



**Modesto Irrigation District
2023 – 2025 Wildfire Mitigation Plan**

June 2, 2023

**Modesto Irrigation District
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1. INTRODUCTION

Following the devastating California wildfires of 2007 the California Public Utilities Commission (CPUC or Commission) issued Rulemaking (R.) 08-11-005, the Order Instituting Rulemaking to Revise and Clarify Commission Regulations Relating to the Safety of Electric Utility and Communications Infrastructure Provider Facilities, to “consider revising and clarifying the Commission’s regulations designed to protect the public from potential hazards, including fires, which may be caused from electric utility transmission or distribution lines or communications infrastructure providers’ facilities in proximity to the electric overhead transmission or distribution lines.”¹ In 2009, the CPUC issued several decisions in R.08-11-005 that adopted dozens of new fire-safety regulations, including the Phase 1 Decision (D.) 09-08-029, Measures To Reduce Fire Hazards In California Before The 2009 Fall Fire Season.² The CPUC also stated that “several adopted fire-safety regulations apply *only to areas*, referred to as ‘*high fire threat areas*,’ where there is a higher risk for power line fires igniting and spreading rapidly.”³

The Modesto Irrigation District (MID) is a community owned, not-for-profit organization controlled by a locally elected Board of Directors. MID, located in California's Central Valley, provides electric service, irrigation water, and treats surface water for drinking. MID is committed to providing safe, reliable, and cost-effective electric services to all its customers while reducing risks including that from wildfire caused by MID infrastructure. MID’s 2023 Wildfire Mitigation Plan (WMP or Plan) is focused to establish a new baseline to describe programs and initiatives that strengthen and make the MID electrical assets, located within the CPUC’s defined High Fire Threat District (HFTD), more resilient. MID complies with all federal, state, and regional regulations as they relate to the construction, operations, and maintenance of its system-wide transmission, distribution, and substation assets. MID WMP will primarily detail programs and initiatives for how it will satisfy its obligation to construct, maintain, and operate its electrical lines and equipment located within the HFTD, to reduce the risk of catastrophic wildfire posed by those assets.

¹ Available at https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/93758.PDF.

² Available at https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/106128.PDF

³ See <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>

2. UTILITY OVERVIEW AND CONTEXT

2.1 Utility Description and Context Setting Table

MID is a California irrigation district organized in 1887 under the provisions of the California Water Code. MID has the powers under the California Water Code to, among other things, provide irrigation and electric service within the MID service area. In connection, therewith, MID has the powers of eminent domain, to contract, construct works, to fix rates and charges for commodities or services furnished, to lease its properties, and to incur indebtedness.

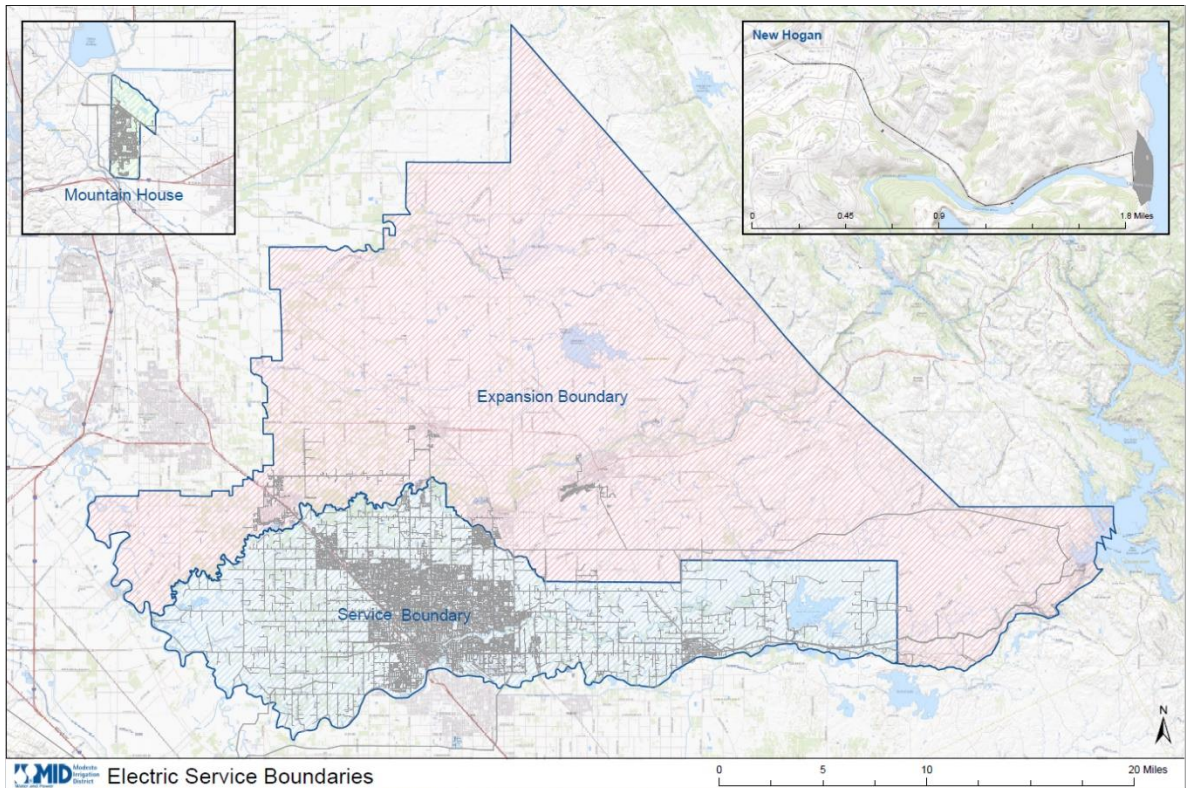
MID began providing electric service in 1923 and is in the San Joaquin Valley of Central California, approximately 90 miles east of San Francisco. In 2022 MID had total retail sales of approximately 2.6 billion kWh and a peak demand of 760 megawatts.

MID owns, maintains, and operates an electric system comprised of transmission, distribution, and generation assets. MID also purchases and sells power and transmission service and participates in pooling and other utility arrangements.

MID provides local electrical service across 560 square miles to portions of San Joaquin, Stanislaus, and Tuolumne counties, as authorized by the California Water Code and other relevant law. MID must provide electrical service within its traditional service area in the Modesto area of Stanislaus County and Tuolumne County, and the Mountain House Community Service District in San Joaquin County, which is an area of approximately eight square miles. MID may also provide service to customers within a separate joint electric distribution service area shared with other utilities. Each electric service provider, within this joint service area, owns, operates, and maintains its own electric infrastructure. If MID is the service provider, at no time, are they dependent on another utility to serve their customer load, nor are there any impacts to MID customers due to another utility's Public Safety Power Shutoff (PSPS).

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Figure 1: Modesto Irrigation District



Registered voters within MID’s service area elect the MID five (5) directors to a four-year term. The Board of Directors is the legislative body of MID. It is the power and the duty of the Board to manage and conduct the business and affairs of MID. Each Board member represents a different geographical division within MID.

The MID Board of Directors appoint General Manager (GM), who reports to the Board, and has overall responsibility for overseeing the operations of the MID. There are eight department leads that report to the GM including the Assistant General Manager (AGM) Transmission & Distribution (T&D), and AGM Electric Resources. (See Figure 2 below). The Electric Engineering, Line Construction, Metering, Substation, and Trouble departments within T&D have critical roles in MID’s efforts to reduce the risk of MID assets being the origin or contributing source for the ignition of a wildfire.

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Figure 2: MID Organizational Chart

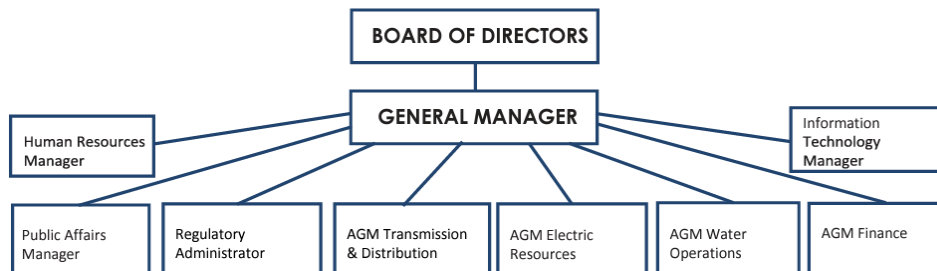


Table 1 below includes the Context Setting Table for the MID and provides detailed information regarding MID’s assets, resources, and general service area information.

