



# **WILDFIRE MITIGATION PLAN**

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# 1 Introduction

As we have seen over the past few years, the western United States has experienced some of the most devastating and catastrophic wildfires in our nation's history. Unfortunately, wildfires have also become a regular occurrence in Clearwater Power Company's (CPC) service area.

Various Wildfire Mitigation Plan (WMP) regulations have been passed or are under development in the states that CPC serves. In general, these regulations direct utilities to develop operational policies and practices to prevent, prepare for and respond to wildfire events.

Fire mitigation plays an essential role in CPC's operational practices. Over the years, CPC has adopted programs, procedures, and improved operational practices to help mitigate the potential for utility caused ignitions and more effectively respond to high wildfire risk conditions.

The strategies, programs and activities included in this WMP, with associated goals and metrics, are an approach to reduce fire-related risk in the near-term and will allow for refinement and improvement over time. As CPC gains experience implementing the WMP's mitigation programs and as new information or technologies emerge, CPC will assess, evaluate, enhance, and refine its practices. The WMP also addresses vegetation management (VM), asset inspection, system maintenance, recloser setting protocols, communication plans, and service restoration processes. Additionally, it identifies responsibilities, performance metrics, mitigation deficiencies, and an audit and approval process for the plan.

## 1.1 Purpose of the Plan

As of April 2024, Idaho does not have any specific laws regulating or requiring the development of WMPs by utilities. Both Oregon and Washington have passed legislation requiring WMPs for both investor-owned, as well as consumer-owned utilities. Notwithstanding, CPC believes the development of a WMP is a prudent and responsible effort to prepare for increased wildfire occurrences in its service area. This plan's primary objective is to reduce the threat of CPC's infrastructure being an ignition source for wildfires and to comply with any current or future state(s) WMP regulations.

This plan describes CPC's strategies and programs to help mitigate the threat of electrical equipment ignited wildfires. It addresses the unique features of CPC's service area such as topography, weather, infrastructure, grid configuration and potential wildfire risks. While CPC's Board of Directors approved the plan, its implementation primarily resides with the General Manager/Chief Executive Officer (GM/CEO) and the Chief Operating Officer (COO).

## 1.2 Objectives of the Wildfire Mitigation Plan (WMP)

The main objective is to implement an actionable plan for increasing reliability and safety while minimizing the probability that CPC's electrical network may be the catalyst or

contributing factor in the ignition of a wildfire. All programs and strategies shall comply with current and proposed laws in all three (3) states where CPC operates and the National Electric Safety Code's (NESC) and Rural Utilities Service's (RUS) regulations and guidelines.

The secondary objective is to measure, through an annual evaluation, the effectiveness of the specific wildfire mitigation strategies as they are deployed by CPC. Where a particular action, program component or protocol proves unnecessary or ineffective, CPC will assess whether modification or replacement is suitable.

### 1.3 CPC Profile and History

CPC is one of ten not-for-profit, member-owned cooperative utilities in Idaho. Founded in 1937, CPC serves approximately 11,000 meters throughout portions of eleven counties in Idaho, Washington, and Oregon. CPC strives to uphold a commitment to service excellence while delivering safe, affordable, and reliable electricity to its members.

CPC members elect a seven-member Board of Directors that determines policy and appoints the GM/CEO who is responsible for CPC's overall management and operations. CPC owns and operates nearly 3,000 miles of power line and maintains more than 10,000 acres of right-of-way to provide electric service to its members. CPC's distribution system is well maintained, as CPC follows RUS design and construction specifications and has a robust pole test, treatment, and replacement program.

### 1.4 The Service Area

CPC serves a large and diverse service area. Stretching 107 miles from Plummer, ID in the north to Flora, OR in the south, and more than 63 miles from Weippe, ID to beyond Cloverland, WA. The service area spans three (3) states, two (2) tribal nations<sup>1</sup>, and eleven (11) counties<sup>2</sup>. While the main office is located in Lewiston, ID, the service area covers approximately 5,000 square-miles in very rural and remote areas with an average density of 3.9 members per mile.

The service area is dominated by open spaces, whether used for farming, grassland, or open range. Some forestland exists and there are dramatic canyons and hillsides, especially along the Snake and Clearwater Rivers, but also long smaller streams and creeks. These slopes can be focal points for wildfire, especially when strong winds blow through the canyons. CPC's right-of-way is primarily located on privately-owned property. However, a small portion crosses State and Federal land. Roughly 30%, or 900 miles, of CPC's overhead lines are in wooded areas. Elevations range from approximately 1,000 feet in the Clearwater River valley to approximately 4,700 feet on the peak of Craig Mountain near the southern end of the service area.

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<sup>1</sup> Coeur d'Alene and Nez Perce Tribal Lands

<sup>2</sup> **Idaho:** Benewah, Clearwater, Idaho, Latah, Lewis, Nez Perce, Shoshone. **Washington:** Asotin, Garfield, Whitman. **Oregon:** Wallowa

Much of the CPC service area is in Agronomic Zone 2 for the Dryland Northwest, with areas closer to the rivers in Zone 3. Both zones are characterized by slopes of 10 to 40 percent, with moderate temperatures in both winter and summer. The CPC service area is generally less hot and dry than the areas of central Washington and Oregon, which are in zones 4-6. The warmest days generally occur from late June through mid-September<sup>3</sup>.

## 1.5 The Electric System

CPC owns and operates an electric system that includes transmission and distribution assets. As of 2023's RUS Financial and Operating Report, the system is comprised of 81 miles of transmission line (34.5kV, 69kV, and 115kV), 2,559 miles of overhead (OH) distribution line and 375 miles of underground (UG) line (7.2kV – 14.4kV). CPC operates 21 power substations, some of which are owned or shared with the Bonneville Power Administration (BPA) and Avista (Figure 1).

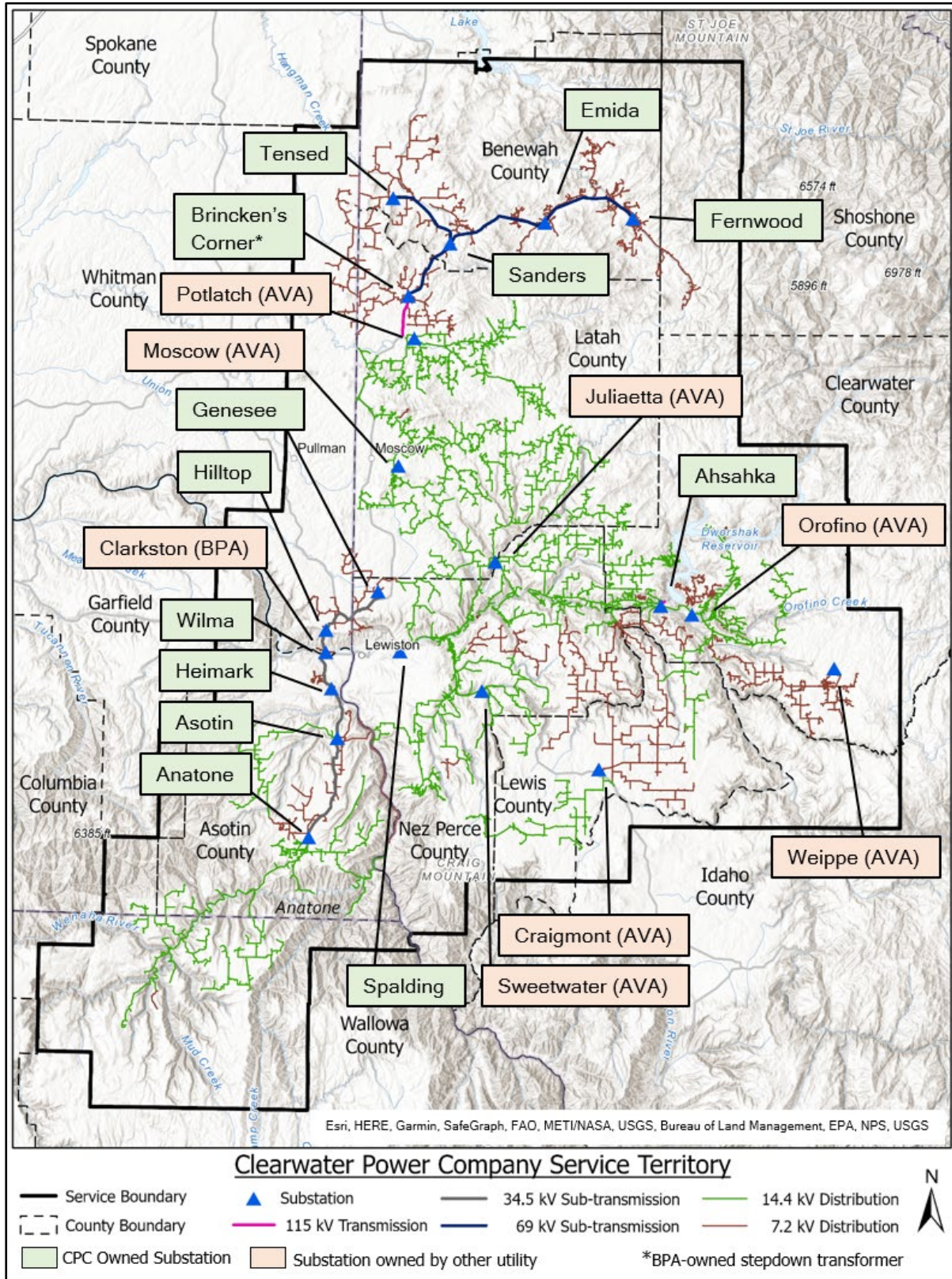
The main office and operations center is in Lewiston, Idaho. CPC has two additional warehouses; one just outside of Ahsahka, Idaho and the other in Princeton, Idaho.

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<sup>3</sup> <https://weatherspark.com/y/145394/Average-Weather-at-Lewiston%E2%80%93Nez-Perce-County-Airport-Idaho-United-States-Year-Round>



**Figure 1. CPC Service Area and Substations**



## 2 Overview of Fire Prevention Strategies

CPC’s proposed wildfire prevention strategies are comprised of five main components (Tables 1-3). Together they create a comprehensive wildfire preparedness and response plan with a principal focus on construction standards, ignition prevention through system design, operations, inspection and maintenance programs, and emergency planning.

Table 1 - 3 summarizes CPC’s programs and activities that support wildfire prevention and mitigation along with a timeframe for implementation.

### 2.1 Timeframes of Preventative Strategies and Programs

The five components have several strategies and programs including some that are situational and not limited to any timetable, scheduled for completion over several years, under evaluation, or in the initial stages. Targets, scheduled timeframes, and programmatic metrics are in Chapter 4. The strategies and programs below fall into one or more of the five implementation timeframes:

- A: Currently implemented
- B: Implemented before the upcoming Fire Precautionary Period
- C: Completed annually or on schedule per relevant code
- D: In evaluation or development
- E: Implemented on as-needed basis and protocols in place
- \* Ongoing program with no defined completion date

**Table 1. Mitigation Programs/Activities**

DESIGN AND CONSTRUCTION	TIMEFRAME
Strategic undergrounding of distribution lines	A*
Install animal guards as required on jumpers and transformers	A*
Reduced span length in high wind areas	A*
Avian protection program	A*
Increased phase spacing	A*
Fire resistant coating on high-risk wood poles	A*

**Table 2. Mitigation Programs/Activities Continued**

<b>INSPECTION AND MAINTENANCE</b>	
Infrared inspections of substation equipment	A
Drone inspection program	A
Satellite Imagery of ROW with AI prioritization	B
Transmission line ground patrols	C
T&D wood pole testing and treatment	C
T&D vegetation right-of-way maintenance	C
Distribution system line patrols and detailed inspections	C
Enhanced line patrols in high-risk areas prior to Fire Precautionary Period	B
<b>OPERATIONAL PRACTICES</b>	<b>TIMEFRAME</b>
T&D system vegetation management program	A
Increased community outreach/wildfire safety awareness	B
Alternate recloser practices during fire weather conditions	A
<b>SITUATIONAL AWARENESS</b>	
Weather Monitoring (USFS-WFAS, NWS)	A*

**Table 3. Mitigation Programs/Activities Continued**

<b>RESPONSE AND RECOVERY</b>	
Public Safety Power Shutoff (PSPS) Protocols	D
Coordination with local Department of Emergency Management	A*
Line patrols before re-energization	A*
Emergency Response Plan	A
Mutual Aid Agreements	A

### 3 CPC’s Service Territory and Asset Overview

As part of the risk analysis process, CPC examined its asset locations to identify risks unique to its service area. This chapter will provide an overview of the service area properties and associated risks, which are factored into the wildfire mitigation strategy. See Section 1.4 for a detailed service area description.

Power is provided to CPC members by way of substations, overhead transmission, and sub-transmission lines, overhead and underground distribution lines. Table 4 depicts a high-level description of CPC’s T&D assets.

