Burbank Water and Power

WILDFIRE MITIGATION PLAN

November 2019

DRAFT

CITY OF BURBANK
Water and Power
Since 1913
Always There for You!

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List of Acronyms and Abbreviations

AMI	Advanced Metering Infrastructure
BWP	Burbank Water and Power
CAL FIRE	California Department of Forestry and Fire Protection
CPUC	California Public Utilities Commission
CWSAB	California Wildfire Safety Advisory Board
DOC	Department Operations Center
ECC	Energy Control Center
EERP	Electric Emergency Response Plan
ERP	Emergency Response Plan
EM	Emergency Management
GIS	Geographic Information System
GO	General Order
HFTD	High Fire Threat District
IC	Incident Command or Incident Commander
ICS	Incident Command System
kV	Kilovolt
MW	Megawatts
NERC	North American Electric Reliability Corporation
NIMS	National Incident Management System
NWS	National Weather Service
OMS	Outage Management System
PRC	California Public Resources Code
PUC	Public Utilities Code
RFW	Red Flag Warning
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition
SEMS	Standardized Emergency Management System
SME	Subject Matter Expert
T&D	Transmission and Distribution
WMP	Wildfire Mitigation Plan
WUI	Wildland Urban Interface

Definitions

1. **Energy Control Center (ECC):** BWP's ECC personnel are responsible for directing the safe and reliable operation of BWP's electric system while operating within current policies and procedures during normal and emergency situations. The ECC prepares, checks, and administers the execution of safe and reliable switching procedures. The ECC will monitor and maintain equipment-loading levels to prevent damage to equipment. The ECC is also responsible for updating outage information timely and accurately.

2. **General Order 95 (GO 95):** GO 95 is a set of rules formulated by the California Public Utilities Commission (CPUC) with the purpose of creating requirements for overhead line design, construction, and maintenance. While the CPUC does not have direct governance over publicly owned utilities, BWP designs, constructs, and maintains all overhead electrical lines to meet or exceed this industry standard.

3. **General Order 165 (GO 165):** GO 165 is a set of rules formulated by the CPUC with the purpose of creating requirements for the inspection of electric distribution and transmission facilities in order to ensure safe and high-quality electric service. BWP has an inspection program in place that meets or exceeds this industry standard.

4. **Hardening:** Modifications to electric infrastructure to reduce the likelihood of ignition and improve the survivability of electrical assets.

5. **High Fire Threat District (HFTD):** In 2017, the CPUC adopted new fire safety regulations to combat the threat of wildfire for areas in Northern and Southern California. High Fire Threat Districts (HFTD) have been classified as High Hazard Zones due to tree mortality (Tier 1), elevated risk for utility-associated wildfires (Tier 2), and extreme risk for utility-associated wildfires (Tier 3).

6. **Incident Commander (IC):** The IC is the person responsible for all aspects of an emergency response, including quickly developing incident objectives, managing all incident operations, application of resources, as well as responsibility for all persons involved. The IC sets priorities and defines the organization of the incident response teams and the overall incident action plan.

7. **Incident Command System (ICS):** The ICS "a systematic tool used for the command, control, and coordination of emergency response" according to the state Standardized Emergency Management System and federal National Incident Management System. A more detailed definition of an ICS according to the United States Center for Excellence in Disaster Management & Humanitarian Assistance is "a set of personnel, policies, procedures, facilities, and equipment, integrated into a common organizational structure designed to improve emergency response operations of all types and complexities." Responding emergency service providers would establish the ICS and designate an Incident Commander.

8. **Red Flag Warning (RFW):** An RFW is a warning issued for a stated period of time by the National Weather Service using pre-determined criteria to identify particularly critical wildfire danger in a particular geographic area.

9. **Senate Bill 901 (SB 901):** SB 901 is legislation enacted as of September 21, 2018 that, among other changes and requirements, amended California Public Utilities Code (CPUC) Section 8387 to provide in subpart (b) that each local publicly owned electric utility and electrical corporative shall annually prepare and present a wildfire mitigation plan (WMP) to its governing board for review and approval, and to specify in subpart (b) (2) the elements that must be included in such WMP. As used herein, SB 901 refers to the requirements of CPUC Section 8387.

10. **Wildfire Risk:** The risk of a potential wildfire event caused by BWP electrical lines or equipment.

Chapter 1. Introduction

1.1 Policy Statement

As a community owned utility, Burbank Water and Power's policy is to provide safe, reliable, affordable and sustainable electric service to the residents and businesses of the City of Burbank.

1.2 Plan Summary

While the City of Burbank has experienced wildfires in the Verdugo Mountains throughout its history, no wildfires have ever been caused by BWP electrical facilities. This WMP describes the range of activities that BWP is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies and procedures. This plan will be reviewed and evaluated by its governing board each year.

This plan meets or exceeds the requirements of PUC section 8387 for publicly owned electric utilities to prepare a WMP by January 1, 2020. Table 1 below summarizes the plan compliance with the corresponding plan sections referenced.

Table 1 - Plan Compliance with PUC 8387(b)

SB 901 Requirement	Description	Plan Section Number
b (2) (A)	An accounting of the responsibilities of the persons responsible for executing the plan.	7.1
b (2) (B)	The objectives of the wildfire mitigation plan.	1.3
b (2) (C)	Description of the preventative strategies and programs to be adopted by the publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	3, 5
b (2) (D)	A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions made that underlie the use of those metrics.	7.2
b (2) (E)	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	7.2.2

SB 901 Requirement	Description	Plan Section Number
b (2) (F)	Protocols for disabling reclosers and de-energizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure	5.3.1, 5.5
b (2) (G)	Appropriate and feasible procedures for notifying a customer who may be impacted by the de-energizing of electric lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	6.3
b (2) (H)	Plans for vegetation management.	5.2.2
b (2) (I)	Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	5.2.1
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. The list shall include, but not be limited to, both of the following:	4.2
b (2) (J) (i)	Risks and risk drivers associated with design, construction, operations, and maintenance of the local publicly owned electric utility or electrical cooperative's equipment and facilities.	4.2.1
b (2) (J) (ii)	Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned utility's or electrical cooperative's service territory.	4.3
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 currently identified in a commission fire threat map, and identification of where the commission should expand the high fire threat district based on new information or changes to the environment.	4.3.3
b (2) (L)	A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.	4.1

SB 901 Requirement	Description	Plan Section Number
b (2) (M)	A statement of how the local publicly owned electric utility will restore service after a wildfire.	6.4
b (2) (N)	A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:	
b (2) (N) (i)	Monitor and audit the wildfire mitigation plan.	7.3
b (2) (N) (ii)	Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.	7.3.1
b (2) (N) (iii)	Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, and other applicable statutes, or commission rules.	7.3.2
b (3)	The local publicly owned electric utility or electrical cooperative shall present each wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards as appropriate.	8.2
(c)	The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the internet web site of the local publicly owned electric utility or electrical cooperative and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.	8.3

1.3 WMP Objectives

The primary objectives of this WMP are to:

1. Reduce the probability that BWP's electric system may be the contributing source for the ignition of a wildfire; and

2. Create a WMP that is consistent with state law and objectives.

BWP continually evaluates prudent and cost-effective improvements to its design standards, physical assets, inspection and maintenance programs, operations, and training in order to meet these objectives. This plan documents mitigation activities that will be carried out by BWP. Lastly, this plan will set measures of effectiveness to inform future improvements or modifications to specific programs and strategies.

Chapter 2. Burbank Water and Power

2.1 BWP Profile

Burbank Water and Power is a vertically-integrated, publicly-owned municipal utility that has served Burbank's electrical needs for more than 100 years. Being vertically integrated means that BWP generates, transmits, and distributes power to Burbank customers. BWP is owned and operated by the City of Burbank and is governed by its Board and the Burbank City Council. BWP is not-for profit, delivering service at cost.

BWP is committed to providing reliable, affordable and sustainable electrical service to Burbank. BWP's reliability is superb, maintaining electrical service to BWP's customers 99.998% of the time in 2017. In terms of affordability, BWP's rates are near the lowest in the region, with annual rate increases at or below the long-run rate of inflation for the last decade. BWP's commitment to sustainability is strong: In 2007, BWP was the first utility to commit to 33% renewables by 2020 and BWP reached 33.3% renewables in fiscal year 2016-17.