Table 1: Context Setting Table

Utility Name	Modesto Irrigation District (MID)	
Service Territory Size	~560 square miles	
Owned Assets	Transmission ~390miles Distribution ~1895 miles Generation (12 units / Total Capacity ~590 MW)	
Number of Accounts Served	~132k	
Population Within Service Territory	~300 k	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	77.4% Residential 9.80% Commercial 0.10% Industrial 12.7% Other	38.3% Residential 25.8% Commercial 30.5% Industrial 5.3% Other
Service Territory Location/Topo	86.45% Agriculture 0.32% Barren/Other 0.25% Hardwood Forest 3.03% Hardwood Woodland 7.60% Urban 2.27% Water	

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graphy	
Service Territory Wildland Urban Interface (based on total area)	0.54% Wildland Urban Interface 2.02% Wildland Urban Intermix
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	Tier 2: 0% Tier 3: 0%
Miles of Owned Lines Underground and/or Overhead (Total System-wide Circuit Miles)	Overhead Distribution: ~ 1060 miles Overhead Transmission: ~ 390 miles Underground Distribution: ~ 835 miles Underground Transmission: ~ 0 miles
	Explanatory Note 1 – Description of Unique Ownership Circumstances: A portion of 230 kV~23.5% of the transmission line miles is jointly owned (MID & TID)
	Explanatory Note 2 – Additional Relevant Context: ~16% of lines are located outside the service territory
Percent of Owned Lines in CPUC High Fire Threat Districts	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2: 0% Tier 3: 0%
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: ~0.4% Tier 3: 0%
Customers have ever lost service due to an IOU PSPS event?	No

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Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	No
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	Yes, for the 60 kV transmission tap connecting to a small hydro. Does not impact MID’s customers.
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	Yes Data for the calendar year 2022: <i>Number of shut-off events: 0</i> <i>Customer Accounts that lost service for >10 minutes: 0</i> <i>For prior response, average duration before service restored: 0</i>

2.2 MID WMP Budget and Funding Mechanisms

MID’s 2023 adopted Capital and Operations and Maintenance (O&M) budget⁴ does not include a specific allocation for wildfire mitigation programs. Any wildfire mitigation programs are funded within MID’s overall budget. Increases in the overall budget are approved by the board.

**Table 2: MID's 2023 Adopted Budget
Electric Transmission & Distribution Division**

	Actual	Actual	Budget	Budget
Year	2020	2021	2022	2023
Capital	\$ 26,257,658	\$ 18,160,760	\$ 23,431,702	\$ 23,117,663

⁴ <https://www.mid.org/about/budget/documents/2023AdoptedBudgetDocument20230213.pdf>

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O&M	\$ 26,943,382	\$ 25,848,944	\$ 29,455,312	\$ 30,768,051
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2.3 Statutory Cross-Reference Table

MID’s 2023 comprehensive WMP complies with Public Utilities Code (PUC) § 8387 statutory requirements as outlined in Table 3: PUC § 8387 – Statutory Requirements Checklist. MID also provides a reference to where each requirement is addressed in the Plan.

Table 3: PUC § 8387 – Statutory Requirements Checklist

PUC § 8387	Compliance Requirements and Corresponding Plan Sections	Plan Section
(a)	Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.	2.6
(b)(1)	The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, and annually thereafter, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.	2.4
(b)(2)	The wildfire mitigation plan shall consider as necessary, at	

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PUC § 8387	Compliance Requirements and Corresponding Plan Sections	Plan Section
	minimum, all of the following:	
(b)(2)(A)	An accounting of the responsibilities of persons responsible for executing the plan.	4.1
(b)(2)(B)	The objectives of the wildfire mitigation plan.	3.
(b)(2)(C)	A description of the preventative strategies and programs to be adopted by the local 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.	5. and 6.
(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 that underlie the use of those metrics.	9.1
(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.	9.2
(b)(2)(F)	Protocols for disabling reclosers and deenergizing 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.	6.6 and 6.7
(b)(2)(G)	Appropriate and feasible procedures for notifying a customer who may be impacted by the de-energizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications	6.7.2

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PUC § 8387	Compliance Requirements and Corresponding Plan Sections	Plan Section
	infrastructure with premises within the footprint of potential de-energization for a given event.	
(b)(2)(H)	Plans for vegetation management.	6.3
(b)(2)(I)	Plans for inspections of the local publicly owned electric utility’s or electrical cooperative’s electrical infrastructure.	6.4
(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:	5.
(b)(2)(J)(i)	Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility’s or electrical cooperative’s equipment and facilities.	6.2
(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 electric utility’s or electrical cooperative’s service territory.	5.3
(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 identified in a commission fire threat map, and identification of where the commission should expand a high-fire threat district based on new information or changes to the environment.	5.2
(b)(2)(L)	A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	5.1
(b)(2)(M)	A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	8.

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PUC § 8387	Compliance Requirements and Corresponding Plan Sections	Plan Section
(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:	<u>9</u>
(b)(2)(N)(i)	Monitor and audit the implementation of the wildfire mitigation plan.	<u>9.3</u>
(b)(2)(N)(ii)	Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies.	<u>9.4</u>
(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, other applicable statutes, or commission rules.	<u>9.5</u>
(3)	The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric 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.	<u>2.4</u>
(3)(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	<u>10</u>

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PUC § 8387	Compliance Requirements and Corresponding Plan Sections	Plan Section
	independent evaluator shall issue a report that shall be made available on the internet website 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.	

2.4 Process for Update and Submittal of Annual WMP and Opportunities for Public Comment

The MID Electric Engineering department is responsible for the annual update of their WMP in compliance with PUC § 8387. MID Electric Engineering will provide the AGM Transmission & Distribution with a final draft of the revised WMP for review and approval. When approved by the AGM T&D the draft WMP will be posted on the MID public website for public comment. The draft will be updated, incorporating the applicable comments and then be placed on a MID Board of Directors’ general meeting agenda. By July 1 of each year, MID Electric Engineering will submit the approved MID WMP to the WSAB and post the Plan, and if applicable, the Independent Evaluator (IE) Report, on the MID website.⁵

2.5 Description of Where WMP Information Can be Found on Utility Website

The updated MID WMP, and if applicable, the IE report along with related reports, will be posted on the MID public facing website.⁶ At this site, the public

⁵ <https://www.mid.org/about/board/agenda/default.html>

⁶ Available at <https://www.mid.org/about/newsroom/wildfiresafety/default.html>

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can also view the previous year's MID WMPs and IE report(s).

2.6 Purpose of the Wildfire Mitigation Plan

MID's WMP describes in detail the range of activities that MID is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies, and procedures. This Plan is subject to direct supervision by the MID Board of Directors and is implemented by the MID GM. This plan complies with the requirements of PUC § 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter.

In accordance with California PUC § 8387(a), each local publicly owned electric utility and electrical cooperative (POU):

Shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment. After January 1, 2020, each POU shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board (WSAB) on or before July 1 of that calendar year. Each POU shall update its plan annually and submit the update to the WSAB by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan”.

MID complies with PUC § 8387(a) and regional, state, and federal standards to construct, maintain, and operate its electric system in a safe and reliable manner that minimizes the risk of catastrophic wildfire posed by its electric power lines and equipment. The purpose of MID's 2023-2025 comprehensive WMP continues to build upon the work and strategies described in the 2020-2022 WMP. Additionally, MID continues to evaluate its overall wildfire mitigation programs and initiatives to look for opportunities to improve by expanding current programs and developing and implementing new programs for MID assets within the HFTD.