**Table 4. Asset Description**

ASSET CLASSIFICATION	ASSET DESCRIPTION
<b>Transmission Line Assets</b>	Approximately 81 miles of conductor, transmission, sub-transmission structures, and switches at 34.5kV, 69kV and 115kV.
<b>Distribution Line Assets</b>	<p>Approximately 2,559 miles of overhead (OH) conductor, transformers, voltage regulators, capacitors, switches, and line protective devices operating at 7.2kV and 14.4kV.</p> <p>Approximately 375 miles of underground (UG) conductor, sectors, and transformers operating at 7.2kV and 14.4kV.</p>
<b>Substation Assets</b>	Major equipment such as power transformers, voltage regulators, capacitors, reclosers, relays, open-air structures, switchgear, and control houses in 21 substations.

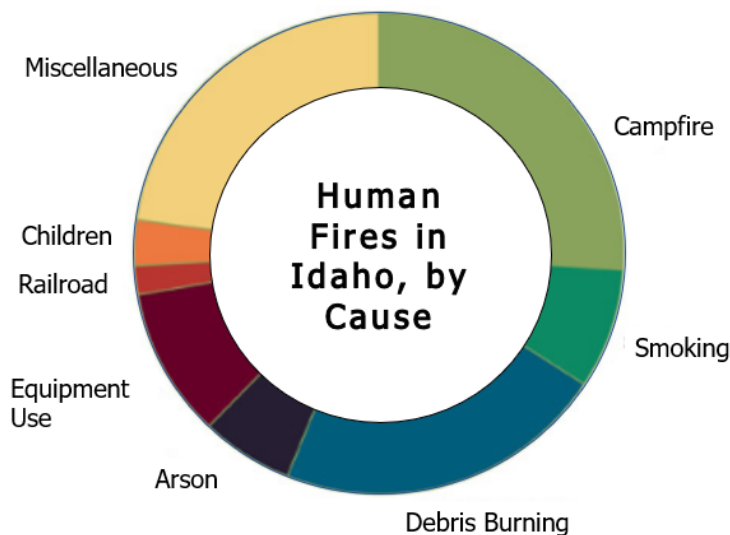


### 3.1.1 Wildfire Risk in the Service Area

The fire history map (Figure 2) represents the large fire<sup>4</sup> history from 2000 through 2020. Historically, most large fires have occurred in the southern and eastern regions of CPC’s service area. Lightning is the source of approximately 35% of all ignitions, the remainder being human caused. While lower intensity grass and rangeland fires are more common, in the summer of 2020, forest fires caused by high winds burned over 1,600 acres in the Orofino, ID area.

The service area includes a mix of forestland, riparian, and agricultural ecosystems. The most prevalent vegetated cover type is agricultural land at approximately 28% of the total area. Although fires in these fuels may not present the same control problems as those associated with large, high intensity fires in timber fuel types, they can cause significant damage if precautionary measures have not taken place prior to a fire event. During extreme drought and when pushed by high winds, fires in grassland fuel types can exhibit extreme rates of spread, making suppression difficult. Without substantial fuel breaks between grasslands and forested areas, grass fires can transition into areas with more volatile fuels.

Ignition potential exists throughout the service area. Recreational areas, major roadways, debris burning, and agricultural equipment are typically the most common human ignition sources. The frequency of high wind conditions in North-Central Idaho has increased in recent years, exacerbating the challenges for fire suppression resources.

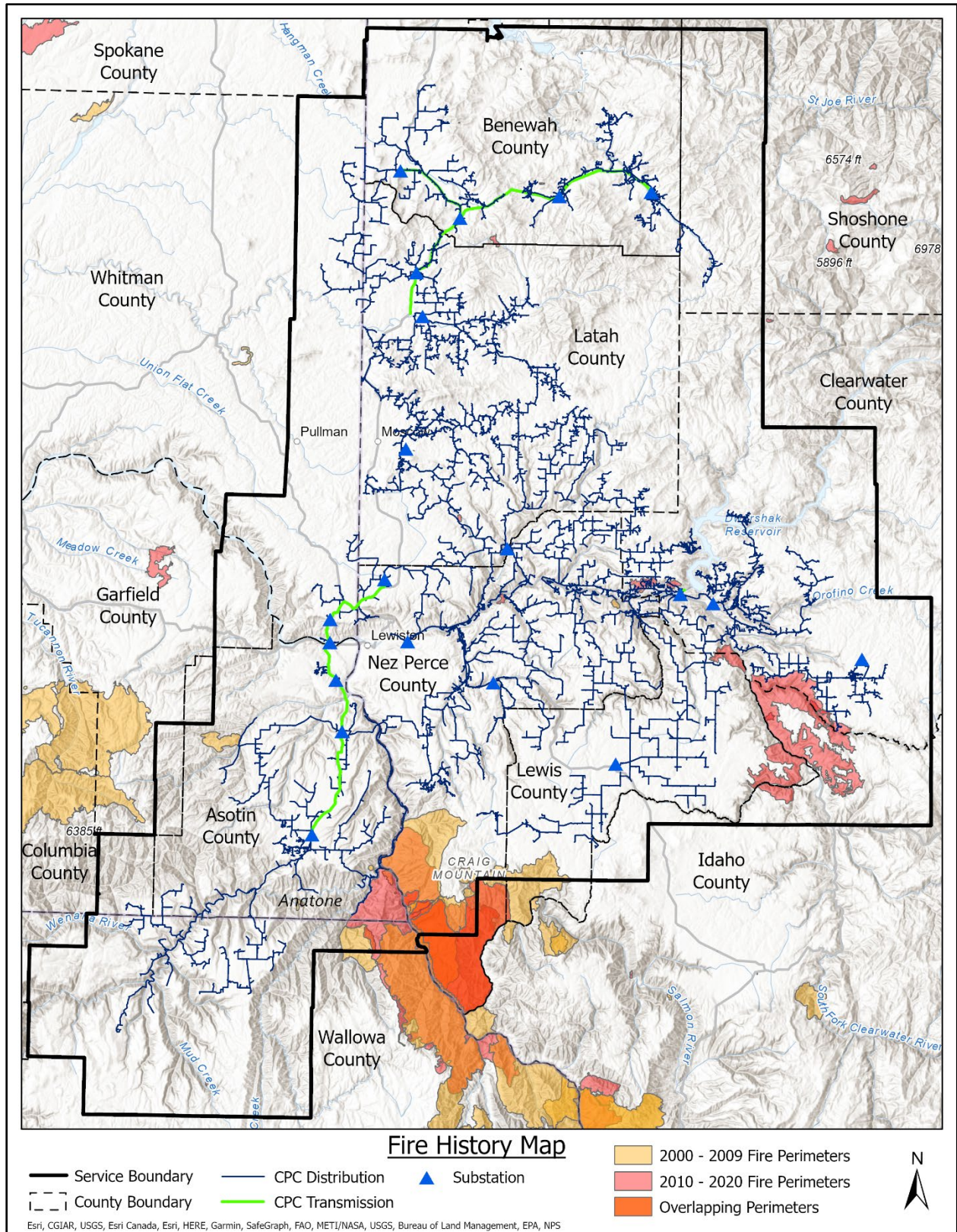


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<sup>4</sup> Large Fire as defined by the National Wildland Coordinating Group, is any wildland fire in timber 100 acres or greater, and 300 acres or greater in grasslands/rangelands, or has an Incident Management Team assigned to it.

<sup>5</sup> Idaho Firewise 1980-2009

**Figure 2. Fire History 2000-2020**





### 3.1.2 Wildland Urban Interface (WUI)

The United States Forest Service (USFS) defines the WUI as a place where humans and their development meet or intermix with wildland fuels. The development of wildland areas creates two problems related to wildfire. First, growth in WUI designated areas results in an increased chance of wildfire ignitions since electrical power lines must traverse these wildlands to reach customers. Second, wildfires that occur will pose a greater risk to lives and homes, they will be hard to fight, and letting natural fires burn becomes impossible.

WUI perimeters were identified and mapped using the data from the United States Department of Agriculture (USDA) in conjunction with the Spatial Analysis for Conservation and Sustainability (SILVIS Lab) at the University of Wisconsin-Madison<sup>6</sup>. Figure 3 depicts the various WUI designated areas of CPC's service area. Although the idea of a wildland-urban interface is easily understood and the term widely used, a specific definition is needed to determine where it occurs and map its location. The definition we use here is based on a report prepared for the Council of Western State Foresters on WUI fire risk (Teie and Weatherford 2000) and was later published in the Federal Register<sup>7</sup>.

The WUI is composed of both interface and intermix communities. The distinction between these is based on the characteristics and distribution of houses and wildland vegetation across the landscape. Intermix WUI refers to areas where housing and wildland vegetation intermingle, while interface WUI refers to areas where housing is in the vicinity of a large area of dense wildland vegetation.

The USFS has established five classes of WUI in its assessment:

- **WUI Intermix:** Areas with  $\geq 16$  houses per square mile and  $\geq 50$  percent cover of wildland vegetation
- **WUI Interface:** Areas with  $\geq 16$  houses per square mile and  $< 50$  percent cover of vegetation located  $< 1.5$  miles from area  $\geq 2$  square miles in size that is  $\geq 75$  percent vegetated
- **Non-WUI Vegetated (no housing):** Areas with  $\geq 50$  percent cover of wildland vegetation and no houses (e.g., protected areas, steep slopes, mountain tops)
- **Non-WUI (very low housing density):** Areas with  $\geq 50$  percent cover of wildland vegetation and  $< 16$  houses per square mile (e.g., dispersed rural housing outside neighborhoods)
- **Non-Vegetated or Agriculture (low and very low housing density):** Areas with  $< 50$  percent cover of wildland vegetation and  $< 128$  houses per square mile (e.g., agricultural lands and pasturelands)

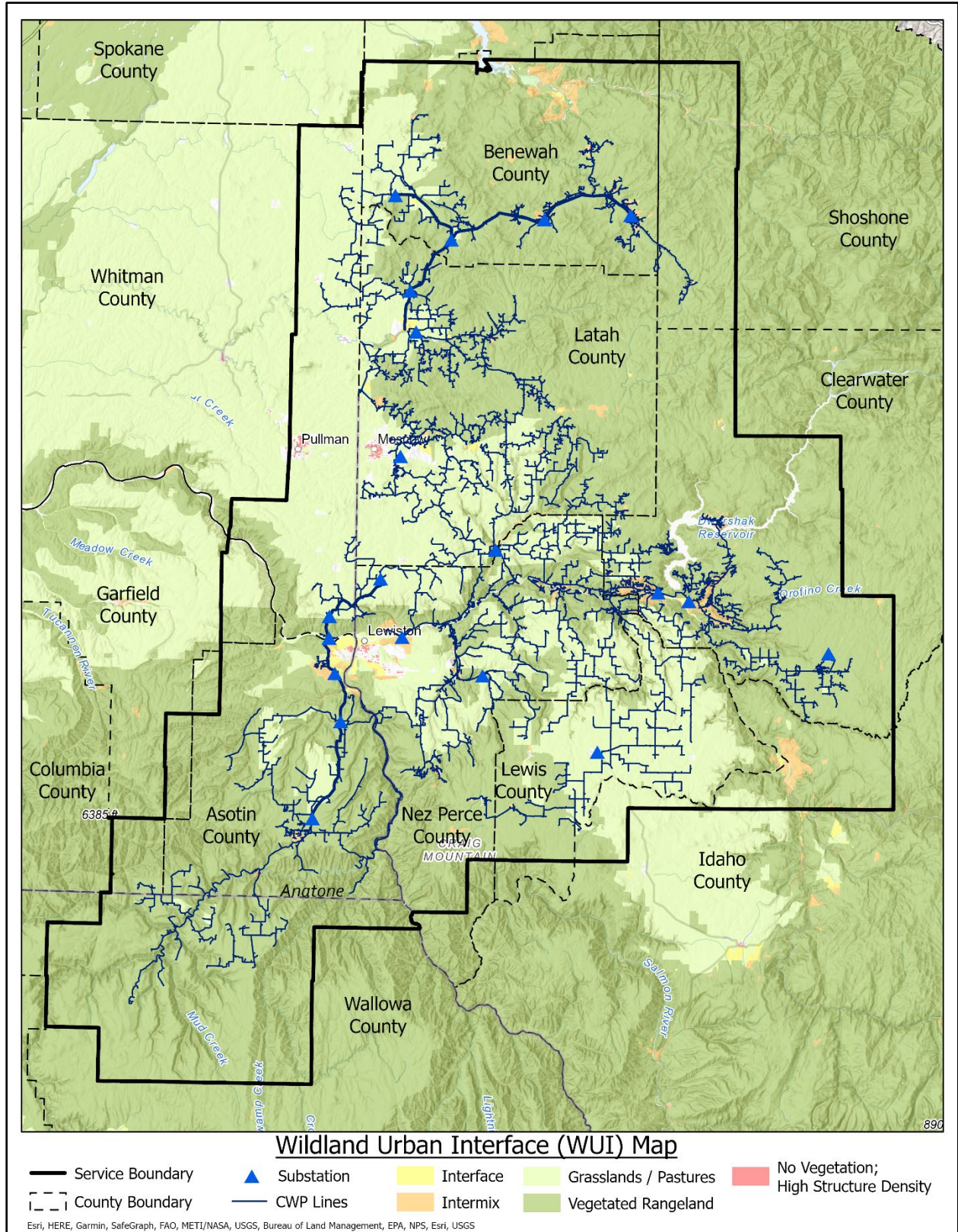
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<sup>6</sup> <http://silvis.forest.wisc.edu/data/wui-change/>

<sup>7</sup> "Urban wildland interface communities within the vicinity of federal lands that are at high risk from wildfire. Notice." 66. Federal Register 3(2001 January 4): 751-777.



