	P-19A	1000	
	Water Tender	2	Y			1968	Autocar		4000	

Action Items			Grangemont Fire		
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chiefs Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop access to additional water sources within the Grangemont Rural Fire District.	High	Lead: Grangemont Fire	2 years	New Project	In progress
Obtain funding to build a substation capable of house 2 apparatus near the end of Rudo Road in the Grangemont Rural Fire District.	High	Lead: Grangemont Fire	5 years	New Project	In progress

Elk River Volunteer Fire Department

District Summary: Elk River Volunteer Fire Department is a city-based volunteer organization housed in a new fire building and managed by the City Council and Mayor. Elk River responds to structural and limited wildland fires. We currently have MOU's with Deary, Boville and IDL. CPTPA has a wildland fire camp near Elk River and is our main wildfire support.

One major concern for Elk River is the lack of escape routes. Many outlying homes are at the end of long driveways and surrounded by forest. Another major issue is the amount of combustible materials around homes right here in downtown Elk River.



Elk River Volunteer Fire Department

Location	Kind of Resource	Type	Radio	Resource Name	Note	Year	Make	Model	Capacity Gallon	Special Equipment
Fire Station	Engine	1	Y		1st out	1977	Amer	TK	300	
Fire Station	Command car		Y		Collisions & Wildfire	1986	Chevy	TK	250	
Fire Station	Tender	1	Y		2nd out	1970	Jeep	TK	1000	

Action Items				Elk River	
Action Item	Priority Ranking	Responsible Organization	Timeline	2011 Status	2023 Status
Continue to enhance radio availability in each district and improve range within the region.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Develop programs to improve retention of volunteer firefighters.	Moderate	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress
Continue to improve training program and capabilities of firefighters	High	Lead: Clearwater Fire Chief's Association Support: Local Fire District	Ongoing	In progress	In progress
Obtain funding to update PPE, hand tools, portable radios, and other miscellaneous equipment for city and rural fire departments.	High	Lead: Local Fire District Support: County Emergency Management	Ongoing	In progress	In progress

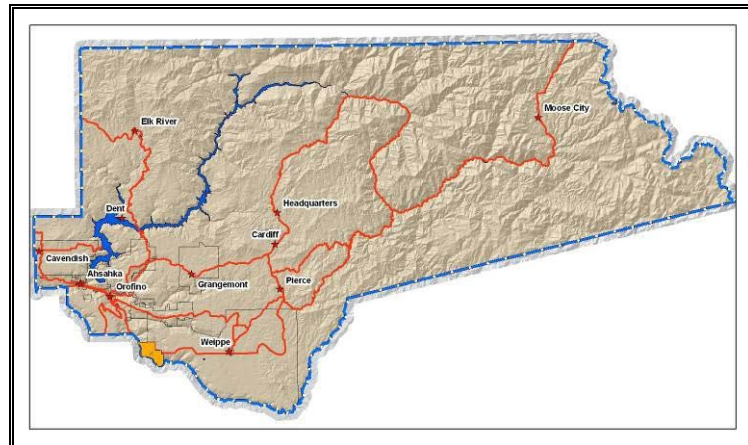
Greer Fire District

District Summary: Greer Fire District is managed by three fire commissioners. Greer no longer provides protection; however, they have contracted with Orofino Rural Fire District and Weippe Rural Fire Department to provide coverage. All items and personnel available for fire suppression from Orofino or Weippe is “Dependent upon Availability.”

Issues of Concern: Risk in the Greer area is, to a large extent, a result of the wildland fuels that lay adjacent to residential development on the banks of the Clearwater River canyon. Access to some homes may be difficult due to narrow roads and lack of adequate turn-arounds.

Communication throughout the District is adequate; however, replacement of equipment continues to be a challenge.

The recruitment of volunteers has been low. The current volunteer level puts existing firefighters at additional risk.





Clearwater-Potlatch Timber Protective Association

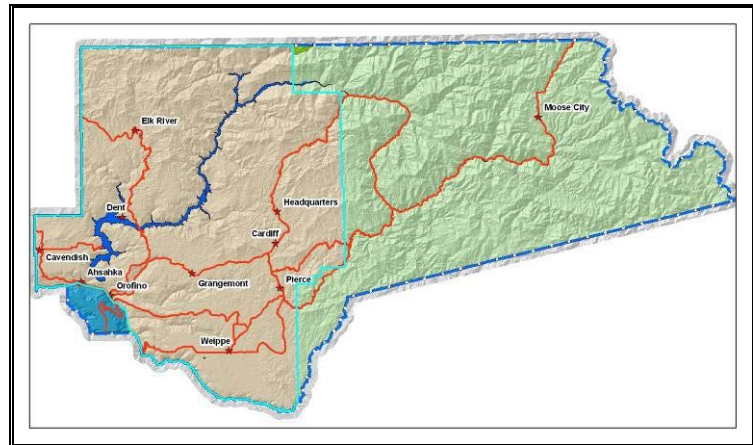
The Clearwater Timber Protective Association and the Potlatch Timber Association were separately organized in the early 1900's. In 1966, these two entities merged to form the Clearwater-Potlatch Timber Protective Association, a non-corporate entity. Subsequently, on July 16, 1982, the Association completed filings for incorporation under the Idaho Nonprofit Corporation Act and became the Clearwater-Potlatch Timber Protective Association, Inc.

The Association is controlled by forest landowners belonging to its membership and subject to the provisions of the Idaho Forestry Act. The Association is primarily responsible for the conservation and protection of the forests and forestland within the State of Idaho; specifically, the Palouse, Potlatch, and North Fork of the Clearwater River drainages.

A cooperative agreement continues to this date between the Association and the State Board of Land Commissioners through the Director of the Idaho Department of Lands. The purpose of this agreement is to clarify the forest protection relationship between the Association and the Idaho Department of Lands. It defines the reimbursable expenditures and emergency fire suppression expenditures that may be incurred by the State and Association. In addition, the agreement addresses the following:

(1) fire protection plans, (2) fire management, (3) reports and records, (4) budgets, (5) administrative matters, (6) payments, (7) duration, and (8) limited obligation by the State.

The protection agreement with the Corps of Engineers to provide additional protection services around Dworshak Reservoir was renewed in 2019. This agreement provides for boat patrols, aerial patrols, fire prevention, prescribed fire, and maintenance efforts in the campsites.



The C-PTPA maintains 4 stations located at Boehls Cabin, Headquarters, Elk River, and Orofino (administrative office). All aircraft resources are based out of Orofino. The Association provides almost 1 million acres of wildland fire protection in Clearwater, Latah, and Shoshone County. CPTPA has cooperative agreements in place with the IDL, US Forest Service, BLM, and rural fire districts.

Issues of Concern: Residential growth in the WUI is increasing at a fast rate. This will require additional response capabilities and prevention efforts for CPTPA fire wardens and local fire chiefs.

Clearwater-Potlatch Timber Protective Association

Clearwater-Potlatch Timber Protective Association

Location	Kind of Resource	Type	Resource Name	Radio	Note	Year	Make	Model	Capacity	Gallon	Special Equipment
Headquarters	Wildland Engine	T 6	4301	Y	See Run Card	2017	Ford	F450	300gal		NWCGcompliant
Orofino	Wildland Engine	T5	4302	Y	See Run Card	2003	Ford	F 550	300 gal		NWCGcompliant
Orofino	Wildland Engine	T4	4609	N	See Run Card	1968	Kaiser	M35A2	900 gal		
Orofino	Wildland Engine	T4	4606	N	See Run Card	1990	Kaiser	M35A3	750 gal		
Orofino	Wildland Engine	T6	4308	Y	See Run Card	2016	Ford	F450	250 gal		NWCGcompliant
Orofino	Water Tender	T2	4805	Y	See Run Card	1980	Mack	Superliner	3250 gal/700gpm		NWCGcompliant
Orofino	Water Tender	T2	4808	Y	See Run Card	1991	Western star	4964F	3250gal/700gpm		NWCGcompliant
Orofino	Water Tender	T2	4831	Y	See Run Card	1998	Kenworth	W900B	3500gal/500gpm		NWCGcompliant
Orofino	Dozer	T3	4907	Portable	See Run Card	2002	Caterpillar	D5M			6 Way Dozer w/winch
Boehls	Dozer	T2	4903	Portatble	See Run Card	1976	Caterpillar	D6c			Angle Dozer w/winch
Orofino	Excavator	T2	4911	Y	See Run Card	2014	Komatsu	Pc170			
Elk River	Dozer	T3	4904	Portable	See Run Card	2005	Caterpillar	D5N			6 Way Dozer w/winch
Orofino	Dozer	T3	4906	Portable	See Run Card	1994	Caterpillar	D5H			6 Way dozer w/ winch
Orofino	Helicopter	T3		Y	See Run Card		Bell	206L3	120 gal bucket		5 firefighter
Orofino	Air Patrol		083	Y	See Run Card	1976	Cessna	185 Skywagon Ag	5 passenger		GPS/ADSB
Orofino	Air Patrol		79P	Y	See Run Card	1954	Piper	PA-18 Super Cub			GPS/ADSB
Orofino	Dump Truck		4831	Y	See Run Card	1998	Kenworth	W900B	58,000 GVWR		
Orofino	Equipment Transport		4707	Y	See Run Card	1998	Kenworth	W900B	25 Ton		Truck/Tilt Deck
Boehls	Equipment Transport		4708	Y	See Run Card	1994	Marmon	Tractor	35 Ton		Lowboy
Orofino	Equipment Transport	T2	4706	Y	See Run Card	1994	Western star	4964F	50 Ton		Lowboy
Headquarters	Wildland Engine	T6	4316	Y	See Run Card	2017	Ford	F450	300 gal		NWCGcompliant
Headquarters	Wildland Engine	T4	4618	N	See Run Card	1972	Kaiser	M35A2	750gal		
Headquarters	Dozer	T2	4905	Portable	See Run Card	1994	Caterpillar	D5H			6way dozer
Elk River	Wildland Engine	T6	4313	Y	See Run Card	2019	Ford	F450	300 gal		NWCGcompliant
Elk River	Wildland engine	T4	4607	N	See Run Card	1972	Kaiser	M52	750 gal		NWCGcompliant

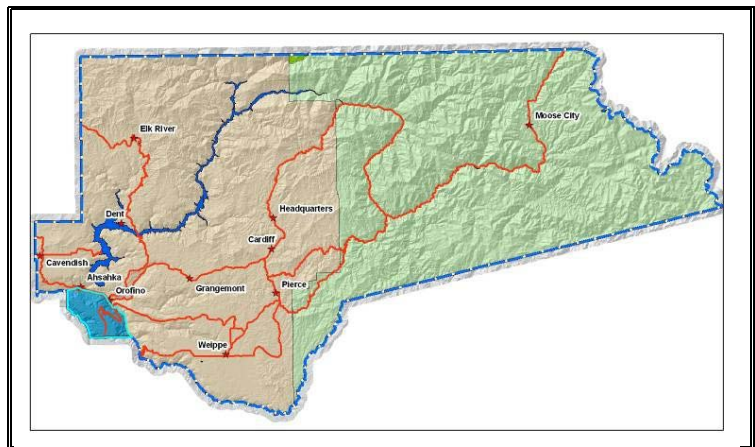


Idaho Department of Lands

District Summary: The Maggie Creek Fire Protection District covers an area of approximately 400 thousand acres. There is a permanent fire staff of five people with a seasonal fire crew of 12-15 depending on the fire season. Rough district boundaries are the USFS forest boundary to the east, Peck to the north, Central Ridge-

Nez Perce-Highway 7 to the west, and Snow Haven Ski Area to the south. The district has three distinct landform types: steep, dry canyon land, flatter prairie land, and rolling to steep mountainous terrain. The area is considered prime real estate and Wildland Urban Interface issues abound. Maggie Creek coordinates suppression efforts with eleven rural fire departments, four of them taxing and the remainder subscription or volunteer. Maggie Creek averages 31 wildfires per year and another 20 or so false alarms. District coordination is compounded because three counties lie within fire district boundaries. There is an active prevention program in place supported by interagency and fire departments alike. Maggie Creek issues approximately 500 burn permits each year.

Issues of Concern: Canyon fires and associated Wildland Urban Interface issues especially in the Woodland Grade, Tom Taha, Adams Grade, Beaverslide, Big Cedar Area, and Clear Creek areas. Other issues include: multi-county mutual aid agreements; developing pre-fire plans that evaluate evacuation routes, suppression tactics, safety zones, trigger points, multi-jurisdictional coordination, and common communication for all responders.