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2.7 Organization of the Wildfire Mitigation Plan

MID's WMP is outlined consistently with the WSAB recommended template and contains the following elements:

- Section 1 – Introduction;
- Section 2 – Utility Overview and Context-Setting Table;
- Section 3 – Objectives of the Wildfire Mitigation Plan;
- Section 4 – MID Roles and Responsibilities;
- Section 5 – Identification of Key Wildfire Risks and Risk Drivers;
- Section 6 – Description of Wildfire Mitigation Strategies;
- Section 7 – Community Outreach and Public Awareness;
- Section 8 – Restoration of Service;
- Section 9 – Metrics and Assumptions for Measuring Plan; and
- Section 10 – Independent Evaluation

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3. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

MID's 2023-2025 WMP documents the initiatives MID is undertaking and/or evaluating for reducing the risk of MID assets located within the HFTD being the origin or contributing source for a catastrophic wildfire. MID's 2023-2025 comprehensive WMP builds upon the 2020-2022 WMP programs and initiatives and is built around the following objectives:

3.1 Minimizing Sources of Ignition

MID's objectives of its WMP is to outline wildfire mitigation strategies related to its assets within the HFTD. MID has very little exposure and very little wildfire risk in the HFTD with only 1.6 miles of overhead 60kV transmission line in a Tier 2 fire-threat area, and no distribution assets in or abutting to the HFTD. The primary goal of this WMP is to minimize the probability that MID's transmission assets may be the origin or contributing source for the ignition of a fire. MID has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. MID has implemented those changes consistent with this evaluation and continues to evaluate wildfire risk reduction tools, processes, and utility best practices, and implement over time through Plan evaluation and continuous improvement.

3.2 Improving Grid Reliability and Resiliency

The secondary goal of this WMP is to improve the reliability and resiliency of the MID electrical assets within the HFTD. As part of the development of this Plan, MID assessed new industry practices and technologies that could reduce the likelihood of a disruption in service and improve the restoration of service. During the 2020-2022 WMP cycle, MID evaluated its risk mitigation programs such as grid hardening, and enhanced vegetation management to determine if they could provide additional benefits such as improved reliability and resiliency. That risk analysis resulted in MID identifying very low risk of their assets in the HFTD being the potential source of ignition for a catastrophic wildfire. MID will continue to evaluate the HFTD and its assets annually and provide updates on system improvements, if any, during the 2023-2025 WMP cycle.

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3.3 Measuring Plan Effectiveness

The third objective of the MID WMP is to measure the effectiveness and performance of MID’s wildfire mitigation programs and initiatives as described herein. The MID will monitor the performance of its Plan, such as a continued decline in equipment failures or vegetation contacts and make Plan modifications as necessary to continuously improve the safety, reliability, and resiliency of the MID system. The Plan will also help determine if more cost-effective measures could produce the same or better results to reduce the risk of MID electrical assets being the origin or contributing source of a catastrophic wildfire.

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4. MID ROLES AND RESPONSIBILITIES

4.1 MID Specific Responsibilities

The MID GM is the owner and has overall responsibility of the Plan. The AGM T&D has overall responsibility for execution of the Plan. Table 4 provides the program owner for each of the 2023 WMP programs.

Table 4: WMP Program Responsible Person

Activity	Responsible Person/Title
Transmission Asset Inspections	Trouble Supervisor
Distribution Asset Inspections	Trouble Supervisor
Substation Inspections	Substation Supervisor
Transmission maintenance	Line Construction Manager
Distribution maintenance	Line Construction Manager
Substation maintenance	Substation Supervisor
Vegetation inspections / Transmission	Trouble Supervisor
Vegetation inspections / Distribution	Trouble Supervisor
Vegetation inspections / Substations	Substation Supervisor
Vegetation management / Transmission	Trouble Supervisor
Vegetation management / Distribution	Trouble Supervisor
Vegetation management / Substations	Substation Supervisor
WMP Updates	Electric Engineering Manager
Communications	Power Operations Supervisor & Public Affairs Specialist
Governmental Liaison	Regulatory Analyst
WMP Review	General Manager and Assistant General Manager of T&D
WMP Implementation	General Manager
WMP Final Approval	Board of Directors

MID utility staff have the following responsibilities regarding fire prevention, response, and

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investigation:

- Conduct work in a manner that will minimize the risk of ignition for a utility caused wildfire;
- Take all reasonable and practicable actions to prevent and suppress fires resulting from MID electric facilities;
- Coordinate with local, state, and federal fire management personnel to ensure that appropriate preventative measures are in place;
- When made aware of a fire caused by MID assets immediately report the incident to the agency having jurisdiction (i.e., CAL FIRE, USFS, local fire department, etc.) pursuant to specified procedures;
- Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained;
- Ensure compliance with relevant federal, state, and industry standard requirements;
- Ensure that relevant incident data is appropriately and timely collected when it is suspected or known that a utility asset was the cause or contributing source for the ignition of the wildfire;
- Ensure that evidence is appropriately preserved when it is known or suspected that a utility asset was the cause or contributing source for the ignition of the wildfire; and
- Maintain adequate fire mitigation training programs for all relevant employees and, applicable, POU contractors.

4.2 Coordination with Critical Infrastructure Providers

The US Cybersecurity & Infrastructure Security Agency states that “There are 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof.”⁷

MID has no lines that are subject to PSPS that would impact critical infrastructure. For other MID system emergencies MID adheres to the communication protocols outlined in the MID Emergency Operations Plan. MID considers all critical infrastructure sectors within the MID service territory of critical importance to the safety and health of the MID customers. MID’s Emergency Operations Plan describes the coordination activities between MID and the following sectors:

- Water and Wastewater Systems sector;
- Communications sector; and
- Healthcare and Public Health sector.

4.3 MID Emergency Response Plan

MID’s Emergency Response Plan outlines the MID departmental responsibilities for the response, communications, and recovery from major incidents.

MID is a member of the California Utility Emergency Association (CEUA), which plays a key role in ensuring communications between utilities during emergencies. MID also participates in the Western Energy Institute’s Western Region Mutual Assistance Agreement, which is a mutual assistance agreement covering utilities across several western states.

⁷ <https://www.cisa.gov/critical-infrastructure-sectors>

5. IDENTIFICATION OF KEY WILDFIRE RISKS AND RISK DRIVERS

This section lists the wildfire risks and risk drivers associated with MID's assets within the HFTD.

5.1 Enterprise-Wide Safety Risks

MID tracks risk events throughout its service territory. MID utilizes the lessons learned from these risk events to evaluate potential risks to the MID assets in the HFTD. Other WMP effectiveness measures are listed below:

- **Measuring Effectiveness of the Plan** – MID continuously monitors and evaluates the effectiveness of the MID Plan. Changes are made as deemed appropriate to maintain and enhance system safety, reliability, and resiliency.
- **Feedback and Lessons Learned from MID Employees** – MID utilizes the broad experience of and feedback from MID employees to evaluate risk factors and implement mitigation strategies.
- **Trends and Consistency Across the Utility Industry** – MID monitors and evaluates new trends and events, including wildfires, throughout the utility industry. Considerations for change will be evaluated if such trends could impact MID.
- **Ongoing Lessons from Past or Active Fires** – The identified cause and possible proactive approaches that could have been taken for prevention of wildfires will be evaluated. Any applicable strategies will be recommended for implementation. The MID continuously collaborates with the CMUA and engages with various community partners and stakeholders to continuously share and learn best management practices and lessons learned from any powerline related wildfires and emergencies they may have experienced.
- **Unseen Operational Issues** – MID evaluates, and if necessary, addresses unpredicted and unexpected operational issues which may act as a deterrent for the minimization, prevention, and control of wildfires.
- **Any New Research Papers** – MID tracks industry research for new or updated methodologies, design changes, pilot projects, and new policies and procedures. Fire

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risk mitigation changes that reduce MID's risk for the wildfire will be addressed in the Plan as applicable based on new findings.

