
Independent Evaluator's Report

Turlock Irrigation District 2026-2028 Wildfire Mitigation Plan

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CAL FIRE	California Department of Forestry and Fire Protection
CPUC	California Public Utilities Commission
FEMS	Fire Environment Mapping System
FHSZ	Fire Hazard Severity Zone
GIS	Geographic Information System
HFTD	High Fire-Threat District
IEMS	Iowa State University Mesonet
LRA	Local Responsibility Area
NWCG	National Wildfire Coordinating Group
OEIS	California Office of Energy Infrastructure Safety
PG&E	Pacific Gas and Electric Company
POU	Publicly Owned Electric Utility
PSPS	Public Safety Power Shutoff
PUC	Public Utilities Code
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SME	Subject Matter Expert
SRA	State Responsibility Area
T&D	Transmission and Distribution
TID	Turlock Irrigation District
WFTIIC	Wildfire Forecast & Threat Intelligence Integration Center
WMP	Wildfire Mitigation Plan
WSAB	Wildfire Safety Advisory Board

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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 Turlock Irrigation District (TID) to review its current WMP, evaluate its ongoing and new wildfire mitigation strategies, and prepare this Independent Evaluator's Report for TID's 2026-2028 WMP.

1.1 Scope and Intent

Dudek worked with TID to prepare this Independent Evaluator's Report to satisfy the requirements of Public Utilities Code (PUC) Section 8387(c). This report is specific to TID's 2026-2028 Wildfire Mitigation Plan. It reviews the elements of the WMP and presents the results of Dudek's review of data provided by TID and publicly available data regarding wildfire risk in TID's service territory and TID's wildfire risk-reduction strategies. Dudek's review assessed the following elements:

- i. Regulatory Requirements
- ii. TID's understanding of the wildfire risk and risk drivers in its service territory
- iii. TID's wildfire mitigation strategies

This Independent Evaluator's Report is intended to satisfy the requirements of the PUC and provide TID with an assessment of the comprehensiveness of its WMP. Recent guidance from the California Wildfire Safety Advisory Board (WSAB) indicated that its current focus areas are risk identification and preemptive de-energization (WSAB 2025). Therefore, Dudek's independent evaluation of TID's WMP also focuses on risk identification and preemptive de-energization.

1.2 Changes to the WMP Submittal Process

The Wildfire Safety Advisory Board published several guidance documents in late 2025 and early 2026 that included information about changes to the WMP submittal process for publicly owned electric utilities. Changes to PUC Section 8387 revised the submittal requirement for POU WMPs from annually to every two years. To distribute the WMP review workload, the WSAB modified the submission dates for POU WMPs. The WSAB's new guidance establishes a staggered submittal process in which a select group of POUs submits WMPs each year for WSAB review. The WSAB published the final WMP submittal schedule in March 2026 for more than 50 California public electric utilities. The state's public utilities were divided into groups, and each group was assigned a final submittal

date in the first week of October for the 2026–2028 version of each utility's WMP. TID is in the group whose WMPs are due on October 2, 2026. Under the new WMP submittal guidance, TID will not be required to resubmit its WMP to the WSAB for review until 2028.

The changes to the WSAB submittal schedule do not affect the requirement in PUC Section 8387(b)(3) to present the WMP at a properly noticed public meeting to accept comments from the public and other agencies. Before submitting its 2026–2028 WMP, TID staff will present the WMP at a public meeting.

1.3 Qualifications of the Independent Evaluator

PUC Section 8387(c) states that a public electric utility must contract with a qualified independent evaluator with experience assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its WMP.

Dudek's Fire Prevention Planning team has prepared independent evaluator reports, wildfire risk assessments, and wildfire mitigation plans for publicly owned electric and water utilities and independent transmission operators since the State of California began requiring these plans for publicly owned utilities in 2019. Additionally, Dudek has worked with and prepared fire-prevention planning documents for new energy projects across California and the Pacific Northwest. Our Fire Prevention Planning Team includes National Fire Protection Association Certified Wildfire Mitigation Specialists and Fire Protection Engineers.