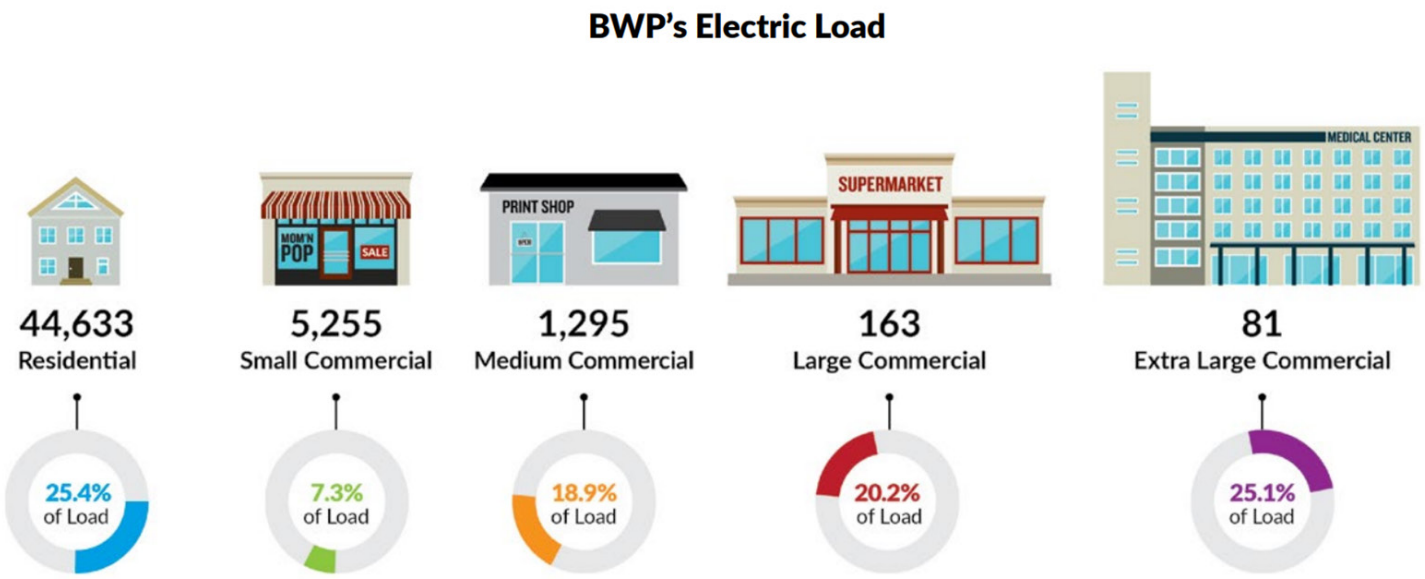
2.2 Service Territory

BWP electric system provides power to approximately 52,500 customers across 17 square miles within the City limits. Burbank is known as the Media Capital of the World and is home to two of the world's largest studios, Warner Bros. Entertainment and The Walt Disney Company. The city is also home to thousands of smaller businesses, many of whom moved to Burbank in the early 1990s after the aerospace industry

contracted and real estate became more available. These businesses have come to expect cost-effective and reliable electrical service, as well as additional services such as fiber optic networking.

Burbank also has a vibrant residential community, with a housing mix of about 18,750 single family homes that range from post-World War II bungalows to two story view homes. There are also about 28,850 multifamily homes. In total, BWP serves 44,633 residential, 5,255 small commercial, 1,295 medium commercial, 163 large commercial, and 81 extra-large customer accounts.

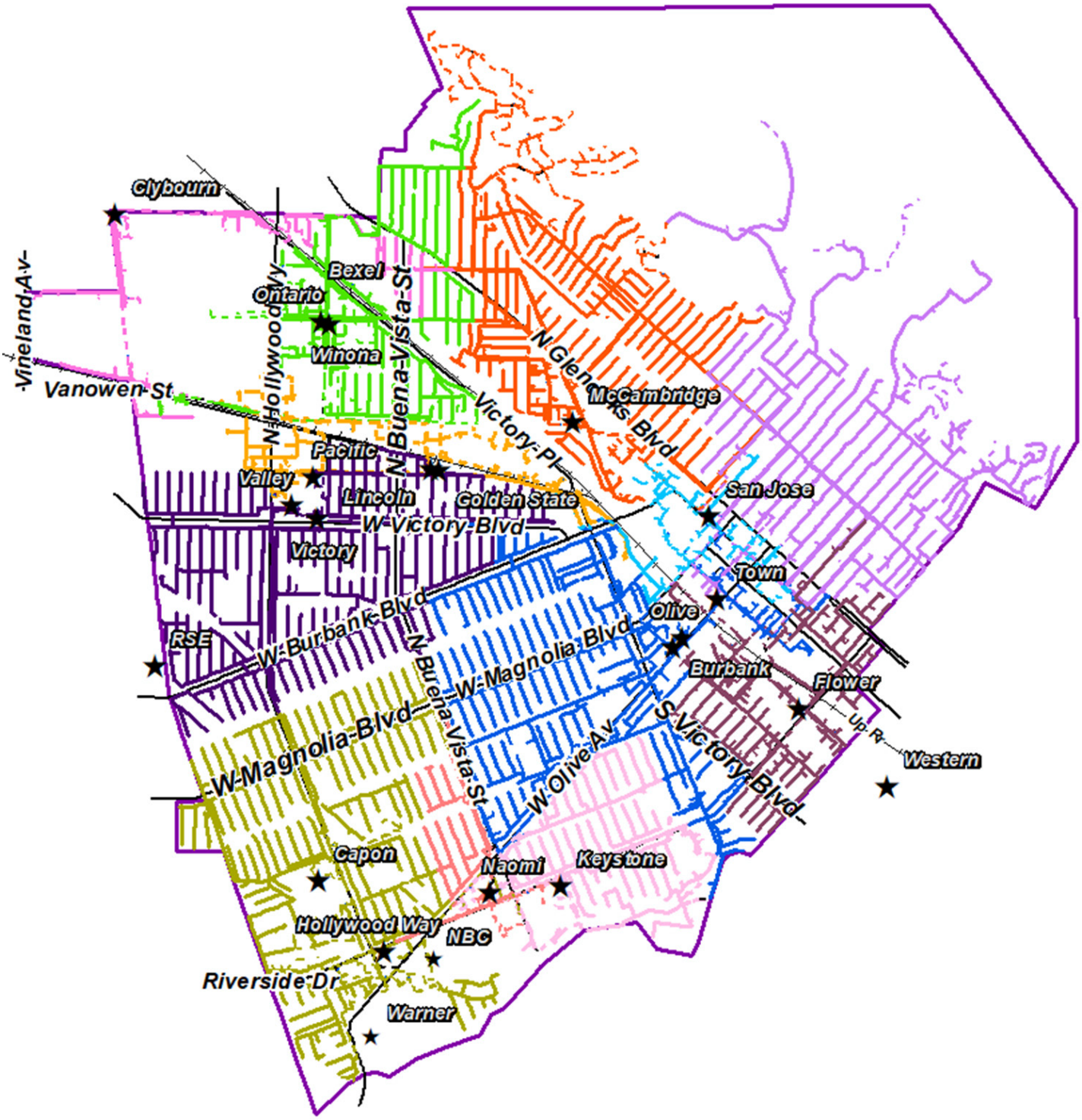
Figure 1 - BWP's Electric Load



2.3 Electric System

BWP supplies electrical service to its customers through a distribution network, which includes 13 distribution substations, 2 customer substations, 4 switching stations, 40 miles of 34.5 kilovolt (kV) sub-transmission lines, 32 miles of 69 kV transmission lines, 205 miles of overhead distribution lines, 126 miles of underground distribution lines, 11,000 poles, and 6,000 transformers. BWP's all-time peak demand was 322 MW in 2017, but is forecast to remain flat at about 314 to 322 MW for the next several years.

Figure 2 - BWP Electric Distribution System



Chapter 3. Preventative Strategies and Programs Overview

BWP's strategy for preventing wildfires resulting from its electrical infrastructure includes attention to fire prev ention during ongoing operations and maintenance and during planning, design, and construction of new assets. The overarching goal is to minimize the risk of BWP facilities starting or contributing to the ignition of vegetation fires. The BWP fire prevention strategies and programs encompass four primary fire safety categories. Each of the fire safety categories below have several mitigation measures, many of which have already been implemented. Each of the mitigation measures is discussed in more detail in Section 5 of the WMP. Table 2 is a summary of BWP's program and strategies that support wildfire prevention and mitigation.

Table 2 – Overview of Mitigation Activities

Mtigation Activites		Description	Timing
Design and Construction			
1	Deteriorated Pole Replacements	Replacement of poles that do not pass condition-based assessments to prevent pole failure.	A
2	Pole Loading Assessments & Remediation	Structural assessment of poles to identify potential loading issues during high wind events. Replacement of poles that do not pass GO 95 wind loading design criteria to minimize the risk of pole failure.	A
3	Overloaded Transformer Replacements	Replacement of overhead transformers that do not meet loading criteria to prevent transformer failure.	A
4	Distribution Construction Standards Improvements	Engineering study of distribution construction standard improvements, which could provide additional risk reduction in the Tier 2 HFTD.	B
Inspection and Maintenance			
5	Annual Patrol Inspection (GO 165)	Annual system patrol to inspect the condition of electrical assets to avoid faults, which could cause ignitions.	A

***A – Mitigation activity already implemented**
B – Planned mitigation activity

Mtigation Activites		Description	Timing
6	Vegetation Management Program	Annual vegetation maintenance and clearance from electrical lines to avoid vegetation contact in Tier 2 HFTD	A
7	Intrusive Pole Inspections	Condition based assessment of remaining pole strength to identify poles at risk of failure	A
Operational Practices			
8	Block Reclosing during RFW	Block reclosing on all feeder lines in the Tier 2 HFTD during RFW events	A
9	Line Patrol after outage event during RFW	Patrol with physical inspection of tripped feeder lines in Tier 2 HFTD during RFW before re-energizing circuit	A
Situational/Conditional Awareness			
10	Weather Monitoring	Conduct weather monitoring via publicly available weather resources to monitor weather forecast and any potential extreme fire conditions	A
11	Geographic Information System (GIS) Applications	Implementation of Outage Management System (OMS), which uses GIS data and meter information to help BWP locate outages and decrease response time	A

Chapter 4. Risk Analysis and Risk Drivers

4.1 Risk Analysis Methods

BWP consulted with a fire expert (Dudek) to perform a fire risk assessment of its electrical system and equipment utilizing the following approaches:

- **Risk Bowtie Analysis**. Risk evaluation method to analyze all potential causes of an BWP-caused wildfire as well as the potential impacts of such an event.
- **Site Fire Environment Assessment**. Assessment of natural and landscape environments around BWP facilities to determine the presence of potential threats or conditions that could become a BWP-caused wildfire threat.
- **Electrical Equipment Assessment**. Inventory of all BWP electrical assets within the Tier 2 HFTD and analysis of historical outage information.