5.2 High Fire Threat District (HFTD)

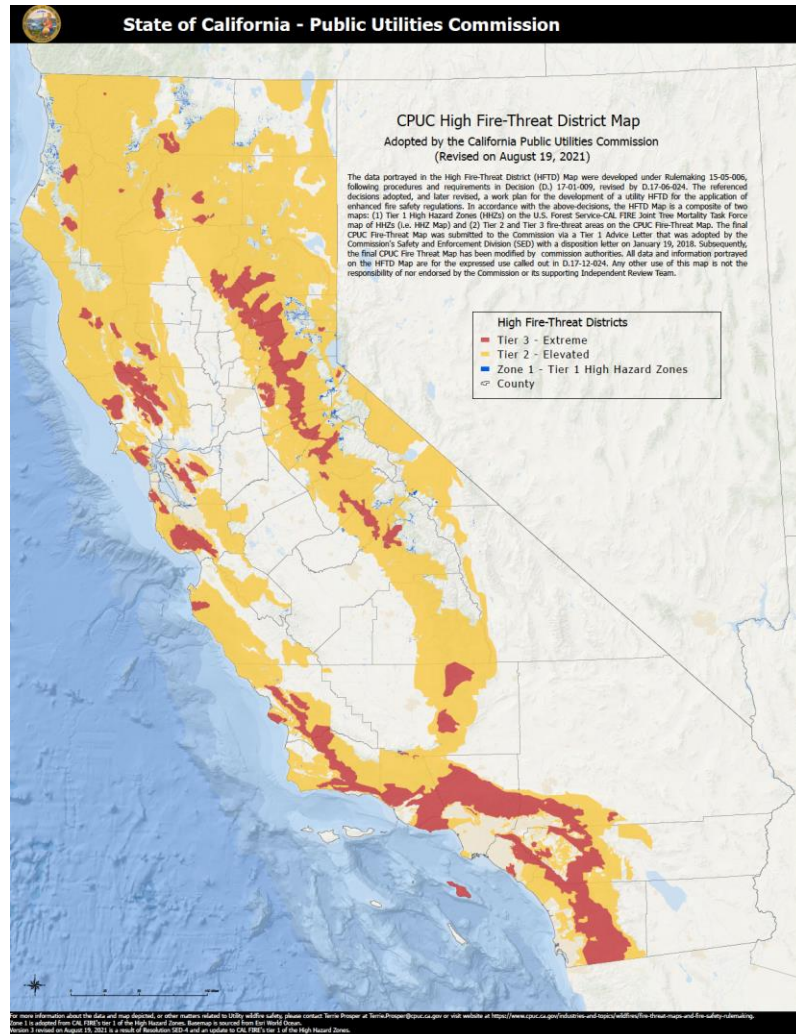
MID participated in the development of the CPUC's Fire-Threat Map⁸, which is one part of the HFTD. The HFTD is made up of two maps:

1. Tier 1 High Hazard Zones (HHZs) on the U.S. Forest Service-CAL FIRE joint map of Tree Mortality HHZs ("Tree Mortality HHZ Map").
 - a. The Tree Mortality HHZ Map is an off-the-shelf map. Tier 1 HHZs are zones near communities, roads, and utility lines, and are a direct threat to public safety.
2. Tier 2 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map.
 - a. Tier 2 fire-threat areas outline areas where there is an elevated risk (including likelihood and potential impacts on people and property) from utility related wildfires.
 - b. Tier 3 fire-threat areas outline areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility related wildfires.

⁸ <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>

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Figure 3: CPUC High Fire Threat District Map

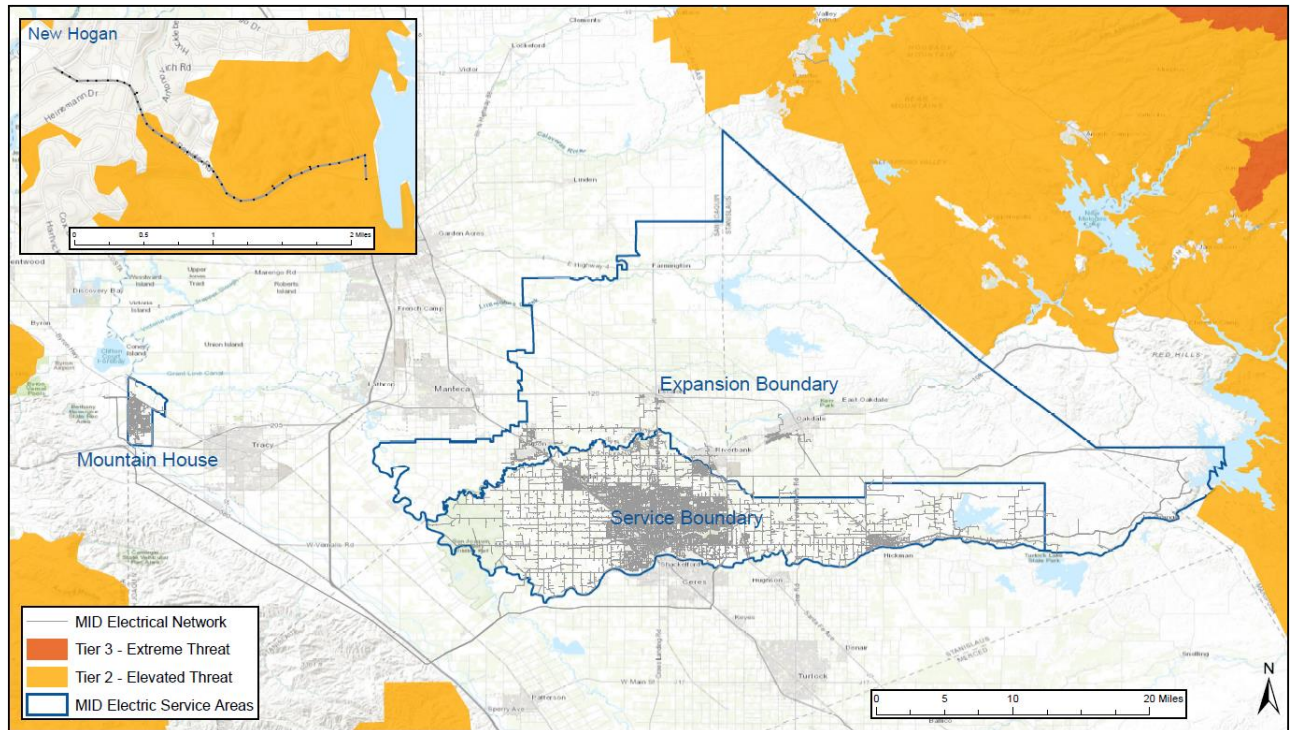


In the map development process, MID reviewed the proposed boundaries of the fire- threat areas and confirmed that, based on local conditions and historical fire data, all MID’s service territory was properly excluded from the HFTD. MID has incorporated the HFTD into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

MID’s entire service territory is located outside of the HFTD. There is only 2.2 miles of MID owned and operated transmission line outside of MID’s service territory and 1.6 miles of that are within a Tier 2 fire- threat area.

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Figure 4: California HFTD and MID Service Areas



5.2.1 New Hogan Line

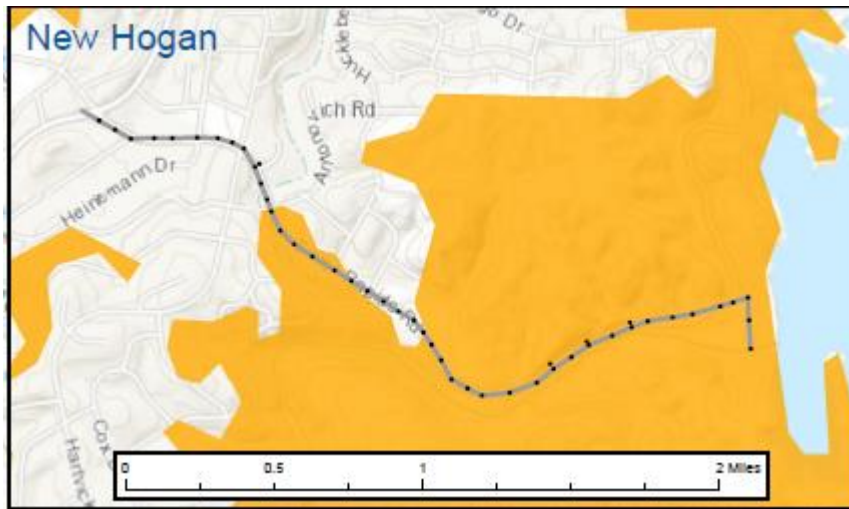
MID's 60kV New Hogan transmission line tap interconnects with PG&E's 60kV Valley Springs #1 line. MID owns and operates 2.2 miles (all contiguous) of the overhead electrical infrastructure. 1.6 miles of this tap line is within a Tier 2 fire-threat area. MID has determined that their electrical assets in the HFTD are very low risk for being the origin or contributing source for a catastrophic wildfire. MID's section of the 60kV New Hogan transmission runs from the New Hogan Powerhouse along Silver Rapids Road to Highway 26 in the community of Valley Springs, CA. where it interconnects to the PG&E system at a line switch. All terrain is below 700 feet elevation. MID evaluates risk events, system wide, to identify cause trends and consequence of those risk events to determine if construction, maintenance, and/or operational changes should be considered including to the 60kV New Hogan line.