1.4 Assessment Methods

Dudek fire prevention planners prepared this Independent Evaluator's Report using TID's draft 2026–2028 Wildfire Mitigation Plan, as well as the following documents and datasets from TID:

- Draft PSPS Circuit Recommendations
- Outage data tables
- Fire incident and wire-down data tables
- Emergency operations data tables
- WMP metric data tables
- GIS datasets of TID circuits and facilities

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

- Weather and climate data (FEMS, WFTIIC, IEMS)
- Fuels and fire-danger data (FEMS, WFTIIC)

- Local fire history (CAL FIRE)
- PG&E local fire history (CPUC)

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

2 TID Service Territory

2.1 TID Service Territory Fire Environment Summary

Turlock Irrigation District's service territory covers 662 square miles within and outside the Turlock city limits. It extends across the San Joaquin Valley—from the crest of the Coast Range, across the Central Valley, to the Sierra Nevada foothills adjacent to Don Pedro Reservoir (Figure 1, Turlock Irrigation District Service Territory). Due to a combination of terrain, vegetation, and weather conditions, TID's service territory experiences frequent wildfires during the summer. Fire risk is higher in the portions of TID's service territory that encompass the Coast Range west of Patterson and the Sierra Nevada foothills to the east. These areas are known as the West Side Fire Zone and East Side Fire Zone, respectively (Figure 2, West Side Fire Zone, including Diablo Grande; and Figure 3, East Side Fire Zone, including La Grange). Grassland communities dominate the vegetation in both fire zones, with chaparral, shrubland, and woodland also present. If a fire starts in these zones, the additional fuel load and limited firebreaks can support a fast-moving, high-intensity fire that is difficult to control. Additionally, slopes within the West Side and East Side Fire Zones are steep: the East Side Fire Zone has moderate slopes ranging from 0% to 20%, while slopes in the West Side Fire Zone exceed 20%. This topography, combined with vegetation-related fire risk, increases the fire hazard in these areas. In contrast, the portion of TID's service territory within the Central Valley has flat to moderate slopes and is dominated by agricultural land uses and urban development. These land-use types result in lower fire risk because of irrigation, limited combustible vegetation, and fewer steep slopes.

Turlock, like most of the San Joaquin Valley, experiences hot, dry summers and cool, wet winters. Summers are consistently hot and dry, and there is always a heightened risk of fires in the summer and into the fall before the rainy season begins—even in an average or wet year. During dry years, the fire risk can extend into the winter and through the spring. While wet winters can delay the ignition of significant fires until later in spring or early summer, they also promote more vegetation growth and may therefore produce higher fire risk during the inevitable hot, dry summer season. Fire season in the TID service area—the period of the year when wildfires occur most frequently based on historical fire occurrence—has historically extended from early spring through late fall (NWCG n.d.), after annual grasslands and herbaceous cover have cured. The potential for extreme fire behavior, as indicated by Red Flag Warnings issued by the National Weather Service, occurs during most of the region's fire season, from June to October (IEMS n.d.). Due to drier conditions and increasing urban development in fire-prone areas, however, fire protection and mitigation are becoming year-round necessities.

The TID service area has experienced numerous wildfires, including overlapping historical fire perimeters in the mountainous terrain of the West Side Fire Zone and some fire history in the East Side Fire Zone. A total of 48 fires have been recorded within TID's service territory. The Coast Range within the West Side Fire Zone has the most extensive fire history, with 30 recorded wildfires; the most recent were the 2025 Grande Fire (12 acres) and the 2025 Fink Fire (12 acres). The most significant recent wildfire recorded in the West Side Fire Zone is the 2020 SCU

Lightning Complex Fire. Approximately 65,733 acres of the fire's total 393,624 acres burned within the West Side Fire Zone. The East Side Fire Zone has 16 recorded fires. The most recent was the 2025 Grange Fire (19 acres), and the most significant recent wildfire was the 2008 La Grange Fire. Approximately 196 acres of the fire's total 1,334 acres overlapped the East Side Fire Zone. Two fires occurred along the San Joaquin River near the northwestern boundary of TID's service territory (CAL FIRE 2026).

