
Technical Review Report

Truckee Donner Public Utility District 2026-2028 Wildfire Mitigation Plan

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Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Introduction	5
1.1 Scope and Intent	5
1.2 Assessment Methods.....	5
2 TDPUD's Service Territory.....	6
2.1 TDPUD's Service Territory Fire Environment Summary.....	6
2.2 State Designated Areas of Increased Wildfire Hazard	7
3 TDPUD's Understanding of Wildfire Risk in its Service Territory	7
3.1 Wildfire Risk Drivers	8
3.2 TDPUD Wildfire Risk Mitigation Strategies.....	8
4 Wildfire Mitigation Strategy Execution	18
4.1 WMP Tracked Event Metrics.....	18
4.2 Vegetation Inspection and Management.....	18
4.3 Asset Inspection and Corrective Actions.....	18
4.4 System Hardening/Upgrades	18
4.5 Recloser Policy.....	19
4.6 Preemptive Power Shutoff	19
5 Technical Competency of the WMP and Recommendations	20
5.1 Thresholds for Operational Practices	20
5.2 Fire Risk Analysis.....	20
5.3 Ignition Risk Tracking: Metric and Outage Data Tracking.....	20
5.4 Inconsistencies.....	21
6 Conclusion	21
7 References	22

TABLE(S)

Table 1 TDPUD Wildfire Risk Driver to Risk Mitigation Strategy Comparison	8
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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
TDPUD	Truckee Donner Public Utility District
WUI	Wildland Urban Interface
WSAB	Wildfire Safety Advisory Board
OEIS	Office of Energy Infrastructure Safety
CPUC	California Public Utility Code
WMP	Wildfire Mitigation Plan
NV Energy	Nevada Energy

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1 Introduction

Publicly owned electric utilities and electric cooperatives in California are required to construct, maintain, and operate their electrical equipment in a manner that minimizes the wildfire risk posed by this equipment. This requirement includes preparing a Wildfire Mitigation Plan (WMP) that documents the utility's understanding of wildfire risk and risk drivers in its service territory, as well as the wildfire risk-reduction strategies it uses to mitigate these risks. Publicly owned electric utilities and electric cooperatives are further required to have their WMP evaluated by a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure.

Dudek's fire prevention team worked with the Truckee Donner Public Utility District (TDPUD) to review their current WMP, evaluate their ongoing and new wildfire mitigation strategies, and prepare this Technical Review for its 2026-2028 WMP.

1.1 Scope and Intent

Dudek worked with TDPUD to prepare this Technical Review to help the utility evaluate its understanding of the fire risk drivers and the wildfire mitigation strategies it implements to address these wildfire risk drivers. This Technical Review is specific to TDPUD's service territory and its 2026-2028 WMP. The contents of this Technical Review are based on the information in the WMP, data provided by TDPUD relevant to wildfire risk management, and data from publicly available sources regarding environmental conditions present in the Truckee area. Dudek's review of the TDPUD WMP assessed the following elements:

- i. Technical completeness
- ii. Wildfire risk drivers and risk identification
- iii. Wildfire mitigation strategies

1.2 Assessment Methods

Dudek fire prevention planners prepared this Technical Review using TDPUD's draft 2026-2028 Wildfire Mitigation Plan, as well as the following documents and datasets provided by TDPUD:

- Outage data tables
- Fire Incident data
- Pole data tables

These datasets, in combination with the TDPUD 2026-2028 WMP, were used to evaluate TDPUD's service territory, occurrence of utility-ignited wildfires, and potential ignition events, and wildfire risk drivers described in the WMP. Dudek also utilized publicly available datasets, including:

- Weather and climate data (FEMS, WFTIIC, IEMS)

- Fuels and Fire Danger data (FEMS, WFTIIC)
- Local Fire History (CAL FIRE)
- Liberty Utilities Local Fire History (CPUC)

These datasets were used to assess the fire environment in TDPUD's service territory and to independently verify the fire risk factors described in the WMP.

