

State of Washington
Department of Natural Resources
Wildland Fire Management

Grant County Public Utility District #2 Wildland Fire Mitigation Plan

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Version 1.0

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1.0 Executive Summary

When the Washington Legislature passed [House Bill 1032](#) in July 2023 it stated that, *it is in the best interest of the state, our citizens, and our natural resources to identify the sources of wildland fires; identify and implement best practices to reduce the prevalence and intensity of those wildland fires; put those practices in place; and by putting those practices in place, reduce the risk of wildland fires and damage and losses resulting from those fires.*

Grant County PUD (Grant PUD) has gathered stakeholders and subject matter experts throughout its utility to create the following Wildfire Mitigation Plan (WMP).

2.0 Wildfire Mitigation Plan Overview

2.1 Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes in detail the range of activities that Grant PUD is taking to mitigate the threat of utility involved wildfires, including various programs, policies, and procedures. This plan complies with the requirements of HB1032 for investor and customer owned electric utilities (IOU/COU) to prepare a wildfire mitigation plan by October 31, 2024, and to review and revise the plan at a minimum every three years thereafter.

2.2 Description of Where WMP Can be Found Online

The WMP can be found on Grant PUD's website: www.grantpud.org/publications

2.3 Best Practices Cross-Reference Table

Standard or Best Practice Name and Description	Document, page number, or citation
NERC Reliability Standard FAC-003	Section 7.3, Page 11

3.0 Utility Overview

3.1 Utility Description and Context Setting Table

About Grant PUD: Established by local residents over 80 years ago, Grant PUD generates and delivers energy to millions of customers throughout the Pacific Northwest from its Columbia River dams, Priest Rapids and Wanapum, and other energy resources. For more information visit www.grantpud.org

Table 1. Context-Setting Information Table

Utility Name	Grant County Public Utility District No. 2
Service Territory Size (sq miles)	2,791 square miles
Service Territory Make-up	63% Agriculture 30% Shrub 4% Water 3% Urban 0% Barren/Other 0% Conifer Forest 0% Conifer Woodland 0% Desert 0% Hardwood Forest 0% Hardwood Woodland 0% Herbaceous
Service Territory Wildland Urban Interface (based on total area) Source: Grant PUD Senior GIS Analyst	4.09% Wildland Urban Interface 6.20% Wildland Urban Intermix
Customers Served	55,297 service agreements
Account Demographic Figures shown are based on service agreements per customer class.	76% Residential 9% Agricultural

	15% Commercial/Industrial
Utility Equipment Make-up (circuit miles) Figures shown are based on general survey numbers.	Overhead Dist.: 2,810 Overhead Trans.: 475 Underground Dist.: 1,156 Underground Trans.: 0
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?²	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Has previously pre-emptively shut off electricity in response to elevated fire risk?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, then provide the following data for the three trailing calendar years: Number of shut-off events: [] Customer Accounts that lost service for >10 minutes: [] For prior response, average duration before service restored: []

4.0 Objectives of the Wildfire Mitigation Plan

The objectives of the wildfire mitigation plan for Grant PUD are multifaceted, aiming to address various aspects of fire prevention, response, and recovery. The following objectives support a response and recovery system that can respond to fire events, are integrated with internal and external stakeholders, and are sustainable for Grant PUD in the long term:

Preventive Measures:

Objective: Implement measures to reduce the risk of wildfires caused by utility infrastructure, such as regular equipment maintenance, vegetation management around power lines, and installation of fire-resistant materials.

- *Supports Response and Recovery:* By minimizing the likelihood of fire ignition, preventive measures help reduce the frequency and severity of fire events, enabling a more effective and efficient response when fires do occur. This ensures that resources can be directed towards managing the fire and mitigating its impact on the utility's operations and the community.
- *Integrated with Stakeholders:* Collaborate with internal teams responsible for infrastructure maintenance and external stakeholders such as government property owners, emergency responders, and community groups to develop and implement preventive measures.
- *Long-Term Sustainability:* Investing in preventive measures is sustainable for the utility in the long term as it reduces the need for costly emergency response and recovery efforts, minimizes potential liabilities, and helps maintain uninterrupted service for customers.

Emergency Response Planning:

Objective: Develop comprehensive emergency response plans that outline procedures for detecting, reporting, and responding to wildfire incidents affecting Grant PUD's infrastructure.

- *Supports Response and Recovery:* A well-prepared emergency response plan enables swift and coordinated actions to mitigate the impact of wildfires on Grant PUD operations, ensuring the safety of personnel, protecting critical assets, and minimizing service disruptions.
- *Integrated with Stakeholders:* Involve internal teams responsible for emergency management and external stakeholders such as fire departments/first responder agencies, other government agencies, and community organizations in the development and implementation of response plans.
- *Long-Term Sustainability:* Regular review and updating of emergency response plans ensure their effectiveness and adaptability to evolving wildfire risks, contributing to Grant PUD's resilience in the face of changing environmental conditions and regulatory requirements.

Community Engagement and Education:

Objective: Engage the community to raise awareness about wildfire risks, prevention measures, and emergency response procedures.

- *Supports Response and Recovery:* Informed and prepared communities can act as partners in wildfire prevention and response efforts, facilitating early detection, evacuation, and mutual support during emergencies.
- *Integrated with Stakeholders:* Collaborate with community leaders, homeowner associations, schools, and other stakeholders to develop educational campaigns, and establish communication channels for sharing information and coordinating responses.
- *Long-Term Sustainability:* Building strong relationships with communities fosters trust and cooperation, enhancing Grant PUD 's ability to implement sustainable wildfire mitigation strategies and adapt to changing needs and priorities over time.