2.2 Fire Hazard Severity Zones

CAL FIRE designates areas of the state with increased wildfire hazard based on previous fire occurrence and anticipated fire behavior. These areas are designated as fire hazard severity zones (FHSZs). FHSZs are present in portions of TID's service territory that overlap the Coast Range and Sierra Nevada but are not present in the Central Valley portions of the service territory. Most of the West Side Fire Zone consists of State Responsibility Area (SRA) designated as Very High FHSZ. SRA High FHSZ areas and much smaller SRA Moderate FHSZ areas are also present. Local Responsibility Area (LRA) designated as Very High FHSZ is present along the western side of the City of Patterson and continues approximately 3 miles south along the east side of Interstate 5. Smaller outer bands of LRA High and Moderate FHSZ are adjacent to the LRA Very High FHSZ areas. The East Side Fire Zone contains SRA Moderate, High, and Very High FHSZ areas. The SRA Moderate FHSZ is above Turlock Lake, while much of the SRA High FHSZ is east of Turlock Lake and extends into the foothills. SRA Very High FHSZ areas are located in the portion of TID's service territory near Don Pedro Reservoir.

Most of TID's transmission corridors are within the Central Valley, which does not have a CAL FIRE FHSZ designation. Portions of these corridors run parallel to the SRA Very High FHSZ within the West Side Fire Zone but are not located within it. Transmission corridors and distribution lines do pass through SRA Moderate, High, and Very High FHSZ areas in the northeastern portion of TID's service territory and into the East Side Fire Zone. Distribution lines are also located within the West Side Fire Zone, primarily in SRA Very High FHSZ areas. Underground distribution lines are present in the SRA Very High FHSZ areas and adjacent SRA High FHSZ areas in both the West Side and East Side Fire Zones; however, their total extent is substantially less than that of the transmission corridors and overhead distribution lines. Figure 5, Fire Hazard Severity Zones, shows the FHSZs and the locations of transmission corridors and distribution lines within TID's service territory.

2.3 High Fire Threat Districts

The California Public Utilities Commission (CPUC) designates areas with an increased risk of utility-associated wildfires as High Fire-Threat Districts. The West Side and East Side Fire Zones contain areas designated as Tier 2 High Fire-Threat Districts (HFTDs). These areas overlap SRA lands with the FHSZ designations described above. The nearest Tier 3 HFTD areas are approximately 11 miles northeast of the East Side Fire Zone, east of Don Pedro Reservoir. The Tier 3 HFTD areas closest to the West Side Fire Zone are on the opposite side of the Coast Range, west of Morgan Hill and Gilroy, approximately 22 miles southwest of the West Side Fire Zone.

As shown on the FHSZ maps, the distribution lines and underground distribution lines described above are also located within Tier 2 HFTD areas. However, some underground distribution lines in the East Side Fire Zone near Don Pedro Reservoir are outside the Tier 2 HFTD areas. Figure 6, High Fire-Threat Districts, shows the HFTDs and the locations of transmission corridors and distribution lines within TID's service territory.

3 Independent Evaluator Review of Regulatory Compliance

Public Utilities Code (PUC) Section 8387 creates two requirements for each publicly owned electric utility (POU) in California. First, each POU is required to construct, maintain, and operate its electrical lines and equipment in a manner that minimizes wildfire risk. Second, each POU is required to prepare a wildfire mitigation plan and submit it to the California Wildfire Safety Advisory Board (WSAB) in accordance with the applicable submission schedule.

PUC Section 8387 contains several subsections that identify the elements required in WMPs prepared by POUs. Publicly owned utilities have prepared WMPs since 2019 and, with support from power-agency associations, have consistently produced plans containing the elements required by PUC Section 8387(b)(2). Table 1 lists each required element and identifies where it appears in TID's 2026-2028 WMP.