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Figure 5: Aerial View of Valley Springs Community



Figure 6: New Hogan Line – MID Facilities on CPUC HFTD



5.2.2 Changes to CPUC Fire Threat Map

MID's electrical assets pose a very low risk of being the origin or contributing source for a catastrophic wildfire with only 1.6 miles of well-maintained line in a Tier 2 fire-threat area. For the 2023-2025 WMP cycle MID concurs with the existing HFTD boundaries and does not recommend changes to the HFTD boundaries as currently established.

5.3 Climate / Weather Risks

Adverse weather conditions, specifically critical fire weather events, pose very little risk to MID electrical assets in the HFTD. MID’s service territory is subject to hot temperatures during the summer months but historically do not experience strong damaging winds. The MID service area is subject to Red Flag Warnings however most of the MID service territory is in the valley where most of the vegetation is frequently irrigated crops.

MID referenced the City of Modesto 2022 Climate Change Vulnerability Assessment⁹ to evaluate potential climate change impacts to the MID service territory and MID assets.

5.3.1 Extended Drought

MID’s service territory has experienced extended periods of drought over the years. Drought in combination with dryness and other factors can create an ideal situation for the ignition and rapid spread of wildfires. However MID has very few assets within the HFTD and has concluded that there is a very low risk of MID assets being the origin or contributing source for a catastrophic wildfire.

5.3.2 Extreme Heat

The City of Modesto Climate Change Vulnerability Assessment states that “Extreme heat occurs when temperatures rise significantly above normal levels. In Modesto, an extreme heat day occurs when temperatures reach above 102.9 degrees Fahrenheit (°F). As shown in Figure 7, the number of extreme heat days in Modesto is projected to increase from four days historically to an average 22 extreme heat days per year by midcentury and an average of 42 extreme heat days per year by the end of the century”.

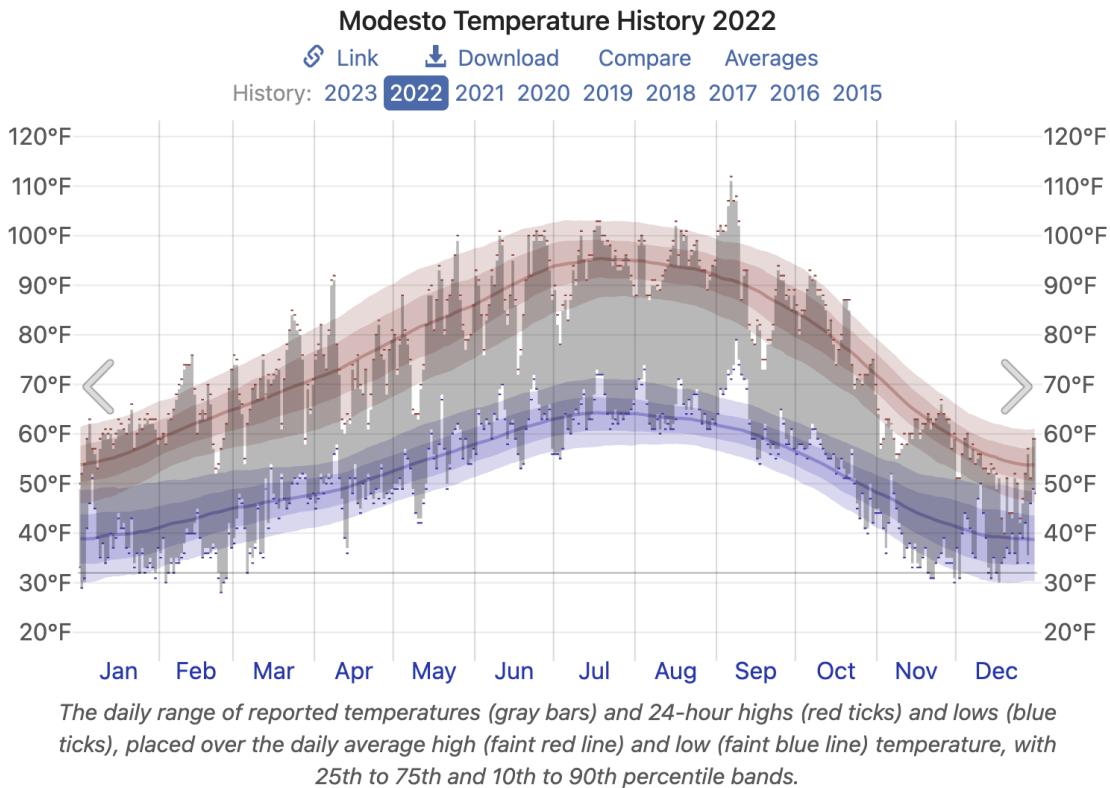
Figure 7 below shows the daily temperatures in Modesto in 2022. The hottest temperature in 2022 was 113 degrees recorded on September 6.¹⁰

⁹ https://gp2050.modestogov.com/wp-content/uploads/2022/06/Modesto-VulnerabilityAssessment-Final_June-2022.pdf

¹⁰ <https://www.mid.org/weather/WeatherQuery/results/TempRainSeason.jsp>

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Figure 7: Modesto Temperature History



5.3.3 Severe Weather

5.3.3.1 High Winds

Average sustained wind speed throughout the Modesto region varies throughout the year from 5.0 to 9.4 miles per hour. Heat and drought complemented by strong wind may contribute to rapid spread of wildfires. The average wind speed and direction collected from Modesto Airport is stated below.

Table 5 below displays the reported sustained wind speeds and maximum wind gust throughout 2022 in the Modesto region. Throughout 2022 the highest wind gust reported was just below 40 mph.

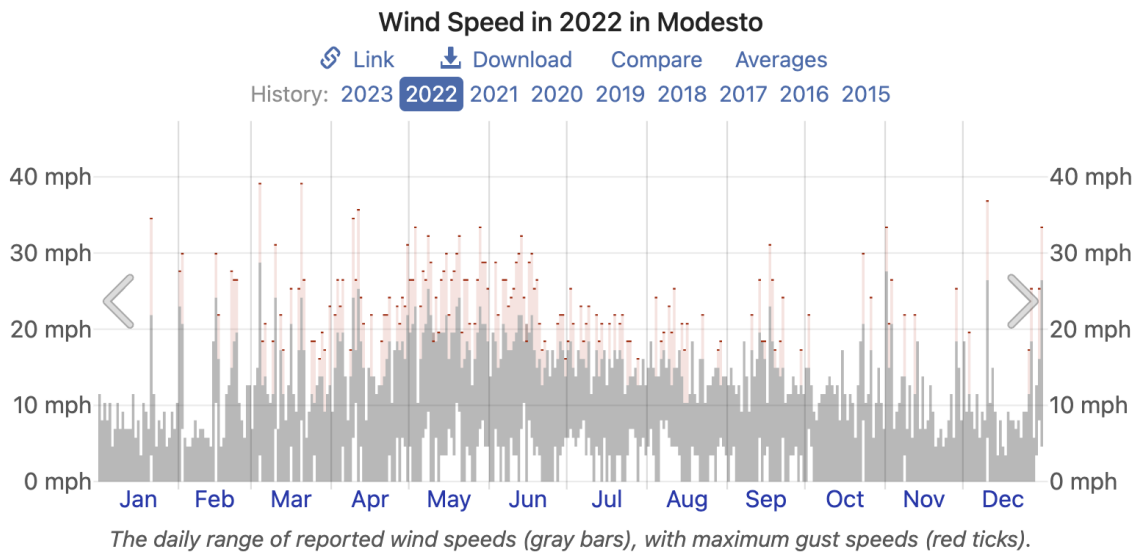
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Table 5: Reported Sustained Wind Speeds and Maximum Gust Throughput in 2022

Wind	Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
	Speed	5.0	6.2	7.0	7.8	8.9	9.4	8.6	8.1	6.9	6.0	5.0	5.6	7.0
	Direction	SE	SE	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	SE	NW

Note: Average Wind Speed 1996 -2006

Figure 9: Wind Speed in Modesto¹¹



5.3.4 Other Risks

5.3.4.1 Vegetation Type

Most of the vegetation in MID’s service area includes crops in frequently irrigated fields, primarily nuts and fruits. To the east of MID’s service territory there is dry wild grass and low growth bushes.