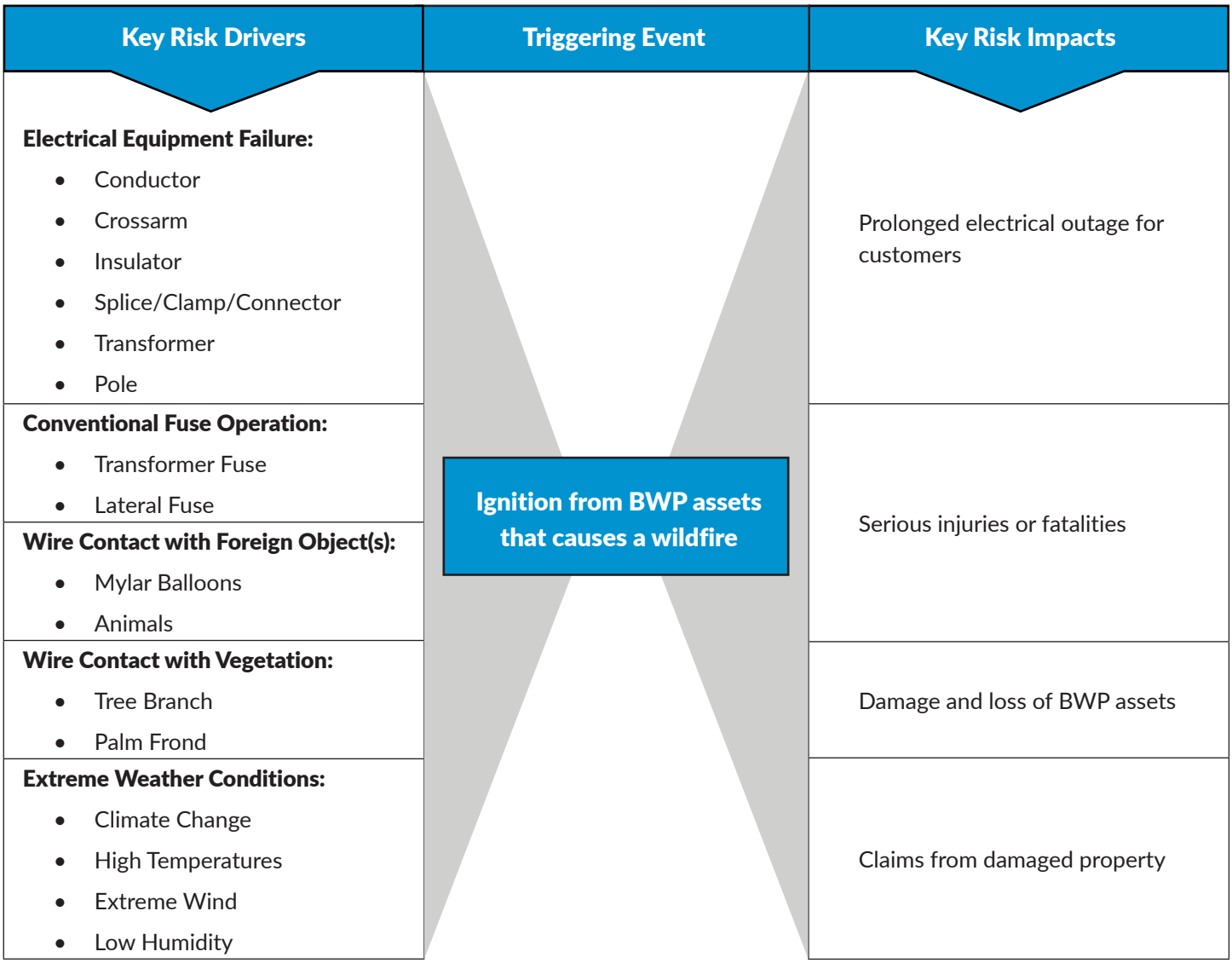
4.1.1 Hazard vs. Risk Discussion

The definition of a BWP risk of catastrophic wildfires (Wildfire Risk) is a wildfire event itself that is caused by BWP electrical facilities. However, it is important to distinguish between hazard (which the hazard maps categorize) and risk (which the hazard maps do not quantify). Hazard is a property of the potential fire environment or wildfire behavior for a given area (such as flame length, crown fire occurrence, and capacity to generate embers). A wildfire risk, however, relates to potential risk drivers (or triggers) that indicate if a risk event could occur, and do not reflect actual conditions or threatened conditions. Thus, even if there is potential high fire hazard in a given area (with expected high flame lengths, and aggressive wildfire), there may be a low risk of ignition from BWP electrical facilities.

4.2 Wildfire Risk Bowtie Analysis

The risk of a vegetation ignition and potential for an uncontrollable wildfire caused by BWP electrical facilities is related to the type of vegetation (fuel bed) within its vicinity, the local/regional weather patterns, or the potential for a failure of BWP's equipment. For example, areas that include uninterrupted, natural (unmaintained) vegetation present a risk of ignition from ongoing operational activities or equipment failures. When the area also includes weather conditions that result in periodic high wind and low humidity, the wildfire risk is significantly enhanced. Both of these weather conditions can occur in BWP's Tier 2 HFTD area. A bow tie analysis was conducted to identify these risk drivers as well as their potential resulting impacts. Figure 3 provides the risk bow tie diagram, which summarizes the assessment process.

Figure 3 – BWP's Wildfire Risk Bowtie



4.2.1 Potential Risk Drivers

Risk drivers are important to identify because they are the primary ways in which BWP electrical facilities could result in a catastrophic wildfire. The center of the bow tie chart is the triggering event, which is an ignition caused by a BWP asset resulting in a catastrophic wildfire. During the wildfire threat assessment, five categories were identified as potential drivers for causing fire ignitions:

1. Electrical equipment failure;
2. Conventional fuse operation;
3. Wire contact with foreign object(s);
4. Wire contact with vegetation; and
5. Extreme weather conditions.

It should be noted that the listed potential risk drivers are just an indication that a risk event could occur from a BWP asset, but actual conditions may differ. This type of analysis helps identify the types of mitigations necessary to minimize the risk of wildfire.

BWP's risk driver analysis identified and studied the five categories of drivers:

4.2.1.1 Electrical Equipment Failure

Electrical equipment failure is an inherent risk. Failure can occur for a variety of reasons such as manufacturer defects, loading conditions, or deterioration. Failure of electrical components, such as poles, crossarms, conductor, insulators, splices, connectors, or guy wires can result in a downed conductor (or "wire down") situation, which could lead to fire ignition. Electrical equipment such as transformers, voltage regulators, or capacitor banks can have internal shorts that can potentially be destructive and eject materials which could lead to fire ignition.

4.2.1.2 Conventional Fuse Operation

Fuses are devices that protect electrical lines and equipment during fault or overload conditions. Historically, BWP, as well as most of the electric industry, standardized on conventional type fuses to protect their system. During overload or fault conditions, a conventional fuse will operate and can expel hot particles and gases, which could ignite nearby vegetation.

4.2.1.3 Wire Contact with a Foreign Object(s)

BWP constructs its overhead electrical lines in alignment with industry standards by installing bare wires spanned on top of insulators on wooden poles. These lines are constructed at a certain height above the ground and a certain distance from adjacent objects based on appropriate design criteria to prevent contact and faults. Unfortunately, foreign objects such as animals and mylar balloons can still occasionally come into contact with overhead electrical lines.

Animals and mylar balloons are highly conductive and could result in a fault when contact is made with overhead electric lines. Protective devices such as relays, circuit breakers, and fuses are set up to protect and isolate these type of situations. However, there is a time delay between the protective devices sensing the fault and operating to isolate the fault. Although this time delay is nearly instant (within fractions of a second), there is still enough time to cause an emission of sparks, molten metal, or burnt foreign objects, which could lead to a fire ignition. In a worst-case scenario, this could also cause the conductor to fail and land in an energized mode, causing a fire ignition.

Vehicles, that come in contact with an electrical pole or supporting guy wires can damage or break the pole. This could cause energized wires to break and fall to the ground igniting vegetation.

4.2.1.4 Wire Contact with Vegetation

Vegetation such as tree branches or palm fronds also pose a risk of coming into contact with overhead electrical lines. This contact can cause sparks and arcs, and in some cases can cause the vegetation to ignite into flames and drop to the ground. Vegetation contact could also lead to conductor failure, which could cause a fire ignition. In addition, trees that are near BWP's electrical lines could possibly uproot and fall onto an energized conductor, causing pole failures or wire down events that could cause fire ignition.

4.2.1.5 Extreme Weather Conditions

Climate change along with extreme weather conditions contribute to the risk of wildfires. Higher air temperatures and lower humidity cause trees and vegetation to dry out and create conditions that are ripe for fire ignition and expansion. Additionally, extreme winds can increase tree failures, vegetation contact with overhead electrical lines, and failure of BWP assets such as poles and conductor.

4.2.2 Key Risk Impacts

If one of the risk drivers listed above were to occur, resulting in a wildfire ignition caused by BWP electrical facilities, there could be potential consequences for BWP as presented on Figure 3.