Table 1. PUC 8387(b)(2) Required Element Table and Location in TID WMP

PUC 8387 Subsection¹	PUC 8387 Required Element Description	WMP Section and Page No.	Section Title
(b)(2)(A)	Person responsible for executing the plan	3.3 Page 17 ; 9.1 Pages 56-58	Utility Governance Structure, Roles and Responsibilities
(b)(2)(B)	Objectives of the wildfire mitigation plan	1.2 Page 6	Purpose
(b)(2)(C)	Identification and prioritization of risks; preventive strategies	6.0	Wildfire Preventative Strategies
(b)(2)(D)	Evaluation of plan performance, including metrics	9.2 Pages 58-62	Metrics for Measuring Plan Performance
(b)(2)(E)	Description of how metrics inform plan improvements	9.3, Page 62	Impact of Metrics on Plan
(b)(2)(F)	Protocols for de-energization	6.8 Pages 45-47	Public Safety Power Shutoff
(b)(2)(G)	Procedures for customer notification before, during, and after de-energization	6.8 Pages 45-47 ; 7.4 Pages 52-53	Public Safety Power Shutoff, Communications Prior to Public Safety Power Shutoffs
(b)(2)(H)	Vegetation management activities and protocols	6.4 Pages 39-42	Vegetation Management

¹ TID's 2026-2029 WMP contains all of the PUC 8387 required elements.

PUC 8387 Subsection¹	PUC 8387 Required Element Description	WMP Section and Page No.	Section Title	
(b)(2)(I)	Inspections and maintenance of electrical infrastructure	6.5 Pages 43–44	Inspections	
(b)(2)(J)	A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory.	4.2–4.5 Pages 22–29	Wildfire Drivers	Risk
(b)(2)(J)(i)	Risks and risk drivers associated with the design, construction, operation, and maintenance of the electric utility's equipment and facilities.	4.2 Pages 22–23	Wildfire Drivers	Risk
(b)(2)(J)(ii)	Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the electric utility's service territory.	4.2–4.5 Pages 23–27	Wildfire Drivers	Risk
(b)(2)(K)	Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map	5.2 Pages 30–31 ; 6.1 Page 34	Locations of Fire Zones, High Fire Threat District	
(b)(2)(L)	A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk	4.1 Page 22	Enterprise Management	Risk
(b)(2)(M)	Procedures for restoration of service after de-energization or wildfire-related outages	8.0 Pages 54–55	Restoration of Service	
(b)(2)(N)	Monitoring and auditing of plan implementation	9.3, 9.4, and 9.5 Pages 62–63	Identifying and Correcting Deficiencies in the Plan, Monitoring Effectiveness of Inspections	

4 Wildfire Mitigation Strategy Review and Understanding

According to PUC Section 8387(c), the role of the Independent Evaluator is to “review and assess the comprehensiveness of [the utility’s] wildfire mitigation plan.” Dudek interprets this requirement to include assessing whether the utility:

- A. Understands the wildfire risks present in its service territory.
- B. Understands the specific wildfire risks associated with its equipment and operations.
- C. Implements effective mitigation strategies to address these risks.

4.1 TID’s Understanding of Wildfire Risk in Its Service Territory

TID’s 2026–2028 WMP does not divide wildfire risk and risk drivers into the two categories described in PUC Section 8387(b)(2)(J). Instead, Chapter 4 of the WMP describes the key wildfire risk drivers in TID’s service territory based on their contribution to ignition risk and fire-spread risk. These drivers include equipment failure and contact with wires, as well as environmental factors such as terrain and combustible vegetation cover. In addition to the fire-risk drivers described in Chapter 4, Sections 3.4 and 5.1 describe the two fire zones in TID’s service territory. As outlined in Section 2.1 of this report, wildfire risk is elevated in two areas: the Sierra Nevada foothills east of Turlock Lake and the Coast Range west of Interstate 5. In contrast, the remainder of the service territory has relatively low wildfire risk because the land surrounding TID equipment and lines is primarily agricultural or urban and lacks sufficient combustible vegetation to sustain a wildfire.

To evaluate TID’s understanding of wildfire risk in its service territory, Dudek reviewed utility-caused fire and outage data from 2021–2025. Utility-caused fire data serve as an indicator of the potential for an ignition event to develop into a wildfire, while outage data provide an indicator of the frequency of events with ignition potential. Dudek did not cross-reference outage data with weather data to determine whether an outage occurred during conditions conducive to wildfire spread. To evaluate risk drivers associated with fire spread, Dudek reviewed fire history within TID’s service territory.