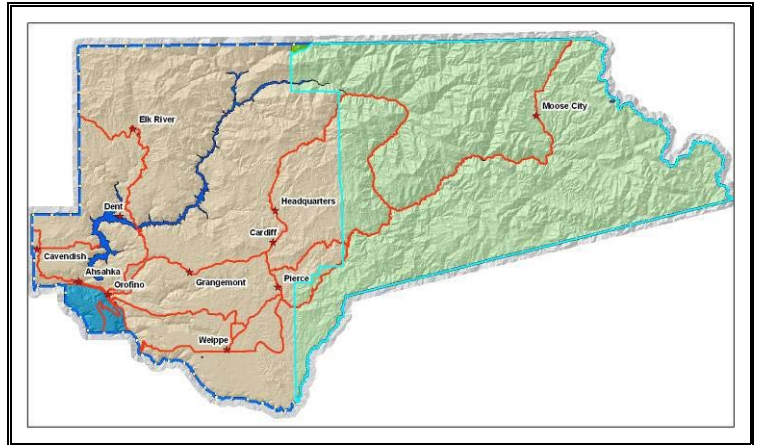




USDA Forest Service – Clearwater National Forest

District Summary: The Clearwater National Forest is responsible for wildland fire protection within the National Forest lands. The agency works collaboratively with the Idaho Department of Lands, the C-PTPA, and local fire

departments on fire prevention and public education campaigns within Clearwater County.



Fire Protection Issues

The following sections provide a brief overview of the many difficult issues currently challenging Clearwater County in providing wildland fire safety to citizens. These issues were discussed at length both during the committee process and at several of the public meetings. In most cases, the committee has developed action items that are intended to begin the process of effectively mitigating these issues.

Urban and Suburban Growth

One challenge Clearwater County faces is the large number of houses in the urban/rural fringe compared to twenty years ago. Since the 1970s, a segment of Idaho's growing population has expanded further into traditional forest or resource lands. The “interface” between urban and suburban areas and the resource lands created by this expansion has produced a significant increase in threats to life and property from fires, and has pushed existing fire protection systems beyond original or current design or capability. Many property owners in the interface are not aware of the problems and threats they face and owners have done very little to manage or offset fire hazards or risks on their own property. Furthermore, human activities increase the incidence of fire ignition and potential damage.

It is one of the goals of this document to help educate the public on the ramifications of living in the wildland urban interface, including their responsibilities as landowners to reduce the fire risk on their property and to provide safe access to their property for all emergency personnel and equipment. Homeowners building in a high fire risk area must understand how to make their properties more fire resistant using proven firesafe construction and landscaping techniques and they must have a realistic understanding of the capability of local fire service organizations to defend their property.

Rural Fire Protection

People moving from urban to more rural areas frequently have high expectations for structural fire protection services. Often, new residents do not realize they are living outside a fire protection district, or that the services provided are not the same as in an urban area. The diversity and amount of equipment and the number of personnel can be substantially limited in rural areas. Fire protection may rely more on the landowner’s personal initiative to take measures to protect his or her property. Furthermore, subdivisions on steep slopes and the greater number of homes exceeding 3,000 square feet are also factors challenging fire service organizations. In the future, public education and awareness may play a greater role in rural or interface areas. Great improvements in fire protection techniques are being made to adapt to large, rapidly spreading fires that threaten large numbers of homes in interface areas.

Debris Burning

Local burning of trash and yard debris has been identified as a significant and growing cause of wildfires throughout Clearwater County. Not only are some people regularly burning outside of the designated time frame, but escaped debris fires impose a very high fire risk to neighboring properties and residents. A growing portion of local fire department calls are in response to debris fires or “backyard burning” that either have escaped the landowner’s control or are

causing smoke management problems. It is likely that regulating this type of burning will always be a challenge for local authorities and fire departments; however, improved public education regarding the county's burning regulations and permit system as well as potential risk factors would be beneficial.

Pre-planning in High Risk Areas

Although conducting home, community, and road defensible space projects is a very effective way to reduce the fire risk to communities in Clearwater County, recommended projects cannot all occur immediately and many will take several years to complete. Thus, developing pre-planning guidelines specifying which and how local fire agencies and departments will respond to specific areas is very beneficial. These response plans should include assessments of the structures, topography, fuels, available evacuation routes, available resources, response times, communications, water resource availability, and any other factors specific to an area. All of these plans should be available to the local fire departments as well as dispatch personnel.

Fire Service “No Man’s Land”

Harmony Heights, Lower Fords Creek, Dent, Judgetown, and the Gilbert Grade are not currently within a structural fire protection district. In many cases, the homeowners in these areas are not aware that they do not have structural fire protection. Additionally, some landowners are aware of the inadequacy, but are resistant to formation of a new fire district or annexation into an existing district for various reasons. Clearwater County supports researching the options available to improve the fire services in this area, which may involve a well-organized public education campaign to ensure homeowners in the area are aware of the situation and understand the ramifications.

Road and Bridge Standards

Fire chiefs throughout Clearwater County have identified home accessibility issues as a primary concern in many of the rural areas in the county. Some private driveways are too narrow and/or too steep and most do not have adequate turnouts, turnaround areas, or alternative escape routes. In addition, some privately-maintained rural access roads have become overgrown by vegetation, effectively restricting safe access, particularly in a wildfire situation.

Inadequate private bridges lacking weight rating signage are also a common problem. Due to the risk of bridge failure and resulting personnel injury and equipment damage, fire and medical service organizations will not cross bridges that may be incapable of handling the weight of emergency response apparatus.

The planning committee involved in the development of this CWPP found accessibility due to nonexistent or ineffective driveway and private bridge standards to be the number one difficulty for safe emergency ingress and egress. It is a clear goal of this planning process to begin the development, enforcement, and maintenance of accepted road, driveway, and private bridge standards countywide. As part of this process, the committee has recommended an action item for improvement of substandard roads, driveways, and private bridges as well as development of an inventory and certification process for privately owned bridges.

Wildland Fire Specific Building Regulations

As the trend to build in the wildland urban interface continues, many counties and communities have begun to develop wildland urban interface codes for new construction that regulate the use of certain building materials (roofing, siding, vents, decking, etc.) in high fire risk areas. In addition, WUI codes regarding road and bridge standards, availability of water resources, proximity of vegetation, and other requirements have been adopted in communities and counties across the United States.

In 2005, the CWPP planning committee recommended the development of countywide policies to regulate the types of building materials used in high fire risk areas. As of 2011, Clearwater County has adopted the International Building Codes and is working towards adopting fire codes and enforcement rules that will best serve the County. It is the goal of the committee that these types of local code changes help prevent the high fire risk situations that are characteristic in numerous rural subdivisions already existing in Clearwater County.

Volunteer Firefighter Recruitment

The rural fire departments in Clearwater County are dependent on volunteer firefighters. Each district spends a considerable amount of time and resources training and equipping each volunteer, with the hope that they will continue to volunteer their services to the department for at least several years. One problem that all volunteer-based departments encounter is the diminishing number of new recruits. As populations continue to rise and more and more people build homes in high fire risk areas, the number of capable volunteers has gone down. In particular, many departments have difficulty maintaining volunteers available during regular work day hours (8am to 5pm).

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 protection of all the resources in the wildland urban interface.

Adoption of International Fire Code

Currently, fire departments in Clearwater County are not consistently notified of new construction projects within their jurisdiction; thus, they are not aware of the new addresses or what to expect when they arrive at an incident. The committee working on this plan would like to see the County adopt the International Fire Code, which would place more restrictions on building permittees to provide for safer emergency response to their structures. This would address minimum road widths and grade, adequate turn-around areas, turnouts for driveways over a designated length, and water availability among many other things.

Current Wildfire Mitigation Activities

Red Zone Program

The Sunnyside Volunteer Fire Department, Orofino Fire Department, and Grangemont Rural Fire District have successfully set up and are using the Red Zone program through assistance from the Idaho Department of Lands. The Red Zone software creates a database for the fire departments to record risk assessment information on individual structures in their district. This type of prior knowledge of potential fuels, access, and other risk factors is very useful when responding to both structural and wildland fire calls. The Data is still used but the program is no longer used.

Clearwater Fire Academy

The Clearwater Fire Chief's Association has successfully implemented the Clearwater Fire Academy, which is a three day firefighting (structural and wildland) school open to all departments and agencies in the region. Offered courses cover a number of topics ranging from specific structural firefighting issues to basic wildland firefighting. The Academy has been very well attended and is an excellent example of departments and agencies working together to provide quality training at a lower cost to everyone.

Communications

Clearwater County has made significant upgrades to their communications system with installation of new P-25 repeaters. Many of the individual fire departments have also been successful in acquiring P-25 radio equipment. Clearwater County has a countywide interoperability plan and is part of the DIGB II FOG.

North Central Idaho Fire Prevention Cooperative

The North Central Idaho Fire Prevention Cooperative is comprised of volunteer, federal, state, tribal, county, city, and private firefighting agencies/organizations, emergency and disaster services agencies/organizations, as well as regulatory agencies from Latah, Lewis, Clearwater, Idaho, and Nez Perce counties. Their mission is to work collaboratively to educate the public by providing a unified message with regard to fire prevention, prescribed fire, Firewise landscaping, home fire safety, and the ecological importance of fire in Idaho's forests.

Public Education Programs

Many of the county's fire departments and agencies are actively working on public education and homeowner responsibility by visiting neighborhoods and schools to explain fire hazards to citizens. Often, they hand deliver informative brochures and encourage homeowners to have their driveways clearly marked with their addresses to ensure more rapid and accurate response to calls and better access. The Firewise Program is also being utilized to help fire response organizations communicate fire hazards to the public. Clearwater County Emergency Management distributes information to residents and published the "52 week of properness" in 2019.

Community Fire Risk Assessments

The majority of homes and structures within and surrounding these communities are along a spectrum from low to moderate to high risk of loss to wildland fire. Individual characteristics of each community and structure dictate the risk factors. The prevalence of tree and shrub fuels pose a moderate to high threat to homes surrounded by these fuels, as fire typically spreads quickly through the grasses and burns at relatively high intensities in the brush and forest tree fuels, especially where declining forest health is a factor. Many homes are at low risk because of the management of fuels in the area immediately surrounding the structures and their access routes. There are a number of individual homes that are at much higher risk to wildland fire loss in the area, largely due to use of highly ignitable materials in home construction, or by lack of defensible space surrounding the home. Home defensibility practices can dramatically increase the probability of home survivability. The amount of fuel modification necessary will depend on the specific attributes of the site. Considering the high spread rates possible in these fuel types, homes need to be protected prior to fire ignitions, as there is little time to defend a home in advance of fire.

Individual Risk Assessments

Ahsahka

The community of Ahsahka is located approximately 5 miles northwest of Orofino on Cavendish Road. Ahsahka is situated in the small gorge created by the main Clearwater River and North Fork of the Clearwater River on the eastern side of the Nez Perce Indian Reservation. Although many residents of this community live near the town center, there are several small clusters of homes along the Cavendish Highway to the west and the Old Ahsahka Grade to the north, as well as southeast toward Orofino and outlying areas. Ahsahka is nestled on the toe of Dworshak Reservoir to the east and a very steep slope rising northward toward the Cavendish Prairie. These slopes are dominated by ponderosa pine, Douglas-fir and various grasses.

The topography of the landscape near Ahsahka consists of mostly southern and western aspects. The surrounding area has been broken up into several ownerships including some state land, industrial property, and privately owned parcels. Different land management techniques on these mixed ownerships have led to varied vegetation and fuel types. Much of the overstory surrounding Ahsahka is represented by ponderosa pine and Douglas-fir with an under-story of grass, ninebark, and ocean-spray. Under normal weather conditions fire spread is primarily through the fine herbaceous fuels, either curing or dead. A mixture of various logging operations over many years constitutes different fuel types depending on the treatment of slash and the amount of volume left standing. Fires in these fuel types are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Fuel types that have been well managed tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Ahsahka lie within the several residents located along timbered forest routes leading into the surrounding rural and wildlands. These clusters of

residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases the likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging and mining, recreational use, and an active railroad system increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from Cavendish Road, a paved two-lane highway. To the east of Ahsahka is Dworshak Reservoir and directly west is the Clearwater River. As a result, the only vehicle access into the area is from the north and southeast along Cavendish Road. There are very few additional escape routes on forest roads that lead away from this community. Most of these routes are located in areas at moderate to high fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire-fighters; they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Ahsahka lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

The Orofino City and Rural Fire Departments provide structural fire protection within the Ahsahka city limits, while the surrounding areas are protected from wildfire by the Clearwater- Potlatch Timber Protective Association.