2 TDPUD's Service Territory

2.1 TDPUD's Service Territory Fire Environment Summary

TDPUD's service territory covers approximately 45 square miles and comprises the Truckee town limits. Truckee's urban and developed areas are separated by natural features, including mountains, lakes, and rivers, resulting in developed areas that are intermixed with open space. As a result, Truckee lacks an urban core that would be considered lower wildfire risk due to distance from vegetation and terrain capable of sustaining wildfire. Wildland-urban interface (WUI) areas are prevalent throughout the service territory, and no developed area in Truckee is more than 0.5 miles from an area with sufficient vegetation to sustain wildfire (OSFM 2025). This elevated fire hazard within TDPUD's service territory results from a combination of mountainous terrain and a generally continuous layer of forest and shrubland vegetation. The TDPUD service territory is situated within the high-elevation Truckee River basin of the northern Sierra Nevada, where the landscape is predominantly mountainous. Elevations generally range from approximately 5,800 feet to more than 8,000 feet, creating steep slopes that influence terrain and vegetation patterns. The terrain within TDPUD's service territory includes relatively flat valley bottoms along the Truckee River corridor, rolling upland benches, and increasingly steep slopes as the land rises toward surrounding ridges and peaks, including Donner Summit and Alder Hill. Development is concentrated in the gentler valley areas. Vegetation cover within the service territory varies based on elevation, aspect, and slope position. Mixed conifer forest is the dominant vegetation cover within TDPUD's service territory. Forests predominantly composed of Jeffrey pine are common in drier, rockier soils and on south-facing slopes, while denser mixed conifer stands are often found on cooler, north-facing aspects. In areas with steeper slopes, higher exposure, or drier conditions, montane chaparral and shrub communities, composed of species such as manzanita and ceanothus, become more prevalent. Meadows and grasslands are present in valley bottoms and low-lying areas with poor drainage, and scattered aspen stands occur in localized moist microsites. Riparian vegetation is present along the Truckee River and its tributaries and represents the least fire-prone vegetation cover in the service territory.

TDPUD's service territory and the surrounding area experience cold winters with regular snowfall and warm to hot, dry summers with occasional thunderstorms (WRCC, 2026). TDPUD's service territory has a defined fire season that, during an average climate year, begins in May after winter snowmelt has receded, vegetation has dried, and temperatures have increased. Based on National Weather Service Red Flag Warning records, weather conditions can support rapid wildfire growth and extreme fire behavior from June through September (IEMS, n.d.). The beginning and end of fire season in TDPUD's service territory depend on the timing of fall and winter precipitation and the amount of snow accumulation. Fire season can begin earlier and end later during abnormally dry years or when fall and winter precipitation is delayed. Occasional summer thunderstorms in the region may produce

relatively little precipitation but abundant lightning. These dry thunderstorms can create numerous wildfire ignitions during the summer and are a contributing factor in some recorded Red Flag Warning events.

According to historical wildfire records from CAL FIRE, 40 wildfires have occurred within TDPUD's service territory since 1910. Truckee Fire Protection District's 2024 Community Wildfire Preparedness Plan (CWPP) states that 137 fires have been recorded in roughly the same time period (TFPD 2024). The CWPP contains significantly more recorded fires than CAL FIRE's records because it includes fire records from local agencies as well as CAL FIRE's records. Fire cause data in the fire records from CAL FIRE and the CWPP is limited, with both data sets listing unknown or miscellaneous fire cause for the recorded wildfires in TDPUD's service territory. However, there is no wildfire in these records that is attributed to TDPUD equipment or an electric utility. This data is at odds with TDPUD's own outage records, which indicate that the utility's equipment is attributed as the cause of 3 fires from 2021-2025.

2.2 State Designated Areas of Increased Wildfire Hazard

CAL FIRE designates areas in the state where there is an increased wildfire hazard based on previous fire occurrence and anticipated fire behavior. The areas with increased fire hazard are designated as fire hazard severity zones (FHSZ). According to the CAL FIRE Fire Hazard Severity Zone Maps, the majority of TDPUD's service territory is designated as a Very High Fire Hazard Severity Zone; the remainder is designated as a High Fire Hazard Severity Zone with a small area of Moderate (in Donner Lake and part of Martis Valley). (CAL FIRE 2025).

The California Public Utilities Commission (CPUC) designates areas with an increased risk of utility-associated wildfires as High Fire Threat Districts. Similar to the FHSZ maps, the majority of TDPUD's service is in a CPUC-designated Tier 2 or Tier 3 High Fire Threat District (HFTD). The Tier 3 HFTD in the service territory area is north of Interstate 80 and covers an area that includes Alder Hill and the portion of Donner Ridge in the service territory. The surrounding area north and south of Interstate 80 is primarily a Tier 2 HFTD. Small, undesignated areas exist in Truckee's downtown area along Interstate 80 and the southwest portion of Martis Valley (CPUC, n.d).