¹¹ Charts available at <https://weatherspark.com/h/y/1325/2022/Historical-Weather-during-2022-in-Modesto-California-United-States#Figures-Temperature>

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5.3.4.2 Communities at Risk

MID’s evaluation of its service area has not identified communities at risk from a catastrophic wildfire. MID has only 1.6 miles of line in a Tier 2 fire-threat area that has very little vegetation with little to no risk that an ignition would result in a large catastrophic wildfire.

5.3.4.3 Terrain

The majority of MID’s service area is essentially flat with an average elevation of less than 100 feet above sea level. MID’s service territory to the east and west are at a slight elevation consisting of rolling hills with low and slow growth vegetation. There are three rivers traversing the county - Dry Creek, Tuolumne, and Stanislaus rivers.

5.3.5 Climate Change

The National Oceanic and Atmospheric Administration¹² (NOAA) describes climate change as, “Climate change refers to any significant change in the measures of climate for extended periods of time, usually over decades or longer. This includes major, long-term changes in temperature, precipitation, humidity, ocean heat, wind patterns, sea level, sea ice extent, and other factors, and how these changes affect life on Earth”.

NOAA also states that “Global temperatures rose about 1.98°F (1.1°C) from 1901 to 2020, but climate change refers to more than an increase in temperature. It also includes sea level rise, changes in weather patterns like drought and flooding, and much more. Things that we depend upon and value — water, energy, transportation, wildlife, agriculture, ecosystems, and human health — are experiencing the effects of a changing climate”.

In June 2022 the City of Modesto published the “Modesto 2050 General Plan Update and Environmental Impact Report, Final Technical Memorandum: Climate Change Vulnerability Assessment” report¹³. The assessment looked at the following climate change hazards, agricultural and ecosystem pests, air quality, drought, extreme heat, flooding, human health

¹² <https://www.noaa.gov/explainers/what-s-difference-between-climate-and-weather>

¹³ https://gp2050.modestogov.com/wp-content/uploads/2022/06/Modesto-VulnerabilityAssessment-Final_June-2022.pdf

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hazards, landslides, and severe weather.

In conclusion, the study “identifies which hazards are expected to harm sensitive populations and assets, and which assets are most vulnerable to various hazards that are projected to intensify with climate change. The effects of climate change that are expected to have the largest impacts on Modesto’s communities, infrastructure, buildings, activities, ecosystems, and services are extreme heat, flooding, and severe weather”. There were 17 different infrastructure assets evaluated that provide various services to the Modesto community. MID has identified six risks that are of specific interest to them:

1. Electrical substations and transmission lines, as mapped by the California Energy Commission and California Office of Emergency Services,
2. Power plants, including McClure Generation Station and Stone Drop Mini-Hydro,
3. Dams and reservoirs, including Don Pedro Dam, New Melones Dam, New Exchequer Dam, La Grange Dam, Hetch-Hetchy Reservoir, Modesto Reservoir, and Turlock Lake,
4. Electric vehicle charging stations,
5. Communication facilities, including television and radio antennae and Internet lines, as mapped by the California Office of Emergency Services,
6. Evacuation routes and single access roads.

During the 2023-2025 WMP cycle MID will evaluate the conclusions of this report to determine what these projected climate change impacts may have on MID operations and evaluate possible changes to reduce MID’s fire risk potential, if any identified, in the region and develop an action plan to mitigate any potential increase in risk.

6. DESCRIPTION OF WILDFIRE MITIGATION STRATEGIES

MID’s wildfire mitigation strategies are described below:

6.1 Situational Awareness

6.1.1 Weather Monitoring

The MID operations department receives a “Daily Weather Threat Briefing” situation report prepared by the California State Warning Center and issued by the California Office of Emergency Services.¹⁴ The report provides information on (not all inclusive):

- Weather Risk Outlook for the day and a 7-day outlook,
- A narrative on weather key points,
- Weather Outlook (6-14 days),
- Statewide wildfire risk potential,
- Weekly fire potential and weather forecast,
- Weather map & watches / warnings,
- PSPS Summary/Status for PG&E, SCE, SDG&E, Liberty Utilities, and
- Cal OES Fire Preparedness Levels and Fire Activity,

MID reviews the Daily Weather Threat Briefing report for any approaching severe weather events including Red Flag Warnings issued for Fire Weather Zone CAZ 219 which covers most of the MID service territory.

MID does not assign different operating conditions based on current or forecasted weather. MID is evaluating adopting the WSAB recommended operating conditions and will report back in the 2024 WMP Update.

MID owns one weather stations but monitors publicly available weather information within

¹⁴ Adopted by CPUC Decision 17-12-024.

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its service territory.

6.2 Design and Construction Standards

MID's electric facilities are designed and constructed to meet or exceed the CPUC GO 95, the National Electric Safety Code (NESC), and the Institute of Electrical and Electronics Engineers (IEEE) standards.

MID designs and specifies materials to meet or exceed industry standards (GO 95 and the National Electric Safety Code) for use throughout their entire service territory. MID continuously evaluates and, if necessary, makes modifications to existing equipment design to reduce the risk of MID asset failure. MID's current design and construction standards are applicable to their assets in the Tier 2 fire threat area and do not require changes specific for fire risk mitigation. In their continuous effort to enhance public safety, increase reliability, and minimize MID's risk of being the origin or contributing source for a catastrophic wildfire, MID is implementing the following projects or design changes:

6.2.1 Wood Pole Replacement

During the 2020-2022 WMP cycle, routine inspections of assets within the HFTD have not identified any poles that need replacing at this time.

6.2.2 Replace Overhead #6AWG Copper Conductor

MID does not have any #6 AWG copper conductor within the HFTD.

6.2.3 New Fuse Installation / Fuse Replacement

MID's only overhead line in the HFTD, the 60kV New Hogan transmission line does not have any fuses.

6.2.4 Avian Protection

Risk events caused by bird contact can result in the ignition of a fire. MID's Avian Protection Plan procedure describes MID's program to protect wildlife (birds) from contacting energized equipment. MID's avian protection programs consist of the use of perch deterrents, conductor insulator and jumper cover, avian diverters, and installation of nesting platforms. At selected

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locations, phase spacing between conductors has been increased to provide additional clearances. By doing so, birds or other wildlife will be less likely to create a connection between two phase conductors which could result in a risk event.

MID has not identified any avian issues on the 60kV line within the HFTD.

6.2.4 Oil Circuit Breaker Replacement

During the 2020-2022 WMP cycle MID replaced two oil circuit breakers (OCB) at substations located outside of the HFTD with air circuit breakers.

There is one oil circuit breaker at the MID 60kV New Hogan line terminal. The source/remote end of this line is owned and operated by PG&E. The breaker is tested every year and complete maintenance is performed every four years. As the time of writing this plan, the breaker is in a healthy condition.

6.3 Vegetation Management

MID meets or exceeds the industry standards for vegetation management around transmission lines, distribution lines, and substation facilities. For transmission-level facilities, MID complies with North American Electric Reliability Corporation (NERC) FAC-003-4, where applicable. For both transmission and distribution level facilities, MID meets or exceeds the following standards:

- 1) NERC FAC-003-4
- 2) California Public Resources Code § 4291
- 3) California Public Resources Code § 4292
- 4) California Public Resources Code § 4293
- 5) CPUC GO 95 Rule 35
- 6) CPUC GO 95 Appendix E Guidelines to Rule 35
- 7) CAL FIRE's Power Line Fire Prevention Field Guide - 2021

These standards require significantly increased clearances in the HFTD. The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful

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guidance to utilities. MID will use specific knowledge of tree growth rates and tree species to determine the appropriate time-of-trim clearance in each circumstance.

To comply with industry, state, and federal standards, MID maintains the following internal vegetation management procedures:

1. T&D Vegetation Management Program (115kV and below), and
2. 230kV Transmission Vegetation Management Program.

These procedures provide the methodology for preventing encroachment into minimum vegetation clearance distances of energized overhead lines and on clearing vegetation from the energized lines by maintaining safe clearance.