Cavendish

Cavendish is a small farming community located just north of the Nez Perce Indian Reservation on Cavendish Road approximately 15 miles north of Ahsahka. This area can be accessed by the Cavendish Road from Orofino or from Southwick to the north. Most of this area is relatively flat and has been converted from forested land to agricultural fields. Few residents actually live near the town site; however, there are clusters of homes and structures scattered along this road from Orofino and Southwick. Although this area is primarily used for agricultural purposes, it is bordered by forested land to the north, south, and east characterizing Cavendish as an interface condition by the wildland urban interface classification system.

There are a few small streams flowing through the area, most of which drain into the Clearwater River to the west and Dworshak Reservoir to the east. Cavendish sits on a gentle west aspect that becomes much steeper a few miles further east and west of the community. This area is a mixture of agricultural, pasture land, and mixed conifer forests; thus, providing several different fuel types. Fires in one fuel type under normal weather conditions tend to be slow moving ground and surface fires with occasional “jackpot” burning, crowning, spotting, and torching, which can make suppression efforts difficult and dangerous for firefighters. The rate a fire spreads to another fuel type tends to be governed by the amount of continuous herbaceous fuels that have

cured or are nearly cured. When these fires consist of flashy fuels they are generally fast-moving surface fires.

Fire Potential

Slopes surrounding Cavendish show evidence of numerous past and recent logging operations. Slash and growth of brush and dense regeneration on these sites adds to the amount of surface and dead and down fuels available. Furthermore, the close proximity of logging and recreational use on the forested land to the east of the town further increases the fire risk by contributing to potential ignition sources. Although fuel accumulations in these areas could potentially lead to a severe wildland fire, due to its location and agricultural development, it is unlikely that the community would be threatened. However, a few homes in the outlying areas near the timber are at much higher risk.

Many of the homes in the community have been built using wood siding and decking, which is unfavorable for protection against wildfire. Some homeowners also stack firewood under decks or against structures. Nevertheless, large fields surrounding most of the homes in this area provide an adequate defensible space against oncoming wildfires early in the fire season, but add to the fire risks when the fields cure or during harvest with the equipment in the area.

The primary access into the area is on Cavendish Road, a two lane paved road from either Orofino or Southwick. Most of the roads near Cavendish are located in low fire risk areas near the community. However, the fire risk significantly increases as forested land along roadways becomes more common to the east of town. Many of the homes in this area are located on one-way in, one-way out forest routes or private drives, some of which are bordered by timber. This not only increases the risk of the residents becoming trapped, it is also dangerous for firefighters.

Road names and house numbers are generally present throughout the area, yet bridges on many access roads lack adequate signing and weight ratings. Most residences in the area access water and power through personal wells and above ground power lines. The power line corridor stretching from Dworshak to Cavendish travels through sections of very heavy fuels. This corridor has been cut and pruned; however, this area still maintains a very high risk of ignition due to remaining surface fuels and nearby forest fuels.

Fire Protection

Cavendish is protected by the Evergreen Rural Fire Department. The Evergreen Rural Fire District provides structural fire protection in this area, while the Clearwater-Potlatch Timber Protective Association and the Nez Perce Tribe provide wildland fire protection.

Dent

Dent Acres is located on the north shore of the North Fork of the Clearwater River near the entrance to the Dworshak Reservoir. This area, which is predominantly used for recreation, lies on a southern aspect with steep slopes. The vegetation can be characterized as scattered ponderosa pine and Douglas-fir, with brush and grasses. The elevation ranges from 1600 to 2600 feet. A recreational vehicle park is located near the banks of the reservoir. There are approximately 58 structures within the project area, many of which are in high risk wildfire zones according to the risk analysis. The Dent area has a vast assortment of different structures, from year round residences to summer cabins to trailer parks and a public campground (with RV's, trailers and tents). Construction methods are highly variable ranging from manufacture homes to custom built cabins. Thus, the value of these structures also varies considerably.

The spacing of these structures is very good throughout most of this area, with the exception of the trailer park and the campgrounds. The Dent area is becoming a very popular location for people to build summer cabins. With the sale of Potlatch land in this area and a couple of new subdivisions, more and more structures are popping up.

Fire Potential

The primary concern in this area is the high recreational use coupled with a xeric landscape. This combination results in a high probability of ignition and a potentially high rate of fire spread. Campfires and heavy traffic around the campground near the aquatic interface increase the risk of wildfire spreading uphill to the recreational homes and improved RV campsites. Residences in the area are typically surrounded by scattered timber, brush and grasses, many lacking a defensible space. Prevailing winds out of the southwest would likely drive wildfire upslope towards residences.

Access to Dent Acres is limited. The Elk River Road from the north and Dent Bridge to the south provide access into and out of the area. Many of the residences and the RV park are accessed by narrow, one-way driveways contributing to the possibility of residents becoming trapped in the event of a wildfire. Due to the remoteness of the area, emergency response may be delayed. Developing adequate escape routes and evacuation plans for residents and campers should be given a high priority. This should include designated landing spots for helicopters placed in strategic locations.

The Dent area does not currently have any kind of rural structure fire protection. However, there are several individuals in the Dent area that have expressed an interest in forming a rural fire district. There are several grassy meadows that would make very good safety zones. There are also a number of good ponds located in the Dent area. Most of these are good sources of water for helicopters. Not all them lend themselves to engines, as drivable access to most is limited. The best water source for engines would most likely be Dworshak reservoir. The Dent area has both overhead and underground power lines.

Fire Protection

In terms of rural fire protection, the Dent area is without a structure protection and a rural fire district. It is recommended that a volunteer fire department be placed in this area with at least one rural engine and one wildland fire engine. Although Clearwater-Potlatch Timber Protective Association provides wildland fire protection services for this area, their closest engine and crew is located in Elk River, over half an hour away. This forward advanced engine would provide a rapid response to future wildland fires. In point of fact, the Clearwater-Potlatch Timber Protective Association often does place an engine in this area during the high use periods of the year. The addition of a rural engine (structure protection) would enhance the fire protection in this area greatly.

Elk River

The community of Elk River is located approximately 17 miles southeast of Bovill at the end of State Highway 8. Elk River is situated in the small valley created by Elk Creek, Partridge Creek, and several other smaller draws that are bordered by the Clearwater National Forest and Potlatch Corporation. Elk Creek, Partridge Creek, Elk Creek Reservoir, and several other small streams provide ample water resources. There are only about 100 residents that live year round within

Elk River's community, but there could be several hundred more loggers, hunters, campers, tourists, etc. during the summer months. Many of these homes in the area are nestled in or adjacent to stands of mixed conifer stands increasing their risk to fire.

The topography of the surrounding forestland near Elk River consists of all aspects. Much of the area surrounding the Elk River community is encompassed by the Clearwater National Forest and Potlatch Corporation. Grand fir, lodgepole pine, western red cedar, Douglas-fir, and other conifer species dominate the vegetative structure of the landscape. The surrounding areas are broken up into several ownerships including state land, federal land, industrial property, and privately owned parcels. Different land management techniques on these mixed ownerships have led to varied vegetation and fuel types. Much of the area surrounding Elk River is represented by a thick over-story and multi-level under-story creating ladder fuels. Furthermore, there is a layer of dead and down fuels that greatly increases the risk of higher intensity ground and surface fires. Occasional "jackpot" burning, crowning, spotting, and torching of individual trees also makes suppression efforts difficult and dangerous for firefighters. A mixture of various logging operations over many years constitutes several different fuel types depending on the treatment of slash and the amount of volume left standing. Fires in these fuel types tend to spread rapidly, creating high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Furthermore, these fuel types tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Elk River lie within escape routes and the several residents located along timbered forest routes leading into the mountains and directly adjacent to forest land. These clusters of residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases its likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging, mining, and recreational use increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from State Highway 8, a paved two-lane highway that ends at Elk River. To the east, south, and north of Elk River is primarily logging roads that are two and one lane gravel roads with turnouts. There are several additional escape routes on forest roads that lead away from these communities in all directions; however, some may be restricted throughout parts of the year. Most of these forest routes are located in areas at moderate to high fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire-fighters; they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Elk River lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

This community and surrounding areas are protected from wildfire by the Clearwater-Potlatch Timber Protective Agency.

Freeman Creek

The Freeman Creek recreation area lies approximately 6 miles east of Cavendish along the west shore of Dworshak reservoir. This area is heavily used by boaters, campers and seasonal homeowners. Located near the reservoir is a large established campground operated by the State of Idaho. The camping area contains several structures such as a dining hall, several cabins and boat launches. Above the campground there are approximately 75 structures in fairly dense timber. The majority of the structures are framed construction, with wood siding and metal roofs. Defensible spaces around numerous residences located within the forested area are inadequate. The eastern aspects are relatively steep, with mesic timberlands and elevations ranging from 1,600 to 2,600 feet. Western red cedar and grand fir dominate the lower slopes, while Douglas-fir and ponderosa pine dominate upslope. During drought conditions combined with a wind event these fuels could create extreme fire behavior. A small inlet exists on the southern portion of the recreational area. Douglas-fir, ponderosa pine, and western larch are dominant on this drier slope. Agricultural fields lie on the relatively flat ground west of Freeman Creek recreation area. These less hazardous areas could become a safety zone for both public and firefighter refuge during an extreme wildfire event. The primary access into the recreation area is a well-maintained, narrow, two-lane road with many switchbacks.

Fire Potential

The primary concern in this area stems from the higher probability of ignition due to recreational use. Campfires and heavy traffic surrounding the campground near the shore increase the risk of wildfire spreading uphill to the structures. Even though the timber type on the eastern aspect does not support a high probability of ignition, it is a relatively drier western red cedar habitat with heavy accumulations of ladder fuels.

The primarily eastern exposure presents several additional risk factors. The predominate timber type in this area would support a fire with a high potential for spotting and crowning. Additionally, a fire in this area would likely have a high rate of spread. The prevailing winds out of the southwest would possibly thrust the fire into the adjacent eastern slopes. The probability of ignition is greater in this area given the drier site and heavy recreational use.

The residences in the area are typically located midslope along the eastern exposures. Many homesites are established on unmarked private driveways without adequate access for firefighting equipment. Residences are placed in small openings often without prudent clearing of brush and timber away from buildings. Structure protection during an extreme wildfire event for many of these structures would impose serious danger to firefighters. These residences may be determined as not defensible during extreme wildfire triage events. There are a few ponds that provide engine fill and helicopter dip sites. There are additional needs for pond development and maintenance.

Some landowners have accomplished pruning, thinning, and brush disposal around their residences. These improvements in defensible space, combined with large green lawns will improve the homes survivability in a wildfire event.

The Freeman Creek road is the main paved arterial route to this area. This access road is not only difficult for fire fighting equipment to negotiate due to steepness and switchbacks, but it is also the only road available for ingress and egress. Heavy accumulations of timber and fuels are immediately adjacent to the road making it unsafe as an exit route in a wildfire situation. There is an additional escape route from the campground along the reservoir; however, drivability is questionable at this time and it would not serve residents upslope.

Overhead power lines provide power to all residences and state park facilities. Although these power lines are maintained regularly, they are vulnerable to falling trees during wind events creating possible fire ignitions during extreme fire conditions.

Fire Protection

The Evergreen Rural Fire District protects structures within the Freeman Creek area. Evergreen Fire Department combined with C-PTPA has provided public education for residents to take measures to improve their homes survivability from wildfire.

Gilbert Grade

The Gilbert Grade is the northern terminus of State Route 7 providing fairly rapid access from the Clearwater River corridor near Orofino to the farmland of the Camas Prairie above. The Gilbert Grade area is mainly composed of mature Douglas fir and ponderosa pine timber types and brush. Several grassy meadows and farm fields are located throughout the area, but timber is the dominant fuel type. The continuity of fuels is the major component aiding fire spread. Given the steepness of the area, a wind driven fire would quickly move through the area. The topography varies from rolling, timbered hills to flat benches and steep, rocky cliffs. Dwellings are interspersed from the intersection of U.S. Highway 12 and State Route 7 southwest to the end of the Grade almost seven miles later.

Fire Potential

There are a few narrow spots, but the Gilbert Grade right of way will accommodate large trucks. Given the limited accessibility and fuel continuity, a wind-driven fire would cause severe damage. Residents at either end of the grade have an excellent escape route, with the quality diminishing towards the middle. The timber's proximity to the road would inhibit the fuel break qualities a gravel road would normally demonstrate. A fire moving in the crowns of the trees would move across the road without hesitation. Crockett Bench and several other roads dead end at home sites, which poses accessibility issues for fire suppression forces. Power lines run up the hill from Orofino and cross the road about four miles from Highway 12. Structures range from all wood to wood and metal and are located in both meadows and within the timber stands.