**Figure 3. Wildland Urban Interface within CPC Service Area**



### 3.1.3 Fire Threat Assessment Mapping

The Wildfire Hazard Potential (WHP) map is a raster geospatial product produced by the USDA Forest Service, Fire Modeling Institute that can help to inform evaluations of wildfire risk or prioritization of fuels management needs across very large landscapes (millions of acres). The specific objective of the WHP map is to depict the relative potential for wildfire that would be difficult for suppression resources to contain. The 2018 version was built upon spatial datasets of wildfire likelihood and intensity generated for the conterminous U.S. in 2016 with the Large Fire Simulator (FSim), as well as spatial fuels and vegetation data from LANDFIRE 2012 and point locations of past fire occurrence (ca. 1992 - 2013). Areas mapped with higher WHP values represent fuels with a higher probability of experiencing torching, crowning, and other forms of extreme fire behavior under conducive weather conditions, based primarily on landscape conditions at the end of 2012<sup>8</sup>.

On its own, WHP is not an explicit map of wildfire threat or risk, but when paired with spatial data depicting highly valued resources and assets such as communities, structures, or power lines, it can approximate relative wildfire risk to those resources and assets. WHP is not a forecast or wildfire outlook for any season as it does not include any information on current or forecasted weather or fuel moisture conditions. It is instead intended for long-term strategic planning and as a vegetation/fuels management tool.

To determine fire threat levels within CPC's service area, the electrical system was overlaid on the WHP maps shown in Figures 4 through 8. The T&D assets as well as substation locations can be seen in relation to the Hazard Potential Areas (HPAs) shown in color-coded overlays, which are classified into Low, Moderate, and High hazard areas. Calculations are then performed using ESRI mapping software to determine the miles of line, based on voltage, located in the various HPAs. See Table 5 for an overview of this information.

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<sup>8</sup> <https://www.fs.usda.gov/rds/archive/Catalog/RDS-2015-0046-2>

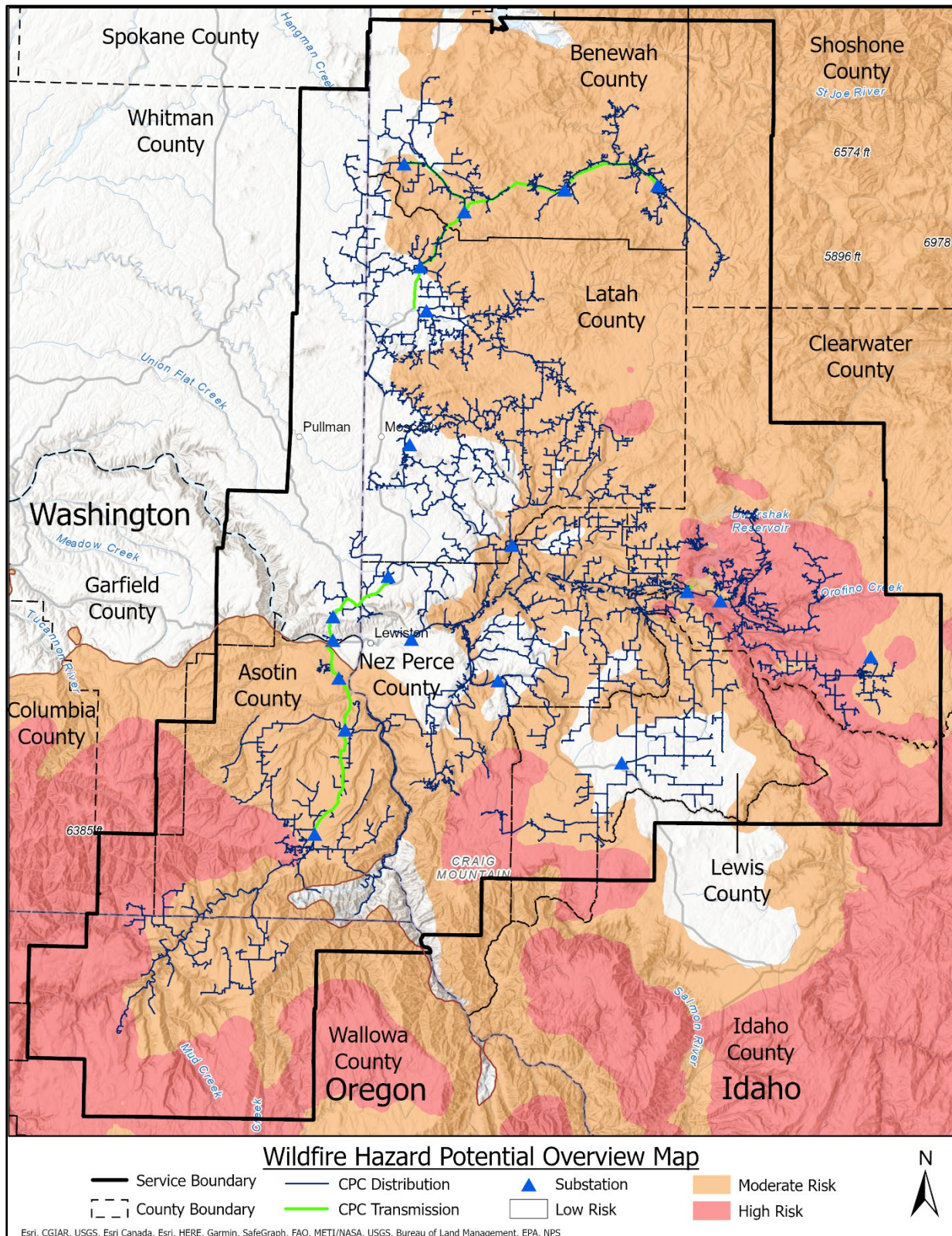
**Table 5. Overview of CPC’s T&D Assets within WHP Tiers\***

Assets	Total	Low		Moderate		High	
	Line-Miles	Line-Miles	%	Line-Miles	%	Line-Miles	%
115 kV OH Transmission	6.2	4.6	74%	1.46	24%	0.0	0%
69 kV OH Transmission	40.5	1.9	5%	38.6	95%	0.0	0%
34.5 kV OH Transmission	35.1	12.5	36%	22.6	64%	0.0	0%
14.4 kV OH Distribution	1694.8	377.5	22%	991.5	58%	325.8	19%
7.2 kV OH Distribution	879.1	253.1	29%	511.4	58%	114.5	13%
14.4 kV UG Distribution	227.6	56.9	26%	127.9	56%	42.76	19%
7.2 kV UG Distribution	132	23	17%	90.6	69%	18.47	14%
<b>Totals</b>							
Total OH Transmission	81.8	19	24%	61.2	76%	0.0	0%
Total OH Distribution	2573.9	630.6	24%	1502.9	58%	440.3	17%
Total UG Distribution	359.6	82.6	23%	218.5	61%	61.23	17%
Total Substations	21	10	45%	10	50%	1	5%