The worst-case scenarios could include:

- Prolonged electrical outage for customers;
- Serious injuries or fatalities;
- Damage and loss of BWP assets; and
- Claims from damaged property.

BWP is fully aware of the impacts that wildfires can have on the publicly owned utility, Burbank's populace, and local economy. As discussed in Section 5 of the WMP, BWP has established programs and implemented wildfire prevention strategies to create barriers or methods of reducing the likelihood of the risk driver events identified above from occurring and possibly leading to a catastrophic wildfire.

4.3 Site Fire Environment Assessment of BWP's Electric Service Territory

Due to its weather, topography, and native vegetation, the entire southern California area is at risk from wildland fires. The threat of wildfire exists throughout this region, including BWP's service territory. This threat is attributable to a variety of factors including extended drought, which has resulted in vulnerable vegetation for longer periods; climate change which may be driving the drought and vegetation drying; and population growth into the fire-prone areas, which results in the potential for increased ignitions and higher threat based on private and public assets that may be exposed to wildfires.

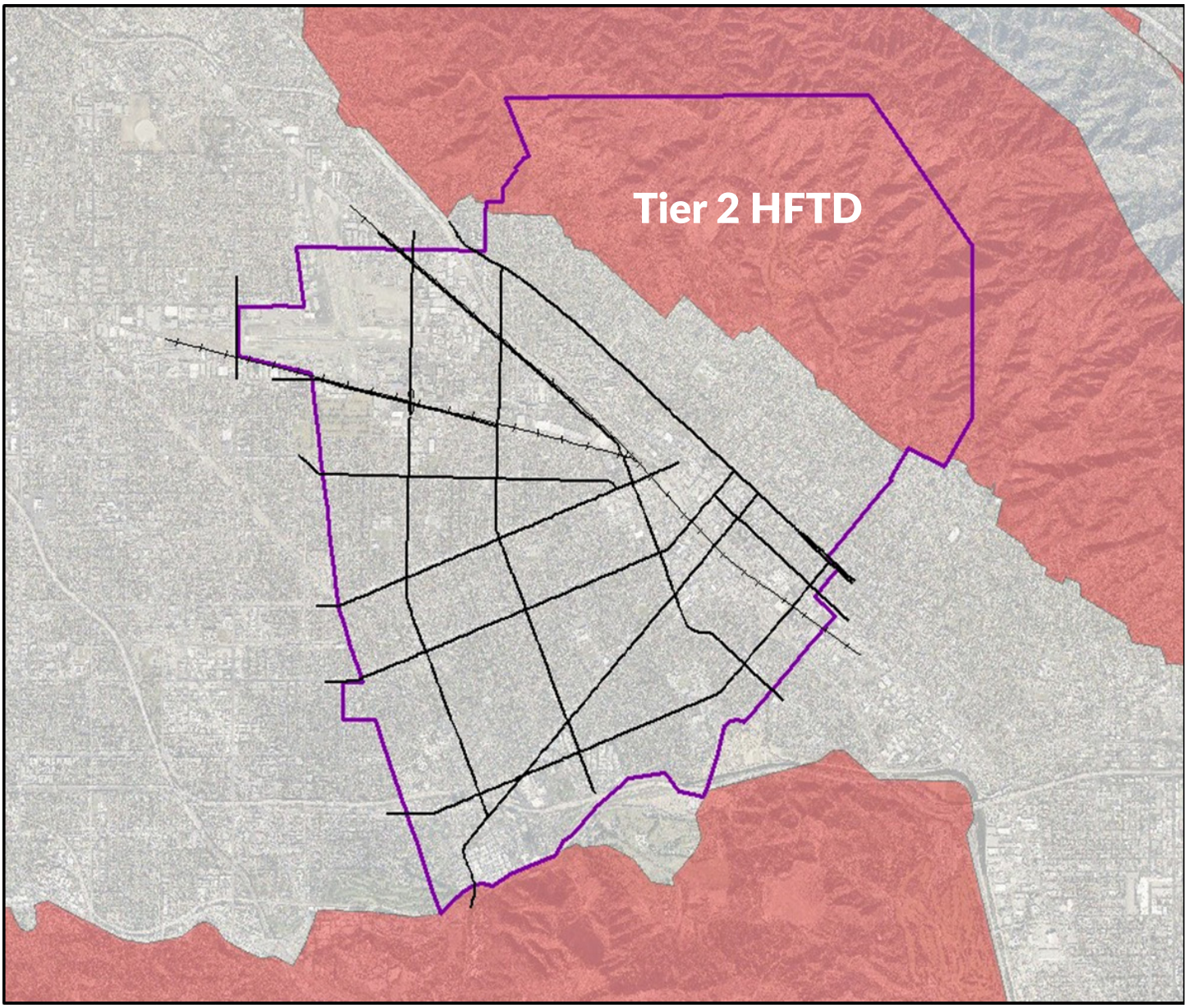
An assessment was made of the surrounding terrain, vegetative fuels, regional weather patterns, and regional fire history for the HFTD areas within BWP's service territory. **The factors evaluated were:**

1. **Fire risks:** all activity periods (operation, maintenance, new project design, construction, materials and methods);
2. **Site and facility ignition sources:** equipment, personnel, processes;
3. **Fire prevention strategies:** design, maintenance, inspections, monitoring;
4. **Best management practices** for hardening of electrical system;
5. **Fire agency coordination:** Firefighting and emergency response technical evaluation, training, and coordination

4.3.1 High Fire Threat District

BWP directly participated in the development of the California Public Utilities Commission' s (CPUC) Fire-Threat Map which designates High-Fire Threat Districts (HFTDs) throughout the State of California. The CPUC Fire-Threat boundary map ranks HFTDs based on the need to increase infrastructure resiliency to mitigate the wildfire threat posed by electric infrastructure. The CPUC Fire-Threat Map is comprised of Tier 2 HFTDs (elevated risk of potential impacts to people and property) and Tier 3 HFTDs (extreme risk of potential impacts to people and property).

Figure 4 - BWP's Tier 2 High Fire Threat District



In the map development process, BWP served as a territory lead, and worked with local fire & government officials to identify the areas of BWP's service territory that are Tier 2 or Tier 3 HFTDs. It was determined through the development process and affirmed by both a peer review and a team of independent nationwide experts led by the California Department of Forestry and Fire Protection (CAL FIRE), that a portion of BWP's service territory is situated within a Tier 2 HFTD. Additionally, no portion of BWP's service territory falls within a Tier 3 HFTD.

4.3.2 Wildfire-Threat Area Site Evaluation

BWP staff provided Wildfire SME (Dudek) with a guided tour on May 9, 2019 of the electric distribution system within Tier 2 HFTD area. The wildfire experts evaluated existing site conditions (e.g., topography, vegetation, and fuel loading) and whether or not there are the presence of potential risk drivers or conditions that could become a BWP-caused wildfire threat. Based on Dudek's field assessment and BWP staff interviews, the following observations were recorded for the distribution system in the Tier 2 HFTD area.

Fire Environment Observations

1. Most of the Tier 2 HFTD Areas are hilly or mountainous and steeper slopes exacerbate fire spreading, which also impedes fire suppression efforts. In worst-case scenarios, fires on the steep slopes of the Verdugo Mountains could burn well into the heavily developed areas of Burbank.

2. Wildland fires are relatively common in the Verdugo Mountains and have historically burned into the wildland-urban interface or Tier 2 HFTD areas of Burbank. The most recent fire, La Tuna fire (2017), consumed large portions of the south face of the Verdugo range within the City limits. The La Tuna fire significantly changed the fuel beds from chaparral-shrubby species to non-native grasses and other weedy species, especially north to northwest of overhead feeder line T-14.

3. Fuels in Sunset Canyon, off of Country Club Drive, remain dense and pose a threat to the residents. Defensible space has been provided around some of the residences along Country Club Drive.