Technological Innovation:

Objective: Leverage technological advancements to enhance wildfire detection, monitoring, and response capabilities, such as deploying remote sensing systems, predictive analytics, and real-time communication tools.

- *Supports Response and Recovery:* Advanced technologies enable early detection of wildfire threats, improved situational awareness, and more efficient deployment of resources, thereby enhancing Grant PUD 's ability to respond effectively to fire events and minimize their impact.
- *Integrated with Stakeholders:* Collaborate with technology partners, research institutions, and government agencies to develop and implement innovative solutions for wildfire mitigation and management.
- *Long-Term Sustainability:* Investing in technological innovation allows Grant PUD to stay ahead of emerging wildfire risks, improve operational efficiency, and adapt to evolving regulatory requirements, ensuring its long-term viability and resilience.

By pursuing these objectives, Grant PUD's wildfire mitigation plan will establish a robust response and recovery system that can address fire events, integrated with internal and external stakeholders, that is sustainable in the long term.

4.1 Minimizing Likelihood of Ignition

Grant PUD continually investigates possible sources of ignition and has incorporated such awareness into design and operation processes. Examples of possible ignition sources include lightning, vegetation contact, wildlife contact, and electrical faults. Ongoing efforts to minimize ignition risks include the incorporation of materials, such as higher-level insulating devices, into designs of transmission, substation, and distribution infrastructure. Preventative activities include effective vegetation management plans and practices to minimize the likelihood of

ignition due to electrical contacts. Tree trimming (exceeding federal mandates) and periodic herbicide application are examples of such activities. A heightened level of employee situational awareness, as communicated in job briefs and exercised when using equipment, contributes to reducing potential human-caused ignition sources.

4.2 Resiliency of the Electric Grid

Most of Grant PUD’s Bulk Electrical System (BES) 230kV and some 115kV structures are of non-flammable materials such as steel. Areas around vital switches and Motor Operated Devices (MODs) are devoid of vegetation and down to mineral earth to protect the integrity of the asset which can aid in restoration.

5.0 Roles and Responsibilities

5.1 Utility Roles and Responsibilities

Chief Operations Officer

- Executive Sponsor of the Wildfire Mitigation Plan.
- Provides oversight to ensure successful development and implementation of the Wildfire Mitigation Plan.
- Secures and advocates necessary funding to support all aspects of the Wildfire Mitigation Plan; to include prevention, preparedness, response and recovery from a wildfire.

Director of Power Delivery

- Oversee the wildfire mitigation program.
- Develop and implement wildfire mitigation strategies.
- Coordinate wildfire mitigation efforts with internal business units.
- Ensure compliance with regulations and standards.
- Report to the COO on wildfire mitigation efforts.
- Deploys Power Delivery Incident Management Team (if necessary).

Sr Manager of Construction & Maintenance

- Develop and maintain wildfire prevention programs.
- Conduct risks assessments to identify potential wildfire threats.
- Implement and maintain early warning systems.
- Monitor weather conditions and issue warnings as necessary.
- Develop and maintain wildfire response plans
- Train and equip field response teams
- Reports to Director of Power Delivery status reports and battle rhythms for incident response by field crews.

System Operations Manager (Dispatch Manager)

- Coordinate and manage wildfire response activities.
- Develop and maintain wildfire response plans.
- Train and equip Operations response teams.
- Ensure proper documentation and reporting of wildfire incidents.
- Reports to Director of Power Delivery status reports and battle rhythms for incident response by Operations personnel.

Power Delivery Line Crew Supervisor

- Oversee vegetation management program(s) to reduce wildfire risk.
- Ensure regular inspection and clearance of vegetation near power lines.
- Develop and implement vegetation management policies.
- Coordinate with environmental agencies to ensure compliance with regulations.
- Supervise vegetation clearance teams.
- Oversee a team responsible for inspecting utility infrastructure for wildfire risks.
- Schedule and conduct regular inspections of power lines, poles and other equipment
- Ensure compliance with inspection protocols and standards
- Provide training and equipment to field teams
- Lead a team responsible for responding to wildfire incidents.
- Coordinate with Wildfire Operations Manager during response efforts and report updates
- Work with the Power Delivery Incident Management Team, if deployed.

Emergency Management Coordinator

- Develop and maintain the Wildfire Mitigation Plan.
- Coordinate emergency drills and exercises.
- Serve as the main point of contact with non-PUD partners during wildfire emergencies.
- Act as the liaison with local, state and federal emergency management and first responder agencies.
- Coordinate wildfire prevention measures and education for employees and the public with Grant PUD's Public Affairs and Internal Communications teams.

Inspection Team Lead (line, fiber, facilities, other)

- Lead a team responsible for inspecting utility infrastructure for wildfire risks.
- Schedule and conduct regular inspections of power lines, poles and other equipment.
- Identify and report potential hazards.
- Ensure compliance with inspection protocols and standards.
- Provide training to inspection team members.

Power Delivery C&M Line Maintenance Engineer

- Develop clearance schedules and ensure timely execution.
- Coordinate with landowners and environmental agencies.
- Ensure compliance with vegetation management policies.
- Develop and maintain vegetation management policy.