Fire Protection

There is a rural fire department in place to protect structures near the bottom of the grade. Existing safety zones, in the form of cleared agricultural fields or livestock pasture, are located from the mid-slope upwards, with the top of the grade flattening out into the Camas Prairie. Ponds capable of dipping or drafting are scattered throughout the area; however, few are visible or readily accessible from the main road.

Grangemont and Rudo Area

The small community of Grangemont is located on Grangemont Road about half way between Orofino and Pierce. The Rudo area refers to the group of homes south of Grangemont scattered

along Rudo Road towards the Orofino Creek drainage. The greater Grangemont and Rudo area is mainly composed of mature timber and brush. Several grassy meadows are located throughout the area, but timber is the dominant fuel type. The continuity is the major component aiding fire spread. The topography is primarily gently sloping with some smaller canyons and ridges tapering towards the Orofino Creek drainage. Construction materials for structures in this rural area range from all wood to wood and metal and are located in both open meadows and within the timber type fuels.

Fire Potential

Given the limited accessibility and fuel continuity, a wind-driven fire would cause severe damage. The Grangemont Road is a paved, two lane access route that will accommodate emergency and large truck traffic in either direction. The Rudo Road, on the other hand, is a narrow, winding gravel road that would cause problems for equipment bigger than a pickup. The timber's close proximity to the road would inhibit the fuel break qualities a gravel road would normally demonstrate. A fire moving in the crowns of the trees would move across the road without hesitation. Power lines throughout Grangemont and Rudo appear to be in good condition. A power line corridor, relatively free of hazardous fuels, is maintained; however, it may not be wide enough given the adjacent timber fuels.

Fire Protection

The Grangemont Volunteer Fire Department provides structural fire protection, while the Clearwater-Potlatch Timber Protective Association is responsible for wildland fire protection. There are several grassy meadows that would make adequate safety zones, the best being located around Grangemont and at the southern end of Rudo Road. There are also several ponds capable of dipping or drafting scattered throughout the area. Some of these are visible from the road and some are not readily accessible.

Greer

The community of Greer is located approximately 8 miles southeast of Orofino at the intersection of U. S. Highway 12 and State Highway 11. Greer is situated in the small gorge created by the Clearwater River nestled on the eastern side of the Nez Perce Indian Reservation. Although many residents of this community live near the town center, there are several small clusters of homes along Highway 11 to the east toward Weippe and outlying areas. Greer is nestled on the toe of a very steep slope rising eastward toward the Weippe Prairie. These slopes are dominated by ponderosa pine, Douglas-fir and various grasses.

Much of the area surrounding the Greer community is encompassed by the private ownership. Ponderosa pine, Douglas-fir, and many grass types dominate the vegetative structure of the landscape. Various land management techniques on these ownerships have led to varied vegetation and fuel types. Much of the area surrounding Greer is represented by ponderosa pine and Douglas-fir over-story, with a mix of grass, ocean-spray, and ninebark under-story. Under normal weather conditions fire spread in this vegetation type is primarily through the fine herbaceous fuels, either curing or dead. A mixture of various logging operations over many years constitutes different fuel types depending on the treatment of slash and the amount of volume left standing. Fires in other fuel types are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Other fuel types tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Greer lie within the several residences located along timbered forest routes leading into the mountains. These clusters of residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases its likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging and mining, recreational use, and active railroad system increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from State Highway 11, a paved two-lane highway. To the east of Greer is the Greer Grade, which is a steep windy road traveling to the east up slope to the Weippe Prairie. There are very few additional escape routes on forest roads that lead away from this community. Most of these routes are located in areas at low to moderate fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire-fighters; they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Greer lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

Greer has contracted the Orofino Rural Fire Department to provide structural protection to the community. The Clearwater-Potlatch Timber Protective Association is responsible for wildfire protection in this area.

Headquarters

The community of Headquarters is located approximately 10 miles northeast of the Intersection of the Grangemont Road and State Highway 11. Headquarters is situated in the small valley created by Reeds Creek, which is bordered by the land owned mainly by Potlatch Corporation. Reeds Creek, North Fork of Reeds Creek, and several other small streams provide ample water resources. There are only a few residents that live in within the Headquarters' communities there are several small clusters of homes along Highway 11 to the southwest toward Pierce and outlying areas. Many of these homes are nestled into stands of lodgepole pine, grand fir, and Douglas-fir or other fuels increasing their risk to fire.

The topography of the forestland near Headquarters consists of all aspects. Much of the area surrounding the Headquarters community is encompassed by the by Potlatch Corporation. Grand fir, lodgepole pine, Douglas-fir, and other conifer species dominate the vegetative structure of the landscape. The surrounding areas has been broken up into several ownerships including some mainly industrial property and some state and privately owned parcels. Different land management techniques on these ownerships have led to varied vegetation and fuel types. Much

of the area surrounding Headquarters is represented by various mixtures of conifer trees, with a mixture of grasses and brush types, which under normal weather conditions tend to support higher intensity ground and surface fires due to greater quantities of dead and down fuels. Occasional “jackpot” burning, crowning, spotting, and torching of individual trees also makes suppression efforts difficult and dangerous for firefighters. A mixture of various logging operations over many years constitutes different fuel types depending on the treatment of slash and the amount of volume left standing. Fires in these fuel types are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Other fuel types tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Headquarters lie within the several residents located along timbered forest routes leading into the mountains, Potlatch Corporation’s office, and recreationists. These clusters of residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases its likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging and mining and recreational use increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from State Highway 11, a paved two-lane highway that ends at Headquarters. To the east of Headquarters is primarily logging roads that are two and one lane gravel roads with turnouts. There are several additional escape routes on forest roads that lead away from these communities in all directions; however, some may be restricted throughout parts of the year. Most of these forest routes are located in areas at moderate to high fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire-fighters; they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Headquarters lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

This community and surrounding areas are protected by the CPTPA.

Lakeview Estates

The Lakeview Estates are located northeast of Orofino on Eureka Ridge. This small peninsula juts out into Dworshak Reservoir just north of the dam. The Lakeview Estates Development is primarily well-spaced, year around residences with the exception of a couple summer homes. Fuels on this southwest aspect are typical for a dry site consisting primarily of an open ponderosa

pine stand with a grassy understory. Fires in these fuels would tend to spread rapidly, but burn at low intensities. These forest types historically burned relatively frequently.

The Eureka Ridge Road is the main access route into the Lakeview Estates and is capable of accommodating emergency vehicles. Nevertheless, most of the driveways accessing structures are narrow with only one way in and one way out and inadequate turnaround areas. These characteristics limit the size and number of emergency vehicles able to respond at one time.

Fire Potential

The Lakeview Estates Development has continued to grow since the 1970's. The major threat of wildfire to the Lakeview Estates comes from the U.S. Army Corps of Engineers land downslope of the development. Intense recreational traffic associated with Dworshak Reservoir increases the risk of a fire starting on the Corp's ownership. In the spring of 2004, the Clearwater-Potlatch Timber Protective Association conducted home fire risk assessments in which approximately 75 percent of participating Lakeview Estates homeowners with the conclusion that 50 percent of the homes are at high risk of loss in the event of a catastrophic fire. Mitigation of these risks before a wildfire occurs is imperative for homeowners' safety.

Fire Protection

Lakeview Estates is within the boundaries of the Twin Ridge Rural Fire District. The Lakeview Estates Development has constructed reservoirs that contain approximately 50,000 gallons of water with a pump system to fill emergency fire engines. There are also two large ponds, both containing approximately one million gallons each. These ponds are accessible by helicopter; however, there are power lines that could pose a safety hazard. Hayfields along the ridge could potentially serve as safety zones for both residents and fire fighters in the event of a compromised evacuation.

Orofino

The community of Orofino is located approximately 30 miles east of Lewiston along U.S. Highway 12. Orofino is situated in a steep canyon created by the Clearwater River nestled on the eastern side of the Nez Perce Indian Reservation. Although many residents of this community live near the town center, there are several smaller communities in all directions out of the canyon. Orofino is nestled on the toe of a very steep slope rising eastward toward the Weippe Prairie. These slopes are dominated by ponderosa pine, Douglas-fir and various grasses.

The topography of the area surrounding Orofino consists of mostly southern and northern aspects. Much of the area surrounding the Orofino community is encompassed by the private ownership and the Nez Perce Indian Reservation. The surrounding areas have been broken up into several ownerships including some state land, industrial property, and privately owned parcels. Different land management techniques on these mixed ownerships have led to varied vegetation and fuel types. Much of the area surrounding Orofino is represented by ponderosa pine and Douglas-fir overstory and grass, ocean spray, and ninebark in the under-story. Ponderosa pine and grass constitutes the southern aspects, and Douglas-fir, ninebark, and ocean-spray on the northern aspects. The ponderosa pine fuel type under normal weather conditions, fire spread is primarily through the fine herbaceous fuels, either curing or dead. The Douglas-fir fuel type supports higher intensity ground and surface fires, due to greater quantities of dead and down fuels. Occasional "jackpot" burning, crowning, spotting, and torching of individual trees also makes suppression efforts difficult and dangerous for firefighters. A mixture of various

logging operations over many years constitutes a mixture of fuel types depending on the treatment of slash and the amount of volume left standing. Fires in one fuel type are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs, while other fuel types tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Orofino lie within the smaller communities located up the small timbered canyons in all directions from Orofino. These small clusters of residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases its likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging and mining, recreational use, and active railroad system increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from State Highway 12, a paved two-lane highway that runs along the banks of the Clearwater River. To the east of Orofino is the Grangemont Road, which is a steep windy road traveling to the east up slope to the Weippe Prairie. There are very few additional escape routes on forest roads that lead away from this community. Most of these routes are located in areas at moderate to high fire risk due to the close proximity of continuous fuels along the roadway and steep funnel like canyons. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire-fighters; they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Orofino lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

The Orofino City and Rural Fire Departments provide structural protection, while the surrounding areas are protected from wildfire by the Clearwater-Potlatch Timber Protective Association and the Idaho Department of Lands.

Pierce

The community of Pierce is located approximately 10 miles northeast of Weippe on State Highway 11. Pierce is situated in the small valley created by Orofino Creek, which is bordered by the Potlatch Corporation lands on all sides. Orofino Creek, Rhodes Creek, Jim Brown Creek, and several other small streams provide ample water resources. Although many residents of these communities live near the town center, there are several small clusters of homes along forest roads in outlying areas. Many of these homes are nestled into stands of lodgepole pine, grand fir, and Douglas-fir or other fuels increasing their risk to fire.

The topography of the surrounding forested land near Pierce consists of all aspects. Grand fir, lodgepole pine, Douglas-fir, and other conifer species dominate the vegetative structure of the landscape. The surrounding areas has been broken up into several ownerships including some state land, industrial property, federal, and privately owned parcels. Different land management techniques on these mixed ownerships have led to varied vegetation and fuel types. Much of the area surrounding Pierce is represented by Douglas-fir, grand fir, lodgepole pine, and other conifer species in the overstory and mixed brush species in the understory, which under normal weather conditions tend to support higher intensity ground and surface fires due to greater quantities of dead and down fuels. Occasional “jackpot” burning, crowning, spotting, and torching of individual trees also makes suppression efforts difficult and dangerous for firefighters. A mixture of various logging operations over many years constitutes different fuel types depending on the treatment of slash and the amount of volume left standing. Fires in these fuel types are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Other fuel types within the area tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material.

Fire Potential

The primary fire risks to the community of Pierce lie within the residential areas located along timbered forest routes leading into the mountains. These clusters of residences are commonly nestled into stands of timber on dead end secondary roads or driveways. The lack of a defensible space around homes increases its likelihood of ignition by oncoming wildfires. Residences throughout the area are frequently constructed with wood siding and decks; thus, further increasing their risk of ignition. Heavier fuel loading and steeper topography in these areas increases the chance of an uncontrolled wildfire endangering lives and property. Current logging and mining, recreational use, and active railroad system increase the risk of fire by contributing to potential ignition sources.