\*Updated 2023 based on E&O Mapping Data

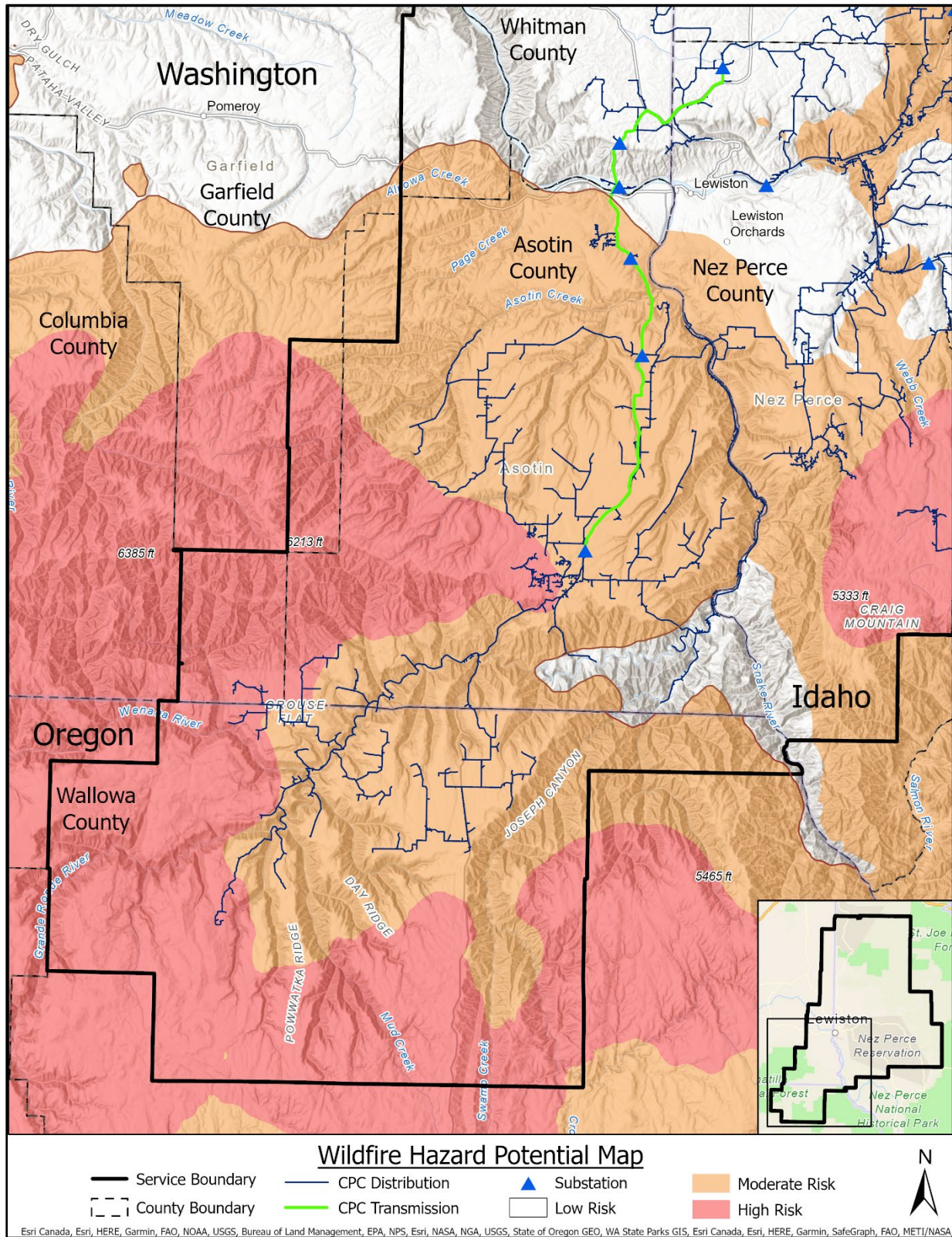


**Figure 4. CPC Service Area and Wildfire Hazard Potential Overview**



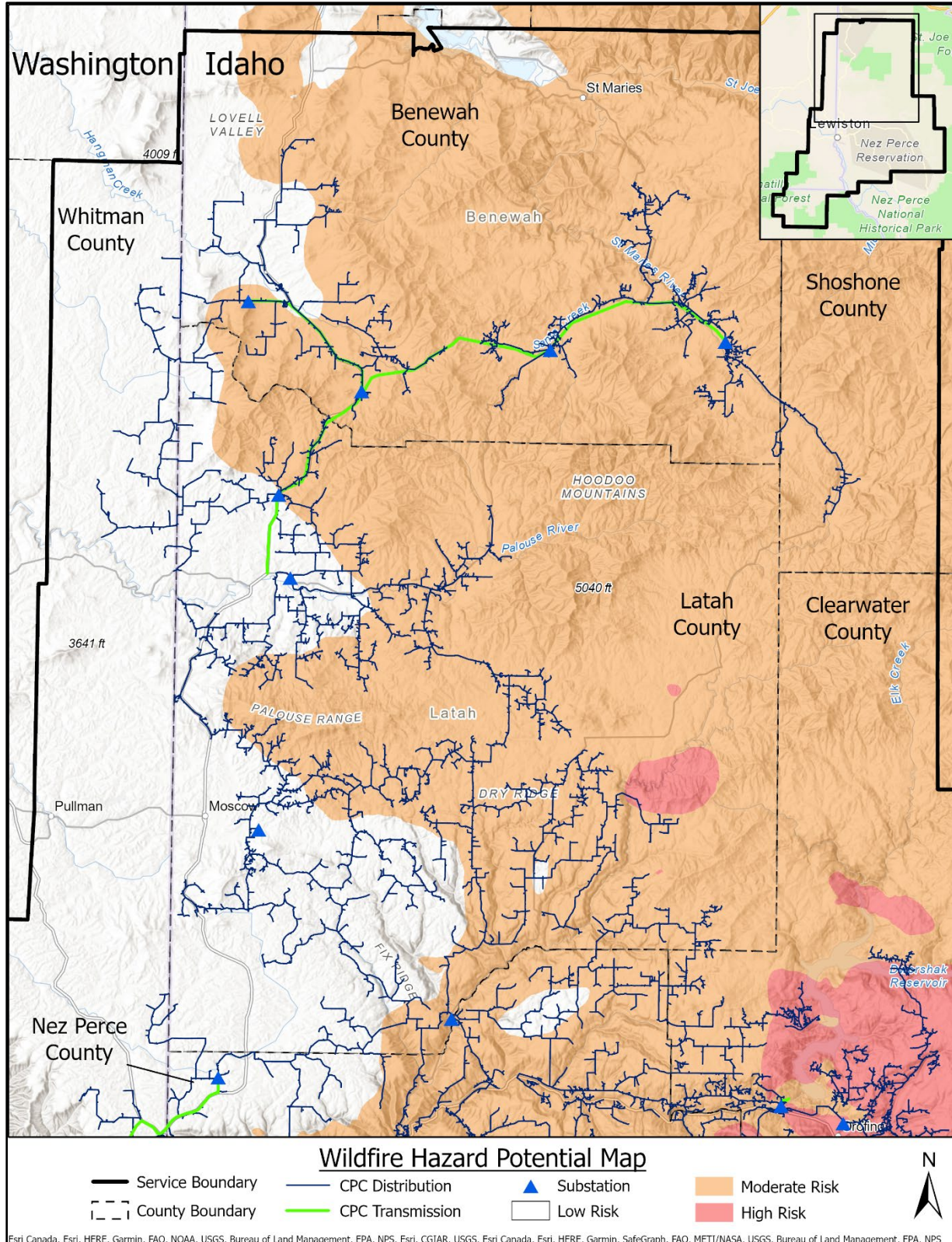


**Figure 5. Wildfire Hazard Potential Map #1**



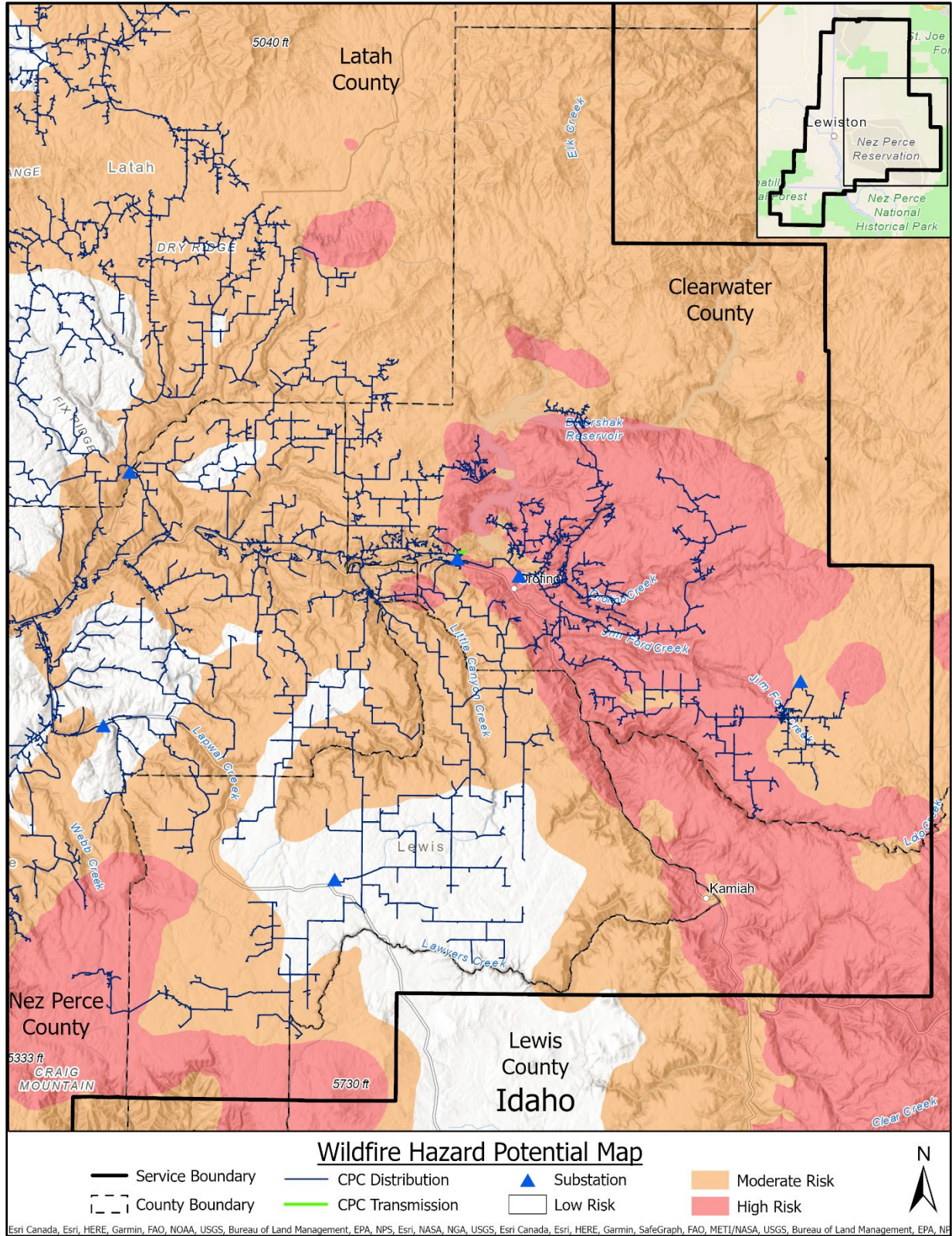


**Figure 6. Wildfire Hazard Potential Map #2**



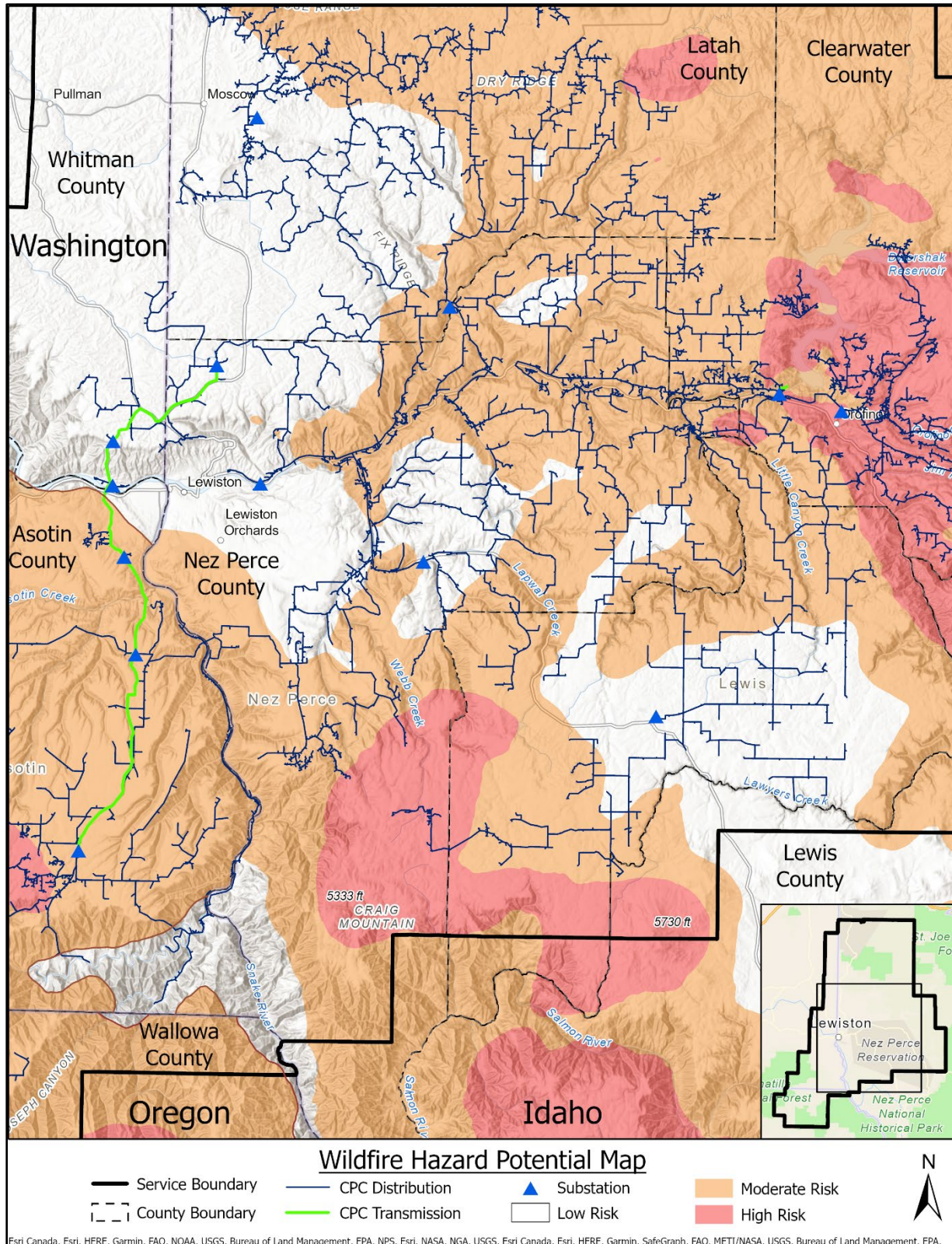


**Figure 7. Wildfire Hazard Potential Map #3**





**Figure 8. Wildfire Hazard Potential Map #4**







## 4 Wildfire Prevention Strategy and Programs

CPC has proactively implemented measures to reduce wildfire risks. The WMP outlines existing fire mitigation efforts and identifies new processes CPC is evaluating or developing.

Generally, the WMP describes specific programs CPC has embarked on to mitigate wildfire risks. Many of the programs, however, are multi-year and programmatic. While some have an immediate startup period, full implementation may occur when processes and methods mature.

Several of CPC's current strategies and programs do not fall within any timeframe but remain situational based on certain events. These conditions are predominantly weather and vegetative fuel-related and not associated with time periods. Similarly, CPC's emergency preparedness and response plans, post-incident recovery, restoration, and remediation activities are event-driven and are not timeframe-dependent. CPC updates these practices as new information emerges and then adopts improved practices. Furthermore, administrative-related programs such as risk analyses, performance metrics, and monitoring of this WMP occur at regular intervals. Table 6 depicts the activities intended to address key wildfire risk factors.

**Table 6. Activities That Address Wildfire Risk Factors**

RISK FACTOR	MITIGATION MEASURES
<b>Fuel Source</b>	<ul style="list-style-type: none"> <li>• Vegetation Management</li> <li>• Line Inspections</li> <li>• Right-of-Way Maintenance</li> <li>• Enhanced Inspection Intervals in High-Risk Areas</li> </ul>
<b>Extreme Weather</b>	<ul style="list-style-type: none"> <li>• National Weather Service Monitoring</li> <li>• Undergrounding of Distribution Lines</li> <li>• Reduced Span Length in High-Wind Areas</li> </ul>
<b>Contact from Objects</b>	<ul style="list-style-type: none"> <li>• Wildlife Guards</li> <li>• Increased Vegetation Clearances</li> <li>• Avian Protection Framing Standards</li> <li>• Insulated Equipment and Jumpers</li> </ul>
<b>Equipment Failure</b>	<ul style="list-style-type: none"> <li>• Routine Maintenance</li> <li>• Focused Design and Construction Standards</li> <li>• T&amp;D Line Inspections</li> <li>• Pole Testing and Treatment</li> <li>• Infrared Inspections of Substation Equipment</li> <li>• Monthly Substation Inspections</li> </ul>
<b>Field Work</b>	<ul style="list-style-type: none"> <li>• Education on Fire Ignition Sources and Fire Suppression</li> <li>• Fire-Watch Services as Required<sup>9</sup></li> <li>• Tailboards</li> </ul>

<sup>9</sup> Oregon Revised Statute 477.665, 629-043-0030

## 4.1 T&D Operational Practices

### 4.1.1 Situational Awareness and Assessment

Situational Assessment is the process by which current operating conditions are determined. Situational Awareness is the understanding of the working environment, which creates a foundation for successful decision making and the ability to predict how it might change due to multiple factors. The GM/CEO and COO or their designees monitor, as needed, the following online resources to track evolving weather conditions.

- **USFS-Wildland Fire Assessment System (WFAS):** For immediate and short-term situational awareness, mapping tools from the USFS-WFAS help determine daily and short-term forecasted risk. Daily or weekly fire weather status maps are produced as needed to assess short-term wildfire conditions. (<https://www.wfas.net/>)
- **The National Weather Service (NWS):** The NWS provides online predictive fire weather forecasting tools in the form of a current fire-weather outlook, 2-day, and a 3-8 day outlook. ([https://www.spc.noaa.gov/products/fire\\_wx/](https://www.spc.noaa.gov/products/fire_wx/))
- **NOAA Weather and Hazards Data Viewer:** This online map provides historic or real-time surface observations including wind speed and direction, wind gust, dew point, relative humidity, and sea level pressure collected from remote automated weather stations (RAWS) throughout the northwest. Extreme-weather alerts such as fire weather watch, high wind watch, and red flag warning are provided from this resource. (<https://www.wrh.noaa.gov/map/?wfo=psr>)
- **Idaho Wildfire Information:** Fire season requirements become effective when fire season is declared in each Idaho Fire Restriction Area. (<http://www.idahofireinfo.com/p/central-idaho-fire-restrictions.html>)
- **CPC Owned Weather Stations (pilot program):** CPC will evaluate installing its own weather stations at designated substations throughout the service area. These stations would be monitored remotely and provide temperature, wind speed, wind direction, barometric pressure, and relative humidity.
- **Washington State Energy Office's Weather Hazards Outlook:** Provides an outlook from all four NWS offices serving Washington State. This product is intended to supplement normal briefings provided by each office in order to support advanced planning and decision making. Weather-driven briefings will be provided as usual in advance of any significant weather events.