5.2 Coordination with Local Utility and Infrastructure Providers

Grant PUD has a well-established relationship with the Grant County Sheriff's Office Emergency Operations Division (EOD). The EOD will act as the primary point of contact with neighboring jurisdictions during a wildfire incident that expands to the level requiring their Emergency Operations Center (EOC) be activated. In those instances, Grant PUD will establish a Liaison Officer assigned to the Grant County EOC whose role is dedicated to maintaining communication and coordination with the EOD.

Responsibilities Include:

- Act as the primary point of contact.
- Establish reliable communication protocols and capabilities between Grant PUD, the Liaison and the EOC while also coordinating communication efforts between the EOC Public Information Officer (PIO) and Grant PUD's PIO to ensure consistent and accurate communications with the public
- Attend all relevant coordination meetings.
- Coordinate with the EOC to request additional resources and deploy additional resources to the broader response when necessary.
- Ensure Grant PUD's needs and actions are aligned with the broader emergency response efforts.

5.3 Coordination with Local Tribal Entities

Grant PUD has a well-established relationship with the Wanapum Band of Indians. The Wanapum have an established community on the right bank of Priest Rapids Dam (PRD) and additional cultural land and resources within the Priest Rapids Project.

Grant PUD employs a Cultural Resource Manager (CRM). The CRM reports directly to the Chief Operations Officer (COO). Both the CRM and the COO have direct links and communication with the Wanapum Band Liaison/Cultural Resource Interface, also an employee of Grant PUD.

Grant PUD has an evacuation procedure, SA-DW-PRG-330 – Evacuating a Grant PUD Facility that includes the Wanapum Indian Village Emergency Response Plan. This plan addresses evacuations, route, and muster locations. The plan identifies emergency contact and backup information for members of the Wanapum Band.

In addition, the right embankment at Priest Rapids Dam is equipped with an Emergency Alert System (EAS – siren) that is activated from the control room at PRD.

5.4 Emergency Management / Incident Response Organization

Grant PUD has adopted the National Incident Management System (NIMS) Incident Command System (ICS) and Incident Management Team (IMT) concept to guide our response to wildfire incidents and other emergency incidents and crises that impact Grant PUD. In doing so we have developed three different IMTs.

Specific to wildfires and Grant PUD's response, when impacted, we have developed a Power Delivery Incident Management Team that is scalable to meet the needs of our response. This approach allows for Grant PUD to provide a liaison to the local emergency management agency and/or designated local, state, or federal incident response team. This liaison assists in the overall response when our assets are or may be impacted.

The Grant PUD Emergency Management Department (EMD) has established and will maintain relationships with corresponding agencies, jurisdictions, and other stakeholders in advance of a crisis.

The EMD will work with our legal department to ensure any necessary mutual aid agreements and/or contracts are reviewed and updated as needed.

The EMD has and will continue to cooperate and coordinate with local authorities on drills and exercises that highlight Grant PUD's roles and responsibilities.

6.0 Wildfire Risks and Drivers Associated with Design, Construction, Operation, and Maintenance

6.1 Risks and risk drivers associated with topographic and climatological risk factors

The primary topographic and climatological risk drivers for wildfires in Grant County are:

- Low rainfall - Less than 1 inch per month during the summer months.
- High Summer Temperatures - Consistent daily highs over 100 degrees F in the summer.
- Windy Conditions - Average wind speeds of 8mph with speeds above 20 mph are common.
- Terrain Type – 30% of Grant PUD's Service Territory is non-irrigated natural land that is generally covered in sage brush and dry grasses which are very flammable.

The highest priority risk driver is the terrain type. The dry, undeveloped land areas are most susceptible to fire ignition. Fires are far less likely to ignite in irrigated farmland and urban areas. After terrain type, lack of rainfall, high temperatures, and wind all jointly contribute to the risk of fire ignition and spread.

6.2 Enterprise-Wide Safety Risks

Grant PUD recently formed an Asset Management department which in part assesses risks related to physical assets. In 2024 the Asset Management team worked with internal subject matter experts from maintenance, engineering, and operations to identify potential ignition sources related to our assets. These subject matter experts estimated the likelihood of an ignition from each of the potential sources. A larger group of internal experts including Legal, Risk, and Public Affairs estimated the range of potential impacts from a wildfire event. The Asset Management team combined the likelihood and impact estimates to rank the potential ignition sources in order of expected risk with an initial estimate of the range of anticipated annual costs for each risk. This information will be used in the future to help determine when changes are necessary in Grant PUD's current fire mitigation practices.

The following are the primary risk drivers that could lead to a potential ignition and subsequent wildfire:

- Contact from objects such as animals (squirrels/birds), manmade objects (balloons), vehicle accidents, etc.
- Equipment failure due to wear and tear, Internal failures (Mechanical/Electrical), Manufacture defects, etc.
- Environmental such as high summer temperatures, extreme windy conditions, etc.

7.0 Wildfire Preventative Strategies

7.1 Weather Monitoring

7.1.1 Current Strategy Overview

Dispatch monitors weather as it has for several years, primarily through the nightly actions of adding the next day forecast, from the National Oceanic and Atmospheric Administration (NOAA), into the log. This is also augmented by using Lightning Maps.org when a known weather event is predicted to affect our service territory. With the move from weekly studies to daily next day studies, Operations Technical Advisors (OTA) note possible significant events like thunderstorms and red flag warnings, in the daily Operational Planning Analysis (OPA) as well.

The following is a list of possible weather monitoring sources:

- *United States National Weather Service*
- *United States Forest Service Wildland Fire Assessment System*
- *National Fire Danger Rating System*

7.1.2 Planned Updates

Grant PUD will modify any existing practices in a proactive manner if more effective means are discovered as a best business practice, regardless of being mandated by regulatory authorities.