According to TID’s WMP metrics (Section 9.2), TID’s equipment and lines have not been identified as the cause of any recorded wildfire during the past five years. TID’s outage data show 16 instances of pole or equipment fires, two-thirds of which occurred during the region’s typical fire season; one occurred within a fire zone. Additionally, TID’s service territory contains PG&E infrastructure, including transmission lines and a substation. According to CPUC records, three recorded fires in or near TID’s service territory were attributed to PG&E equipment (CPUC 2026).

4.1.1 Equipment-Based Fire Risk Drivers

TID's WMP identifies the following equipment-based risk drivers: equipment failure, wire-to-wire contact, and wire-down events. Based on outage data from TID, vehicle or third-party incidents are the most common cause of outages, accounting for about 30% of recorded outages. Equipment failure is the second most common cause of outages, accounting for 20% of outages in TID's service territory. Wire-to-wire contact is not listed as a cause of any outages in the records, but this cause would be difficult to determine unless directly observed by TID staff. Wires down is a relatively uncommon cause of outages in TID's service territory, accounting for less than 5% of outages. It is worth noting that less than 1% of recorded outages, regardless of cause or initiating event, were attributed to lines and equipment within a state-designated FHSZ or HFTD.

TID's equipment-based fire risk drivers are appropriate for understanding the utility's wildfire risk. Vehicle/third-party and equipment failure are appropriate indicators of higher-frequency outage causes in TID's service territory and are useful for understanding the frequency of events with ignition when filtered for time of year (during fire season) and location (outside of urban and agricultural areas). Vehicle/third-party-caused outages are a particularly valuable fire risk driver to understand because they represent the majority of outages in a FHSZ or HFTD and have the potential to knock energized equipment to the ground. Wire-to-wire contact and wires down are appropriate indicators of lower-frequency outage events that have a higher potential for igniting a wildfire. These fire risk drivers are useful for informing TID about the potential for higher-severity events in its service territory and, when filtered for location and weather, are good indicators of where there is a higher potential for a high-severity event.

4.1.2 Environment-Based Fire Risk Drivers

TID's WMP identifies only one environment-based fire ignition driver: vegetation contact with wires. Based on TID's outage data, less than 10% of recorded outages are attributed to contact with vegetation. This is not surprising, considering that tree cover within TID's service territory is limited to small, isolated areas and that most vegetation is either agricultural or grassland. Adverse weather, which includes high winds, is not listed as a wildfire ignition risk driver but accounts for a similar percentage of outages in TID's service territory. Only one recorded outage attributable to vegetation or adverse weather was located within an FHSZ or HFTD.

TID's WMP identifies environment-based fire-risk drivers as important factors in fire spread. The WMP summarizes terrain, weather, and vegetation conditions within the service territory that are more conducive to fire spread, such as those in FHSZs and HFTDs. These risk drivers are not unique to areas surrounding TID's equipment and lines; rather, they occur throughout portions of TID's service territory within FHSZs and HFTDs. TID's WMP states that mountainous areas covered by chaparral and woodlands have the greatest potential for high-intensity wildfire within the service territory. CAL FIRE fire-history data confirm this: historical fires are more frequent and larger on the western side of the service territory in the Coast Range, where mountainous terrain and chaparral predominate, than on the eastern side, which extends into the grass-covered Sierra Nevada foothills. Table 3 of the WMP identifies the circuit miles of overhead distribution and transmission lines within FHSZs or HFTDs and further divides those miles between the East Side and West Side Fire Zones. Although the distribution of overhead lines is similar in the two fire zones, the fire-spread risk drivers described in the WMP suggest that TID's equipment and lines in the West Side Fire Zone have a higher fire risk; however, the WMP does not state this explicitly.

TID's environment-based fire-risk drivers are appropriate for understanding the conditions that govern wildfire spread within its service territory. Because the East Side and West Side Fire Zones are relatively sparsely developed

and contain continuous combustible vegetation, it is appropriate to use general terrain features, such as the Coast Range, or vegetation types, such as chaparral, to define areas of higher wildfire risk. However, the analysis could provide greater detail. Based on Table 3 of the WMP, a relatively small portion of TID’s equipment and lines is located within an FHSZ or HFTD. In both fire zones, the equipment and lines occupy relatively limited areas, creating an opportunity to refine the analysis to conditions immediately surrounding the equipment and lines rather than treating each entire fire zone uniformly. Terrain and vegetation likely vary within each zone, resulting in corresponding variation in fire risk.