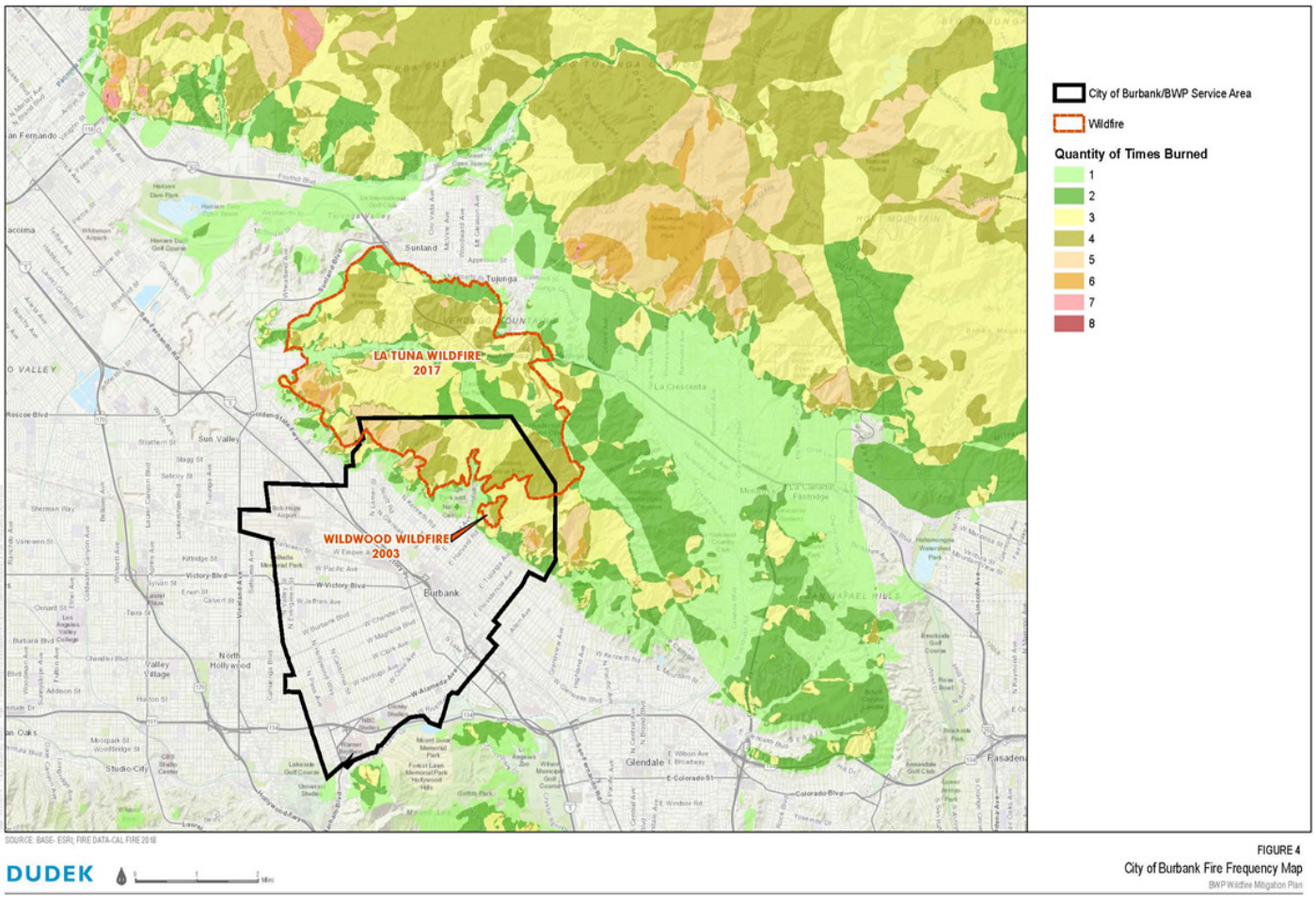
4. The level of fire hazard in wildfire-threat Tier 2 HFTD areas prone to wildland fires is also greatly increased during periods when weather conditions of high temperatures, low humidity, and high winds (e.g., RFW days) would accelerate the spread of a wildland fire and make containment difficult. "90% of the land area burned in California occurs during wildfires that ignite on the 10% of days that meet Red Flag Warning conditions while 10% of the land area burns occurs during the 90% of fires that occur during typical weather conditions."

5. BWP's Tier 2 HFTD area includes brush and grass-covered areas of significant topographic relief in the Verdugo Mountain range that is susceptible to wildland fires. The most recent wildfire (La Tuna fire) in BWP's service territory occurred in September 2017.

6. Although large areas of the Verdugo Mountains are undeveloped, there are many single-family residential neighborhoods that have been developed in the canyons, and at the base or edge of the hillsides, within the Tier 2 HFTD area. In these areas, the wildfire hazard is of significant concern. This is especially true for those older residential areas in the canyons that were built in the 1960's to 1980's before current ignition resistant fire and building codes.

7. Some of the older residential areas are typically reached by narrow roads that do not meet the current fire safety standards for access and egress of fire apparatus. Many roads in the canyons are also dead-end roads that are too long, do not have appropriate turnarounds at their end, and have no secondary access. Of the roads not meeting dead-end road standards, County Club Drive poses by far the most serious concern regarding accessibility, as this is the only way out during a wildfire for the residents on this street.

Figure 5 - Historical Fires in Burbank



4.3.3 Evaluation of Higher Fire-Threat Areas

A component of this WMP is the evaluation of the area's fire threat to determine whether it is accurately classified. Based on wildfire threat analysis conducted, there was no justification for increasing the Tier fire threat level beyond its current Tier 2 designation. BWP will continue to evaluate changes to the Tier 2 HFTD in future WMPs based upon new information that is obtained during the implementation and evaluation of BWP's WMP.

4.4 Electrical Facility Assessment

Figure 6 presents the portion of BWP's service territory (e.g., feeder lines and equipment) within CPUC fire-threat areas. As illustrated in Figure 6, BWP's electrical system is located within both Tier 2 areas and areas not considered within the HFTD (referred to as outside HFTD in this WMP). Table 3 includes the breakdown of BWP's electric system that falls within the Tier 2 HFTD.

Table 3 - Breakdown of BWP's Electrical Assets within the Tier 2 HFTD

BWP Asset	Total Assets in Entire System	Total Assets within Tier 2 HFTD	Percent of Total
Overhead Wire	205 miles	11 miles	5.4%
Underground Lines	126 miles	15 miles	11.9%
Poles	10,683	643	6.0%
Overhead Transformers	4,680	184	3.9%
Overhead Transformer Fuses	4,680	184	3.9%
Overhead Lateral Fuses	2,060	45	2.2%

As shown in Table 3, approximately five percent of BWP's total 205 miles of overhead wires are located within the Tier 2 HFTD area. In comparison, approximately 12 percent of the total underground lines occur within the Tier 2 HFTD area.

Figure 6 - Electrical Facilities within Tier 2 HFTD

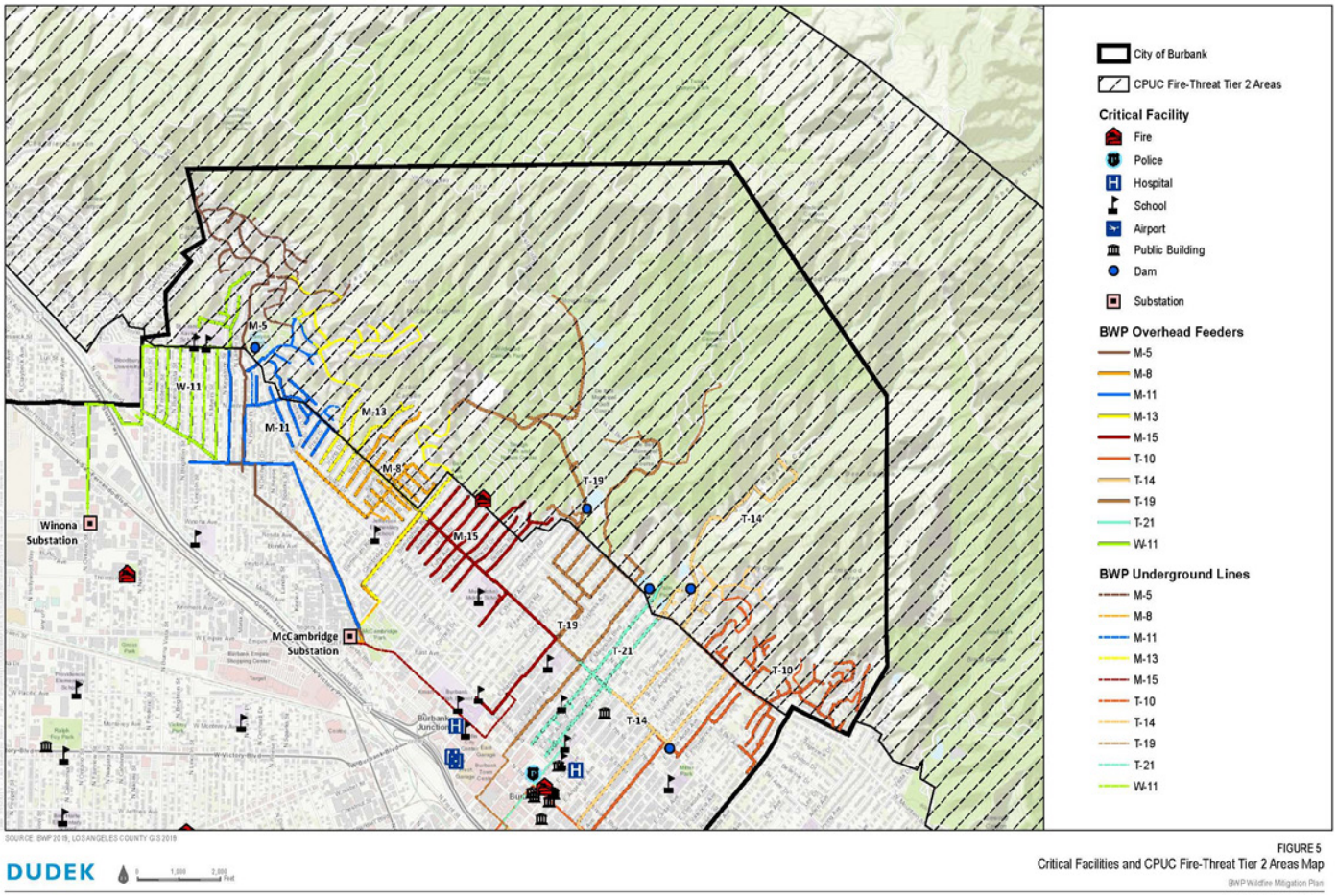


Table 4 provides a detailed inventory of BWP assets within Tier 2 HFTD area organized by distribution feeder circuit. As indicated, there is a total of approximately 26 miles of distribution lines in Tier 2 HFTD, with 15 miles underground lines and 11 miles overhead wire. The overhead wire and related components are the focus of this WMP as they represent the primary source of potential wildfire ignitions. Approximately 56 percent of BWP-owned electrical lines in the Tier 2 HFTD area are currently underground, which significantly reduces the threat of fire ignition.