7.2 Design and Construction Standards

7.2.1 Current Strategy Overview

Grant PUD has engaged in numerous system re-design, hardening, and other activities that contribute to wildfire mitigation. Some of these activities include:

- Transitioning from utilizing wood crossarms to fiberglass crossarms. Fiberglass crossarms are less susceptible to leakage current tracking that results in wood pole fires, thus decreasing the likelihood of pole fires developing into a wildfire.
- Utilization of distribution insulators that are rated for higher levels than required. Grant PUD has standardized the use of 25 kilovolt rated insulators rather than the 15 kilovolt insulators that are minimally required for its less than 15 kilovolt distribution system. These higher rated insulators lessen the chances of wildlife contacts to the electrical conductor, fewer wildlife contacts result in fewer animals becoming electrocuted, fewer ignited carcasses falling from the poles and starting a wildfire.
- Reducing the likelihood of wildfires caused by human activity by way of heightened situational awareness. Employees/contractors perform job briefings daily to address hazards. Crews are reminded of ignition potential during fire season. Some contract crews utilize a specific job briefing form to ensure heightened awareness. Crews are also restricted from using high-potential ignition tools such as grinding wheels during dry conditions.

- Utilizing equipment such as towable water trailers with high pressure spray bars and hoses to tow behind vehicles that are traversing dry vegetation. Vehicles may also utilize pump-action high-pressure backpack firefighting canisters to help extinguish any fires that may be started.
- Periodically applying herbicide at the base of some transmission structures. This not only preserves the infrastructure from wildfire, but also minimizes the opportunities for a pole fire to develop into a wildfire.

7.2.2 Planned Updates

Grant PUD continually monitors and adjusts design and construction standards to ensure maximum effectiveness.

7.3 Fuel & Vegetation Management

7.3.1 Current Strategy Overview

Grant PUD maintains a robust vegetation management plan. The plan, as federally required by the North American Electric Reliability Corporation (NERC) Reliability Standard FAC-003, has been federally audited numerous times without recommendation or non-compliant findings. Grant PUD vegetation management plan prescribes tree trimming clearances, herbicide application, and mechanical removal processes that are based on regional arbor/vegetation characteristics. Grant PUD staff performs an annual patrol of its electric infrastructure system to identify vegetation concerns and ensure mitigation efforts are effective. Conductor movement and other electrical hazards must also be addressed to satisfy the NERC reliability standard.

7.3.2 Planned Updates

Grant PUD periodically updates this plan to mitigate vegetation concerns and to ensure NERC compliance. Currently, there are no indications from NERC of upcoming regulatory changes nor are there any known mitigating issues experienced by Grant PUD that would warrant any changes.

7.4 Asset Inspections and Response

7.4.1 Current Strategy Overview

Grant PUD monitors its assets to ensure reliable operation and to mitigate the potential to cause wildfire. This monitoring is conducted annually by Grant PUD employees via visual and infrared camera inspections of its power lines and infrastructure. The Line Inspectors are looking for any damage, deterioration, loose or missing hardware, as well as any vegetation of concern. Grant PUD has also contracted infrared inspections of its assets. LiDAR data has been used in the past to identify clearance and vegetation concerns on the transmission system or other potential equipment failures that could lead to an ignition. Issues discovered during visual or infrared inspections are tracked and followed up on by Grant PUD's maintenance department with support from engineering and operations as needed.

7.4.2 Planned Updates

Grant PUD continually monitors and adjusts inspection practices to ensure maximum effectiveness.

7.5 Workforce Training

7.5.1 Current Strategy Overview

Initial Training – The initial phase is considered after the adoption and publication of all documentation and materials for the Grant PUD Wildfire Mitigation plan.

Initial training will consist of documentation and material being reviewed by all stakeholders and their departments in Policy Tech within a 30 day-time frame based off assignment date. This will coincide with the information campaign to all Grant PUD employees of the Wildfire Mitigation Plan with Internal Communication.

- Coordination for Policy Tech and Internal Communication to be completed by Emergency Management Team supported by Learning and Development.
- List of individual participants or affected cost centers provided by Emergency Management Team.
- Depending on the time and availability a rehearsal for a tabletop exercise may be conducted at this time with key stakeholders to review requirements for the annual tabletop scenario-based exercises held prior to each Washington state fire season.
- The Scenarios and rehearsal location will be prepared and coordinated by the Emergency Management Team as required.

Sustainment / Annual Training – This phase is for the annual training of the Grant PUD Wildfire Mitigation plan.

- Annually, there will be tabletop scenario-based exercises held prior to each Washington state fire season. This training event will involve multiple scenarios with internal and external stakeholders responsible for Wildfire Mitigation for Grant PUD and central Washington.
- The Scenarios and rehearsal location will be prepared and coordinated by the Emergency Management Team as required.
- List of individual participants (internal or external) or affected cost centers coordinated by Emergency Management Team.

7.5.2 Planned Updates

If there are any updates or changes to the Grant PUD Wildfire Mitigation plan there will be a requirement for review by all stakeholders and their departments in Policy Tech within a 30-day time frame based off assignment date. This will coincide with the information campaign to all PUD employees of the Wildfire Mitigation Plan with Internal Communication.

- Coordination for Policy Tech and Internal Communication to be completed by Emergency Management Team.
- List of individual participants or affected cost centers provided by Emergency Management Team.