3 TDPUD's Understanding of Wildfire Risk in its Service Territory

TDPUD's 2026-2028 WMP divides wildfire risk and risk drivers into the two categories described in CPUC 8387(b)(2)(j); wildfire risk drivers associated with the design, construction, operation, and maintenance of its equipment and wildfire risk drivers associated with topographical and climatic conditions.

To evaluate TDPUD's understanding of wildfire risk in its service territory, Dudek reviewed utility-caused fire and outage data from the utility from 2021-2025. Utility-caused fire data serves as an indicator of the potential or likelihood for an ignition event to transition into a wildfire, while outage data provides an indicator of the frequency of events with ignition potential. Because TDPUD's service territory experiences strong winter storms that can cause outages, Dudek filtered outage data to a time period defined by the TFPD CWPP and NWS records as fire season (May through October). Outages attributed to maintenance or other planned outages were also filtered out, as these were not considered likely to create an ignition event.

3.1 Wildfire Risk Drivers

TDPUD's WMP identifies the following wildfire risk drivers associated with the design, construction, operation, and maintenance of its equipment:

- Explosive fuses (non-exempt equipment),
- Combustible wooden poles and cross arms in the HFTD,
- Limited staff and equipment,
- The majority of its overhead wires are in a HFTD, and
- Poor road access to portions of its overhead lines.

Wildfire risk drivers associated with topographical and climatological risk factors include:

- Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.
- Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons aligned with the prevailing winds (Interstate 80 corridor).
- Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation.
- Prevailing winds align with the Interstate 80 corridor, resulting in strong winds through the center of the TDPUD service territory.
- An overall warming trend in the climate in TDPUD's service territory results in an increase in the reduction of winter snowpack, an increase in the length of the fire season, and an increase in the length of the hottest and driest period of the year.

The risk drivers in TDPUD's WMP describe a utility where the location of the utility's service territory in a high fire hazard area and the layout of its equipment and lines in these areas are the primary drivers of wildfire risk. TDPUD's outage and fire data generally support this conclusion, and the outage data does not indicate any potential ignition source that is not covered in the WMP's fire risk drivers. Outage causes associated with potential ignition events, such as equipment failure, vegetation contact with wires, and animal contact with wires, make up the majority of non-planned outages during fire season, with similar proportions (approximately 20% each) from 2021-2025. Outages attributed to wires down, which have a high risk of ignition, are uncommon, accounting for less than 1% of recorded outages. TDPUD's outage data records 40 outages attributed to a TDPUD-caused fire from 2021-2025. The number of fires attributed to TDPUD's equipment is similar to that of publicly owned utilities with a large proportion of their service territory in a high fire hazard area, such as Redding Electric Utility. It is indicative of a utility where the majority of aboveground equipment and lines are in an area where terrain and vegetation conditions can support fire growth.

3.2 TDPUD Wildfire Risk Mitigation Strategies

TDPUD recognizes that the placement of overhead equipment and lines in areas with elevated wildfire risk is a key factor contributing to wildfire risk in its service territory. Its mitigation strategies address frequent unplanned outage causes, including equipment failure and vegetation contact with wires, as well as known operational and service territory limitations, including limited staffing and remote equipment and lines with poor access. Table 1 lists the

wildfire mitigation strategies employed by TDPUD and the risk drivers each strategy addresses, categorized by mitigation strategy focus.

Table 1 TDPUD Wildfire Risk Driver to Risk Mitigation Strategy Comparison

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Situational Awareness			
Weather Monitoring	▪ Prevailing winds align with the Interstate 80 corridor. ▪ Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons aligned with the prevailing winds. ▪ An overall warming trend in the climate in TDPUD's service territory. ▪ Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation.	7% of recorded outages are weather-related. Three recorded wildfires attributed to wildfire equipment. 14 Red Flag Warnings issued by NWS 2021-2025.	Deployed one weather station in 2024 and currently collects data from Gridware weather stations.
Fire Danger Monitoring and forecasting	▪ Combustible wooden poles and cross arms in the HFTD, ▪ The majority of its overhead wires are in a HFTD, and ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs. ▪ Overhead circuits traverse areas of steep slopes.	Three recorded wildfires attributed to wildfire equipment. 14 Red Flag Warnings	Consulting agreement with Cloudfire to provide weather and fire risk intelligence.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
	Several circuits are on slopes or in canyons aligned with the prevailing winds (Interstate 80 corridor). ▪ Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation. ▪ Prevailing winds align with the Interstate 80 corridor, resulting in strong winds through the center of the TDPUD service territory. ▪ An overall warming trend in the climate in TDPUD's service territory		
Outage Management System (OMS)	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD, and ▪ Poor road access to portions of its overhead lines. ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	N/A	Tracks outages and system hazards. Provides recommendations for resolving outages.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Advanced Metering Infrastructure (AMI)	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD, and ▪ Poor road access to portions of its overhead lines. ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	N/A	Integrates with OMS, GIS, and SCADA systems. Allows remote monitoring of electricity use.
Supervisory Control and Data Acquisition	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD, and ▪ Poor road access to portions of its overhead lines. ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	N/A	