MID's Vegetation Manager is a Qualified Electrical Worker (QEW or Journeyman level line worker) and a member of the International Society Arboriculture (ISA) and Utilities Arborist Association (UAA). MID contracts with a tree trimming service to maintain clearance around its power lines and structures. The tree trimming services are performed by Qualified Line Clearance Tree Trimmers (QLCTT). The contractor adheres to the Minimum Approach Distances (MADs) set by Cal/OSHA. MID's Vegetation Manager makes periodic field visits to check trimming activities and worksite safety.

All contractors and MID personnel are required to maintain safe working distances from energized lines and use spark arrestors on their equipment for worker safety and reduce the risk to an ignition.

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6.3.1 Vegetation Inspections

6.3.1.1 Vegetation Inspections / Transmission lines

MID conducts vegetation inspections around transmission lines in compliance with local, state, and federal standards. For transmission lines segments located in HFTD MID conducts additional vegetation inspections, four times per year.

6.3.1.2 Vegetation Inspections / Distribution lines

MID conducts vegetation inspections around distribution lines in compliance with local, state, and federal standards. MID has no distribution lines in the HFTD.

6.3.1.3 Vegetation Inspections / Substations

MID conducts biweekly substation inspections. These routine inspections include vegetation in and around the facility.

6.3.2 Vegetation Management / Trim

6.3.2.1 Vegetation Management around Transmission Assets

MID conducts vegetation management (trim) around transmission lines in compliance with local, state, and federal standards, or as needed when identified. For transmission lines segments located in HFTD, clearing/trimming is completed within two weeks from the time the follow up is issued.

6.3.2.2 Vegetation Management around Distribution Assets

MID conducts vegetation management (trim) around distribution lines in compliance with local, state, and federal standards. MID has no distribution lines in the HFTD.

6.3.2.3 Vegetation Management in and around Substations

The MID Substation Supervisor is accountable for the vegetation management in and around the substations. Any weeds inside the station are sprayed and trees outside of the fence are trimmed as needed.

6.3.2.4 Brush Clearing

MID's Vegetation Management Program includes a fuel reduction program and brush

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clearing around electrical assets in compliance with PRC § 4292. MID identifies and removes (where practical) the sources of fuels around its energized lines that could potentially contribute to the start and growth of wildfires. Examples of such fuels include brush, grass, dry leaves, dry branches, dead wood, etc.

6.4 Asset Inspections

MID meets or exceeds the minimum inspection requirements of CPUC GO 95 Rule 18, CPUC GO 165, and CPUC GO 174. Pursuant to these rules, MID inspects electric facilities as required. MID has operating procedures that detail the inspection frequency and methodologies and establishes the criteria for repair or replacement of the assets.

MID's only asset in the HFTD is the 60kV New Hogan line that is in the Tier 2 fire-threat area. MID performs four inspections per year in the Tier 2 area. MID staff use their knowledge of the specific environmental and geographical conditions of MID's service territory to determine if any areas require more frequent inspections.

MID's Trouble Department reviews the vegetation management program on a yearly basis and recommends updates or changes to the Plan as needed for effectiveness. Any changes made to the vegetation management program that coincide with the Plan will be reviewed by all departments involved and the changes will be recommended for implementation into the Plan as needed.

The Trouble Department also inspects overhead electric lines per established requirements on a yearly basis. The department maintains the records of such inspections. Any deficiencies found during inspections are prioritized and addressed according to the level of severity.

If MID staff discovers a facility in need of repair that is owned by an entity other than MID, MID will issue a notice of repair to the facility owner and work to ensure that necessary repairs are completed promptly.

Any identified imminent risk to public or employee safety as identified during such inspection will be immediately addressed.

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6.4.1 Transmission Line Inspections and Patrols

6.4.1.1 Transmission Line Patrols

MID conducts transmission line patrols in compliance with local, state, and federal standards. For transmission line segments located in HFTD MID conducts four line patrols per year.

6.4.1.2 Transmission Line Detailed Inspections

MID conducts detailed inspections of transmission lines in compliance with local, state, and federal standards. For transmission line segments located in HFTD, starting in 2023, MID will conduct an annual detailed inspection.

6.4.2 Distribution Line Inspections and Patrols

MID has no distribution lines in the HFTD.

6.4.3 Intrusive Pole Inspections

During the 2023-2025 WMP cycle MID plans to conduct a comprehensive review of its intrusive pole inspection program for all wood poles. MID will provide an update on the intrusive pole inspection program for all wood poles in the HFTD in the 2024 WMP update.

6.5 Workforce Training

Electrical workers are continuously exposed to hazards from energized power lines and equipment. If proper safety and work procedures are not followed, risks may include personnel injury or death, equipment failure leading to power outages, or exposing safety risks to the public.

Safety is a positive and integral part of the culture at MID. MID provides a variety of trainings for all levels of employees to perform their job in the safest and most efficient manner. MID crews always adhere to safe work practices.

All electrical workers are provided with classroom and on-the-job training. Only trained and qualified electrical workers are authorized to work on specific jobs. Prior to commencing any work, a job briefing is held with everyone on site. All safety procedures are followed, and

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before starting any job. MID requires all electrical workers to adhere to all safety procedures and wear proper personal protective equipment while working on the lines and equipment.

MID provides employees the necessary and appropriate tools and equipment required to perform their work. These tools and equipment are also properly maintained. All MID vehicles are regularly serviced to reduce the risk of creating a spark (i.e. faulty brakes or metal in contact with the ground).

MID provides annual training on the use of fire extinguishers to personnel and to new employees as part of the on-boarding process.

6.6 Recloser Policy

An industry best practice is to disable the automatic reclose function on circuits that traverse the HFTD when critical fire weather conditions are forecasted or exist. MID's one transmission line that is in a Tier 2 fire-threat area does not have an automatic recloser.

6.7 Public Safety Power Shutoff / De-energization

MID has the authority and responsibility to preemptively shut off power when it is determined that MID electrical assets could pose a threat to the safety of the public, employees, or property.

Proactive de-energization of utility electrical assets during critical fire weather conditions is known as a Public Safety Power Shutoff or PSPS. A PSPS is used as a measure of last resort to minimize the risk of utility infrastructure being the origin or contributing source for a catastrophic wildfire. Many utilities throughout the Western States now execute PSPSs for public safety. MID's 60kV New Hogan line is subject to de-energization during critical fire weather conditions when PG&E has determined that their portion of the line could be a potential source of ignition and elect to de-energize the line for public safety. The only system impact from the de-energizing of MID's 60kV New Hogan line is the loss of MID's New Hogan generator output but no impacts to MID nor PG&E customers.

MID's evaluation of their electrical assets, historical fires, vegetation, and topography, within

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the HFTD, pose little to no risk of a catastrophic wildfire. MID has no primary distribution lines, nor do they serve any customer load, within the HFTD. Additionally, there are no MID customers that could be impacted by a neighboring utilities PSPS such as PG&E. PG&E has identified PSPS zones for their service territory that are to the east and west of the MID service territory however no PG&E primary circuits subject to PSPS serve any MID facilities or customers. MID concluded its evaluation of protocols for PSPS for distribution lines during high fire-threat condition. MID has no distribution lines nor serves customer load in or through the HFTD and has concluded that PSPS is not a wildfire mitigation strategy for them.

6.7.1 Impacts to Public Safety

MID has no formal PSPS program due to no load-serving assets located in or through the HFTD nor are any MID customers impacted by a neighboring utility's PSPS. There is an area served by MID where customers have a choice in their electric service provider. They can choose either MID or PG&E. Each utility has an independently owned and operated distribution system that does not impact each other. MID's infrastructure to serve these customers is also outside HFTD and not impacted by PSPS by either entity.

6.7.2 Customer Notification Protocols

MID customer communication/information is for unplanned interruptions which include interruptions caused by wildfires. Information provided for an unplanned interruption includes, but not limited to, time outage occurred, estimated time of restoration, number of customers impacted, and outage cause.

Red Flag Warnings are issued by the National Weather Service and wildfire alerts are provided by local news media or the fire agency having jurisdiction of the incident

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7. COMMUNITY OUTREACH AND PUBLIC AWARENESS

MID's Public Affairs Department is responsible for MID's public information management including public relations, media relations, advertising, social media, reputation management and crisis communications. The MID website, direct mail, e-mail, local media outlets, social media and paid advertising are all tools MID utilizes to educate and inform its customers, including its WMP.