During fire season, local TV and radio broadcasts may be monitored in addition to the above sources.

#### 4.1.2 Industrial Fire Precaution Levels

When conditions of fire hazard exist each summer, the Idaho Department of Lands, United States Forest Service, or the Bureau of Land Management, (together "Agencies") declare fire season to be in effect. Title 36 of CFR 261.50(a) gives each Forest Supervisor the authority to issue orders which close or restrict use of the area over which he/she has jurisdiction. As conditions warrant, the forester will issue an Industrial Fire Precaution Level<sup>10</sup> (IFPL) at one of four levels. Because conditions vary across states, each protection district will declare their fire season separately. The declaration of fire season affects utility and other commercial operations and recreational activities by the public. Fire season remains in effect until terminated by each Agency or by reducing the IFPL until conditions for fire hazard no longer exist. During Fire Season, the GM/CEO, COO, or their designees shall monitor IFPL levels and direct staff and VM crews to take necessary precautions and deploy available fire suppression equipment to job sites as needed.

#### 4.1.3 Fire Precautionary Period

Historically, the North-Central Idaho fire season occurs between June and mid-September, with mid-August most vulnerable to extreme fire conditions. For this WMP, the Fire Precautionary Period (FPP) is **June 1<sup>st</sup> to October 1<sup>st</sup>** of each year.

During this Fire Precautionary Period, CPC and contractor crews shall make reasonable efforts to:

- Abide by the requirements of this WMP and be responsible for patrolling and preventing fires caused by operational and VM management activities.
- Take steps necessary to ensure CPC employees, contractors, and their employees prevent ignitions directly or indirectly during their work activities and operations.
- Permit and assist with periodic testing and inspection of required fire equipment. Operators shall abide by specific fire precautionary measures in this WMP before beginning operations during the Fire Precautionary Period and shall update such certification when operations change.
- Prohibit smoking during fire season, except in a barren area or an area cleared to mineral soil at least three (3) feet in diameter. Under no circumstances shall smoking be permitted during the Fire Precautionary Period while an employee is operating equipment or walking or working in grass and woodlands.
- Clear equipment service areas, parking areas, and gas and oil storage areas of flammable material for a radius of at least 10 feet unless otherwise specified.

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<sup>10</sup> <https://www.oregon.gov/odf/fire/documents/industrial-fire-precaution-levels.pdf>

#### 4.1.4 Recloser Operational Practices

There are over 530 reclosers on various transmission and distribution lines on CPC's system. Before line work or clearing operations are performed, reclosers or breakers that have the capability may be set to the "non-reclose" setting. This setting ensures the recloser or breaker does not re-energize the line after interrupting a fault while at the same time maintaining coordination with downstream devices. Equipment that will allow remote control of certain reclosers has been ordered and is in the process of being installed.

#### Public Safety Power Shutoff

Public Safety Power Shutoffs (PSPS) are strategies used by electric utilities to help keep people and communities safe during a Red Flag Warning (RFW). A PSPS preemptively de-energizes selected, at-risk power lines during high wind events combined with hot and dry weather conditions, to reduce or eliminate the risk of CPC-owned assets becoming the origin or contributing source of an ignition.

CPC considers the external risks and potential consequences of a PSPS while striving to meet its main priority of protecting the communities and members it serves. These considerations include but are not limited to:

- Potential loss of water supply from wells and pumping facilities to fight wildfires.
- Negative impacts to emergency response and public safety and health due to disruptions to the internet and mobile phone service during periods of extended power outages.
- Loss of key community infrastructure and operational efficiency.
- Medical emergencies for members of the community requiring powered medical equipment or refrigerated medication.
- Negative impacts on medical facilities.
- Negative economic impacts from local businesses forced to close.
- The inability to open garage doors or motorized gates.
- Timeframe to patrol and re-energize distribution circuits that have been subject to a PSPS.

The risks and potential consequences of initiating a PSPS are significant and extremely complex. Based on the above considerations, CPC reserves the option of implementing a PSPS when conditions dictate. While CPC believes the risks of implementing a PSPS far outweigh the chances of its electric overhead distribution system igniting a catastrophic wildfire, the PSPS may provide a last resort option to avoid a possible ignition involving CPC assets.

On a case-by-case basis, CPC has historically and will continue to consider de-energizing a portion of its system in response to a request from an outside emergency management agency. If conditions on the ground indicate that a wildfire threat is imminent, CPC's GM/CEO or the COO if the GM/CEO is not available, has the authority to de-energize select transmission and distribution circuits. A decision is based on multiple factors accompanied with the unique understanding of the CPC system, including any risks involved. No single element is

determinative. CPC relies on weather data from various sources, including the National Weather Service, NDFRS, and the USFS Wildfire Assessment System, as well as on the ground observations from field personnel.

#### 4.1.5 Strategy for Re-energization

When fire risk conditions return to safe levels and conditions are verified, CPC will patrol impacted circuits to confirm that no conditions exist that could potentially present a public safety hazard when re-energizing circuits. Once CPC confirms that it is safe to re-energize the affected circuits, power will be restored, and local government and members will be notified of re-energization status as needed.

## 4.2 Infrastructure Inspections and Maintenance

Recognizing the hazards of equipment that operate high-voltage lines, CPC maintains a formal inspection and maintenance program for distribution, transmission, and substation equipment. The COO oversees the time-based system inspection programs and the wood pole inspection program. CPC currently patrols its system at regular intervals. Table 7 summarizes the inspection schedule for all assets, while the following plan sections outlines inspection practices for the utility.

For the portion of CPC's service area located in the State of Oregon, CPC follows Oregon Administrative Rules (OAR) Chapter 860-024-0011, which provides inspection schedule requirements for electric distribution and transmission assets.

**Table 7. Inspection Cycles**

ASSET CLASSIFICATION	INSPECTION TYPE	FREQUENCY
Overhead Transmission	Line Patrol	Every 2 years
	Detailed Inspection	Every 15 years*
	Pole Test and Treatment	Every 15 years
Overhead Distribution	Line Patrol	Every 2 years
	Detailed Inspection	Once every 15 years*
	Pole Test and Treatment	Every 15 years
Underground Distribution	Line Patrol	Once every 2 years
	Detailed Inspection	Every 15 years*
Substations	Routine Inspection	Monthly

\* Every 10 years for lines located in Oregon

**4.2.1 Definition of Inspection Types**

- Line Patrol:** A simple visual inspection of utility equipment and structures designed to identify hazards.
- Detailed Inspection:** Utility equipment and structures receive a detailed visual examination and may include using diagnostic testing procedures.
- Pole Test and Treatment:** CPC contracts with a third-party to test and treat wood poles on a rotating basis.

**4.2.2 Instructions to Inspectors**

CPC considers and prioritizes maintenance work by assessing the most urgent needs. The inspection should focus on hazards that could affect the system's integrity or the safety of workers and the public. The inspector will document the inspection data and prioritize any deficiencies as follows:



- **Priority # 1** – Immediate hazard: A deficiency posing imminent danger to life or property must be repaired, disconnected, or isolated immediately after its discovery. Also, any conditions that may affect the system's integrity or present a hazard to line workers or the public pose an immediate hazard. Priority #1 repairs will be responded to immediately, and appropriate action taken until the hazardous condition is remedied.
- **Priority # 2** – Non-emergency repair condition: Except as otherwise provided, deficiencies should be corrected no later than two (2) years after discovery. These are conditions requiring maintenance, which can be scheduled to maintain the system's integrity. Repairs will be prioritized by urgency and scheduled to have appropriate repairs to correct the condition.
- **Priority # 3** – Non-emergency repair condition: CPC may elect to defer correction of deficiencies that pose little or no foreseeable risk of danger to life or property to correction during the next major work activity. Includes, conditions that do not jeopardize the system's safety, line workers, and the public. Repairs are completed within the time interval recommended.

#### 4.2.3 Line Patrol

CPC has a line patrol procedure that complies with OAR 860-024-0011 and NESC requirements that includes bi-annual inspections of CPC assets. The maximum interval between line patrols is two (2) years, with a recommended rate of 50 percent of assets per year. CPC personnel look for visible signs of defects, structural damage, broken hardware, displaced lines, and vegetation clearance issues. Any anomalies found are addressed based on the severity of the defect. Efforts are made by line crews to identify and document hazard trees during line patrols. Areas identified as "High" risk for wildfire are patrolled annually before fire season.

#### 4.2.4 Detailed Transmission & Distribution Inspections

Detailed inspections of the transmission and distribution system are conducted on a fifteen (15) year cycle. Assets located in the State of Oregon are given detailed inspections every ten (10) years per OPUC requirements. Inspections and maintenance activities are intended to protect the worker, the public, and the system's reliability based on current industry standards.

System equipment found in need of maintenance or repair is categorized depending on the severity of the condition. A record of the inspections and maintenance performed will be made available to regulators when requested and maintained by the appropriate personnel. The maximum interval between detailed inspections of overhead and underground assets is fifteen (15) years.



Detailed Line Inspections (DLI) consist of walking and driving to examine CPC poles, conductors, and equipment. Detailed inspections of assets include, but are not limited to:

- Mechanical damage
- Broken or loose hardware
- Guy wire and anchor condition
- Disconnects and fuse holder condition
- Insulators and conductor condition
- Condition of transformers and reclosers
- Ground conductors
- Pole numbers and other minor hardware
- Raptor nests
- Wood rot
- Fire damage
- Third-party attachments

#### 4.2.5 Wood Pole Test and Treatment

The pole inspection work is performed by a third-party contractor and overseen by CPC's COO. "Sound" and Resistograph tests on wood poles detect decay or rot. This inspection work is performed and tracked using pole inspection software. CPC has over 50,000 wood poles in its system and inspects approximately 6.6% annually. Less than 3% of the inspected poles are rejected annually, due mostly to shell rot. This inspection interval is in line with RUS Bulletin 1730B-121 regarding wood pole inspection and maintenance practices.

#### 4.2.6 Substation Inspections

During substation inspections, individual pieces of equipment and or structures receive a visual examination and routine diagnostic testing as appropriate. Substation inspections occur monthly, and transformer oil testing is performed annually.

Substation inspection involves a thorough look at the system to confirm that there are no structural or mechanical deficiencies, hazards, or tree trimming requirements. Inspections of substations include, but are not limited to:

- Broken or loose hardware
- Vandalism or damage to any equipment
- Oil or gas leaks
- Condition of the bus
- Insulators and other hardware
- Condition of the control house
- Condition of the poles/structures and lines exiting the substation
- Condition of the disconnects and fuses for signs of damage and connectivity
- Insulators, bushings, and arrestors
- Risers and conduits
- Transformers

- Reclosers
- Batteries
- Capacitors
- Circuit breakers
- Fire detection and suppression system (where applicable)
- Grounding
- Voltage regulators or tap changers
- Perimeter fence security
- Lighting and security cameras

#### 4.2.7 Standards for Record-Keeping and Reporting

General Instructions: Facilities meeting standards and not requiring maintenance will be recorded and stored for future reference. Conditions other than satisfactory go into CPC’s asset management database, and the COO or their designee generates a list of deficiencies and monitors the completion of repair work. CPC maintains adequate written records to show inspections and corrective actions meet compliance with relevant state code.

#### 4.2.8 GIS Mapping

CPC uses a network of physical facilities to provide electric power and energy to members connected to those facilities throughout a geographical area. Each component of the distribution system and each meter have an approximate physical location and associated data. To plan, construct, maintain, and operate the distribution network it is necessary to create, manage and utilize this geospatial data.

CPC geolocates and manages its assets utilizing National Information Solutions Cooperative (NISC) MapWise software and has integrated this technology into its inspection and maintenance program, as well as for tracking VM work. This provides the ability to record and map inspections, service work, and tree trimming to ensure work is performed on a prescribed schedule.

### 4.3 Vegetation Management

State and Federal Agencies require maintenance of CPC’s right-of-way under or around power lines. CPC has developed a comprehensive VM program intended to maintain safe and reliable electric facilities throughout the service area. The COO or their designee oversees the VM program.

CPC’s right-of-way is primarily located on privately-owned property however, a small portion crosses State and Federal land. Roughly 30%, or 900 miles, of CPC’s overhead lines are wooded and require right-of-way maintenance.

The topography is diverse and can be categorized into three types: river valleys and canyon bottoms; bench lands or prairie; and timbered mountains. Parts of the distribution system are

aligned along rural roadways, but many miles are routed directly across dryland farms, steep river breaks, and heavily treed landscapes.