7.6 Relay and Recloser Practices

7.6.1 Current Strategy Overview

Transmission:

Transmission Relays at 115kV generally operate in under 30 cycles. At 230kV relays utilize transfer trip and operate in around 5 cycles or less. Single shot reclosing is utilized. Reclosing can be turned off remotely for all transmission relays.

Distribution:

Distribution relays utilize both phase and ground inverse time overcurrent elements (51P/51N) along with instantaneous phase and ground elements (50P/50N). The 51P/51N elements operate with a delay proportional to the amount of fault current on the distribution feeder. The instantaneous elements operate with no intentional time delay. However, in normal operation the instantaneous elements are disabled but can be enabled when necessary. Generally, 3 shot reclosing is utilized. Nearly all distribution relays can have instantaneous elements enabled and reclosing disabled remotely by Operations as required.

Distribution reclosers are electronically controlled, utilizing 3 trips to lockout. The first trip is set as fast as possible to interrupt a fault before damage is caused to the system. The second and third trips are slower inverse time delay curves to allow fault current to burn any foreign objects off the line. These inverse time delay curves trip faster on higher fault currents and slower on low fault currents, allowing maximum energy to burn off the fault.

7.6.2 Planned Updates

Transmission:

All new transmission relays will have line differential capability. This allows for more sensitivity and security. Additionally, the line differential relays have advanced fault locating capability that can locate faults within a single transmission line span.

All new relays at 115kV will have transfer trip capability. This significantly speeds up fault clearing on the transmission lines.

Distribution:

The few remaining stations without remote control capabilities will be upgraded. This will allow reclosing to be turned off and instantaneous elements to be enabled remotely.

New distribution stations utilize a new distribution standard that includes advanced microprocessor relays that allow additional functionality, such as multiple settings groups and customizable logic.

Distribution reclosers determined to be in high-risk areas will have automatic reclosing disabled during the summer months. Installation of additional reclosers will be considered in high-risk areas to sectionalize the distribution system. Installation of TripSavers or non-expulsion fuses will be explored and considered in lieu of expulsion fuses located in designated high-risk areas.

Additionally, high impedance fault detection logic is being explored as an option on the newest microprocessor relays. This element is relatively new and not nearly as secure as traditional overcurrent 50/51 elements so caution must be taken if utilized. Further research will be performed to determine if this is a viable option.

There are no incidents that resulted in these planned updates. They are simply the result of continuous improvement. Grant PUD will continue to explore utility best practices as they develop.

7.7 De-energization / Public Safety Power Shutoff

7.7.1 Current Strategy Overview

Details on restoration of service following a de-energization is provided in Section 9.

Grant PUD does not currently have a Public Safety Power Shutoff (PSPS) plan. Depending on the situation, Grant PUD has exercised the de-energization option for public/first responder safety during an active wildfire under or around the overhead lines. Consideration is given to the effects of the de-energization based on loop or radial feed, and the criticality of the customer(s) being electrically affected. 24/7 operations also allow us to monitor for any adverse weather that could heighten the possibility of a wildfire starting.

7.7.2 Planned Updates

There are currently no planned updates for a de-energization strategy or PSPS program. We will however continue to monitor for necessary changes and best practices through this living document.

8.0 Community Outreach and Public Awareness

8.1 Current Community Outreach and Public Awareness Program

Grant PUD, in partnership with local emergency management agencies, coordinates efforts to inform the public of wildfire risks and threats. We alert customers to power disruptions caused or anticipated by wildfire using social media and Everbridge emergency text alerts.

8.2 Planned Updates

Grant PUD will continue to monitor this practice and increase public awareness about wildfire strategies, as needed.

9.0 Restoration of Service

In the event of a wildfire affecting Grant PUD assets to the point of de-energization, we have a Grant PUD representative coordinating with Incident Command (IC). Through collaboration with the first responding agencies on scene, assessments are made regarding the safety of the public and first responders on an appropriate time for restoration. A line patrol to assess for any unknown hazards created by the fire front or likewise will be conducted precluding any energization. Once the line patrol has reported back with no issues, the reclosers will be placed on one-shot and a test close of the line will follow.

10.0 Evaluating the Plan

10.1 Metrics and Assumptions for Measuring Plan Performance

To effectively measure and benchmark Grant PUD's performance on wildfire mitigation efforts, a comprehensive set of metrics will be established over the next several years and as our plan continues to develop. These metrics can be grouped into several categories: Fire Ignition Metrics, Vegetation Management, Infrastructure Hardening, Inspection and Maintenance, Community Engagement, and Regulatory Compliance. Relevant metrics for each category include:

Fire Ignition Metrics

- **Number of Fire Ignitions:** Total number of fire ignitions caused by Grant PUD equipment annually.
- **Cause Analysis:** Breakdown of fire ignitions by cause (e.g., equipment failure, vegetation contact, human error).
- **Fire Ignition Rate:** Number of ignitions per mile of power line per year.

Vegetation Management

- **Vegetation Clearance Miles:** Total miles of power lines cleared of vegetation.
- **Vegetation Inspection Frequency:** Frequency of vegetation inspections conducted.
- **Compliance Rate:** Percentage of vegetation management activities completed within prescribed timelines.

Infrastructure Hardening

- **Pole Replacements:** Number of wooden poles replaced with fire-resistant materials.
- **Covered Conductor Installations:** Miles of power lines converted to covered conductors.
- **Undergrounding Projects:** Miles of power lines buried underground.
- **Equipment Upgrades:** Number of equipment upgrades (e.g., high-impedance arc fault interrupters) installed to prevent ignitions.