Table 4 - Inventory of BWP Assets in Tier 2 HFTD by Circuit

Electric "Feeder"[1]	Voltage (kV)	No. of Miles UG Line	No. of Miles OH Lines	No. of Poles	No. of Transformers	No. of Lateral Fuses
M-5	4.16	4.6	0.36	18	11	0
M-8	4.16	0.0	1.22	80	20	8
M-11	4.16	1.8	0.56	41	9	7
M-13	4.16	4.7	0.78	48	11	4
M-15	4.16	0.0	0.45	25	8	0
T-10	4.16	0.9	2.27	167	48	12
T-14	4.16	1.6	1.49	83	24	3
T-19	4.16	1.1	2.90	134	38	9
T-21	4.16	0.0	0.06	14	2	1
W-11	4.16	0.0	0.89	33	13	1
Total		**14.6**	**10.98**	**643**	**184**	**45**

[1] Feeder lines are identified by the substation within their circuit. W= Winona Substation; M=McCambridge Substation; and T= Town Substation.

BWP analyzed outage records for energized circuits within wildfire-threat areas. The analysis focused on recent outage data between January 2005 and July 2019 that was obtained from BWP. These records provide documentation about the frequency and cause of outages and represent the most accurate depiction of how often potential ignitions may occur within BWP's service territory in the wildfire-threat Tier 2 areas. The electrical equipment risk assessment examined five categories: equipment failure, foreign object contact, vegetation contact, wire down events, and other or unspecified events. Table 5 presents the results of the analysis.

Table 5 - Electrical Equipment Risk Drivers Based on Historical Events

Wildfire Risk Event	Number of Occurrences (By Circuit)											
	M-5	M-8	M-11	M-13	M-15	T-10	T-14	T-19	T-21	W-11	Count	Percent
Equipment Failure												
Transformer Failure	1										1	2%
Conductor Failure (Wires Down)	3						2	5	1		11	25%
										Total	**12**	**27%**
Conventional Fuse Operation												
Transformer Fuse	1	3			3	3		1		2	13	29%
Lateral Fuse		2			1	2		1			6	13%
										Total	**19**	**42%**
Wire Contact with Foreign Object(s)												
Pole Failure - Vehicle								1			1	2%
Wire Contact - Mylar Balloons					1			3	1		5	11%
										Total	**6**	**13%**
Wire Contact with Vegetation												
Wire Contact - Vegetation	1			1		1	2	2			7	16%
										Total	**7**	**16%**
Other												
Unknown								1			1	2%
										Total	**1**	**2%**
Total Events Per Feeder Line	**6**	**5**	**0**	**1**	**5**	**6**	**4**	**14**	**2**	**2**	**45**	

Source: BWP Outage Data between 1/1/2005 and 10/15/2019

The Risk Event Frequency for the Tier 2 HFTD area was determined to be 45 events over 14 years for 26 circuit miles of distribution line, with a driver frequency as follows:

- **Equipment Failure (26%, 12 potential ignitions).** Failure of transformers and overhead copper conductor wire down events that could have resulted in fire ignition.
- **Conventional Fuse Operation (42%, 19 potential ignitions).** Operation of a transformer or lateral fuse for a faulted condition that resulted in sparks that could have led to fire ignition.
- **Wire Contact with Foreign Object(s) (13%, 6 potential ignitions):** Mylar balloons or vehicles that could contact with conductors, resulting in ignition.
- **Wire Contact with Vegetation (16%, 7 potential ignitions):** Tree, tree limb, palm fronds or other vegetation contact with conductors that could result in ignition.
- **Unknown (2%, 1 potential ignition):** Situations where BWP was unable to determine the cause of the outage. However, 4kV feeder attempted to reclose, twice. Then, it was locked out.

BWP places only eight percent (or three percent of its overhead distribution lines) of its entire distribution system (331 miles of overhead and underground lines) in the Tier 2 HFTD. Of greatest concern from an ignition source, the bare overhead electrical lines (T-14) in Sunset Canyon (e.g., the upper road segment of Country Club Drive) combined with the continuity of vegetation within the canyon and density of tree canopies in close proximity of the power line, could lead to a wildfire event.

4.5 Mitigation Activities that Address Risk Drivers

Table 6 below summarizes each mitigation activity along with risk driver that it addresses. Section 5 goes into more detail for each mitigation activity.

Table 6 - Mitigation Activities that Address Risk Drivers

Mtigation Activity		Risk Driver Addressed			
		Electrical Equipment Failure	Conventional Fuse Operation	Wire Contact with Foreign Object	Wire Contact with Vegetation
1	Deteriorated Pole Replacements	X			X
2	Pole Loading Assessments & Remediation	X			X
3	Overloaded Transformer Replacements	X	X		
4	Distribution Construction Standards Improvements		X	X	X
5	Annual Patrol Inspection (GO 165)	X		X	X
6	Vegetation Management Program		X		X
7	Intrusive Pole Inspections	X			X
8	Block Reclosing during RFW			X	X
9	Line Patrol after outage event during RFW		X	X	X

Chapter 5. Wildfire Prevention Strategies and Programs

This section describes the strategies and programs BWP has implemented to mitigate the threat of electrical infrastructure-related wildfires within Tier 2 HFTD area of its service territory. As previously mentioned, the prevention strategies and programs are developed to address four primary fire safety categories:

1. Facility design and construction
2. Inspection and maintenance
3. Operational practices
4. Situational/condition awareness

5.1 Facility Design and Construction

5.1.1 Deteriorated Pole Replacements

Because pole failure could result in a wires down event and potential fire ignition, it is imperative to replace any poles that do not pass condition based assessments. BWP prioritizes and schedules the replacement of deteriorated poles based on data obtained from intrusive pole inspections. Each year, all priority 1 and 2.1 poles are replaced per the timelines in Table 9 of Section 5.2.3.

5.1.2 Pole Loading Assessments & Remediation

Wind Loading is also an important factor in the prevention of pole failure. BWP design poles to meet or exceed the wind loading criteria set in General Order 95 (GO 95) in order to minimize the chance of pole failure during heavy winds. BWP will perform this loading analysis on all of the poles located within the Tier 2 HFTD. Any poles that do not pass the wind loading criteria are scheduled for replacement or reinforcement.

5.1.3 Overloaded Transformer Replacements

Distribution transformers are another identified risk because failure could lead to the expulsion of sparks or material that could cause a fire ignition. Ensuring that transformers are not excessively loaded past their capacity can help mitigate failures due to internal faults. Each year BWP uses advanced data analytics to measure the

loading levels of every transformer in the electric system. Any transformers that exceed the loading criteria of 175% are scheduled for replacement. Excessive transformer loading can also lead to transformer fuse operations to occur during high heat days. Ensuring transformers are properly loaded can also prevent fuse operations that could expel sparks that could lead to fire ignition. In the Tier 2 HFTD, BWP uses a more conservative loading criteria of 150% as a threshold for transformer replacement.

5.1.4 Distribution Construction Standard Improvements

BWP will perform an engineering study of distribution construction standard improvements that could reduce the risk of ignitions. This study will include components of the electric system such as fuses, overhead conductor, and detection & isolation technology. Each electrical facility location within the Tier 2 HFTD will be analyzed to determine where material upgrades or the installation of new technology would be appropriate, as some locations may not have vegetation present.

5.2 Inspection and Maintenance

5.2.1 Annual Patrol Inspection (GO 165)

In general, BWP performs electrical infrastructure patrol inspections to inspect each component of the electrical system to check that no obvious abnormalities exist to the extent possible. BWP performs these inspections on a cycle that meets or exceeds the timeframes given in General Order 165 (GO 165). During these inspections, problems are identified, prioritized and corrected. Table 7 below summarizes the inspection cycles.

Table 7 - Distribution Inspection Cycles (Maximum Interval in Years)

Component	Patrol Inspection	Detailed Inspection	Intrusive Inspection
Overhead Component Inspection	1	8	
Padmounted Transformer	1	5	
Padmounted Switch	1	5	
Padmounted Regulator/Capacitor	1	5	
Streetlighting	1		
Wood Poles less than 15 years old	1		
Wood Poles over 15 years old which have not been subject to intrusive inspection	1		10*
Wood poles which have passed intrusive inspection	1		20

*Within 10 years or prior to 25 years of age

5.2.2 Vegetation Management Program

BWP meets or exceeds the minimum industry standard vegetation management practices. For all electrical facilities, BWP meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. These standards require significantly increased clearances in the High Fire Threat District. The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. BWP will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance. Table 8 below summarizes BWP's vegetation clearances.

Table 8 - Vegetation Clearances

	Outside Tier 2 HFTD	Within Tier 2 HFTD
Minimum clearance at all times between 4kV overhead lines and vegetation	18 inches	4 feet
At time of trim, minimum trimming clearance between 4kV overhead lines and vegetation	4 feet	12 feet

BWP performs routine vegetation management, such as pruning and removal, on an annual basis in the Tier 2 HFTD. Each year, field patrols are performed to inspect tree and conductor clearances and to identify any hazard trees. Areas for vegetation pruning and removal are targeted based on the results of these patrols. BWP hires contracted line clearance tree trimming crews to trim vegetation near its electrical lines. The tree crews will trim a minimum of 12 feet of clearance. BWP's tree trimming contractors are specialists, supervised by a certified arborist. The tree crews are knowledgeable about work near energized electric lines and about trees, growth rates, and pruning methods that maintain tree health.