#### 4.4 T&D System Vegetation Management Overview

To minimize the interruption of electric service from power line contact and to permit equipment access to service power lines, CPC maintains a systematic right-of-way VM policy. CPC's goal is to work by substation, feeder, and line section on an approximate ten-year cycle. This approximates to 90 miles of power line right-of-way clearing per year and is completed with CPC personnel as well as third-party contractors.

CPC's service area is divided into three (3) "Districts". Areas for VM work are identified in advance, based on determinations and recommendations made by the foreman and serviceman in each District. Although growth rates are similar throughout the service area, hot spots do occur and are given priority for clearance work before the systematic trimming of circuits.

Assets are geolocated in ArcMap and mapped using NISC MapWise software. The MapWise tools allow CPC to map the areas trimmed and verified to ensure lines are inspected and trimmed per the prescribed schedule. The MapWise system allows for enhanced work order management and VM progress tracking. The right-of-way tool also allows for notes and classification by type of clearing.

The employee tasked to track the contractors work, is responsible for inspecting the right-of-way clearing and reporting the contractor progress to the Engineering Department to input in MapWise. This is also used to approve the billing process.

##### 4.4.1 Vegetation Management Trimming Standards

Pruning shall be performed with consideration given to the impact on reliability, individual tree condition, and tree aesthetics.

CPC crews follow standard practices for safety<sup>11</sup>, reliability, policies, procedures, and compliance with the National Electric Safety Code (NESC)<sup>12</sup>, RUS, and relevant state and federal requirements.<sup>13</sup> Work performed to these guidelines provides reasonable service continuity and guards against wildfire damage caused by supply conductors.

##### 4.4.2 Vegetation to Conductor Clearance Guidelines

Trees or vegetation encroaching power lines are trimmed or removed as needed to maintain the necessary minimum clearance distances within the power line right-of-way. Where complete removal cannot be accomplished, trees will be trimmed to maintain the scheduled interval. CPC

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<sup>11</sup> OSHA 1910.269 training requirements

<sup>12</sup> Rules 012,013 and 218

<sup>13</sup> Specification Applicable to VM work in Oregon State. OPUC OAR 860.024.0016/0017

follows RUS<sup>14</sup> specifications for right-of-way maintenance (Figure 9). CPC's line clearing work meets minimum standards for conductor clearances from vegetation to provide safety for the public and line workers, reasonable service continuity, and fire prevention. The tree's location, health, species, and growth rate is considered when deciding whether clearance greater than the minimum is needed.

In determining the extent of trimming required to maintain the clearances required by the NESC and RUS, CPC considers at minimum the following factors:

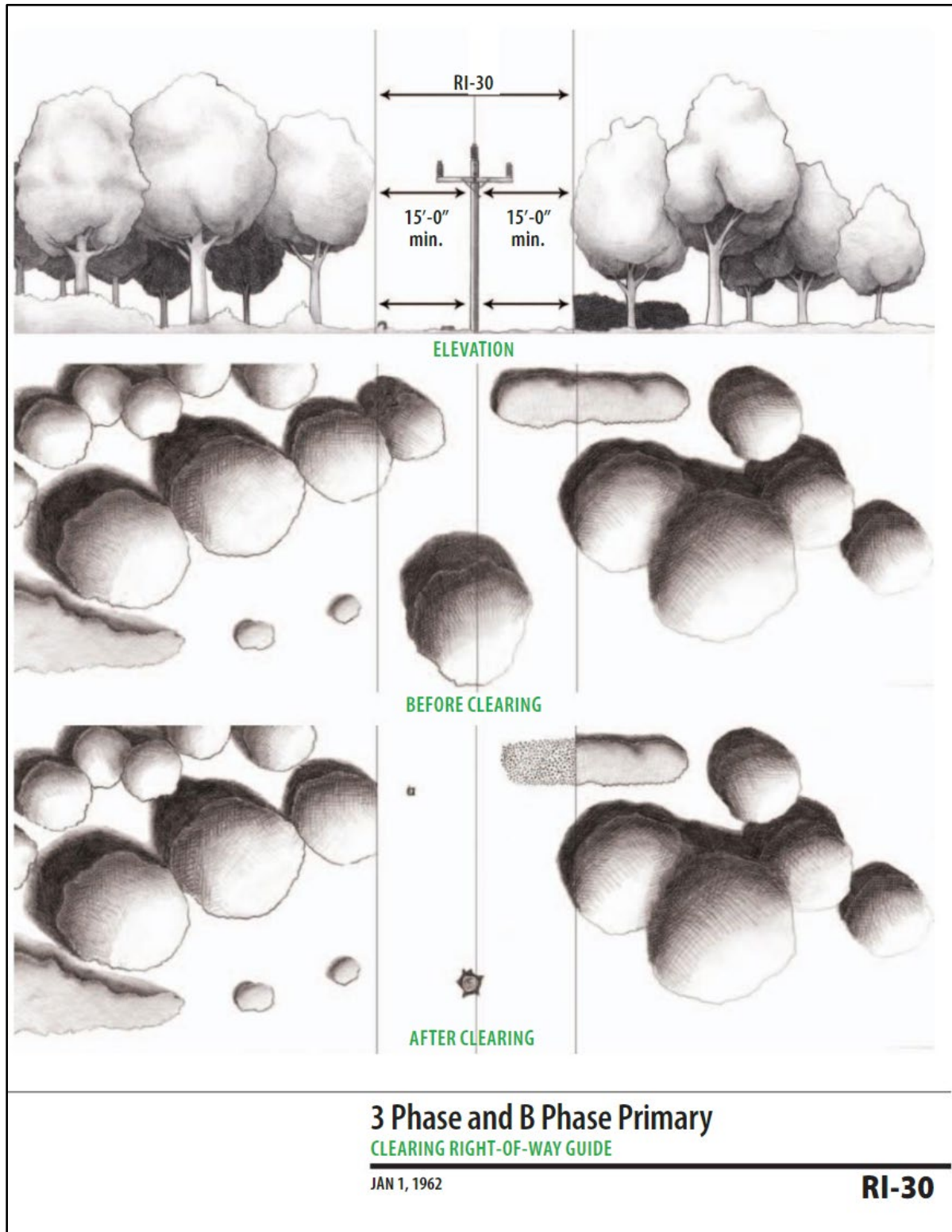
- Voltage;
- Location;
- Configuration;
- Sag of conductors at elevated temperatures and under wind and ice loading; and
- Growth habit, strength, and health of vegetation growing adjacent to the conductor, with the combined displacement of the vegetation, supporting structures, and conductors under adverse weather or routine wind conditions.

The VM program aims to achieve the clearance specifications illustrated in Figure 9.

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<sup>14</sup> Rural Utilities Service <https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service>

**Figure 9. Vegetation to Conductor Clearance**



#### 4.4.3 Vegetation Control Methods

One or more of the following VM methods may be used at CPC's discretion depending on the vegetation mix. Method will be determined by CPC and/or its contractor.

- Complete removal of trees or vegetation in the right-of-way. Brush mowing.
- Foliar spraying with certified applicator using approved products.
- Trimming back trees following minimum clearance guidelines and industry practices.
- Allowing low-growing vegetation that allows walking through the right-of-way to remain. Thorny brush and other difficult-to-pass-through vegetation will be removed.
- Replacing overhead line with underground to eliminate future VM.

When conditions allow, overhead lines may be converted to underground at CPC's discretion. The member or landowner will be responsible for the costs based on the applicable policy. A credit may be included for the offset of some or all of right-of-way not cleared.

#### 4.4.4 At-Risk Vegetation

Although CPC employs a systematic trimming policy, when conducting routine maintenance of power lines and related equipment, CPC makes efforts to identify and remove high-risk fuel sources as needed. Service orders will be created in response to an employee recognized hazard to trim or remove trees threatening power lines when not in the regular trimming cycle. Depending on the severity of the hazard, the tree may need to be removed immediately.

#### 4.4.5 Member Requests

Service orders, as required, are created in response to member or landowner requests to trim or remove trees threatening power lines when not in the regular trimming cycle. CPC or its contractor will communicate with member or landowner regarding the request. After trimming or tree removal, the member or landowner is responsible for clean-up except in circumstances as determined by CPC or its contractor. Member requests will be satisfied on a timeline that is most economic to CPC and considering the severity of the hazard and safety of the public. CPC reserves the right to refuse to cut or remove any tree which, in its judgment, can be safely cut or removed by a private tree company with no damage to CPC's lines.

#### 4.4.6 Member-Owned Lines

CPC is not responsible for trimming or removal of trees endangering the property owner's lines located beyond the point of metering. At the member/landowner's request, CPC will de-energize lines so trimming or tree removal can be done safely.

#### 4.4.7 Storm Damage

Storm damaged trees will be cut and trimmed to correct hazardous situations and to allow for repair of electric lines. Clean up is the responsibility of the member/landowner.

#### 4.4.8 Clear Cut Right-of-Way Specifications

Stumps are cut as close and parallel to the ground level as possible to not leave a “spike” or angle cut stump in the right-of-way, which can damage tires or equipment.

#### 4.4.9 Tools and Equipment

CPC owns and maintains three (3) 150-gallon and one (1) 200-gallon water tanks with pump and hoses mounted on trucks for fire suppression during the FPP. In addition, fire suppression tools, including water backpacks, shovels and/or fire rakes, are available on vehicles and at operating sites. Crews conduct tailboard meetings to confirm the location and readiness of the fire suppression equipment. If required, fire-watch will remain on site for up to three (3) hours to ensure a fire doesn't start after crews leave a remote or high-risk area. The COO monitors weather conditions and RFW.

### 4.5 Fire Mitigation Construction

CPC is taking steps to harden the electrical system with upgrades and design changes. These designs stem from engineering experience and the adoption of emerging technologies. CPC's design practices continue to advance with the addition of newer safety and reliability-related technologies. This advancement recognizes the importance of understanding and adapting to the challenges brought on by the use of public land, development in the WUI, and climate change. The following sections describe these projects.

#### 4.5.1 Wood Pole Fire Protection

The topography of CPC's service area is very challenging. It is especially difficult when it comes to the installation and replacement of wood poles. Many of CPC's poles are located in areas both susceptible to naturally occurring wildfire, and difficult to access with the equipment required for pole replacement. CPC has had success with the application of a fire-resistant coating or mesh designed to protect wood utility poles from fire damage. These products have saved the utility time and money on pole replacement work over the past fifteen (15) years. An example of these benefits is shown in Figures 10.



**Figure 10. Treated Pole**





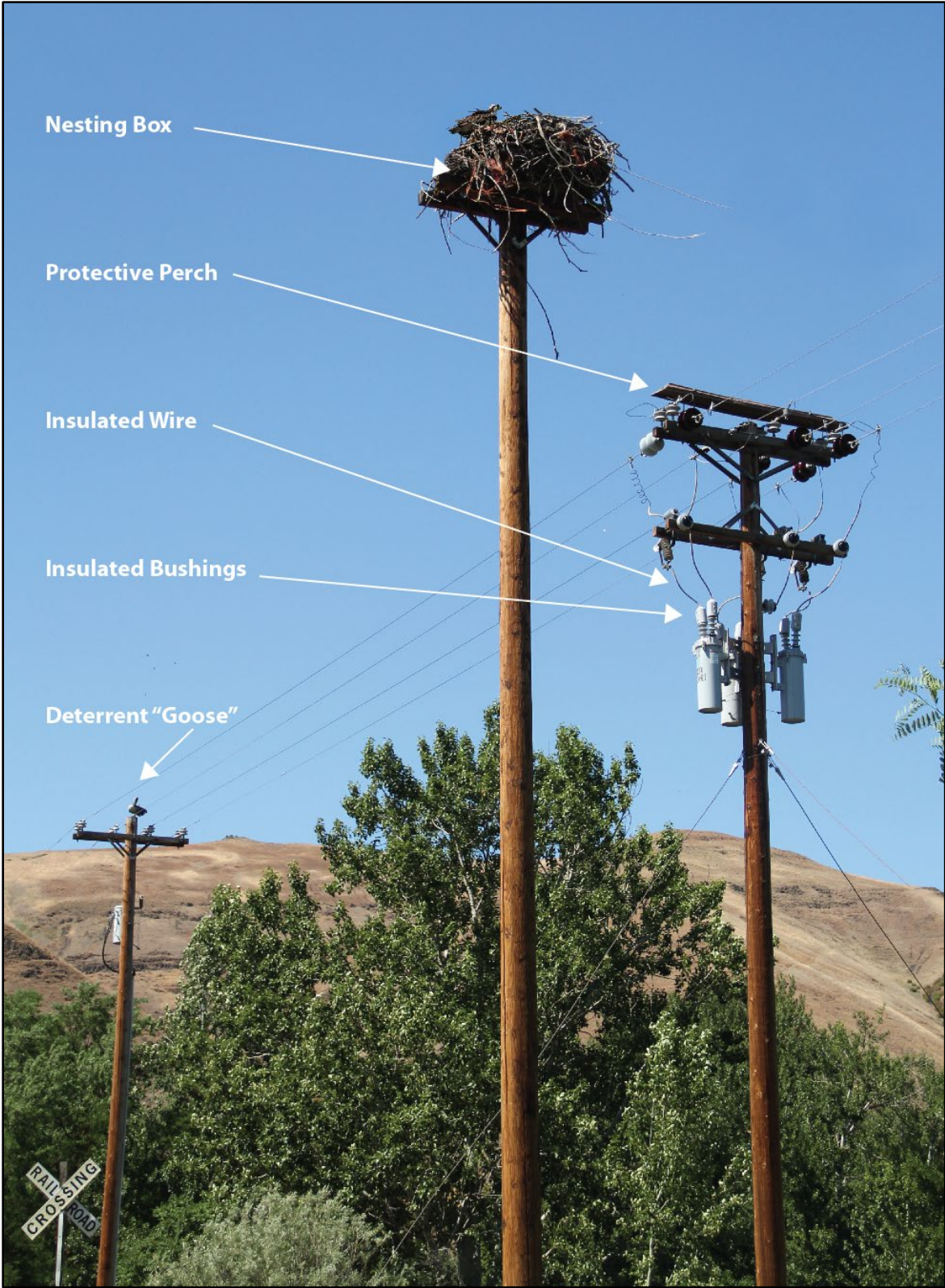
#### 4.5.2 Avian Protection Construction Standards