Inspection and Maintenance

- **Equipment Inspections:** Number of inspections conducted on power lines and equipment.
- **Maintenance Completion Rate:** Percentage of maintenance tasks completed on time.
- **Defect Rate:** Number of defects identified per mile of inspected power line.
- **Inspection Coverage:** Percentage of the Grant PUD's infrastructure inspected annually.

Community Engagement and Response

- **Public Outreach Sessions:** Number of community outreach sessions conducted on wildfire safety.
- **Customer Satisfaction:** Customer satisfaction ratings related to communication and handling.
- **Feedback Response Rate:** Percentage of community feedback addressed and incorporated into mitigation plans.
- **Emergency Coordination Drills:** Number of coordinated emergency response drills conducted with local fire and emergency services.

Regulatory Compliance and Reporting

- **Regulatory Compliance Rate:** Percentage of compliance with federal wildfire mitigation regulations.
- **Audit Findings:** Number of findings from internal and external audits related to wildfire mitigation.
- **Report Timeliness:** Timeliness of submitting required reports to regulatory bodies.

By tracking these metrics, Grant PUD can effectively measure the performance of its wildfire mitigation efforts, benchmark against industry standards, and make data-driven decisions to improve safety and reduce wildfire risks.

10.2 Identifying and Addressing Areas of Continued Improvement in the Plan

This section is not applicable currently as this is Grant PUD's initial WMP submission. This section will be updated once adjustments, improvements, or additions to the plan are made based on established metrics.

10.3 Monitoring the Performance of Inspections

Inspection Tracking and Documentation

Inspection Scheduling and Tracking

- **Centralized Scheduling System:** Utilize a centralized scheduling system to ensure all inspections, including those performed by contractors, are planned and tracked efficiently.
- **Inspection Logs:** Maintain detailed logs of all inspections, noting the date, location, inspector, and specific assets inspected.

Detailed Reporting

- **Standardized Inspection Reports:** Implement standardized reporting templates that inspectors (both internal and contractors) must complete, ensuring consistency and comprehensiveness in documentation.

- **Photographic Evidence:** Require inspectors to provide photographic evidence of inspected assets and any identified issues to enhance the accuracy and reliability of reports.

Quality Assurance Protocols

Inspector Training and Certification

- **Training Programs:** Develop and mandate comprehensive training programs for all inspectors to ensure they are well-versed in inspection protocols, safety standards, and wildfire risk factors.
- **Certification Requirements:** Require inspectors, including contractors, to obtain certifications that validate their expertise and understanding of the specific requirements for wildfire mitigation inspections.

Audit and Review Processes

- **Random Audits:** Conduct random audits of inspection reports and field inspections to verify the accuracy and thoroughness of inspections performed.
- **Peer Reviews:** Implement a peer review system where experienced inspectors review the work of their colleagues and contractors to ensure consistency and quality.

Performance Metrics and Evaluation

Inspection Quality Metrics

- **Defect Detection Rate:** Track the number and severity of defects identified during inspections relative to the total number of inspections performed.
- **Compliance Rate:** Measure the percentage of inspections completed on schedule and in accordance with prescribed protocols.
- **Follow-Up Rate:** Monitor the rate at which follow-up actions are completed based on issues identified during inspections.

Contractor Performance Evaluation

- **Performance Scorecards:** Develop performance scorecards for contractors that include metrics such as timeliness, accuracy, thoroughness of inspections, and compliance with standards.
- **Feedback Mechanisms:** Establish a feedback mechanism where contractors receive regular performance evaluations and areas for improvement.

Technological Integration

Digital Inspection Tools

- **Mobile Inspection Apps:** Equip inspectors with mobile apps that streamline data collection, report generation, and real-time data submission.

- **GPS and GIS Integration:** Utilize GPS and Geographic Information System (GIS) technology to map inspection locations and ensure comprehensive coverage.

Data Analytics

- **Trend Analysis:** Use data analytics to identify trends in inspection findings, helping to pinpoint recurring issues or areas needing more focus.
- **Predictive Maintenance:** Implement predictive maintenance algorithms that leverage inspection data to anticipate potential failures and schedule proactive maintenance.

Continuous Improvement Processes

Regular Training Updates

- **Refresher Courses:** Provide regular refresher courses and updates on new inspection technologies, standards, and wildfire mitigation strategies to all inspectors.
- **Lessons Learned Workshops:** Conduct workshops to share lessons learned from recent inspections and field audits, promoting a culture of continuous improvement.

Feedback Loops

- **Inspector Feedback:** Establish channels for inspectors to provide feedback on inspection processes, tools, and protocols, fostering an environment of open communication and improvement.
- **Stakeholder Feedback:** Collect and incorporate feedback from stakeholders, including utility staff, contractors, and regulatory bodies, to refine inspection practices and protocols.

Regulatory Compliance and Reporting

Compliance Monitoring

- **Regulatory Audits:** Prepare for and facilitate audits by regulatory bodies, ensuring all inspection processes and records meet required standards.
- **Compliance Reports:** Generate regular compliance reports that document adherence to regulatory requirements and highlight any areas of non-compliance along with corrective actions taken.

