

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY

Douglas PUD Wildfire Mitigation Plan



Table of Contents

Secti	on		Pa	ge					
Tab	Table of Contents								
List	List of Figures								
1.0									
2.0									
2.0	2.1		ose of the Wildfire Mitigation Plan						
	2.2		ctive and Plan Access						
	2.3		Practices Cross-Reference Table						
3.0	1 1+1		verview	6					
5.0	3.1	•	y Description and Territory Make-Up						
4.0	Ohi		s of the Wildfire Mitigation Plan						
4.0	4.1		mizing likelihood of ignition						
	4.2		iency of the electric grid						
г о			Responsibilities						
5.0	ко 5.1		y Roles and Responsibilities						
	5.2		dination with Local Utility and Infrastructure Providers						
	5.3		dination with Local Tribal Entities						
	5.4		gency Management / Incident Response Organization						
6.0	\ A /;								
0.0			Risks and Drivers Associated with Design, Construction, Operation, and ance	11					
	6.1		and risk drivers associated with topographic and climatological risk factors						
	6.2		rprise-Wide Safety Risks						
7 0			Preventative Strategies						
7.0	vvii 7.1		ther Monitoring						
	7.1		Current Strategy Overview						
		.1	Planned Updates						
			and Construction Standards						
	7.2	-	Current Strategy Overview						
	7.2	.2	Planned Updates						
	7.3	Fuel	& Vegetation Management						
	7.3	.1	Current Strategy Overview	16					
	7.3	.2	Planned Updates	17					
	7.4	Asset	t Inspections and Response	17					
	7.4	.1	Current Strategy Overview	17					
	7.4		Planned Updates						
	7.5		cforce training						
	7.5		Current Strategy Overview						
	7.5		Planned Updates						
	7.6	кејау	v and Recloser Practices	18					

7.6.1	1 Current Strategy Overview	18			
7.6.2	2 Planned Updates	19			
7.7	De-energization / Public Safety Power Shutoff	20			
7.7.1	1 Current Strategy Overview	20			
7.7.2	2 Planned Updates	20			
8.0 Com	munity Outreach and Public Awareness	20			
	Current Community Outreach and Public Awareness Program				
8.2	Planned Updates	21			
9.0 Rest	oration of Service	21			
10.0 Eval	uating the Plan	21			
10.1	Metrics and Assumptions for Measuring Plan Performance	21			
10.2	Identifying and Addressing Areas of Continued Improvement in the Plan	22			
10.3	Monitoring the Performance of Inspections	22			
Appendix	Appendix A				
Appendix B 2					

List of Figures

Figure	Page
Figure 1. Douglas County PUD Service Territory Map	7
Figure 2. Pearl Hill Fire Damage Area	8
Figure 3. Douglas County Fire District Service Area Map	11
Figure 4. Wildfire Emergency Response Map	13
Figure 5. Active Fire Information Map	13
Figure 6. Potential Wildfire Areas	14
Figure 7. Current Wildfire Risk Map	14

1.0 Executive Summary

Organized in 1936, Douglas County PUD began operations as a non-profit, locally owned electric distribution system in 1945. The PUD was formed to deliver modern conveniences to all the residents of the county, including those who were considered too costly to serve by other for-profit utilities. After acquiring the county's existing electric distribution system from investor-

owned utilities, the PUD constructed about 400 miles of additional power lines to extend service to rural parts of the county. The power supply in those days was the Bonneville Power Administration.

In the late '50s and early '60s, Douglas PUD worked to license and build the Wells Hydroelectric Project on the Columbia River. In 1967, the first power was generated at this 840-megawatt



project. Douglas County did not initially use the power from this plant because it was more costly than power from the Bonneville Power Administration. Instead, the output was sold to four investor-owned utilities who helped finance the project by purchasing power at cost.

Public Utility District No. 1 of Douglas County's mission is to provide the best possible utility services at the lowest possible cost consistent with sound business principles. Part of that mission is ensuring the safety of our customers and reliability of the electric system. To that end, the District is committed to implementing a wildfire protection program that will help ensure the protection of our customers and communities while safeguarding our electrical infrastructure.

As a result of increased wildfire danger, the Washington Legislature passed <u>House Bill 1032</u>. 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, damage, and losses resulting from those fires.