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Design and Construction Standards			
System Hardening Program	▪ Explosive fuses (non-exempt equipment), ▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	15% of recorded outages attributed to equipment failure.	Includes pole and crossarm replacement, implementation of FAST trip on applicable distribution circuits, and improved protective device coordination.
New Service Requirements	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD, and ▪ Poor road access to portions of its overhead lines. ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	N/A	New or reconstructed developments are required to get service via an underground system.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Covered Conductor Program	- Combustible wooden poles and cross arms in the HFTD, - The majority of its overhead wires are in a HFTD, - Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons aligned with the prevailing winds (Interstate 80 corridor). - Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation. - Prevailing winds align with the Interstate 80 corridor, resulting in strong winds through the center of the TDPUD service territory.	16% of recorded outages are due to vegetation contact with wires, and 13% of recorded outages are due to animal contact with wires.	New and replacement conductors are covered.
Vegetation Management			
Vegetation Management (Line Clearance)	- Combustible wooden poles and cross arms in the HFTD, - The majority of its overhead wires are in a HFTD, - Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation,	16% of recorded outages are due to vegetation contact with wires	The majority of tree cover is conifer with compact upper crowns. 5-year trimming cycle, except for hazard and dead trees.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
	and patches of woody shrubs.		
Vegetation Management (Pole Clearance and Fuel Reduction)	- The majority of its overhead wires are in a HFTD, - Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs. - Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons aligned with the prevailing winds (Interstate 80 corridor).	Three recorded utility-ignited wildfires from 2021-2025. Outage data does not provide information about fire spread.	TDPUD's VMP defines a 20-foot right-of-way on all sides of its poles. All dead vegetation in the ROW is removed.
Inspections			
System Inspections	- Expulsive fuses (non-exempt equipment), - Combustible wooden poles and cross arms in the HFTD, - The majority of its overhead wires are in a HFTD,	.	Comprehensive and detailed inspections are performed annually. Targeted patrols are performed during elevated operating conditions.
Vegetation Inspections	- Combustible wooden poles and cross arms in the HFTD, - The majority of its overhead wires are in a HFTD, - Overhead circuits traverse mountainous areas of mixed conifer forests with		Vegetation inspection around equipment is conducted annually and includes legacy tree attachments.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
	continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.		
Operational			
Workforce Training	- Combustible wooden poles and cross arms in the HFTD, - The majority of its overhead wires are in a HFTD, - Limited staff and equipment,		Field staff is trained in the content of the WMP, proper fire extinguisher use, and pre-job hazard briefings.
De-Energization	- Expulsive fuses (non-exempt equipment), - Combustible wooden poles and cross arms in the HFTD, - Limited staff and equipment, - The majority of its overhead wires are in a HFTD, and - Poor road access to portions of its overhead lines. - Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs. - Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons	Approx. 30% of outages during fire season are from the power supplier (NV Energy), including PSOM events.	Implemented a formal de-energization program in 2025.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
	aligned with the prevailing winds (Interstate 80 corridor). ▪ Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation. ▪ Prevailing winds align with the Interstate 80 corridor, resulting in strong winds through the center of the TDPUD service territory. ▪ An overall warming trend in the climate in TDPUD's service territory		
Reclosing Policy	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD, and ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.	No data is provided on the number of times this policy has been used.	Reclosers are disabled during elevated and extreme fire risk periods.

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Operating Conditions	▪ Combustible wooden poles and cross arms in the HFTD, ▪ Limited staff and equipment, ▪ The majority of its overhead wires are in a HFTD. ▪ Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.		Four operating conditions based on fire risk.

The wildfire mitigation strategies listed in TDPUD’s WMP are generally consistent with wildfire risk management practices implemented by other publicly owned utilities in California and the western United States (Coleman et al. 2025).