The primary access into the area is from State Highway 11, a paved two-lane highway that extends to the north and south. There are several additional escape routes on forest roads that lead away from these communities in all directions; however, some may be restricted throughout parts of the year. Most of these forest routes are located in areas at moderate to high fire risk due to the close proximity of continuous fuels along the roadway. In the event of a wildland fire, it is likely that one or more of the escape routes would become impassable. Signing of drivable alternate escape routes would reduce confusion and save time in a wildfire situation. Additionally, many homes are located on high risk one-way in, one-way out secondary roads and/or private driveways that could become threatened by wildland fire. One-way in, one-way out access roads are not only dangerous for fire fighters, they also increase the likelihood of residents becoming trapped.

Road names and house numbers are generally present throughout the area, yet many of the bridges in the vicinity of Pierce lack adequate signing and weight ratings. Most residences access water and power through personal wells or city water hook ups and above ground power lines.

Fire Protection

Structural protection in Pierce is provided by the Pierce Fire Department while the Clearwater-Potlatch Timber Protective Association and the USDA Forest Service provide wildland fire protection.

Sunnyside area and New Hope Subdivision

The Sunnyside area and New Hope subdivision are located on the north side of the Clearwater River east of Ahsahka extending to the Clearwater-Nez Perce County line. In the last ten years this area has experienced the largest growth in Clearwater County and this trend is expected to continue. Vegetation on this south aspect is typical of a dry site consisting primarily of open ponderosa pine with a grassy understory. Fires in these fuels will tend to spread very rapidly, particularly upslope due to convection. This fuel type historically burned relatively frequently, but at lower intensities.

The Ahsahka Grade and Sunnyside Road Bench Road access the lower slope while Cavendish Road, South Road, and Teaken Road access the mid and upper slope. These main roads are adequate to accommodate large emergency vehicles; however, the private roads and driveways are narrow with typically only one way in and one way out. Both Sunnyside and New Hope have overhead power lines, which provide power to the homes. Additionally, there is high voltage transmission lines that cross part of the New Hope subdivision.

Fire Potential

The Sunnyside area and New Hope subdivision have moderate to high fire risk. An ignition near the Clearwater River, depending on environmental conditions, would move very rapidly upslope through the cured grasses. Access to homes on dead end driveways with hazardous fuels adjacent to the roadway is a major hindrance to fire suppression resources along with fuel type, topography, and continuity.

Fire Protection

Both areas are within the structural protection boundaries of the Sunnyside Rural Fire District. The Clearwater-Potlatch Timber Protective Association and the Nez Perce Tribe provide wildland fire protection. There are a number meadows and hay fields that could serve as safety zones for both residents and fire fighters in the event of a compromise evacuation. The Sunnyside Rural Fire District has installed two 10,000gallon water tanks with gravity fed hydrants. One is located at the fire station and the other at the top of the Old Peck Grade. The New Hope subdivision has a 40,000 gallon community reservoir. There are also many private ponds scattered throughout the area, most of which are accessible by helicopter.

Wells Bench

The Wells Bench area is located northeast of Orofino along and extending from Wells Bench Road. Many of the homes in this area are small ranchettes with several associated outbuildings. This is a relatively xeric south aspect site with fuels ranging from grasses and brush at the lower elevations to a Douglas fir and ponderosa pine forest type at higher elevations. The continuity of these fuels is repeatedly broken by cleared farm or grazed pasture ground. These more defendable, less hazardous areas may serve as potential safety zones for both residents and fire fighters.

The Wells Bench area and surrounding ranchettes and rural homes has a good primary road system that can handle large emergency vehicles. Like most of the rural interface areas in Clearwater County, the private roads and driveways are narrow and typically one way in, one way out with hazardous fuels either adjacent to or overhanging the roadway.

Fire Potential

The fire history for the Wells Bench area has been, for the most part, small fires that were easy to contain with initial attack crews from both the Clearwater-Potlatch Timber Protective Association and the rural fire districts of Orofino and Twin Ridge. Many homeowners currently maintain an adequate defensible space in the form of managed farm or pasture fields; however, there are some homes that are at high fire risk due to their abutment to hazardous fuels or storage of flammable materials such as wood piles or propane tanks near the home.

Fire Protection

The Wells Bench area is within the boundaries of the Twin Ridge Rural Fire District and the Orofino Rural Fire District has protection responsibilities for part of the lower portion of Wells Bench. The Clearwater-Potlatch Timber Protective Association provides wildland fire protection. Rural addressing is poor, but is currently in the process of being updated. The Wells Bench area has many large ponds that would serve well as helicopter ponds as well as engine refill sites. The Twin Ridge Rural Fire District has established a refill site next to their fire hall which contains approximately two million gallons of water.

Weippe

Weippe is a small community on the Weippe Prairie near the Clearwater National Forest and located approximately 17 miles east of Greer along Highway 11. There are many residences located near the community center; however, many homes, farms, and ranches are scattered throughout the area for several miles. Many of these are larger landowners are located in the flatter regions known as the Weippe Prairie. Somewhat isolated islands of forest land separate these areas. Ponderosa pine, Douglas-fir, grand fir, lodgepole pine and other conifers are dominant on the slopes. Some landowners have built homes on the lower slopes abutting or mingling with these wildland fuels. Although the very small drainages of Ford Creek, Grasshopper Creek, and Winter Creek provide some water resources, the closest large water body is the Clearwater River approximately 17 miles to the east. Weippe is characterized as an interface condition by the wildland urban interface classification system.

The topography of Weippe is relatively flat. The topography changes drastically though in all directions to very steep canyons and gorges. The majority of the regions fuel types are a mixture of agricultural, pasture land, and mixed conifer forests. Fires tend to support varying degrees of intensity, which under normal weather conditions tend to support higher intensity ground and surface fires due to greater quantities of dead and down fuels. Occasional “jackpot” burning, crowning, spotting, and torching of individual trees also makes suppression efforts difficult and dangerous for firefighters. The rate of fire spread in fuel model 1 tends to be governed by the amount of continuous herbaceous fuels that have cured or are nearly cured. These fires are generally fast-moving surface fires. Mixtures of various logging operations over the forested area for many years have left a variety of fuel types depending on the treatment of slash and the amount of volume left standing. Fires in the dense timber types are rapidly spreading, high intensity surface and ground fires that are generally sustained until a fuel break or change in vegetation occurs. Other fuel types tend to support much less intense surface fires due to lighter fuel loading and a lack of volatile material. Developed agriculture and livestock grazing in the flat, grassy valleys creates the conditions for another fuel type, which tend to support low intensity, fast-moving surface fires. This lower risk area provides not only a fuel break, but also a safety zone for firefighters and residents of Weippe.

Fire Potential

Although the flatter areas provide buffers for many residents against uncontrolled wildfire, the conditions for potentially severe, high intensity fires such as heavy continuous fuels, steep slopes, and up slope winds are all present near the Weippe Prairie. Furthermore, numerous logging operations, annual field burning, and recreational activities in the area increase potential ignition sources.

Many homes in Weippe and surrounding areas have been built using wood siding, roofing, and decking, which is unfavorable for protection against wildfire. Also, some homeowners stack firewood under decks or against other structures. Homes built within the grassy valley bottoms generally have an adequate defensible space; however, those in more mountainous areas are commonly adjacent to or within heavier fuels. Additionally, many residences are located on long, one-way in, one-way out roads or private drives.

The primary access into the area is on Highway 11 which is a paved two lane road. Three Mile Road, Musselshell Road, and various other roads offer additional escape routes traveling in all directions away from the community. Most of these roads are located in areas at low risk of wildland fire due to agricultural development.

Road names are generally present throughout the area, yet bridges on many access roads lack adequate signing and weight ratings. Also, house numbers in some areas seem to be missing or difficult to see. Most residences access water or city water hook ups and power through personal wells and above ground power lines.

Fire Protection

The Weippe Rural Fire Department provides structural protection and Clearwater-Potlatch Timber Protective Association and the USDA Forest Service provide wildland fire protection in the surrounding area.

Mitigation Recommendations

Critical to implementation of this Community Wildfire Protection Plan are the identification and implementation of an integrated schedule of action items targeted at achieving a reduction in the number of human caused fires and the impact of wildland fires in Clearwater County. This section of the plan identifies and prioritizes potential mitigation actions, including treatments that can be implemented in the county to pursue that goal. As there are many land management agencies and thousands of private landowners in Clearwater County, it is reasonable to expect that differing schedules of adoption will be made and varying degrees of compliance will be observed across various ownerships.

The federal land management agencies in Clearwater County, specifically the USDA Forest Service and USDI BLM, are participants in this planning process and have contributed to its development. Where available, their schedule of land treatments have been considered in this planning process to better facilitate a correlation between their identified planning efforts and the efforts of Clearwater County.

Clearwater County encourages the building of disaster resistance in normal day-to-day operations. By implementing plan activities through existing programs and resources, the cost of mitigation is often a small portion of the overall cost of a project's design or program.

All risk assessments were made based on the conditions existing during 2010. Therefore, the recommendations in this section have been made in light of those conditions. However, the components of risk and the preparedness of the county's resources are not static. It will be necessary to fine-tune this plan's recommendations regularly to adjust for changes in the components of risk, population density changes, infrastructure modifications, and other factors.

Maintenance and Monitoring

As part of the policy of Clearwater County, the Community Wildfire Protection Plan will be reviewed at least annually at special meetings of the planning committee, open to the public and involving all municipalities/jurisdictions, where action items, priorities, budgets, and modifications can be made or confirmed. A written review of the plan should be prepared (or arranged) by Clearwater County Emergency Management, detailing plans for the year's activities, and made available to the general public ahead of the meeting (in accord with the Idaho Open Public Meeting Laws). Amendments to the plan should be detailed at this meeting, documented, and attached to the formal plan as an amendment.

Prioritization of Mitigation Activities

The action items recommended in this chapter were prioritized through a group discussion and voting process. The action items in Tables are ranked as "High", "Moderate", or "Low" priorities for Clearwater County as a whole. The CWPP committee does not want to restrict funding to only those projects that are high priority because what may be a high priority for a specific community may not be a high priority at the county level. Regardless, the project may be just what the community needs to mitigate disaster. The flexibility to fund a variety of diverse projects based on varying criteria is a necessity for a functional mitigation program at the county and community level.

Policy and Planning Efforts

Wildfire mitigation efforts must be supported by a set of policies and regulations at the county level that maintain a solid foundation for safety and consistency. The recommendations enumerated here serve that purpose. Because these items are regulatory in nature, they will not necessarily be accompanied by cost estimates. These recommendations are policy related and therefore are recommendations to the appropriate elected officials; debate and formulation of alternatives will serve to make these recommendations suitable and appropriate.

Action Items in Safety and Policy.

Action Item	Ranking	Responsible Organization	Timeline	2011	2023
Continue to improve rural road and addressing signage countywide.	Moderate	Lead: County Commissioners Support: Clearwater Highway Districts	Ongoing	In progress	In progress
Develop County policy concerning building materials used in high-risk WUI areas on existing structures and new construction.	High	Lead: County Commissioners Support: Rural Fire Districts	5 years	In progress	In progress
Amend existing building codes to apply equally to new single housing construction as it does to subdivisions	High	Lead: County Commissioners Support: County Planning and Zoning and Rural Fire Districts	Ongoing	In progress	Completed
Continue to encourage rural residents in the Harmony Heights, Lower Fords Creek Dent, and Judgetown areas to form a rural fire district or annex into an existing fire district	High	Lead: County Emergency Management Support: County Commissioners and Rural Fire Districts	Ongoing	In progress	In progress
Adopt the International Fire Code including provisions for adequate fire suppression and other emergency access and establish a mechanism to enforce the standards.	Moderate	Lead: County Emergency Management Support: County Commissioners, County Planning and Zoning, and Rural Fire Districts	3 years	New Project	Completed
Organize a collaborative process to develop pre-fire plans to evaluate evacuation routes, safety zones, suppression tactics, multi-jurisdictional coordination, trigger points, and other issues in high wildfire risk wildland urban interface areas.	High	Lead: County Emergency Management Support: County Commissioners, IDL, and Rural Fire Districts	3 years	New Project	In progress

Fire Prevention and Education Projects

The protection of people and structures will be tied together closely because the loss of life in the event of a wildland fire is generally linked to a person who could not, or did not, flee a structure threatened by a wildfire or to a firefighter combating that fire. Many of the recommendations in this section involve education and increasing wildfire awareness among Clearwater County residents.

Residents and policy makers of Clearwater County should recognize certain factors that exist today, the absence of which would lead to increased risk of wildland fires in Clearwater County. The items listed below should be acknowledged and recognized for their contributions to the reduction of wildland fire risks:

Forest Management has a significant impact on the fuel composition and structure in Clearwater County. The forest management programs of the Idaho Department of Lands and numerous industrial forestland companies in the region have led to some reduction of wildland fuels where they are closest to homes and infrastructure; however, there is significant room for growth in these organizations' fuels reduction programs. Furthermore, forests are dynamic systems that will never be completely free from risk. Treated stands will need repeated treatments to reduce the risk to acceptable levels in the long term.