Wildfire mitigation has always been a goal for Douglas County PUD. The District's existing policies, programs, and procedures directly or indirectly manage to reduce this risk. In recent years, the District has implemented wildfire mitigation measures to reduce the ever-evolving risk of wildfires in areas of our service territory that are more prone to wildfires. These measures include the installation of new emerging technologies, moving overhead lines to underground, vegetation management, asset inspection, and best management practices to mitigate the potential for utility-caused ignitions and more effectively respond to high wildfire risk conditions.

By October 31, 2024, and every three years thereafter, the District is committed to reviewing and revising this Wildfire Mitigation Plan.

2.0 Wildfire Mitigation Plan Overview

2.1 Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes Douglas County PUD's strategies and procedures to mitigate the threat of electrical equipment-ignited wildfires, including various programs, policies, and procedures. This plan addresses the areas of Douglas County most prone to wildfire risk due to weather, topography, and vegetation in our service territory. This includes the maintenance of District facilities, equipment, and vegetation management. This plan



complies with the requirements of HB1032/RCW 19.29A.170 for investor and customer-owned electric utilities (IOU/COU) to prepare a wildfire mitigation plan by October 31, 2024, and every three years thereafter.

2.2 Objective and Plan Access

The objective of this plan is to increase reliability and safety while minimizing the probability that District assets may be the origin or contributing factor in the ignition of a wildfire. This plan was developed to be consistent with current industry best management practices and National Electric Safety Code (NESC) regulations and guidelines.

This plan seeks to clearly identify the District's strategy in implementing new technologies, vegetation management strategies, asset inspection, best management practices, and customer notification, as well as working with

local first responders and County and State agencies in order to increase reliability and safety of the District's electrical infrastructure.

To help develop the Plan moving forward, the District will evaluate emerging technologies that not only reduce the likelihood of a service interruption but will also minimize the risk of ignition from the fault causing the outage.

Douglas County PUD's Wildfire Mitigation plan is available upon request.

2.3 Best Practices Cross-Reference Table

Standard or Best Practice Name and Description	Document, page number, or citation
HB 1032/RCW 19.29A.170 – By October 31, 2024, and every three years thereafter, each Investor-owned and Consumer-owned Utility must review, if appropriate, revise, and adopt its wildfire mitigation plan.	Sec. 1, pp. 04-05
Design and Construction Standards	Sec. 7.2, pp. 16-17
Relay and Recloser Best Practices	Sec. 7.6, pp. 18-19

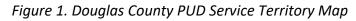
The following table lists District and State best practices.

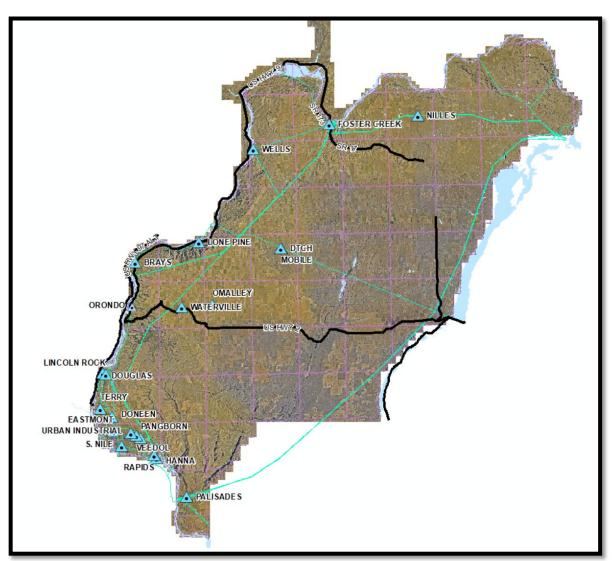
3.0 Utility Overview

3.1 Utility Description and Territory Make-Up

Headquartered in East Wenatchee with a satellite office located in Bridgeport and our hydroelectric facility located in Azwell, Douglas County PUD's service territory encompasses all of Douglas County, which includes 1,819.2 square miles of land (see Figure 1). The District operates 1,501 miles of fiber, 1,844 miles of distribution, and 229 miles of transmission lines serving 22,313 customer metered locations.