4 Wildfire Mitigation Strategy Execution

4.1 WMP Tracked Event Metrics

Sections 8A and 8B provide a record of TDPUD wildfire mitigation management commitments through 2028 and the metrics that the WMP tracks. Section 8A describes TDPUD's wildfire mitigation to existing programs, including the annual vegetation management and inspection programs. Section 8A also includes specific commitments to its system hardening program with the completion of approximately six miles of overhead system hardening each year through 2028 (approximately 27% of the overhead distribution lines). TDPUD uses five metrics to track the success of the WMP. Three are event/outcome metrics: fire ignitions, outages organized by cause, and red flag warnings. Two are performance metrics: vegetation management and reliability metrics (SAIDI and SAIFI).

Negative outcome metrics that the utility can manage, such as outages, show a downward trend in occurrence for the major causes of outages that have ignition potential (vegetation contact with wires, animal contact with wires, equipment failure, and wires down). The recorded fire ignitions in TDPUD's records from 2021-2025 all occurred in June and July of 2024, on separate feeders, and there is no trend in the occurrence of these fires. Red Flag Warnings, which are beyond the utility's ability to control, vary significantly, with 10 in 2021, none in 2022 and 2023, 4 in 2024, and none in 2025. to 2025..

Based on TDPUD's operating conditions policy described in the WMP, TDPUD would have changed to its Red Flag Warning operating conditions 10 times in 2021 and 4 times in 2025. The WMP only provides vegetation management program accomplishment data or reliability score data for the previous year, so no trend can be established. However, in the WMP, TDPUD states that vegetation inspections are completed annually for the entire service territory.

4.2 Vegetation Inspection and Management

TDPUD met all of its vegetation management activity targets in 2025, performing vegetation management around distribution and transmission assets. TDPUD completed tree trimming along 10.65 miles of distribution lines for line clearance and around the base of 57 distribution poles and two transmission poles identified for pole base clearance. Additionally, TDPUD removed more than 1200 trees.

4.3 Asset Inspection and Corrective Actions

TDPUD completed all of its overhead annual inspections and any associated corrective maintenance in 2025.

4.4 System Hardening/Upgrades

In 2025, TDPUD accomplished the following system hardening actions:

- Continued implementing its phased fault tamer fuse program for the Glenshire 14.4 kV system; the program is currently in an engineering phase with installation planned for 2027.

- Continued implementation of an Advanced Power Safety Setting, anticipated completion in 2026.
- Installed 300 ELF Fuses, dropout fuses that do not produce sparks or hot materials when tripped.
- Implemented the Northwoods Fire Mitigation Pilot Project, which included installation of ductile iron power poles, composite fiberglass and plastic crossarms, and covered conductor.
- Installed 15,250 linear feet of covered conductor.

4.5 Recloser Policy

TDPUD's WMP states that the utility disables its automatic reclosers based on current weather and fire danger conditions and guidance by its weather and fire risk intelligence consultant. The WMP does not record the number of times the utility implemented its recloser policy. Based on the records from NWS, in the Truckee area there were 4 Red Flag Warnings and 3 Fire Weather Watches issued for the forecast zone that includes Truckee, but these did not include TDPUD's service territory (Iowa Environmental Mesonet, 2025).

4.6 Preemptive Power Shutoff

In 2025, TDPUD developed and implemented a more robust de-energization program, called the Preemptive Power Shutoff (PPS), intended to mitigate extreme fire risk associated with its equipment when all other mitigation measures are deemed insufficient. The decision to use PPS is based on real-time weather data, field observations, risk assessments, and system conditions. TDPUD did not initiate a PPS event in 2025.

5 Technical Competency of the WMP and Recommendations

TDPUD's 2026-2028 WMP is a comprehensive wildfire mitigation planning document. The WMP describes the features of TDPUD's service territory that increase the risk of wildfires in general, and the actions the utility takes to mitigate this risk. TDPUD's WMP describes a robust wildfire mitigation strategy that includes traditional fire prevention and reliability practices such as vegetation management and asset inspections, as well as newer strategies such as enhanced situational awareness. The WMP also describes progress TDPUD is making in installing system hardening features (e.g., covered conductors) and implementing system hardening practices (e.g., APSS). Appendices to the WMP, which include its vegetation management plan and PPS protocols, are detailed and well written, and provide additional information on TDPUD's wildfire risk mitigation strategies. As noted in section 3 of this report, TDPUD wildfire mitigation strategies address the identified wildfire risk drivers in its service territory. We did not identify any wildfire risk drivers in the WMP that the wildfire mitigation strategies don't address or find wildfire risk drivers from outside information that the WMP overlooks.