Since 2000, CPC has employed design and construction standards in accordance with RUS avian protection standards. These include the use of perches, longer crossarms and lowering the placement of crossarms on the poles to increase the distance between phases and/or neutrals. These measures have reduced the electrocution risk to raptors and the number of raptors that have been injured. Consequently, these measures have reduced the risk of fire ignitions. New construction, as well as rebuilds, are evaluated for the use of RUS avian protection standards. Wildlife protective devices are installed on substation equipment in addition to poles. The following measures have been implemented as design allows:

- Raptor framing
- Insulated jumpers and equipment
- Wildlife protective guards
- Nesting platforms adjacent to structures
- Fiberglass crossarms
- Increased phase and/or neutral spacing

At locations where a bird has been harmed, the pole and equipment are evaluated for reconfiguration to mitigate any future incidents in accordance with RUS avian protection standards. A typical installation of avian protection on a distribution structure is shown in Figure 11. The elevated nesting box provides a safe place for raptors to construct their nests away from energized equipment.

**Figure 11. Avian Protection Construction**



### 4.5.3 Underground Conductor

The undergrounding of overhead distribution lines eliminates the impacts of ice loading, improves reliability in high wind and functions as an effective wildfire mitigation strategy. CPC has approximately 375 miles of 7.2 kV and 14.4kV UG distribution line in its system and will continue to evaluate undergrounding conductors in heavily forested and high fire-risk areas. While there are many benefits to undergrounding distribution lines, these facilities take longer and cost significantly more to construct, maintain, and repair.

## 4.6 Pilot Projects

CPC plans to initiate various pilot projects to explore new technologies and best utility practices. These pilot projects will serve to evaluate the effectiveness of new technologies while controlling unwarranted expenditures on unproven methods. CPC may elect to integrate these technologies or practices into its ongoing maintenance programs based on the outcomes.

### 4.6.1 Electronic Reclosers with Remote Adjustability

CPC currently has 18 SEL electronic relays in use and is adding additional electronic relays on key feeders located in high-risk areas. Remotely configuring these relays to “non-reclose” during weather events may reduce the potential for ignition and is currently being evaluated.

### 4.6.2 Non-expulsion Fuses

Typical utility industry practice is to install expulsion fuses on tap-lines as a means of protecting and isolating parts of the system that have experienced a faulted condition. Expulsion fuses utilize a tin or silver-link element in an arc-tube that expel gas and potentially molten metal to the atmosphere as a means of extinguishing an arc created by a faulted condition. The molten metal, however, can be a source of ignition for fire. Non-expulsion current-limiting fuses are a non-venting fuse encapsulated within a tube to contain the arc and gases, which minimizes the potential for molten metals to be expelled. CPC is investigating the use of non-expulsion fuses in some locations where benefits of this technology can be attained in select elevated fire risk areas.

### 4.6.3 Drone Inspection Program

Due to the challenging terrain that makes up the service area, CPC has acquired drone technology to enhance its asset inspection and VM programs. The drone is equipped with a high-resolution camera allowing for detailed inspections of crossarms, hardware and equipment not visible from the ground. The VM program would benefit as well, as this technology would expedite inspection cycles and hazard tree identification, especially in the areas with limited access and steep terrain. The drone is also fitted with infrared imaging technology, which will be used to identify problem areas.

### 4.6.4 Satellite Imaging Program

CPC is contracting with a third-party company to use satellite imagery to scan the ROW in high WHP areas and create a 3-D model. The imagery is then run through their proprietary AI

algorithms to prioritize vegetation management by circuit. This will allow CPC to dispatch VM crews to the highest priority circuits first. This should reduce the chance of wildfire ignition in these areas and increase the efficiency of VM crews, allowing for more ROW to be maintained.

#### 4.6.5 Weather Stations

As part of its proactive approach to improve CPC's situational awareness capabilities, CPC is investigating the options for the installation of weather stations in substations located in high-risk areas. Weather station observations would allow the Operations Department to analyze critical fire weather elements at critical locations in real time. Since the service area is quite expansive, having the ability to collect precise weather information will allow the utility to focus its attention and resources on the areas showing the most immediate risk. High resolution cameras are another optional feature available on some stations. Most systems typically measure the following parameters:

- Air temperature
- Relative humidity
- Wind speed
- Wind direction
- Precipitation
- Barometric pressure
- Solar radiation—sun plus sky radiation

#### 4.7 Workforce Training

CPC has developed rules and complementary training programs for its workforce to reduce the likelihood of an ignition. Field staff are:

- Trained on the content of the WMP
- Trained in proper use and storage of fire extinguishers
- Required, during pre-job briefings, to discuss the potential(s) for ignition, environmental conditions (current and forecasted weather that coincides with the duration of work for the day)
- Required to identify the closest fire extinguisher and other fire abatement tools
- Required to report all ignition events to the COO for follow-up
- Encouraged to identify deficiencies in the WMP and bring such information to the COO.





## 5 Emergency Response

### 5.1 Preparedness and Response Planning

CPC has taken efforts to identify and coordinate with stakeholders in its service area. The following sections describe emergency planning, jurisdictional structure, and community outreach efforts.

#### 5.1.1 Emergency Restoration Plan

Electric utilities that borrow from the RUS are required to conduct a Vulnerability and Risk Assessment of their entire electric system and business<sup>15</sup>. Results of this study are then incorporated into an Emergency Restoration Plan (ERP). The development of an ERP offers a utility the opportunity to prepare and plan the most efficient means in which to restore its system in the event of either a small, isolated outage or a system wide outage resulting from a major natural disaster or other cause. A coordinated response will then be developed to

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<sup>15</sup> Section 1730.26 (b)

restore critical resources in a timely and rational manner, to allow for effective response to the emergency leading to restoration of services and business functions.

**Mission and objective of the ERP:**

To establish defined responsibilities, actions, and procedures to recover CPC electrical and communications system in the event of an unexpected and unscheduled interruption. The ERP is structured to attain the following objectives:

- Restore the physical network within the critical time frames established and accepted by management.
- Restore the applications within the critical time frames established and accepted by management.
- Restore the nominal course of cooperative business operations within the critical time frames established and accepted by management.
- Minimize the impact on the cooperative and members with respect to dollar losses and operational interference.

**Information included in CPC’s ERP:**

- A list of key contacts.
- A list of key federal emergency response numbers.
- A list of key utility management and other personnel and identification of a chain of command and delegation of authority and responsibility.
- Procedures for recovery from loss of power to the headquarters, key offices, and/or operation center facilities.
- A business continuity section describing a plan to maintain or re-establish business operations following an event.
- Mutual aid agreements.

Title 7 CFR Part 1730 requires RUS borrows to exercise their ERP at least annually to ensure operability and employee familiarity with the ERP. CPC may exercise the ERP in several ways:

- After an event that requires CPC to utilize a portion of the ERP.
- Participate in joint exercises with other utilities, with other borrows, or State or County Agencies.
- Performing a tabletop exercise.

CPC’s Incident Commander for all emergencies is the GM/CEO. Roles of the Emergency Restoration Team will be defined in the ERP document. CPC will conduct annual exercises of the ERP, document the results, and implement lessons learned. Procedures for the development of the ERP can be found in RUS Guide 1730B-2.

### 5.1.2 Government Agency Land Partners

The following describes the various stakeholders or districts with management responsibilities within CPC's service area.

Idaho State: Benewah County, Clearwater County, Idaho County, Latah County, Lewis County, Nez Perce County, and Shoshone County

Oregon State: Wallowa County

Washington State: Asotin County, Garfield County, and Whitman County

National Forests: Idaho Panhandle National Forest, Nez Perce National Forest, Umatilla National Forest, and Wallowa-Whitman National Forest

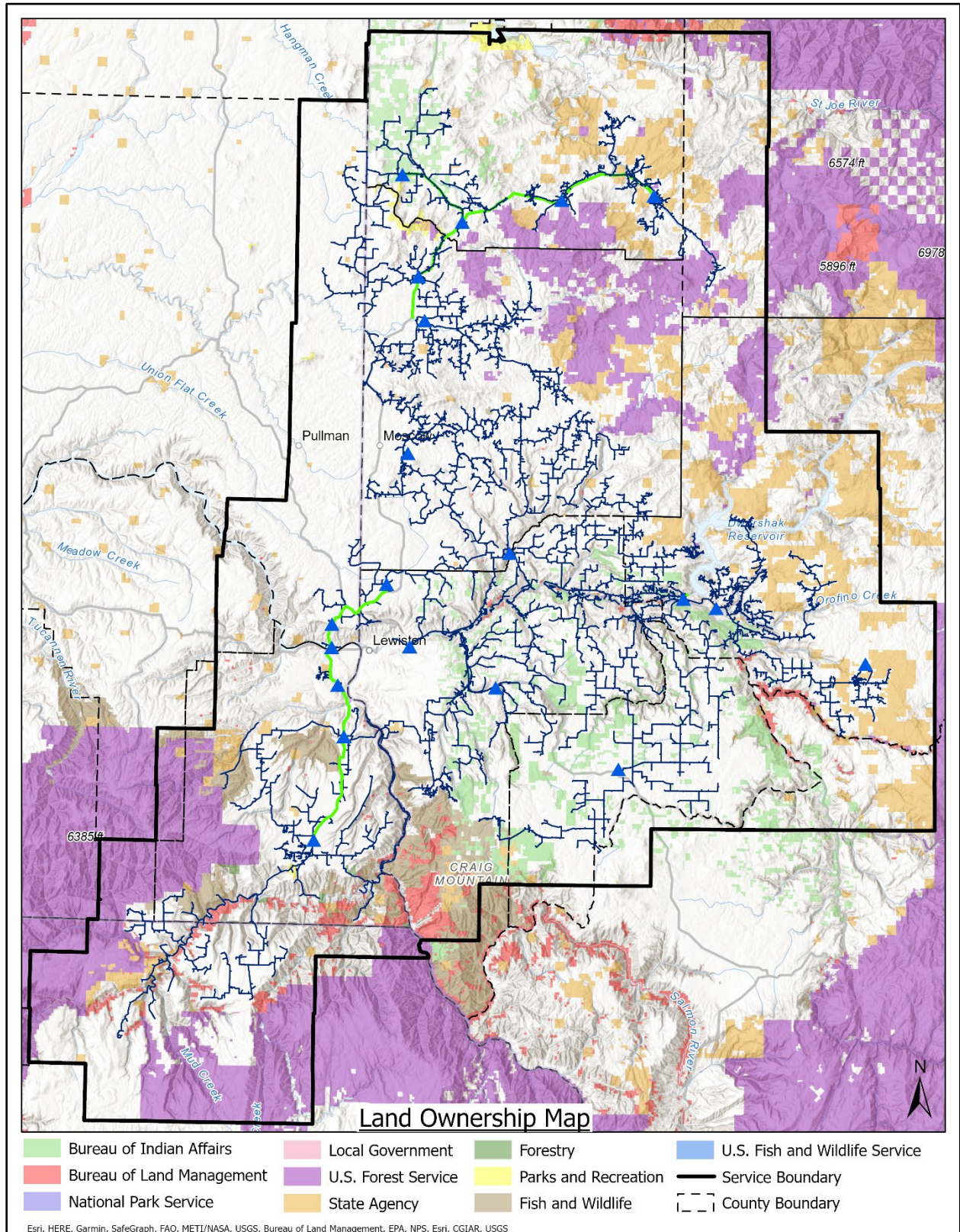
Department of the Interior: Bureau of Land Management. Bureau of Indian Affairs

Tribal Lands: Coeur d'Alene Reservation and Nez Perce Reservation

Land Management is illustrated in Figure 12.



**Figure 12. General Land Management**





### 5.1.3 Emergency Management Communication and Coordination

In response to active emergencies, CPC coordinates and collaborates with local Departments of Emergency Management (DEM) and relevant state agencies as needed. During such emergencies, CPC provides a utility representative to the DEM, as requested, to ensure effective communication and coordination. CPC's primary coordination point is Nez Perce County Emergency Management Department (EMD). The COO or their designee will contact the EMD to coordinate responses as required and will serve as the communications officer during an emergency.