4.2 TID Wildfire Risk Mitigation Strategies

As identified in Sections 4.2–4.5 of the WMP, the potential for TID equipment to ignite a wildfire—and for that wildfire to spread from the point of ignition within TID’s fire zones—is driven by a combination of equipment-based factors that affect ignition risk and environmental conditions that affect fire-spread risk.

TID deploys several wildfire mitigation strategies intended to reduce the risk of its equipment starting a wildfire, including situational awareness tools, design and construction standards, vegetation management, inspection programs, workforce training, reclosing policy for the substations that feed into the two fire zones, and public safety power shutoff. Regarding design and construction standards, TID has a separate standard, the Fire Zone Standard, that describes where the standard applies, allowable equipment in the fire zones, and vegetation clearance requirements, including surface vegetation management standards.

The wildfire mitigation strategies listed in TID’s WMP are consistent with practices implemented by other POUs in California and the Western U.S. (Coleman et al. 2025). Table 2 lists the wildfire risk drivers in TID’s service territory and the mitigation strategies that impact its overall risk.

Table 2. TID Wildfire Risk Driver to Risk Mitigation Strategy Comparison

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Weather Monitoring	Vegetation contact with wires, wire-to-wire contact, Vegetation density, Vegetation type, high winds	56% of alert levels and operating state changes due to Red Flag Warning, 10% due to wildfire	Deployed two weather stations in the west fire zone

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Vegetation Management (Line Clearance)	Vegetation contact with wires, Vegetation density, Vegetation type, high winds	Vegetation contact with wires accounts for 8% of TID-recorded outages.	TID completes vegetation inspections on all T&D lines annually.
Vegetation Management (Pole Clearance and Fuel Reduction)	Wire down events, Vegetation density, Vegetation type	Pole clearance and fuel reduction don't eliminate fire risk but reduce the likelihood of rapid fire growth at ignition point. Limits fire intensity and duration near poles	TID Fire Zone Standard defines treatment requirements.
Inspections	Wire-to-wire contacts, wire-down events, electrical equipment failure, vegetation contact with wires	Equipment failure accounts for 20% of TID recorded outages. Wires down account for 1% of TID recorded outages.	TID completes asset inspections on all T&D lines annually.
Design and Construction Standards	Wire-to-wire contacts, wire-down events, electrical equipment failure, high winds	Equipment failure accounts for 20% of TID recorded outages.	Wood poles with internal decay are being replaced with fiberglass poles. TID developed more sensitive protection settings for reclosers in fire zones.
PSPS	Wire-to-wire contacts, wire-down events, electrical equipment failure, vegetation contact with wires, vegetation density, vegetation type	TID has not de-energized lines. PG&E has de-energized lines twice since 2020, impacting a small number of customers on the west side of the service territory.	Based on weather observations, fire danger, and SME assessment of local conditions

Wildfire Mitigation Strategy	Wildfire Risk Driver	Relationship to Ignition Event/Outage Data	Comment
Reclosing Policy	Wire-to-wire contacts, wire-down events, electrical equipment failure, vegetation contact with wires	Reclosing policy activated 4 times in 2025 due to Red Flag Warning conditions.	TID reclosers in fire zones are disabled during Red Flag Warnings.

4.3 TID Public Safety Power Shutoff

TID, like many POU's, views Public Safety Power Shutoffs as a last resort. However, TID has continued to develop its PSPS program since publishing its first WMP in 2020, when the thresholds for determining when to use a PSPS were limited and the program was implemented only at the request of emergency services during an active incident. The current PSPS program described in the 2026-2028 WMP is more robust and includes monitoring fire danger, nearby fire incidents, and observed and forecast weather conditions, as well as consulting subject matter experts (SMEs). TID has also integrated its PSPS processes into its wildfire mitigation strategy framework so that use of a PSPS is assessed as part of a broader wildfire risk-reduction strategy that includes disabling reclosers and increasing system sensitivity. The WMP describes TID's PSPS implementation sequence, including staff responsibilities, the implementation timeline, and restoration procedures when a PSPS is no longer necessary.