Our Service Territory Make-up is as follows:

- 3.7 % Urban
- 29.4 % Agriculture
- 0.064 % Barren/Other
- 0.0 % Conifer Forest
- 0.92 % Conifer Woodland
- 0.0 % Desert
- 0.0 % Hardwood Forest
- 0.081 % Hardwood Woodland
- 35.1 % Herbaceous
- 29 % Shrub
- 1.64 % Water

Service Territory Wildland Urban Interface:

Douglas PUD Wildfire Mitigation Plan

Adopted 10-15-2024

- 1.5 % Wildland Urban Interface
- 5.4 % Wildland Urban Intermix

Account Demographics:

- 91.1 % Residential
- 2.28 % Agricultural
- 6.64 % Commercial/Industrial

4.0 Objectives of the Wildfire Mitigation Plan

4.1 Minimizing likelihood of ignition

In order to reduce the risk of utility-ignited fires, the District has taken steps to install animal guards in high activity locations, has implemented a plan to replace expulsion fuses with current-limiting fuses, annually paints poles in high-risk areas with fire retardant paint, started a program to identify and underground existing overhead lines in high-risk areas, annually installs avian perch poles in areas along the river where active nesting is occurring, has implemented an internal policy to require new line extensions in high-risk areas to be installed underground, and has an ongoing vegetation management operation.

4.2 Resiliency of the electric grid

In 2020, the Cold Springs Canyon Fire jumped the Columbia River into Douglas County, becoming the Pearl Hill Fire. Together, these two fires destroyed over 400,000 acres in Okanogan and Douglas Counties. During this fire, the District lost an estimated 655 power poles with damage to an additional 60 poles.

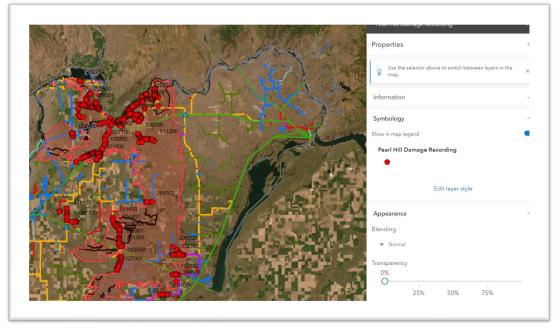


Figure 2. Pearl Hill Fire Damage Area

Several lessons were learned during this fire, which have led to the development of new

Douglas PUD Wildfire Mitigation Plan Adopted 10-15-2024 construction policies. One of the most challenging aspects of rebuilding the system was the location of the existing poles. In order to make electric services financially available to rural parts of the county, several District lines were built cross country to make the shortest and straightest path to rural homes. Since the fire, where possible, lines were moved adjacent to existing roads in order to aid future maintenance and make these lines more accessible in the event of a future fire. Additionally, more poles would have been lost if it had not been the District's policy to put fire retardant paint on poles that were not easily accessible. Since this fire, the District is looking at possible routes to move existing lines in non-accessible locations and has adopted an annual program of painting poles with fire retardant paint.

Even with the severe amount of damage from the Pearl Hill Fire, the District, with help from neighboring utilities, was able to get all customers back in power within 10 days.

5.0 Roles and Responsibilities

5.1 Utility Roles and Responsibilities

Douglas County PUD has a dispatch center that is staffed 24/7 which allows for quick response and coordination with District staff and first responders during an active wildfire incident. This early response allows for a measured and proactive response to a particular emergency.

During a wildfire incident, the following steps are taken by District System Operators:

- Notify emergency services of potential risks to life, property, and equipment if reasonable and appropriate.
- Notify System Operations Supervisor to assist in getting additional help if a major outage of the electrical system is expected.
- Notify supervisors of other departments potentially affected by the incident or threat.
- Consider options to reduce risks to life, property, and equipment (switching, availability of equipment, communications, etc.).

5.2 Coordination with Local Utility and Infrastructure Providers

During an emergency, multiple District departments will collaborate to determine the appropriate steps needed to mitigate the fire, prepare a restoration plan, coordinate with local first responders and communicate with the public. This collaboration of departments will include the District General Manager, Distribution Operations and Engineering, System Operations, Information Systems, Communications and Safety departments.

5.3 Coordination with Local Tribal Entities

When necessary, the District will collaborate with the Colville and Yakama Tribes as well as the State of Washington Department of Historic and Archaeological Preservation to determine the appropriate steps needed to mitigate the fire and protect archaeologically sensitive areas.

5.4 Emergency Management / Incident Response Organization

In Washington State, the Department of Natural Resources (DNR) is the lead state agency responsible for coordinating wildfire response efforts. DNR is responsible for more than 13 million acres of private and state-owned forest lands and provides the fire protection and

Douglas PUD Wildfire Mitigation Plan

Adopted 10-15-2024

safety equipment to help local fire districts respond to wildfires.