Livestock Grazing in and around the communities of Clearwater County has led to a reduction of many of the fine fuels that would have been found in and around the communities and in the wildlands of Clearwater County. Domestic livestock not only eat these grasses, forbs, and shrubs, but also trample certain fuels to the ground where decomposition rates may increase. Livestock ranchers tend their stock, placing additional sets of eyes into the forests and rangelands of the county where they may observe ignitions, or potentially risky activities.

Action Items for Fire Prevention and Education.

Action Item	Ranking	Responsible Organization	Timeline	2011	2023
Continue to develop youth and adult education programs.	High	Lead: North Central Idaho Fire Prevention Cooperative Support: County Fire Mitigation	Ongoing	In progress	In progress
Continue to develop and implement the Clearwater County Fire Mitigation program to complete hazardous fuels treatment projects.	High	Lead: County Fire Mitigation Support: County Emergency Management and Rural Fire Districts	Ongoing	In progress	In progress
Continue to develop and support programs that help control and eradicate noxious and invasive weeds.	Moderate	Lead: County Commissioners Support: Natural Resources Conservation Service	Ongoing	In progress	In progress

Infrastructure Enhancements

Critical infrastructure refers to the communications, transportation (road and rail networks), energy transport supply systems (gas and power lines), and water supply that service a region or a surrounding area. All of these components are important to northern Idaho and to Clearwater County specifically. These networks are, by definition, a part of the wildland urban interface in the protection of people, structures, infrastructure, and unique ecosystems. Without supporting infrastructure, a community’s structures may be protected, but the economy and way of life lost. As such, a variety of components will be considered here in terms of management philosophy, potential policy recommendations, and mitigation recommendations.

Action Items for Infrastructure Enhancements.

Action Item	Ranking	Responsible Organization	Timeline	2011	2023
Continue to update and add to existing Transportation Plan.	Moderate	Lead: County Commission	Ongoing	In progress	In progress
Complete improvements such as widening, installation of turnouts and turnarounds, and fuels reduction on primary ingress/egress routes for the communities of Greer, Freeman Creek, Dent, Elk River, Pierce, Grangemont, Jaype, Cardiff, and Headquarters.	High	Lead: County Highway Districts Support: County Commission, Idaho Transportation Department, and CPTPA	Ongoing	In progress	In progress
Conduct roadside fuels reduction projects on the Upper Fords Creek Road, Lower Fords Creek Road, Deer Creek Road, State Routes 8 and 11, Freeman Creek Road, Elk River Road, Grangemont Road, View Point Road, and Huckleberry Bench Road.	High	Lead: County Fire Mitigation Support: County Commission, County Highway District, Idaho Transportation Department, and CPTPA	Ongoing	In progress	In progress
Obtain funding to purchase alternative power sources for community water systems where needed.	Moderate	Emergency Management Support: Cities and communities	Ongoing	In progress	In progress
Evaluate conditions and complete access improvements such as fortification/replacement of substandard bridges and culverts and enhance road surfaces on Wells Bench Cutoff, Upper Fords Creek Road, Lower Fords Creek Road, Old Ahsahka Grade, Old Peck Grade, Crockett Bench, Deer Creek, and Huckleberry Bench Road.	High	Lead: County Highway District Support: County Commission and Rural Fire Districts	Ongoing	In progress	In progress

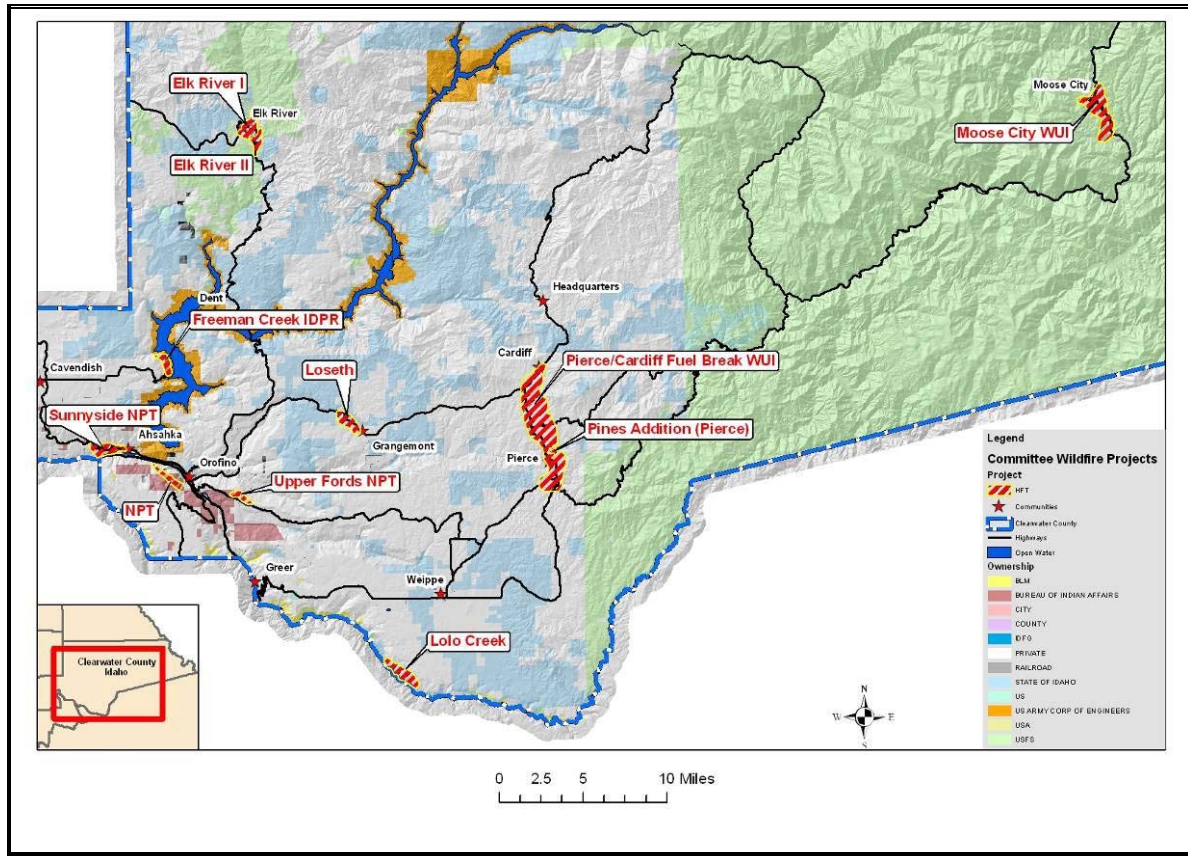
Proposed Project Areas

The following project areas were identified by the CWPP planning committee as having multiple factors contributing to the potential wildfire risk to residents, homes, infrastructure, and the ecosystem. Treatments within the project areas will be site specific, but will likely include homeowner education, creation of a wildfire defensible space around structures, fuels reduction, and access corridor improvements. All work on private property will be performed with consent of, and in cooperation with the property owners. Specific site conditions may call for other types of fuels reduction and fire mitigation techniques as well. Defensible space projects may include, but are not limited to commercial or precommercial thinning, pruning, brush removal, chipping, prescribed burning, installation of greenbelts or shaded fuel breaks, and general forest health improvements.

Proposed Hazardous Fuels Treatment Project Areas.

Project Name	Project Type	# of Acres	# of Structures	Priority Ranking	Status 2023
Elk River I	Fuels Reduction/Defensible Space	788	285	High	40% done
Elk River II	Fuels Reduction/Defensible Space	412	0	Moderate	In progress
Freeman Creek IDPR	Fuels Reduction/Defensible Space	413	15	Moderate	30% done
Lolo Creek	Fuels Reduction/Defensible Space	857	0	Moderate	75% done
Loseth	Fuels Reduction/Defensible Space	668	17	High	In progress
Moose City	Fuels Reduction/Community Defensible Space	2,087	22	Moderate	In progress
NPT	Fuels Reduction/Defensible Space	450	18	Moderate	In progress
Pierce/Cardiff Fuel Break	Community Fuel Break	6,099	348	High	In progress
Pines Addition	Fuels Reduction/Defensible Space	115	136	High	60% done
Sunnyside NPT	Fuels Reduction/Defensible Space	806	58	High	In progress
Upper Fords NPT	Fuels Reduction/Defensible Space	316	12	Moderate	In progress

The Clearwater County Fire Mitigation Program, individual fire districts, or the Idaho Department of Lands, Bureau of Land Management, and US Forest Service may take the lead on implementation of many of these projects; however, project boundaries were purposely drawn without regard to land ownership in order to capture the full breadth of the potential wildland fire risk. Coordination and participation by numerous landowners will be required for the successful implementation of identified projects



Map of Proposed Hazardous Fuels Treatment Projects.

Regional Land Management Recommendations

Wildfires will continue to ignite and burn depending on the weather conditions and other factors enumerated earlier. However, active land management that modifies fuels, promotes healthy forestland conditions, and promotes the use of natural resources (consumptive and non-consumptive) will ensure that these lands have value to society and the local region. The Idaho Department of Lands, U.S. Forest Service, Nez Perce Tribe, industrial forestland owners, private forestland owners, and all agricultural landowners in the region should be encouraged to actively manage their wildland urban interface lands in a manner consistent with reducing fuels and risks in this zone.

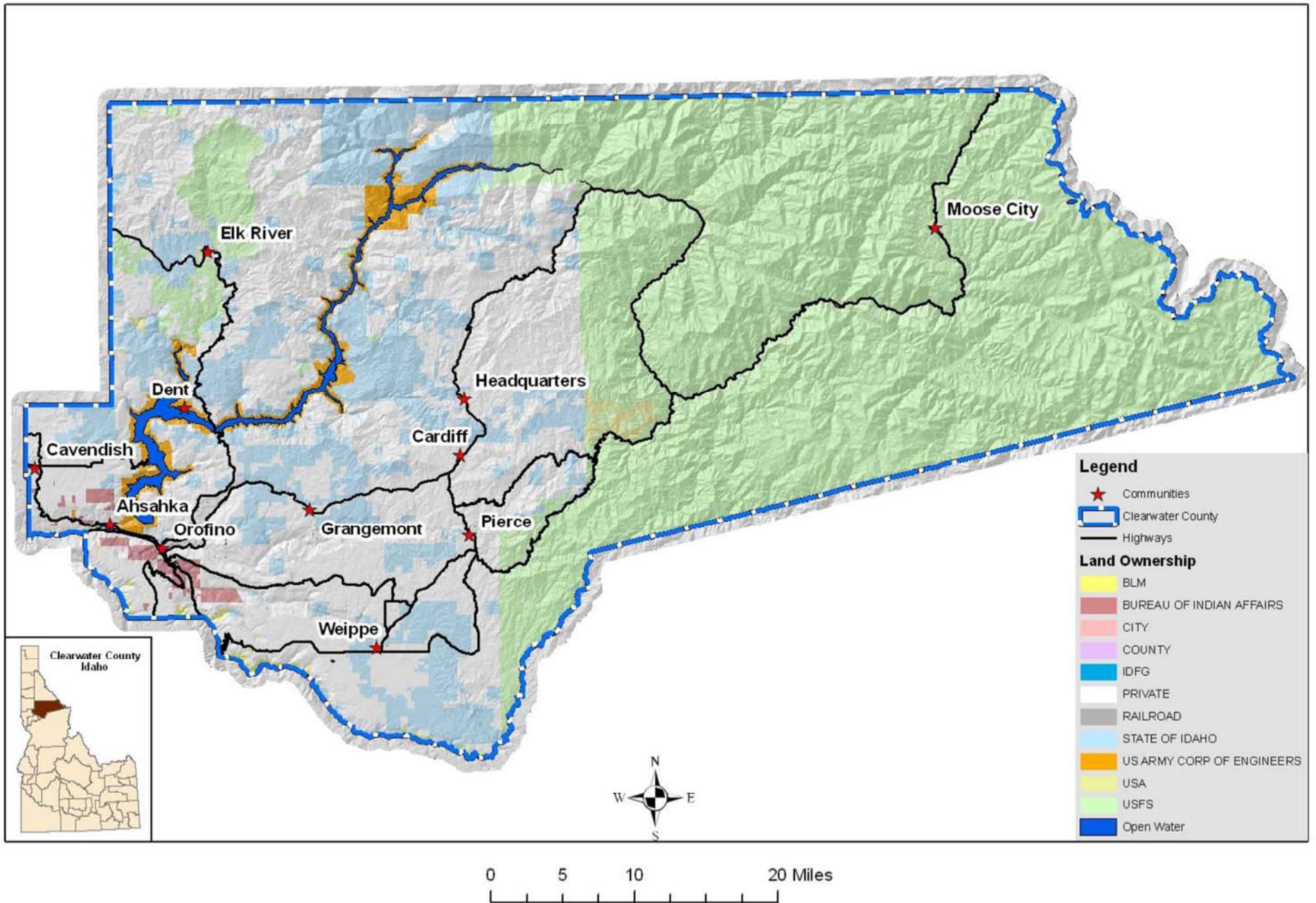
Clearwater County Community Wildfire Protection Plan