Community members who are interested in learning more about what is happening at the Modesto Irrigation District, such as the WMP, are encouraged to attend the regularly scheduled Board meetings. The MID Board of Directors typically meets the second and fourth Tuesday of each month. MID's Board encourages public participation on the topics of discussion. Live streaming is also made available for those who cannot attend meetings and the meeting agendas and videos are archived on the MID Website.¹⁵

MID's Energy Service Department is in regular communication with major customers. Communications include informing customers of any change in operating conditions within MID, load forecasting, coordinating scheduled outages, addressing situational awareness and other important topics that can have direct or indirect impact on MID's and/or the customer's operations.

MID plays an active role in the community and maintains a sound relationship with neighboring utilities, local government organizations and local law enforcement and fire agencies. MID representatives regularly interact with these agencies on pressing issues.

MID has provided copies of their WMP to CAL FIRE, Modesto Fire Department, Stanislaus County OES, and Stanislaus Consolidated Fire Department.

¹⁵ <https://www.mid.org/about/board/agenda/default.html>

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8. RESTORATION OF SERVICE

For unplanned interruptions MID follows an established set of procedures for the restoration of service. MID's operating procedure, System Restoration Plan, details the restoration of service following emergencies and disturbances.

1. Trouble Department crews patrol the lines
2. Any abnormalities to the infrastructure are identified during the patrol and resolved
3. A qualified line worker confirms lines are safe to energize
4. Restore service

For a PSPS initiated by PG&E on the 60kV New Hogan line the restoration procedure is as follows:

1. PG&E declares an all clear and the line is ready for service,
2. PG&E notifies MID to patrol the line from the MID New Hogan line terminal to the point of demarcation between PG&E and MID,
3. MID completes the line patrol and notifies PG&E,
4. PG&E will energize the line from the PG&E line terminal,
5. MID will reconnect the New Hogan generator and resume operations.

Restoration of service after a wildfire varies depending on several factors. First, the Agency Having Jurisdiction of the fire must give approval for MID personnel to access the burn area. Qualified personnel must then conduct a damage assessment of the area to determine the extent of damage to the power system. The outage duration will depend upon the extent of damage done to the electrical infrastructure and time required to repair the equipment.

Restoration of service involves the coordination between various departments within the T&D Division. Where possible, restoration is prioritized to critical facilities. Best attempts are made to restore service as soon as possible.

9. EVALUATING OF THE PLAN

9.1 Metrics and Assumptions for Measuring Plan Performance

MID tracks three metrics to measure the performance of this WMP. The three metrics are tracked by MID's Electric Engineering Department and are:

9.1.1 Metric 1: Fire Ignitions

For purposes of this metric, a fire ignition is defined as follows:

1. MID facility was associated with the ignition of the fire,
2. The fire was self-propagating and of a material other than electrical and/or communication facilities,
3. The resulting fire traveled greater than one meter (approx. 3.28 feet) from the ignition point,
4. MID will continue to record the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

9.1.2 Metric 2: Wires Down

The second metric is the number of distribution and transmission wires downed within MID's service territory, tracked separately inside and outside HFTD, including car-pole incidents. For purposes of this metric, a wire down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or onto a foreign object.

9.1.3 Metric 3: Vegetation Management and Inspections

To measure the effectiveness of the vegetation management program each year, MID will keep records of the following incidents in the HFTD:

1. Percentage of vegetation inspections completed in the HFTD. Target is 100%.
2. Vegetation clearing completed in the HFTD. Target is > 95%.
3. Pole clearing (brushing) program completed in the HFTD. Target is > 95%.

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MID will not normalize this metric by excluding unusual events, such as severe storms. Instead, MID will supplement this metric with a qualitative description of any such unusual events.

Table 6: Performance Metrics

Performance Metrics 2020-2022 WMP Cycle			
	2020	2021	2022
Ignitions in HFTD	0	0	0
Ignitions outside HFTD	7	3	6
Wire down in HFTD	0	0	0
Wire down outside HFTD	35	43	40

Table 7: Performance Metrics – Vegetation Management in HFTD

Performance Metrics / Veg Management in HFTD 2020-2022 WMP Cycle			
	2020	2021	2022
No. Inspections/Line Patrols	2 (100%)	4 (100%)	4 (100%)
Vegetation Clearing complete	100%	100%	100%
Pole Clearing complete	100%	100%	100%

9.2 Impact of Metrics on Plan

MID has very few assets in the HFTD and does not experience a high volume of risk events. Consequently, they still have relatively limited data to make risk informed decisions. However, as the data collection history becomes more robust, MID will be able to identify areas of its operations and service territory that are disproportionately impacted. MID will evaluate the data for potential improvements to the Plan and implement mitigations as needed.

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9.3 Monitoring and Auditing the Plan

The successful implementation of this WMP requires a collective effort from various MID departments. Each department lead, listed in section 5, Roles and Responsibilities, is responsible for ensuring the execution of the applicable tasks stated within the WMP. The department lead ensures that the applicable tasks have been completed in a safe and timely manner. A proactive approach will be taken in identifying emergent hazards and taking corrective action.

Any deficiencies noted during the execution of this Plan will be recorded and recommended for implementation by the department lead on a yearly basis.

MID collaborates with other POU's to create guidelines for future WMPs through its attendance in bi-weekly meetings with the California Municipal Utilities Association (CMUA). MID follows recommendations put forth in the WSAB's Guidance Advisory Opinion to help with yearly revisions to the plan.

9.4 Identifying and Correcting Deficiencies in the Plan

MID is committed to making this WMP as effective and robust as possible. MID is also aware that identifying gaps and deficiencies in the WMP is a continuous process which is learned through experience and specific record keeping. Once identified, any gaps or deficiencies will be corrected.

MID understands that changes to the WMP could occur due to new policies, changes in strategies, or changes in technology.

MID will evaluate such gaps and will update the plan as appropriate.

9.5 Monitoring the Effectiveness of the Plan

During the 2020-2022 WMP cycle MID did not identify any deficient programs applicable to MID assets within the HFTD. MID will continue monitoring and documenting the listed performance metrics to ensure expected performance of the Plan.

**Modesto Irrigation District
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10. INDEPENDENT EVALUATION

PUC § 8387(c) requires MID to contract with a qualified Independent Evaluator (IE) with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this Plan. MID's WMP will continue to be updated annually with a comprehensive review and IE review and report every three years.

MID's initial WMP for the 2020-2022 WMP cycle was evaluated by a qualified IE who submitted a report to MID on the comprehensiveness of the MID Plan and presented an overview of the Plan to the MID Board of Directors.

MID's 2023-2025 WMP begins the next cycle of the WMP and will require a review by a qualified IE to assess the comprehensiveness of the Plan. The IE's report will be presented to the MID Board at a public meeting. Any Board recommendations or revisions to the Plan will be made and the report will be posted to MID's website.

MID may hire IEs for plan evaluation on an as-needed basis within the three-year period. MID will follow its standard purchasing procedures for contracting with a qualified IE. Selection of the successful IE will be made based on the IE's level of experience with wildfire mitigation plans, familiarity with similar type and size utilities, knowledge of utility's design and construction standards, and recommendations from references.

MID has posted its current, previous WMPs, and IE Reports on its website.¹⁶

¹⁶ <https://www.mid.org/about/newsroom/wildfiresafety/default.html>

APPENDIX FOR REFERENCE DOCUMENTS

1. [GO 95](#) - Overhead electric line construction. Revised 01/16/2020 (Decision No. 20-01-010).
2. [GO 128](#) - Construction of underground electric supply and communication systems.
3. [GO 165](#) - Inspection cycles for electric distribution facilities. D.97-03-070 (adopts G.O. 165).
Revised 12/14/2017 (D.17-12-024).
4. [GO 174](#) - Rules for Electric Utility Substations
5. [NERC FAC-003-4](#) – Transmission Vegetation Management
6. [California Power Line Fire Prevention Field Guide](#), 2021 Edition
7. [Standardized Emergency Management System](#) (SEMS)
8. [Wildfire Safety Advisory Board](#) (WSAB) - The WSAB reviews the WMPs submitted by Publicly Owned Electric Utilities and Electrical Cooperatives (together, POUs) and provides comments and Advisory Opinions.
9. [CPUC High Fire Threat District Map](#)