The Wildfire Safety Advisory Board's December 2025 guidance provided specific recommendations that TID add more detail to its WMP regarding the potential use of a PSPS, including the following (OEIS 2025):

1. Describe the data and data sources used to make the decision.
2. Describe the procedures used to collect data and verify that the data are accurate and current.
3. Identify the parties responsible for making the decision and the criteria used.
4. Describe the actions necessary to implement a de-energization and the parties responsible for executing them.
5. Define the "extreme fire event" under which TID would make a real-time decision about whether to de-energize.

Section 6.8 of TID's 2026-2028 WMP addresses WSAB Recommendations 1-4. Recommendation 5 is not described in the WMP; TID is currently developing weather and fire-danger thresholds for implementing a PSPS.

5 Wildfire Mitigation Strategy Execution

5.1 WMP Tracked Event Metrics

Section 9.2 provides records for 12 tracked metrics: 4 event-based metrics, 2 performance-based metrics, and 5 outcome-based metrics. The twelfth metric consists of TID's SAIDI and SAIFI scores, which, as measures of overall reliability, represent both performance- and outcome-based metrics. The WMP metric data generally indicate successful implementation of TID's wildfire mitigation strategies. Negative outcome events, such as TID-attributed wildfire ignitions, indicate that the utility's electrical system has not caused a wildfire ignition during the past five years. Outage data indicate that outages—particularly those attributed to causes more likely to start a fire, such as downed wires, or those occurring in areas where substantial fire growth is possible—are not increasing. At the same time, positive performance metrics, including distribution and transmission inspections, show that 100% of TID's equipment and lines were inspected.

5.2 Vegetation Inspection and Management

TID met all of its vegetation management activity targets in 2025. It began inspections around transmission assets in April and prioritized communities within HFTDs. TID completed line-clearance trimming for all identified trees and cleared vegetation around the base of all poles identified for pole-base clearance.

5.3 Situational Awareness Upgrades

In 2025, TID installed two new weather stations in the fire zone west of Interstate 5. TID also began a partnership with the Wildfire Forecast & Threat Intelligence Integration Center (WFTIIC) to receive weather observations, fire-danger observations, and forecasts for the region that includes TID's service territory.

6 Conclusion

Within TID's service territory and portions of the surrounding area, wildfire risk is elevated because of terrain and vegetation that can support rapid fire growth, combined with a prolonged dry period during summer and fall when extreme fire-weather events occur. Within TID's designated fire zones, portions of TID's overhead circuits and facilities are near continuous unmanaged vegetation and could ignite a wildfire if an ignition event—such as vegetation contacting an energized line or equipment failure—occurred. Although TID equipment has not been identified as the cause of any recent wildfires, its service territory and surrounding areas in the Coast Range and Sierra Nevada have experienced several recent destructive wildfires, including the 2006 Canyon Fire.

TID's 2026–2028 Wildfire Mitigation Plan is a comprehensive document that addresses each element required by PUC Section 8387(b)(2). This review assessed whether the plan satisfies applicable PUC requirements, reflects an appropriate understanding of wildfire risk and risk drivers in TID's service territory, and identifies mitigation strategies responsive to those risks. TID's WMP demonstrates an understanding of wildfire risk through its partnership with WFTIIC, its use of weather and fire-danger monitoring for real-time analysis during fire season, and a proactive annual inspection program that includes two cycles of equipment and line inspections each year. The WMP also describes how TID modifies system settings to minimize ignition risk in areas it has identified as having high wildfire risk. Although TID considers PSPS a last-resort measure, the program is integrated into its situational-awareness and wildfire mitigation framework. Accordingly, PSPS is evaluated as fire danger increases and TID consults with SMEs and utility leadership, rather than being treated as a stand-alone strategy. TID's mitigation strategies are responsive to the specific risks in its service territory. For example, its robust equipment inspection and maintenance program addresses several of the most frequent causes of outages and, therefore, sources of ignition potential. The WMP also demonstrates TID's investment in long-term wildfire risk reduction, including an equipment-hardening program intended to reduce the likelihood of ignition in high-fire-hazard areas and a pole-wrap program intended to improve pole and line survivability during a wildfire.