Appendix 1

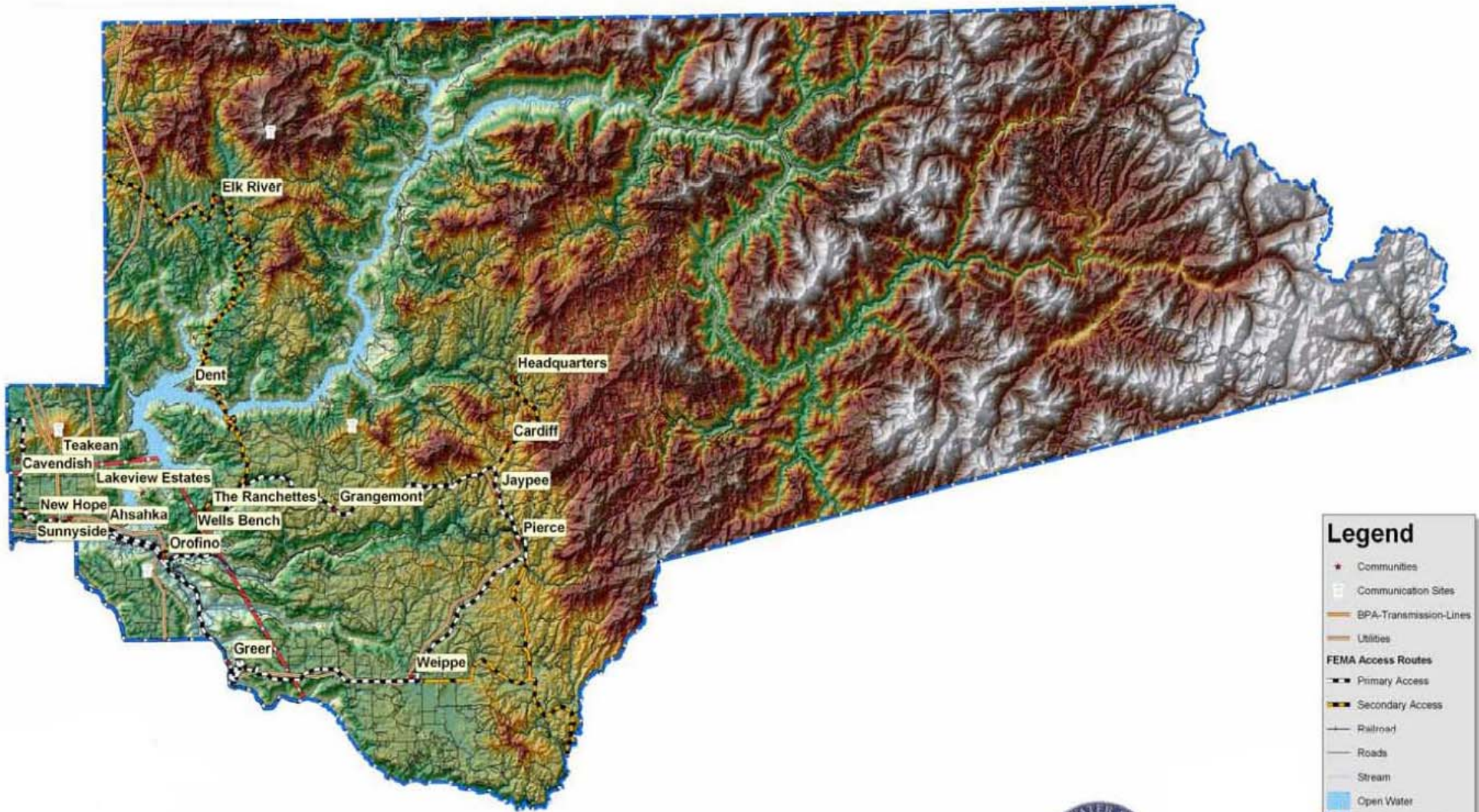
MAPPING PRODUCTS

LAND OWNERSHIP MAP	2
TOPOGRAPHIC RELIEF MAP	3
CITY AND RURAL FIRE PROTECTION.....	4
WILDLAND FIRE PROTECTION.....	5
HISTORIC FIRE REGIME MAP	6
FIRE REGIME CONDITION CLASS MAP	7
WILDLAND URBAN INTERFACE MAP	8
PROPOSED HAZARDOUS FUELS TREATMENT PROJECT AREAS	9

Land Ownership Map

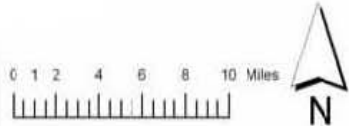


Topographic Relief Map

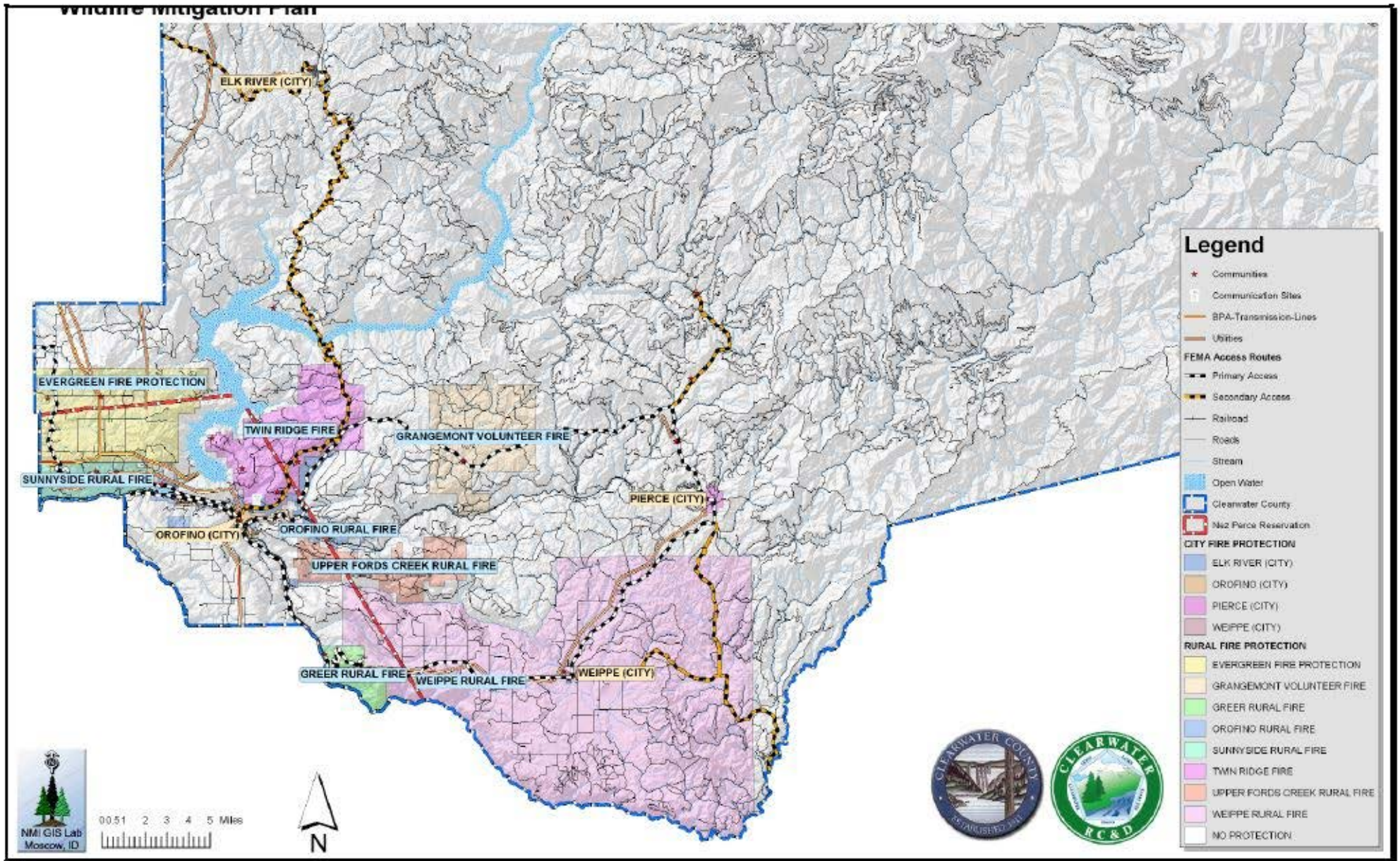


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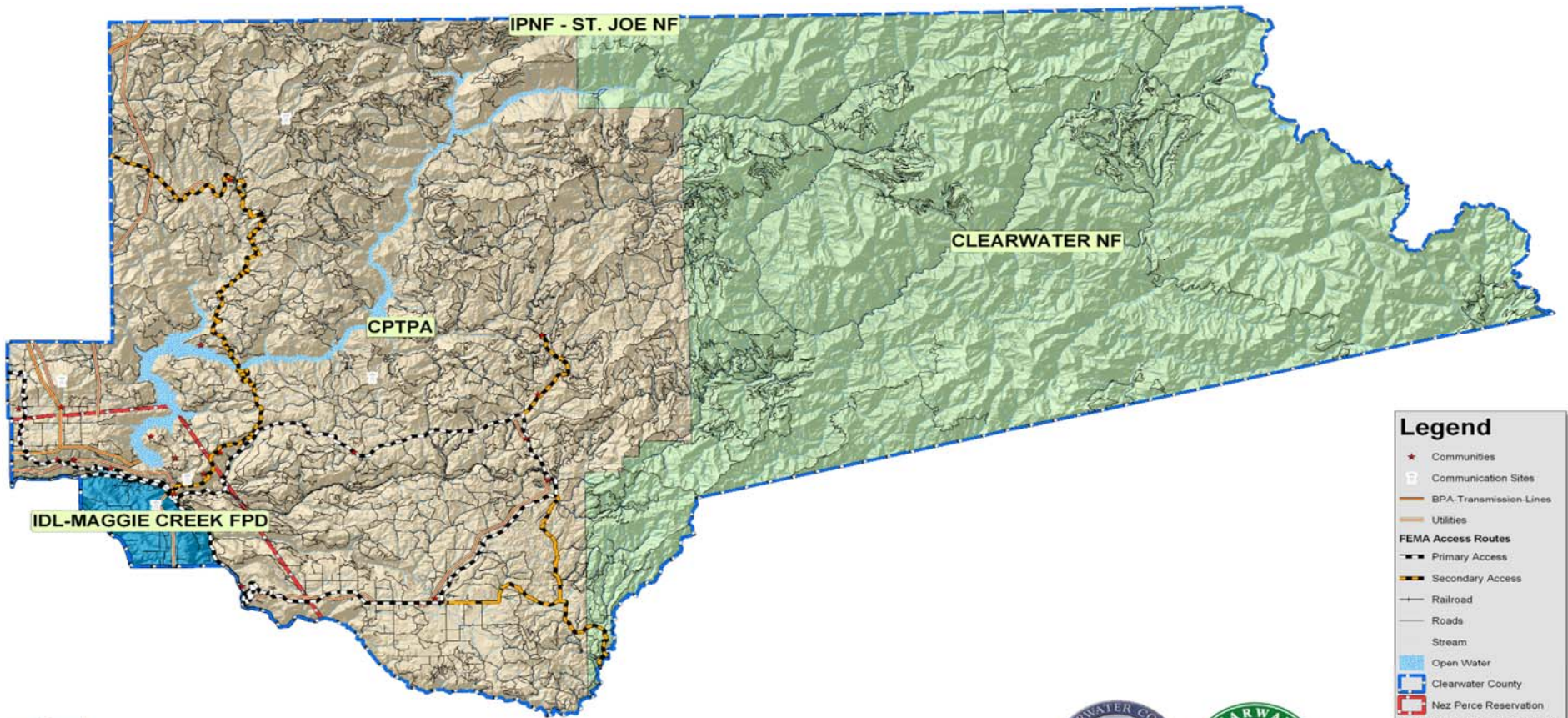
- ★ Communities
- Communication Sites
- BPA-Transmission-Lines
- Utilities
- FEMA Access Routes**
 - Primary Access
 - Secondary Access
- Railroad
- Roads
- Stream
- Open Water
- Clearwater County
- Nez Perce Reservation
- High : 7,928'
- Elevation
- Low : 900'