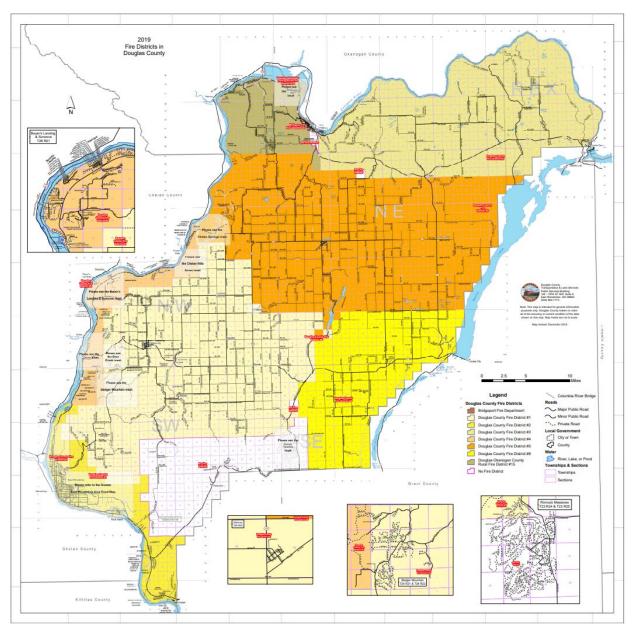
However, all coordination with local first responders will be handled by District System Operators and the first point of contact will be with RiverCom. RiverCom is a dedicated multi-

jurisdictional Public Safety Answering Point (PSAP) located in Wenatchee, Washington, providing public safety communications in Chelan and Douglas Counties. RiverCom answers and processes emergency 9-1-1 calls and provides dispatching services for twenty-two law enforcement, fire, and emergency medical agencies within the twocounty system. Their Telecommunicators



provide the first line of contact with the public when calling for emergency and nonemergency public safety services.

In Douglas County, in addition to the Wenatchee Valley Fire Department, there are a total of eight fire districts responsible for different areas of the county that the District will coordinate with and notify. Figure 3 below shows the different fire district areas of responsibility.





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

Severe weather events pose a variety of risks to utility infrastructure and under certain circumstances, these conditions can cause damage to a multitude of utility and customer assets. Since conditions of low humidity and high winds can lead to a significant wildfire, District personnel actively monitor red flag warnings issued by the National Weather Service, real-time

observations from weather experts, as well as ground crews to assess these risks to utility and customer infrastructure.

A red flag warning is defined as warm temperatures, very low humidities, and strong winds which can combine to produce an increased risk of fire danger. However, a red flag warning does not necessarily pose a risk to District assets, but does help District staff analyze the potential threats in order to make an informed response plan.

6.2 Enterprise-Wide Safety Risks

Severe weather events, including high winds, can cause the following issues to District infrastructure:

- Tree branches and other debris to fall on existing overhead distribution and transmission lines causing protective devices to open circuits.
- Wire to wire contact on overhead lines.
- Downed power poles and lines.

These are some of the factors that are taken into account by the District in order to make an informed decision on how to respond to these conditions.

7.0 Wildfire Preventative Strategies

7.1 Weather Monitoring

7.1.1 Current Strategy Overview

Since the Pearl Hill Fire, the District has developed several GIS portals actively connected to up-tothe-minute wildfire incidents, weather watch warnings, thermal hotspot notifications, and wildfire potential areas of concern. These maps allow District staff to monitor potential weather conditions as well as active fires for potential risk so that actions can be taken in order to minimize damage to District assets.