In our review of the TDPUD 2026-2028 WMP, we identified several areas where the level of detail in the WMP could be increased for the benefit of the WMP user. Dudek identifies the following recommendations for improving the level of detail in the WMP.

The recommendations below identify areas where additional information would improve the clarity, transparency, and technical support for future WMP updates.

5.1 Thresholds for Operational Practices

5.2 Fire Risk Analysis

5.3 Ignition Risk Tracking: Metric and Outage Data Tracking

For the development and updating of a WMP, outage information is useful for understanding a utility's risk drivers associated with construction, design, maintenance, and operations, as well as the effectiveness of mitigation programs. Dudek examined TDPUD's outage data from 2021 through 2025 to support its review of the 2026-2028 WMP. The metrics section of TDPUD's 2026-2028 WMP presents only 2025 outage data. In reviewing outage data from 2021 through 2025, Dudek identified that outage events with heightened ignition potential during fire season, including vegetation contact with wires, equipment failure, and wires down, generally show a downward trend. The WMP does not connect this trend to TDPUD's wildfire mitigation programs, particularly recently implemented programs such as the System Hardening Program and LiDAR-supported vegetation management and asset inspection program. The data also show a downward trend in the number of outages with unknown or unreported causes, indicating an effort among TDPUD staff to identify the causes of outage events. Dudek recommends expanding the data presented in Metric 2 in future versions of the WMP to show five years of outage data and identify trends, particularly those associated with recently implemented or updated wildfire mitigation programs.

5.4 Inconsistencies

- The WMP states in the Wildfire Mitigation Program Highlights section that TDPUD “deployed approximately 375 Gridware line sensors and 3 weather stations to enhance system monitoring and situational awareness.” However, Section V.B, Weather Monitoring, identifies only one weather station installed in 2024.
- TDPUD’s website states that the utility completed system hardening improvements in 2025, but the WMP states only that the utility has established an overhead system hardening program and does not clearly indicate that implementation has begun.
- The data in Metric 2, Outage Causes, do not match TDPUD outage records. For example, the WMP records nine outages caused by tree failure in 2025, while TDPUD’s 2025 outage data records one such outage.

6 Conclusion

Dudek’s independent review of TDPUD’s 2026-2028 Wildfire Mitigation Plan indicates that the WMP provides a comprehensive description of wildfire risk conditions within TDPUD’s service territory and identifies mitigation measures that are generally responsive to the utility’s operating environment and identified wildfire risk drivers. TDPUD’s service territory includes extensive wildland urban interface conditions, substantial areas designated as High or Very High Fire Hazard Severity Zones, and overhead electrical facilities located in areas where vegetation, terrain, and seasonal weather conditions may support wildfire ignition and spread. The WMP appropriately recognizes these conditions and presents a layered wildfire mitigation framework that includes vegetation management, asset inspections, system hardening, enhanced situational awareness, operational controls, and de-energization protocols.

Based on the information reviewed, TDPUD’s wildfire mitigation strategies appear to address the primary wildfire risk drivers identified in the WMP and are generally consistent with mitigation practices implemented by other publicly owned utilities operating in elevated wildfire risk areas. TDPUD’s recent and ongoing activities, including covered conductor installation, non-expulsion fuse replacement, implementation of advanced protection settings, annual asset and vegetation inspections, and development of a Preemptive Power Shutoff program, demonstrate continued implementation of wildfire risk-reduction measures intended to reduce ignition potential and improve system resiliency during elevated fire conditions.

Dudek identified several opportunities to improve the clarity, transparency, and technical support for future WMP updates. These recommendations include providing additional detail regarding the weather and fire danger thresholds used to inform operational decision-making, incorporating a more localized fire risk analysis to support the prioritization of mitigation activities, expanding outage and ignition-related metrics to present multi-year trends, and resolving inconsistencies between the WMP, utility records, and publicly available information. Incorporating these refinements would improve the usability of the WMP and strengthen the documentation supporting TDPUD’s wildfire mitigation decision-making.

Overall, Dudek concludes that TDPUD’s 2026-2028 WMP provides a technically competent wildfire mitigation framework for the utility’s service territory. Continued implementation of the mitigation programs described in the WMP, accompanied by clearer operational thresholds, improved risk analytics, and expanded performance tracking, would further support TDPUD’s ability to manage wildfire risk, document the basis for wildfire mitigation decisions, and demonstrate continued progress in reducing the potential for utility-associated ignitions.

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