City and Rural Fire Protection Map



Wildland Fire Protection Map



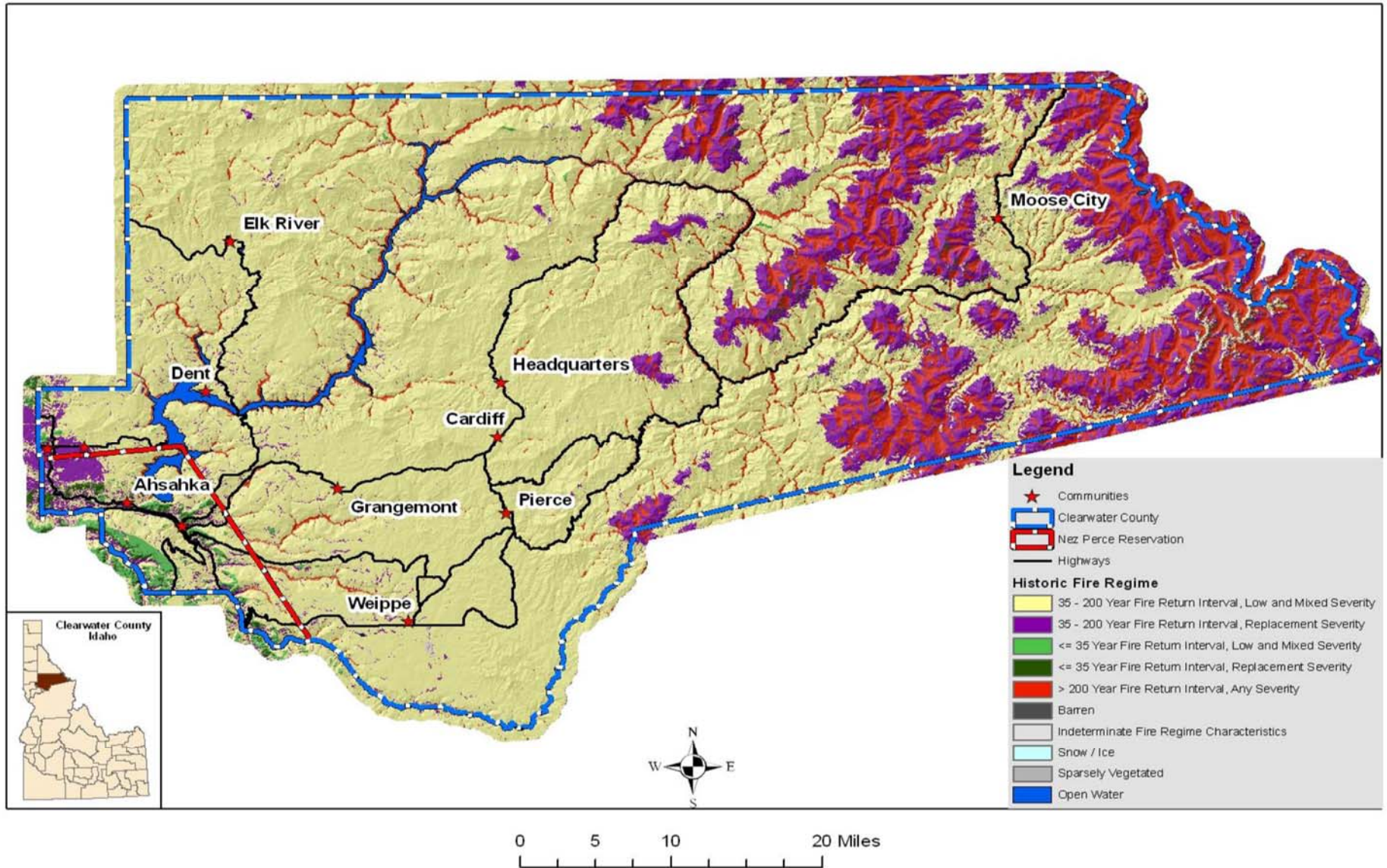
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- ★ Communities
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- Nez Perce Reservation
- WILDLAND FIRE PROTECTION**
 - CPTPA
 - IDL-MAGGIE CREEK FPD
 - CLEARWATER NF
 - IPNF - ST. JOE NF

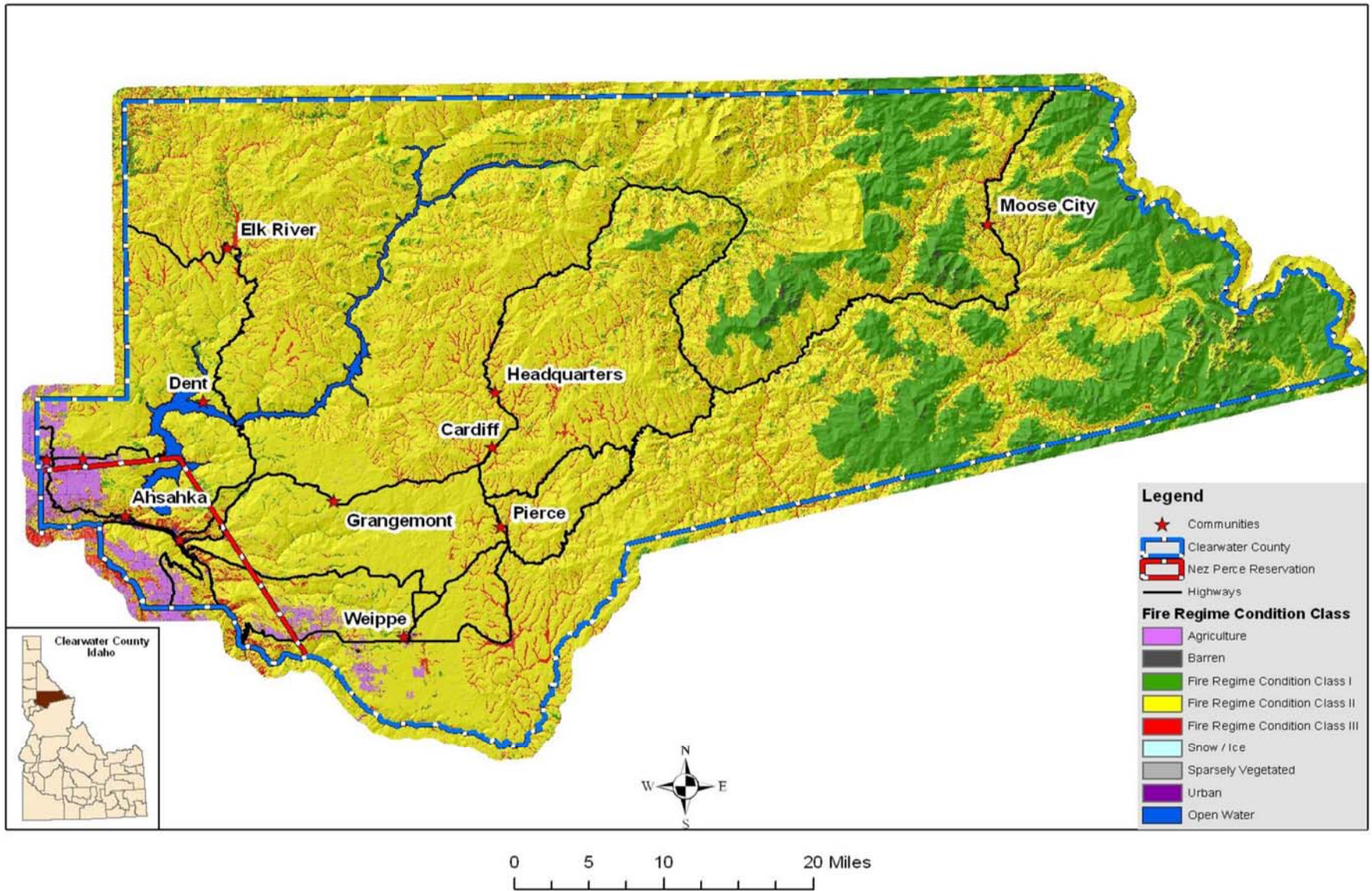
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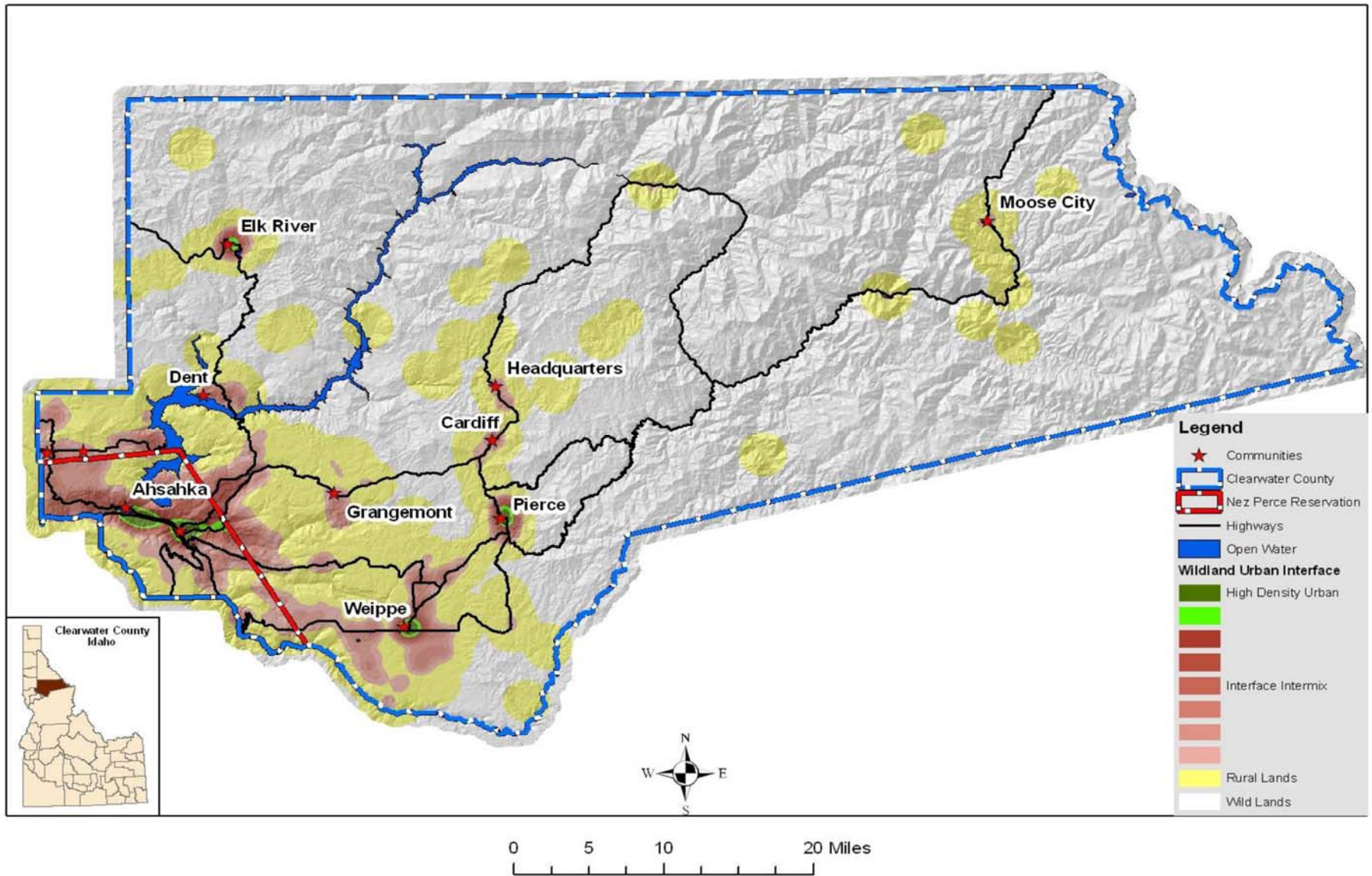
Historic Fire Regime Map



Fire Regime Condition Class Map



Wildland Urban Interface Map



Proposed Hazardous Fuels Treatment Project Areas