Transparency and Accountability

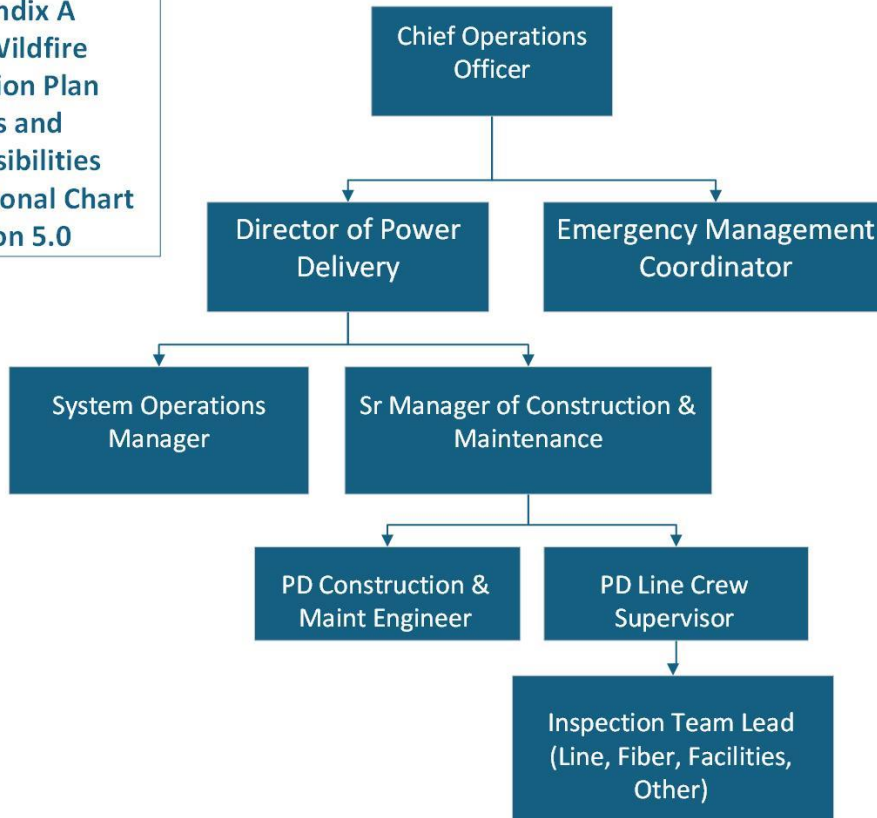
- **Public Reporting:** Maintain transparency by publicly reporting inspection performance metrics, improvement actions, and overall effectiveness of wildfire mitigation inspections.

- **Accountability Measures:** Implement accountability measures for inspectors and contractors, including penalties for non-compliance and incentives for high performance.

By implementing these processes and protocols, Grant PUD can ensure that the performance of inspections, including those conducted by contractors, is monitored effectively. This comprehensive approach promotes high-quality inspections, enhances wildfire mitigation efforts, and ultimately contributes to greater safety and reliability.

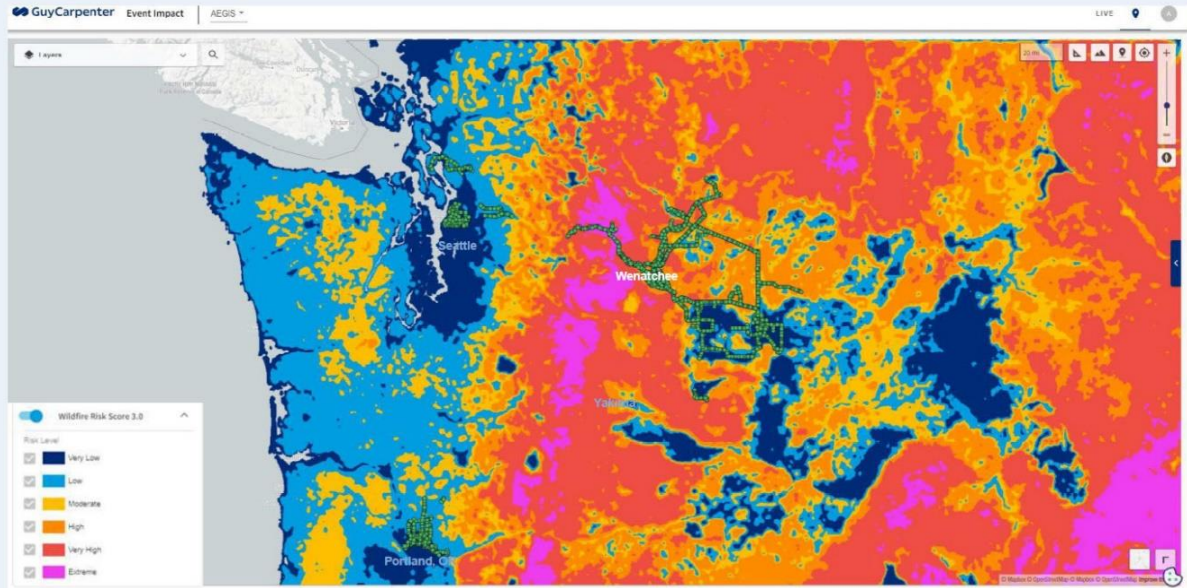
Appendix A

Appendix A
2024 Wildfire
Mitigation Plan
Roles and
Responsibilities
Organizational Chart
Section 5.0