Figure 4. Wildfire Emergency Response Map

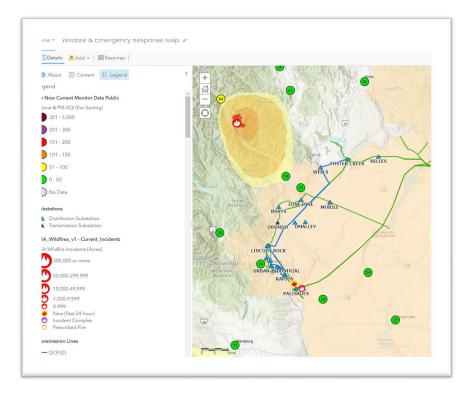
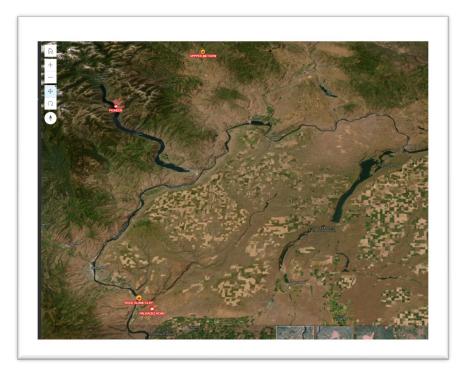
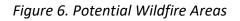
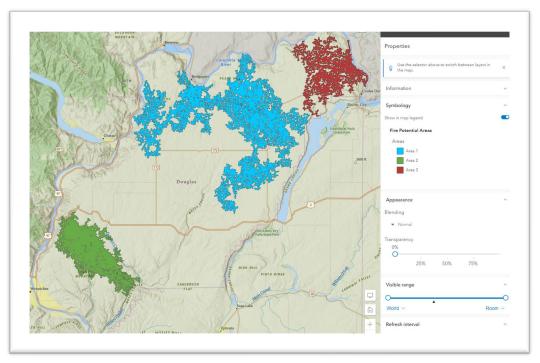


Figure 5. Active Fire Information Map

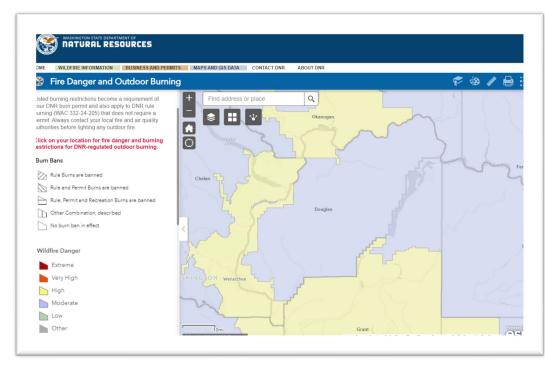






Additionally, the Department of Natural Resources has several online maps that can be utilized to help determine wildfire risk in and around our service territory.

Figure 7. Current Wildfire Risk Map



The District actively uses these maps during low humidity and high wind events to monitor current conditions in order to evaluate and implement protective measures if necessary.

Douglas PUD Wildfire Mitigation Plan Adopted 10-15-2024

7.1.2 Planned Updates

The mapping resources implemented by the District will be reviewed and refined on a yearly basis in order to provide the most accurate and up-to-date information available. Additionally, as new resources are developed internally and by the Department of Natural Resources, those resources will be evaluated and added if they prove to be valuable. Finally, the District will research the effectiveness of installing District weather monitoring stations in different parts of the county in order to receive more accurate and up-to-date information.

7.2 Design and Construction Standards

7.2.1 Current Strategy Overview

The Wildfire Mitigation Plan is the proactive plan set in place by the District.

Design and Construction: This strategy involves the upgrade and replacement of District equipment as well as policies put in place to mitigate the risk of wildfire:

- Animal guards and covered jumpers in areas where squirrels, birds, and other wildlife are known to cause issues.
- One of the largest igniters of utility-caused fires are the fuses utility companies use to
 protect distribution circuits. These fuses are intended to protect the circuit and open up
 in order to protect other equipment on the line from serious damage. However, under
 some circumstances, fuses can expel or drop molten metal and ignite the nearby area.
 The District is actively installing new current-limiting non-expulsion fuses in high-risk
 areas and will continue to replace older fusing throughout our service territory. In 2024,
 the District has replaced approximately 150 fuses with current-limiting fuses. These
 fuses cover 33 miles of distribution lines in one of the most fire prone areas of the
 District's service territory.
- In 2023, the District implemented a plan in high-risk areas of the county to only allow new underground line extensions in order to mitigate wildfire risk. The District has an active program of determining existing overhead areas susceptible to grassland fires. On a yearly basis, the District sends crews out to paint these poles from ground level to a height of 8 feet with fire retardant paint. Currently the District has painted 1,650 poles in fire prone areas, which represents a little over 7.3% of District-owned poles in our service territory.
- During the nesting season, the District actively removes nesting material before nest completion and looks for nearby areas for placement of raptor perch poles near distribution and transmission lines.
- All District work implements avian and wildlife protection standards.
- The District has a plan in place to actively test the structural stability of each and every power pole in the county once every 10 years for risk of failure. This strategy allows the District to find and replace poles before a catastrophic failure occurs.