5.2.3 Intrusive Pole Inspections

BWP performs intrusive inspections on all poles in the electric system according to the cycle intervals in Table 7. The inspections provide information on the amount of rot and decay inside each pole to measure the amount of remaining strength left in the pole before replacement is necessary. Each pole is given a rating that determines the priority and schedule of replacement. Table 9 below summarizes the priority system.

Table 9 - Priority Level of Deteriorated Poles Based on Intrusive Inspections

Priority Level	Recommended Action
1	Immediate Replacement
2.1	Replace within 1 year
2.2	Replace within 3 years
2.3	Replace within 5 years
3	Replace when practical

5.3 Operational Practices

5.3.1 Block Reclosing During RFW

BWP has reclosing capabilities on all substation circuit breakers in the electrical system. Under normal operation, once a fault is detected the circuit will first open and will attempt to reclose the circuit to test if the fault condition still exists. The circuit will make two total attempts to reclose the circuit and will remain open and locked out if unsuccessful. In the Tier 2 HFTD, each attempt to reclose the circuit could cause a spark if fault conditions are still present. This could potentially lead to an ignition of vegetation. For this reason, BWP enacted an operating procedure to block reclosing capabilities on all circuits in the Tier 2 HFTD during RFW conditions to prevent any potential for vegetation ignitions. Additionally, more sensitive, quicker acting relay settings are employed during RFW conditions to increase the chance of detecting and isolating a fault.

5.3.2 Line Patrol after outage event during RFW

If a circuit within a Tier 2 HFTD sees a fault during RFW conditions, field crews will perform a patrol of the entire circuit to locate the cause of the fault. The ECC dispatcher will wait for confirmation of the patrol inspection to ensure no fire ignition risks are present when the circuit is re-energized.

5.4 Situational/Conditional Awareness

5.4.1 Weather Monitoring

The National Weather Service may issue RFWs at any time when humidity and wind conditions meet pre-determined thresholds that would promote fire ignition and spread. BWP's electrical system is located within an area of Los Angeles County that is actively monitored for fire weather conditions. The National Weather Service monitors humidity, wind, and temperatures and will declare RFWs and watches (https://www.weather.gov/sgx/), signaling that fire weather is anticipated. BWP's ECC monitors National Weather Service warnings and watches and coordinates with other agencies and third parties in the area.

5.4.2 Geographic Information System (GIS) Applications

BWP has implemented an ESRI-based GIS system as well as GIS–based applications to improve situational awareness of the electrical system. Through the use of a fully-implemented advanced metering infrastructure (AMI) network, BWP's smart meters will detect an outage and send out a fault message, which is picked up by the Outage Management System (OMS). The OMS helps ECC operators pinpoint the geographic location of the outage as well as the potential electrical component involved. This allows BWP crews to respond faster to the outage location.

5.5 Pre-emptive De-energization

BWP's ECC personnel have the authority to de-energize portions of the electrical system for safety, reliability, or during emergency conditions when requested by the Burbank Fire Department, Burbank Police Department, CALFIRE, or other emergency responding agencies. BWP has evaluated and has implemented mitigation activities that do not necessitate pre-emptive de-energization of any portions of its electrical system.

Chapter 6. Emergency Preparedness and Response

6.1 Emergency Management

BWP responds to emergencies in accordance with its Emergency Response Plan (2017) and in alignment with the State Standardized Emergency Management System (SEMS) and federal National Incident Management System (NIMS). In responding to all-hazard emergencies, BWP staff would be organized based on SEMS and NIMS as outlined in BWP's Emergency Response Plan. The BWP Emergency Response Plan is comprised of separate plans for Electric, Power Supply, Telecommunication, and Water System. Each plan calls for convening a group of experts, or Emergency Response Teams, to respond and coordinate efforts pertaining to any situation where communication and control of an incident would be needed (BWP 2017). Once assembled, these Emergency Response Teams will assess a situation and make a recommendation to the General Manager whether to declare a department system emergency and activate the BWP Emergency Response Plan. The declaration of a department system emergency shall be by the General Manager, by which the Emergency Response Plan would be activated.

BWP's Emergency Response Team is comprised of four teams: Operational Technology, Electric Services, Power Supply, and Water. The collective work of these teams consists of preparing for, responding to, and recovering from incidents that may affect BWP operations.

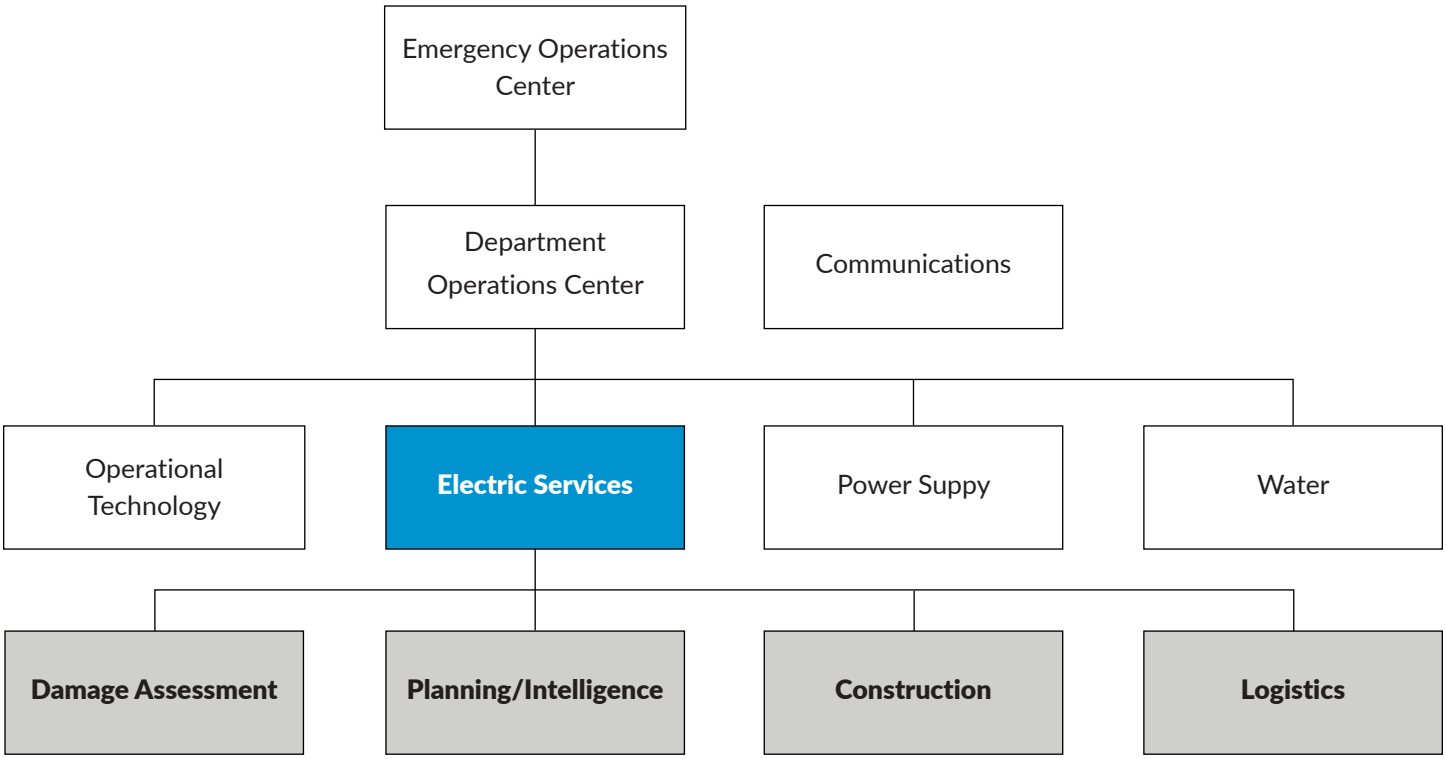
To respond and recover effectively from all hazards and threats, such as wildfires, the Electric Services Team follows guidelines that are detailed in the Electric Emergency Response Plan (EERP).

The EERP may be activated whenever any of the following conditions exist:

- Natural disaster
- Predicted load shedding
- Loss of distribution, one-third or more of the distribution system, or generation facility where load is not transferrable
- Emergency curtailment
- Major civil disturbance

The Electric Services Response Team is comprised of four response teams: Damage Assessment, Planning/ Intelligence, Construction, and Logistics as presented in Figure 7. The responsibilities of each response team are described in Table 10 below.

Figure 7 - BWP Emergency Response Teams' Organization



Source: BWP Electric Services

Table 10 - Electric Services Team Emergency Response Responsibilities

Team	Responsibilities
Damage Assessment	• Visit affected areas to determine extent of damage • Estimate labor, material, and equipment needed for restoration • Submit information to Restoration Team
Planning/ Intelligence	• Prioritize and coordinate restoration according to the Restoration Philosophy • Maintain system integrity • Ensure continued operation
Construction	• Assign and manage construction crews • Coordinate with mutual aid crews
Logistics	• Obtain, manage, and control materials and equipment to support Operations and Construction teams • Maintain communication and technology systems to support all teams

Source: BWP Electric Services

6.1.1 BWP Department Operations Center

BWP's is responsible for coordinating BWP's emergency management activities and activation of the Department Operations Center (DOC). The activation of the DOC assembles the internal subject matter experts for the Electric Services Response Team to assess and provide situational awareness to internal and external stakeholders/Assistant General Managers and providing incident planning objectives and subsequent response.