V1. September 2024

Wildfire Risk Map – PUDs



Structures in Proximity to Transmission Assets

UTILITY	State	Trans Low	Trans Medium	Trans High	Trans Total
PUBLIC UTILITY RISK MANAGEMENT SERVICES	Washington	178,413	17,386	12,094	207,893
PUD NO 1 OF CHELAN COUNTY	Washington	45,389	30,562	22,762	98,713
PUD NO 1 OF CLARK COUNTY - (WA)	Washington	277,166	73	-	279,239
PUD NO 1 OF DOUGLAS COUNTY	Washington	9,224	3,762	2,365	15,351
PUD 1 OF SNOHOMISH COUNTY	Washington	308,879	-	-	308,879
PUD NO 2 OF GRANT COUNTY	Washington	32,581	5,168	1,534	39,283

Structures within Service Territory

UTILITY	State	Dist Low	Dist Medium	Dist High	Dist Total
PUBLIC UTILITY RISK MANAGEMENT SERVICES	Washington	300,010	37,668	40,625	378,303
PUD NO 1 OF CHELAN COUNTY	Washington	10,484	10,955	22,213	43,652
PUD NO 1 OF CLARK COUNTY - (WA)	Washington	173,800	1,376	1	175,177
PUD NO 1 OF DOUGLAS COUNTY	Washington	12,381	3,023	3,240	18,644
PUD 1 OF SNOHOMISH COUNTY	Washington	43,605	920	220	44,745
PUD NO 2 OF GRANT COUNTY	Washington	31,169	7,044	3,177	41,390

Transmission Line Lengths in (Miles) by Class by State

UTILITY	State	Trans Miles Low	Trans Miles Med	Trans Miles High	Trans Miles Total
PUBLIC UTILITY RISK MANAGEMENT SERVICES	Washington	656	130	372	1,158
PUD NO 1 OF CHELAN COUNTY	Washington	25	68	206	300
PUD NO 1 OF CLARK COUNTY - (WA)	Washington	162	1	-	163
PUD NO 1 OF DOUGLAS COUNTY	Washington	30	69	155	254
PUD 1 OF SNOHOMISH COUNTY	Washington	180	-	-	180
PUD NO 2 OF GRANT COUNTY	Washington	225	93	98	416

Frequently Asked Questions

(FAQ):

- **What is wildfire mitigation?**

A: A wildfire mitigation is the implementation of various measures designed to minimize the destructive effects a wildfire has on your property. Some actions are designed to modify the landscape environment around your home that puts it at risk from destruction by wildfire. Wildfire mitigation increases the chances your home will survive but does not guarantee it.

- **What is the Wildland Urban Interface?**

A: The Wildland Urban Interface (WUI) is any area where homes or other structures meet and mix with undeveloped, natural landscapes like grasslands, greenbelts, forests or other wooded areas.

- **What is considered “wildland vegetation?”**

A: Wildland vegetation includes land cover classified as forests (coniferous, deciduous and mixed), native grasslands, shrubs, wetlands and transitional lands. Land cover that is intensively human dominated, including urban grasslands (i.e. golf courses), orchards, arable lands and pastures are excluded.

- **How do I know if I live in the Wildland Urban Interface?**

A: If you live near wildlands, then you live in the Wildland Urban Interface. A “wildland” does not only refer to large forests and grasslands, but any wild expanse of explosively flammable plants shrubs or trees.

- **Why are these areas at high risk for wildfires?**

A: Wildfire risk in the WUI is largely due to two factors: proximity to potentially hazardous wildland vegetation and housing density. In many areas, it is not a question of if a wildfire will impact your home, but when.

In the WUI, combustible homes meet combustible vegetation. Wildland vegetation acts as fuel for wildfires. Once a fire spreads close enough to residential developments, hundreds of ignitable homes are exposed to the flames and embers fuel the fire even further.

- **What is defensible space?**

A: Defensible space is an area between a house and an oncoming wildfire where the vegetation has been managed to reduce the wildfire threat and allow firefighters to safely defend the house. Wildfire does not recognize property lines so creating effective defensible space requires working with neighbors to help strengthen your community.

Each homeowner is personally responsible for creating and maintaining effective defensible space.

- **What is the home ignition zone?**

A: The home ignition zone is the area of the home and its immediate surroundings. It includes both your home and your defensible space.

- **What can I do to protect my home and my family from future fires?**

A: Emergency preparedness and mitigation are the best practices you can adopt to protect your family and your home from potentially devastating wildfires. Both renters and homeowners are encouraged to keep an emergency supply kit handy, create a family communications plan with pre-arranged contact information and practice the evacuation routes from your neighborhood.

It is also a good idea to review your homeowner's or renter's insurance policy, so you know what coverage you have in the event of a wildfire and how defensible space affects your insurance.

Homeowners in the Wildland Urban Interface are encouraged to take a proactive approach to wildfire prevention by using building techniques and fire-resistant materials that can help reduce the risk of damages from future disastrous wildfires.

- **What should I consider when building or rebuilding in the Wildland Urban Interface?**

A: Homeowners face many choices, and opportunities, when working to mitigate wildfire damage. If you are rebuilding or planning to build a new home, this is an ideal time for you to take fire-resistant measures that could minimize damage if a wildfire strikes. Here are some key tips for building or rebuilding stronger, safer and smarter homes.

Use fire-resistant roofing material, such as ceramic or slate tile, instead of asphalt shingles or wood shakes. Protect the home's eaves with stucco or plaster to prevent flying embers from starting a fire.

Ensure that exterior wall coverings are fire-resistant and not susceptible to melting.

Concrete, fiber-cement panels or siding, stucco, masonry and metal are some recommended materials. Use metal mesh screens to keep fast-flying embers out of vents and chimneys.