- Daily tailboard and monthly safety training for all operations personnel.
- Fire suppression equipment on worksites at all times.

In addition to these measures, the District has recently implemented a practice of looking for overhead lines that, due to age and the remoteness of the lines, will be converted to underground. By the end of 2024, the District will have undergrounded 1.5 miles of existing overhead lines in a remote area of Douglas County.

7.2.2 Planned Updates

During times of elevated risk, District crews will limit activities unless critical work must be performed. However, prior to any work taking place, extra precautions will be taken, such as vegetation management and providing on-site fire suppression equipment, as well as a tailgate meeting to discuss the risks and procedures to be taken in the event of a fire. Depending on the work performed and the risk of fire, personnel may be left on-site for up to three hours to ensure no ignition occurs.

Plans are underway to continue identifying overhead lines in high-risk areas and undergrounding those lines throughout our service territory.

7.3 Fuel & Vegetation Management

7.3.1 Current Strategy Overview

Inspection and Maintenance: This strategy involves proactive vegetation monitoring and management as well as implemented operational management practices.

• The District has implemented a yearly inspection of transmission and distribution lines and contracts with a tree trimming service to maintain vegetation a clear distance from District overhead lines. Currently, the District has an ongoing contract with tree trimming services and spends an average of \$ 600,000.00 per year on vegetation management in order to reduce the risk of wildfires.

- The District currently has a policy in place to patrol every transmission structure on a yearly basis to look for not only vegetation management issues, but also to look for any maintenance issues that may affect the reliability of the system.
- The District will from time to time perform LiDAR studies of the transmission and distribution systems in order to monitor potential vegetation and conductor ground clearance risks to the system.

7.3.2 Planned Updates

The District is currently evaluating the purchase of a drone LiDAR system to enable District staff to more closely monitor vegetation near District transmission and distribution lines. If purchased, the drone will allow District staff to quickly identify areas of concern.

7.4 Asset Inspections and Response

7.4.1 Current Strategy Overview

Asset Inspection and Response: This strategy involves proactive vegetation monitoring and management as well as implemented operational management practices.

- By the end of 2024, the District will fly 49 miles of our existing transmission lines. This LiDAR survey will provide critical information on vegetation management and conductor line-to-ground clearances in order to delineate areas that may have an increased risk of starting a fire.
- A policy of monthly inspections of District substations has been implemented and is in place to identify equipment that is no longer operating within the required specifications.
- The District has implemented a yearly thermal inspection of District substations and areas of concern to specifically look for potential weak spots in the system that may be damaged by overheating.
- After every line outage, District personnel patrol and inspect the line before placing it back in service.

Response and Recovery: This strategy involves:

- Coordination with local, county, and state first responders.
- Customer awareness Public Service Announcements.

7.4.2 Planned Updates

The District is currently evaluating the purchase of a drone LiDAR system to enable District staff to allow District staff to monitor conductor to ground clearances on all transmission and distribution lines.

7.5 Workforce training

7.5.1 Current Strategy Overview

Douglas PUD Wildfire Mitigation Plan Adopted 10-15-2024 The District actively participates in training staff and contractors regarding best practices in the following areas:

- Content of the Wildfire Mitigation Plan.
- Contractor safety and Vegetation Management orientation.
- Safe working procedures for persons working in locations with elevated fire risk conditions.
- The latest system protection technology for engineering staff.
- Proper use and storage of fire extinguishers.
- Reporting all ignition events to management for follow-up.

Additionally, the District actively participates in tailboard meetings every morning to discuss potential hazards when performing work in locations more susceptible to creating a wildfire incident.

7.5.2 Planned Updates

The District will continue to strive to strengthen and broaden internal training programs for staff and contractors related to wildfire mitigation practices and procedures as well as best practices when working wildfire incidents, including pre-emptive planning and training that involves mock scenarios in order to evaluate staff response.

7.6 Relay and Recloser Practices

7.6.1 Current Strategy Overview

Douglas PUD uses a variety of microprocessor-based relays and reclosers to protect its transmission and distribution systems. In the event the primary protection system fails, system protection is provided by a secondary microprocessor-based relay, coordinated overlapping zones of protection, and/or fuses. Components of these protection systems are tested and maintained as part of Douglas PUD's Protection System Maintenance Program.