The Wildfire Safety Advisory Board (WSAB) released guidance to POUs in December 2025 regarding the contents of each POU's WMP. TID received specific guidance from the WSAB to include a more detailed description of its PSPS processes, including the data and data sources used to make PSPS decisions. TID's 2026–2028 WMP addresses this request, and TID is working with Dudek to develop more detailed weather and fire-danger thresholds for incorporation into its PSPS decision-making process.

In summary, TID's 2026–2028 Wildfire Mitigation Plan addresses each required element of Public Utilities Code Section 8387. It demonstrates a proactive, risk-informed approach to wildfire prevention, operational readiness, and system resiliency. The plan reflects TID's commitment to continuous improvement through enhanced situational awareness, targeted vegetation management, system-hardening investments, and clearly defined operational protocols intended to reduce the likelihood and consequences of utility-related ignitions. By incorporating WSAB guidance, strengthening its PSPS framework, and aligning mitigation strategies with the specific wildfire risks present within its service territory, TID has developed a WMP that supports regulatory compliance and the ongoing protection of public safety, utility infrastructure, and the communities it serves.

7 References

- California Department of Forestry and Fire Protection. (n.d.). *Fire Hazard Severity Zone Viewer*.
<https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0>
- California Office of Energy Infrastructure Safety. (2026, March 4). Adopted revised 2026–2029 POU and co-op WMP submission schedule. <https://energysafety.ca.gov/wp-content/uploads/2026/01/adopted-revised-2026-2029-pou-and-co-op-wmp-submission-schedule-2026-03-04.pdf>
- California Office of Energy Infrastructure Safety. (2025, November 21). Advisory opinion to publicly owned utilities. <https://energysafety.ca.gov/wp-content/uploads/2025/12/advisory-opinion-to-pous-2025-11-21-1.pdf>
- California Department of Forestry and Fire Protection (CAL FIRE), Fire and Resource Assessment Program (FRAP). 2022. Vegetation-by-Wildlife-Habitat Relations [GIS data layer]. <https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/gis-mapping-and-data-analytics>.
- CAL FIRE. 2026. Historical Fire Perimeters [GIS data layer]. <https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters>.
- Coleman, A. M., Chini, C. M., Catalano, A. J., Bhattacharya, S., Chalishazar, V. H., O'Neil, R. S., Larson, K. B., Gonzalez-Hirshfeld, I., Miller, L. M., Abernethy-Cannella, K. G., Saltiel, T. M., Tagestad, J. D., Kincaid, J., Yoon, J. J., Roy Chowdhury, P., & Netik, I. M. (2026). *Current best practices on wildfire risk reduction for electric transmission and distribution systems* (PNNL-38528). Pacific Northwest National Laboratory. <https://www.osti.gov/>
- California Public Utilities Commission. (n.d.). *Wildfire and wildfire safety*. <https://www.cpuc.ca.gov/industries-and-topics/wildfires>
- National Wildfire Coordinating Group. (n.d.). Normal fire season (period of time). <https://www.nwccg.gov/node/1800962>
- Iowa State University Mesonet. (n.d.). Number of watch/warning/advisories issued per year per month + top 10 daily [Data visualization]. https://mesonet.agron.iastate.edu/plotting/auto/?wait=no&q=171&opt=wfo&station=STO&state=CA&ugc_state=CA&ugc=CAC089&fema=9&c=single&phenomena=FW&significance=W&cmap=inferno&r=t&dpi=100&fmt=png

Figure 1. Turlock Irrigation District Service Territory

Figure 2. West Side Fire Zone

Figure 3. East Side Fire Zone

Figure 4A. Fire History

Figure 4B. Fire History—West Side

Figure 4C. Fire History—East Side

Figure 5. Fire Hazard Severity Zones

Figure 6. High Fire-Threat Districts