### 5.1.4 Fire Response and Suppression Capabilities

On wildland fires, fire districts typically provide initial attack resources until the Idaho Department of Lands assumes command of the incident.

Clearwater County Sheriff's Office (CCSO) provides dispatch services for first responding agencies and during the summer also notifies Clearwater-Potlatch Timber Protection Association (C-PTPA) of wildfire issues in Clearwater County. In addition, CCSO can communicate with the surrounding fire departments and State Police via 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 of Idaho.

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.

Figure 13 depicts the fire districts throughout CPC's service area. As shown, there are unincorporated areas that are not currently protected by any fire district. These areas are protected by Idaho Department of Lands (IDL), US Forest Service (USFS), Washington Department of Natural Resources (WADNR), or the Oregon Department of Forestry (ODF).

The following fire suppression agency acronyms are used in Figure 13:

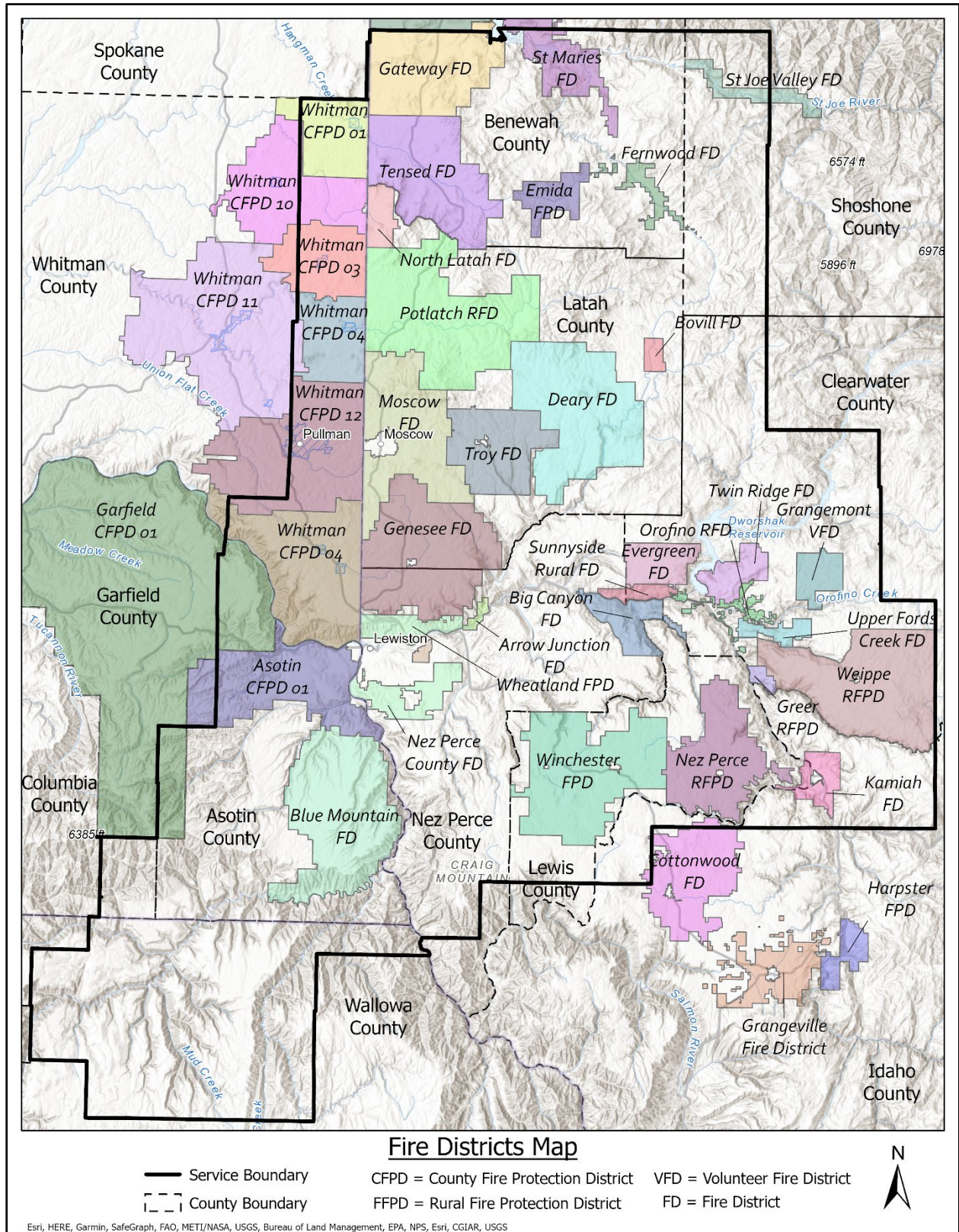
CVPD= County Fire Protection District

FD = Fire Department

RFPA = Rangeland Fire Protection Associations

RFPD = Rural Fire Protection District Fire Protection District

**Figure 13. Fire Protection District Map**



## 5.2 Community Outreach

Public outreach with the community on the importance of wildfire mitigation helps to reduce risk and can play a significant role. CPC encourages its members to take proactive steps to safeguard their homes from wildfire danger and prepare for emergency events. To help create an awareness of fire danger in the service area, CPC provides information on prevention and safety in its Ruralite Magazine, website, bill stuffer publications and social media,.

Members can find useful information regarding:

- Defensible Space Guidelines
- National Weather Service Alerts
- Fire Season Preparation
- Emergency Planning

### 5.2.1 Public Agency and Member Communications for Outages

For scheduled outages, CPC provides as much advance notice as possible, depending on the number of members impacted. Depending on the scope of the project and the length of time prior to the outage, members receive automated telephone calls using NISC's Call Capture module advising of the outage. For larger scheduled outages information is also posted on CPC's Facebook page and website.

For large unplanned outages, information regarding the number of members affected and geographical location are posted on social media and CPC's webpage. The COO or their designee makes the decisions on when and how to issue public announcements.

## 5.3 Restoration of Service

After unplanned outages during fire season, whether due to a PSPS or unknown causes, CPC personnel will patrol the affected portions of the system before the system is re-energized. Suspect equipment or distribution lines that cannot immediately be patrolled will remain de-energized until CPC personnel can do so. System components included in an unplanned outage or PSPS must be assessed and repaired as needed prior to re-energization. Periodic member and media updates of restoration status prior to full restoration will be made.

### 5.3.1 Service Restoration Process

After a wide-spread outage, CPC line crews take the following steps before restoring electrical service. These measures intend to protect the worker, members, the public, and the system's reliability.

- **Patrol:** Crews patrol de-energized lines to ensure no hazards have affected the system during the outage. If an outage is due to wildfire or other natural disasters, as soon as it is deemed safe by the appropriate officials, crews inspect lines and equipment for damage and estimate equipment needed for repair and restoration. Lines located in remote and rugged terrain with limited access may require additional time for inspection.



- **Isolate:** Isolate the outage and restore power to areas not affected.
- **Repair:** After the initial assessment, CPC personnel, including but not limited to, Operations, Engineering, and Management meet to plan the needed work. Rebuilding commences as soon as the affected areas become safe. Repair plans prioritize substations and transmission assets, then distribution circuits serving the most critical infrastructure needs. While the goal to re-energize all areas is as soon as possible, emergency services, medical facilities, and utilities receive first consideration when resources are limited. Additional crews and equipment are dispatched as necessary.
- **Restore:** Periodic member and media updates of restoration status before full restoration are posted on social media and CPC’s website. After repairs are made, power is restored to homes and businesses as quickly as possible. Members, local news, and other agencies receive notification of restored electric service as needed.

The general priority order for restoration work is as follows:

1. Transmission lines
2. Substations
3. Main distribution feeders
4. Secondary distribution feeders
5. Services

## 6 Performance Metrics and Monitoring

CPC has developed performance metrics (See Table 8) to provide a data-driven evaluation of the WMP’s performance to help determine the effectiveness of various programs and to identify areas for improvement.

This chapter also identifies CPC’s management responsibilities for overseeing this WMP and includes the operating departments and teams responsible for carrying out the various activities described in the previous chapters. Methods for identifying plan deficiencies are discussed along with inspection and VM program monitoring processes.

### 6.1 Plan Accountability

The Board of Directors makes policy decisions relative to CPC and they will be responsible for approving the WMP.

The GM/CEO and the COO are responsible for the overall execution the WMP. Staff will be directed as to their roles and responsibilities. The COO or their designee is also responsible for communicating with the public, media outlets, public agencies, first responders, and local Emergency Management during an emergency or planned maintenance outages. The GM/CEO and COO determine when and how to notify outside agencies in cases of wildfire emergency events.

## 6.2 Monitoring and Auditing of the WMP

CPC's GM/CEO will be responsible for monitoring and auditing the targets specified in the WMP to confirm that the objectives of the WMP are met, as well as the implementation of the WMP in general. Reports of the WMP's progress and risk reduction impacts will be developed annually and circulated to appropriate utility staff along with recommendations or proposed actions to enhance the WMP's objectives and strategies over time. The effectiveness of the WMP will be reported to the Board of Directors on an annual basis.

### 6.2.1 Revising the WMP

The GM/CEO and COO are responsible for ensuring the WMP meets Idaho, Oregon, and Washington requirements related to WMPs. CPC Staff responsible for assigned mitigation areas should vet current procedures and recommend changes or enhancements to build upon the WMP's strategies. Due to unforeseen circumstances, regulatory changes, emerging technologies, or other enhancements in the WMP may be warranted or required. The WMP will be updated as needed to correct issues and incorporate new guidelines and best practices. Updates to the WMP will be tracked.

## 6.3 Performance Metrics

CPC has selected several metrics (Table 8) intended to gauge the effectiveness of the various programs and strategies outlined in the WMP.

The continual tracking of these metrics will help identify circuits most susceptible to unexpected outages, ignition risks, and the adequacy of the VM and asset inspection schedules. CPC will reassess its operations and identify areas for improvement as more data becomes available and refine the WMP as needed.

As the WMP is in the initial stage of implementation, relatively limited data is available. However, as results of CPC's mitigation programs become evident and additional data is collected, CPC will identify areas of its operations that will require updating. As the metrics are analyzed in the following years, refinements will be made to the WMP. The selected metrics, as with other aspects of the WMP, will likely evolve in future iterations of the WMP.

**Table 8. Performance Metrics**

Metric	Rational	Indicator	Measure of Effectiveness
Red Flag Warning (RFW) days	Used to adjust annual variation in criteria	Number of RFWs during analysis cycle	N/A
Ignitions in High WHP tier involving CPC assets	Assess system hardening efforts in critical areas	Count of events	Reduction or no material increase
Service interruption with fire reference	Assess system hardening efforts	Count of events	Reduction in the general trend of events
Outages due to line contact with vegetation or animals	Assess VM program work schedules/QC process	Number of contacts recorded	Reduction in the general trend of events
Vegetation or animal caused ignition	Assess VM program work schedules/QC process	Count of events	Reduction or no material increase
Member service calls concerning at risk vegetation	Assess if VM Program has reduced member customer concerns and risk events	Number of calls received	Reduction in the general trend of events
Power line down in High WHP area during the Fire Precautionary Period	Assess system hardening efforts in critical areas	Count of events	Reduction in the general trend of events





## 6.4 Programmatic QA/QC processes

### 6.4.1 T&D System Inspection QC Process

The COO manages the T&D line and substation assets including pole inspection and comprehensive equipment and ROW maintenance programs. The CETO manages design and inspection of new construction. These programs ensure proper design and safe operation of the T&D line and substation assets.

Key imperatives are to:

- Reduce the risk of power-related wildfire.
- Meet federal and state regulatory requirements.
- Achieve reliability performance within mandated limits and to optimize capital and O&M investments.

Designated managers regularly monitor inspection and corrective maintenance records and diagnostic test results to adjust maintenance plans and develop new programs. CPC follows prudent utility practices to develop its maintenance programs.

CPC's Engineering and Operations departments are responsible for performing the inspections and corrective maintenance. The priority for corrective maintenance is to remove safety hazards immediately and repair minor deficiencies according to the type of defect, severity of the risk level associated with the location of the asset. The process is monitored throughout the year to ensure timely completion via regular internal reports.

### 6.4.2 Vegetation Management QC Process

Contractor crews perform the majority of VM and clearing work for the utility. Contracted VM work is field audited by CPC personnel. Quality control efforts monitor program effectiveness, overall tree work performance, and determine the adequacy of the VM work schedule. CPC's right-of-way clearing work is tracked using NISC GIS mapping software. The quality control results are reviewed, and any deficient work is reissued to the contractor for corrective action.



## Appendix A: Disclaimers

### **WILDFIRE MITIGATION PLAN DISCLAIMER**

The information provided in this WMP was developed by CPC staff and is intended for CPC's internal planning purposes only. CPC does not warrant the accuracy, reliability, or timeliness of any information in this report, and assumes no liability for any errors, omissions, or inaccuracies in the information provided. CPC shall not be held liable for losses caused by using this information. Portions of the data may not reflect current conditions. Any person or entity who relies on any information obtained from this report, does so at their own risk. This report is presented solely for internal use by CPC staff. CPC makes no representations or guarantees expressed or implied regarding the accuracy or completeness of this WMP.

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