Operations of protection systems are reviewed to ensure the systems operate as intended during faults. Corrective Action Plans are created and implemented to address any deficiencies identified during these reviews.

Redundant communications-assisted protection schemes, including line-current differential, permissive overreaching transfer-trip, and direct transfer-trip, are utilized on all of Douglas PUD's transmission lines. These protection schemes increase the sensitivity and operating speed of transmission line protective relays, dramatically reducing the amount of energy released during faults on transmission lines. This helps to protect equipment and reduce the risk of igniting any fuel near the faulted line.

Transmission protection systems perform automatic reclosing of transmission lines only once before manual intervention is required to re-energize the line. During this reclosing cycle,

Switch Onto Fault (SOTF) logic is utilized to more quickly de-energize the line when a fault is still present on the line. System Operators remotely disable reclosing on transmission lines when personnel need to work near an energized line or when there is a high risk of fire in the area.

Distribution protection systems perform reclosing up to three times before manual intervention is required to re-energize the faulted circuit. System Operators remotely enable hot-line hold logic for distribution lines when personnel need to work near an energized line or when there is a high risk of fire in the area. This logic disables reclosing and enables faster inverse time overcurrent curves that will detect and clear faults faster.

7.6.2 Planned Updates

Douglas PUD's engineering staff regularly attend continuing education for the latest protection system technology. Several technologies are being considered to improve our protection systems:

- High-Impedance Fault Detection
 There are some recent developments in high-impedance fault detection elements that
 are being considered for our distribution feeder relays and reclosers. These
 improvements could help with the detection of faults that do not produce currents high
 enough for traditional protection elements to detect but could still pose a fire risk.
- Time-Domain Transmission Line Protection Newer transmission protection calculations using higher sampling rates allow for faster detection and location of faults. Douglas PUD is considering updating its most critical transmission line protection to include this technology.
- Traveling Wave Fault Location

Traveling wave fault location is being considered for some of our most critical transmission lines. This technology helps remove most of the error present in impedance fault location currently used in Douglas PUD's transmission protection systems. Traveling wave technology can also detect low energy events to help identify maintenance issues like failing or dirty insulators before a high energy fault occurs, further reducing the risk of sparking a fire.

• Falling Conductor Protection

When conductors break, traditional protection systems do not de-energize the line until after the conductor contacts the ground. Newer schemes are available that can detect a conductor breaking and can take appropriate action to clear the line before the line contacts the ground. This technology would reduce the risk of sparking a fire when a conductor breaks.

Additional Reclosers

Strategic placement of reclosers in the distribution system could allow for quicker detection of high impedance faults and enable isolation of areas that are on fire or have a high potential to catch on fire.

7.7 De-energization / Public Safety Power Shutoff

7.7.1 Current Strategy Overview

A Public Safety Power Shutoff (PSPS) strategy would preemptively de-energize transmission and or distribution lines in the event of high winds combined with low humidity. Douglas County PUD does not operate under a PSPS policy at this time. However, during any high wind, low humidity event or existing wildfire activity, the District analyzes the situation and takes into account the impacts on the ability of customers and first responders to safely combat the wildfire incident when deciding on a course of action.

Douglas County PUD considers the external risks and consequences of de-energizing lines while stiving to meet our obligation to provide electrical service to our customers. Risks of failing to meeting this obligation include:

- Potential loss of water supply to fight wildfires due to loss of production wells and pumping facilities.
- Negative impacts to emergency response and public safety due to disruptions to communication services during periods of extended power outages.
- Loss of key community infrastructure and operational efficiency that occurs during power outages.
- Medical emergencies for members of the community requiring powered medical equipment.
- Lack of air conditioning on vulnerable populations.
- Negative impacts to medical and first responder facilities and personnel.

7.7.2 Planned Updates

Based on the considerations above, the District reserves the option on a case-by-case basis of implementing manual de-energization during high wind, low humidity events or as other conditions might dictate. The District will continue to consider de-energizing in response to known public safety incidents and any de-energization will be performed in coordination with first responders and other local agencies. However, the final determination will be made by the District.