6.2 Disaster and Emergency Response

BWP EERP is consistent with BWP's system wide response approach. The BWP EERP is customized to provide a framework by which BWP can respond effectively to wildfire threats and other hazards. BWP recognizes its essential role in both restoring normalcy after an incident and the importance of the utility sector to the daily lives of customers and stakeholders and the region's economic well-being and security. The WMP reflects these considerations and is intended to be a framework for BWP's engagement with external entities and the citizens of Burbank.

In the event of a disaster, BWP expects to utilize experienced electric staff and affiliate support to perform incident response and management. Roles and responsibilities are divided by functional areas and the emergency response is led by an area commander or an incident commander (IC), depending on incident scope or complexity. BWP will use the Incident Command System (ICS) as the foundation for its incident response organization. ICS is a standardized, on-scene, all-hazard incident management concept, which provides responders with an integrated organizational structure to match the complexities and demands of single or multiple incidents. Through the use of span of control management and a top-down organizational structure, ICS helps ensure full utilization of all incident resources, decreases confusion, and improves communication. As a system, ICS both provides an organizational structure for incident management, and guides the process for planning, building, and adapting that structure.

When an incident affects multiple entities and/or jurisdictions, a Unified Command structure may be established. The Unified Command organization consists of the ICs from the various jurisdictions or agencies, who form a single command structure and work together to make joint decisions. Institutions and responding agencies blend into an integrated, unified team.

A unified approach results in:

- A shared understanding of priorities and restrictions;
- A single set of incident objectives;
- Collaborative strategies;
- Improved internal and external information flow;

- Less duplication of efforts; and
- Better resource utilization.

By utilizing this emergency response framework, BWP will maintain a coordinated and standardized approach for activating and establishing the emergency response organization. The emergency response framework, along with all associated plans, serves to safeguard BWP's ability to meet its essential missions and functions under wildfire threats and hazards, with or without warning, in preparation for or during any incident, regardless of its expected duration.

6.2.1 Fire Agency Emergency Response

In addition to its internal emergency preparedness procedures, emergencies including active fire within Tier 2 areas of BWP's system would be responded to by a robust City fire-fighting system. BWP distribution lines are located within the Burbank Fire Department responsibility area. Emergency response for BWP distribution lines would be provided by the Burbank Fire Department along with Los Angeles County Fire and other agencies, as needed, under existing mutual and automatic aid agreements. The available firefighting resources are considered sufficient to respond to wildfires in the BWP Tier 2 areas.

6.3 Customer Support during Emergencies

Customer support is applicable in emergency situations given the BWP's service area and customer base. BWP includes a communications protocol for communication and coordination with its primary stakeholders, which include Burbank Fire Department, City Manager, other utilities, elected officials, fire agencies and first responders, and BWP's emergency response support team. BWP's General Manager would be the point of contact for all communications and would initiate communication outreach with stakeholders.

6.4 Restoration of Service

Restoration of the electric system would occur in accordance with the BWP Emergency Response Plan (2017). The Planning/Intelligence Team would be responsible for the overall direction and prioritization of the electrical system restoration efforts.

Chapter 7. Performance Metrics and Monitoring

7.1 Accountability of the Plan

BWP's General Manager has overall responsibility for the WMP. Other members of the management team are responsible for executing the various components of the WMP. Table 12 below lists each component of the WMP along with the corresponding owner.

Table 11 - Accountability for WMP Components

Mtigation Activites		Activity Owner
Design and Construction		
1	Deteriorated Pole Replacements	AGM, Electric Services
2	Pole Loading Assessments & Remediation	AGM, Electric Services
3	Overloaded Transformer Replacements	AGM, Electric Services
4	Distribution Construction Standards Improvements	AGM, Electric Services
Inspection and Maintenance		
5	Annual Patrol Inspection (GO 165)	Manager, Electrical Distribution
6	Vegetation Management Program	Manager, Electrical Distribution
7	Intrusive Pole Inspections	Manager, Electrical Distribution
Operational Practices		
8	Block Reclosing during RFW	Manager, Energy Control Center
9	Line Patrol after outage event during RFW	Manager, Electrical Distribution
Situational/Conditional Awareness		
10	Weather Monitoring	Manager, Energy Control Center
11	Geographic Information System (GIS) Applications	Manager, Energy Control Center

7.2 Metrics to Evaluate Plan Performance

BWP's performance metrics are focused on the success of fire prevention strategies at lowering the risk of catastrophic wildfires. The metrics process would evaluate the effectiveness of a fire prevention strategy in reducing the risk of wildfire ignition and spread. This performance metric tracking approach will utilize a format that offers the ability to track compliance trends over time, correct issues as they occur, and adapt metrics as conditions mandate.

These metrics will be measured by BWP personnel at timeframes indicated, and as needed to ensure adequate goal achievement tracking. As with this WMP, overall performance metrics will be managed according to an adaptive management approach, which will facilitate changes in the measures and metric goals, as well as the measurement timeframes, if determined necessary. However, BWP recognizes that there may be unforeseen circumstances that result in the inability to meet a specific metric goal for a given timeframe. This does not necessarily indicate a failure in the process that requires immediate action. The overall metric goal achievement trend will be the focus of this performance measurement process, with a primary focus on maintaining upward trending performance.

7.2.1 BWP Performance Metrics

Performance metrics are derived from and address program measures by fire safety category. Table 11 provides the performance metrics developed to directly address the identified primary wildfire risk drivers.

Table 12 - BWP Wildfire Prevention Performance Metrics

Category	Metric	Responsible	Frequency
Equipment Failure	• Number of wire down events caused by conductor failure in Tier 2 HFTD • Number of pole failures in Tier 2 HFTD • Number of transformer failures in the Tier 2 HFTD	T&D Engineering Manager	Annually
Conventional Fuse Operations	• Number of conventional transformer fuse operation events in Tier 2 HFTD • Number of conventional lateral fuse operation events in Tier 2 HFTD	T&D Engineering Manager	Annually
Wire Contact with Foreign Object(s)	• Number of outage events caused by wire contact with an animal • Number of outage events caused by wire contact with mylar balloons • Number of pole failures caused by vehicle contact in the Tier 2 HFTD	T&D Engineering Manager	Annually
Wire Contact with Vegetation	• Number of outage events caused by wire contact with vegetation	T&D Engineering Manager	Annually
Inspection and Maintenance	• 100% of vegetation management inspections in the Tier 2 HFTD completed on time	Manager Electric Distribution	Annually
Operations	• Number of outages on circuits in Tier 2 HFTD • Number of outages on circuits in Tier 2 HFTD during RFW days • Number of ignitions caused by BWP electrical infrastructure in Tier 2 HFTD	ECC Manager	Annually
Extreme Weather Conditions	• Number of RFW days	ECC Manager	Annually

7.2.2 Previous Plan Metrics

There are no previous WMPs or fire prevention plans to which performance metrics have been measured. However, available historical outage information was analyzed to assess risk and inform certain mitigation activities. Future WMPs will include a discussion of metrics, their performance, and modifications deemed necessary.

7.3 Monitoring and Auditing the Plan

The WMP will be reviewed annually. This annual review will align with BWP's planning and budgeting process. This review will include an assessment of the WMP programs and performance. BWP's planning and budgeting process includes budgeting and strategic planning for a 5-10 year planning horizon.

7.3.1 Identifying and Correcting Deficiencies in the WMP

At any point in time when deficiencies are identified, they should be corrected through BWP Management.

7.3.2 Monitoring and Auditing the Effectiveness of Inspections

BWP meets or exceeds the inspection cycles in GO 165. For the Tier 2 HFTD, BWP performs annual patrols for all overhead equipment. Problems that are identified during inspection are prioritized for correction. Inspection findings are examined to identify trends and recurring problems. These findings will be combined with analysis of performance metrics to develop changes to design, construction or maintenance standards and practices to that the overall performance of the electric system, including safety and reliability, is improved.

Chapter 8. Public Comment, Board Presentation, and Independent Evaluation

8.1 Public Comment

A draft copy of the WMP was made available for comment on BWP's website for at least 30 days prior to the City Council meeting. BWP Board and City Council meetings are open and accessible to the public. Meeting notices and agendas are posted, at a minimum, 72 hours in advance on the City's website. Those who are unable to attend the meeting in-person can livestream the meeting or view a recording on the City's website.

8.2 Presentation to BWP Board and Burbank City Council

The WMP will be posted on BWP's website and will be presented to the BWP Board prior to a presentation to the City Council.

8.3 Independent Evaluation

BWP will contract with a qualified independent evaluator to assess the comprehensiveness of the BWP WMP. The independent evaluator's report will be posted to BWP's website and presented to the governing board.

8.4 Wildfire Safety Advisory Board

On or before July 1, 2020, BWP will submit the WMP to the California Wildfire Safety Advisory Board (CWSAB). The CWSAB will review and provide comments and advisory opinions regarding the content and sufficiency of the WMP. BWP will consider comments and opinions received by the CWSAB in future plans.

Chapter 9. References

Burbank Water and Power (BWP). 2015. City of Burbank Water and Power Department Electric Distribution Master Plan Project. Prepared by Leidos Engineering, LLC.

BWP. 2017. Burbank Water and Power Emergency Response Plan. August 2017

FRAP (Fire and Resource Assessment Program). 2019. CALFIRE Fire Resource and Assessment Program. California Department of Forestry and Fire Protection. Accessed July 2019. http://frap.cdf.ca.gov/.