8.0 Community Outreach and Public Awareness

8.1 Current Community Outreach and Public Awareness Program

Public outreach to the community on the importance of wildfire mitigation helps reduce wildfire risk and provides awareness of District practices and policies that may affect District customers. Customer involvement and education can play a significant role in proactively encouraging safeguarding of homes and businesses from wildfire and can provide information on ways to reduce or mitigate ignition sources. To help create awareness, the District provides information regarding prevention and mitigation through our website as well as other social media outlets.

During planned outages, the District provides notification through social media, automated

Douglas PUD Wildfire Mitigation Plan Adopted 10-15-2024 phone calls and emails, and door-to-door site visits with notices in order to inform and allow customers and businesses to plan for extended outages. All outages are given as much advance notice as possible depending on the scope and safety concerns related to the outage.

8.2 Planned Updates

Moving forward, the District will continue to evaluate and modify our public outreach and notification methods.

9.0 Restoration of Service

After any event in which the transmission or distribution system has been de-energized, prior to restoring service, the District will drive out and carefully inspect District facilities to look for any damage or potential circumstances that may prevent re-energizing the system safely. Once it is determined the system can be safely re-energized, District crews will remain on-site for a one-hour period in order to patrol the lines to ensure equipment has not been damaged or is in need of maintenance.

For outages involving transmission lines, switchyards, and/or distribution substations, the District follows its Blackstart and Tie Line Restoration Procedure.

10.0 Evaluating the Plan

In the event of a wildfire, an incident report plan will be prepared by District staff to evaluate the effectiveness of the Wildfire Mitigation Plan. Based on the incident report and any lessons learned, the District will update its Wildfire Mitigation Plan with new tactics and procedures, should they prove to be necessary and effective.

10.1 Metrics and Assumptions for Measuring Plan Performance

In order to measure the effectiveness of the Wildfire Mitigation Plan, after each wildfire incident, the District will prepare an incident report to measure the following aspects of the Plan:

- Response Timeline. This will involve measuring the effectiveness of the District's overall response by evaluating the response timeline in every facet of the incident, from determining high-risk conditions such as low humidity and high winds in order to activate and put the plan in process, as well as how quickly Department Heads, the General Manager, and Customer response teams were notified. Additionally, communication with first responders and tribal authorities will be evaluated to determine if any changes should be made to the Plan. Finally, deployment of District crews and resources will be evaluated to determine their effectiveness.
- Mitigation Measures. Mitigation Measures will be evaluated to determine the overall effectiveness of these measures both prior to and during the incident.
- Crew Response Time. Crew and District resource response time and the time committed to re-energizing the system will be evaluated to determine where improvement can be made .

• Existing Wildfire Mitigation Measures. This will entail breaking down the measures that have been taken prior to the wildfire such as the retardant pole painting program, vegetation management program, pole testing program, avian measures programs, and the program to underground existing lines to see how these affected the District's downtime and restoration periods.

10.2 Identifying and Addressing Areas of Continued Improvement in the Plan

As stated previously, the District is committed to updating and evolving our Wildfire Mitigation Plan after every wildfire incident as well as every three years thereafter to take advantage of emerging technologies and lessons learned. Every aspect of the plan will be evaluated to determine the effectiveness and possible improvements that can be made to ensure the District's goal of providing the best customer service at the lowest possible cost.



10.3 Monitoring the Performance of Inspections

Douglas County PUD will continue to develop performance metrics to monitor our efforts over time and through lessons learned. These metrics will provide valuable data-driven evaluations of performance related to existing design practices and procedures currently in place to mitigate wildfires, as well as determination of the effectiveness of staff and contractors' efforts to not only prevent wildfires, but also measure the effectiveness of responses and

actions taken during an active wildfire incident. Moving forward, this information will be utilized to identify areas of improvement and will be used to further refine this Wildfire Mitigation Plan.

Appendix A.

External Risk Metrics:

- Red Flag Warning days
- High Wind Warning days
- Customers in high-risk areas (as identified by utility)
- Distribution Inspections (Inspection Type if Applicable)
 - Circuit Miles Inspected
 - Count of Inspection Findings
- Transmission Inspections (Inspection Type if Applicable)
 - Circuit Miles Inspected
 - Count Inspection Findings
- Vegetation Inspections (Inspection Type if Applicable)
 - Circuit Miles Inspected
 - Count Inspection

Outage Metrics:

- Distribution:
 - Utility Identified Outage Case
- Transmission:
 - Utility Identified Outage Case

Appendix B.

See Douglas PUD Power Operations Contingency Plan Section G – Blackstart and Tie Line Restoration