



2022 Wildfire Mitigation Plan

November 18, 2021

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I. Utility Context Summary

Utility Name	Moreno Valley Utility
Size in Square Miles	33.48 square miles
Assets	<input type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input checked="" type="checkbox"/> Generation
Number of Customers Served	6,524 as of December 2020
Customer Classes	<input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Government <input type="checkbox"/> Agricultural <input checked="" type="checkbox"/> Small/Medium Business <input checked="" type="checkbox"/> Commercial/Industrial
Location/Topography	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Wildland Urban Interface <input type="checkbox"/> Rural/Forest <input type="checkbox"/> Rural/Desert <input type="checkbox"/> Rural/Agriculture
Percent Territory in CPUC High Fire Threat Districts	<input checked="" type="checkbox"/> Includes maps 0% in Tier 2 0% in Tier 3
CAL FIRE FRAP Map Fire Threat Zones	<input checked="" type="checkbox"/> Includes maps 0% Extreme 0% Very High 0% High
Existing Grid Hardening Measures	<input checked="" type="checkbox"/> Describes hardened & non-hardened infrastructure
Utility Fire Threat Risk Level	<input type="checkbox"/> High <input checked="" type="checkbox"/> Low <input type="checkbox"/> Mixed
Impacted by another utility's PSPS?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Mitigates impact of another utility's PSPS?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Expects to initiate its own PSPS?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Prevailing wind directions & speeds by season	<input type="checkbox"/> Includes maps <input type="checkbox"/> Includes a description

II. Overview

A. Policy Statement

Moreno Valley Utility's overarching goal is to provide safe, reliable, and economic electric service to its local community. In order to meet this goal, Moreno Valley Utility constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment.

B. Purpose of the Wildfire Mitigation Plan

Moreno Valley Utility's (MVU) entire electric supply system is located underground in conduit and vaults. Historically, undergrounded electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective mitigation measure to reduce the potential of power-line ignited wildfires. Based on a review of local conditions and historical fires, MVU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire.

Despite this low risk, MVU takes appropriate actions to help its region prevent and respond to the increasing risk of devastating wildfires. In its role as a public agency, MVU closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies. In its role as a utility, MVU follows all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its system. This Wildfire Mitigation Plan describes the safety-related measures that MVU follows to reduce its risk of causing wildfires.

C. Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan included the following elements:

- Objectives of the plan;
- Roles and responsibilities for carrying out the plan;
- Identification of key wildfire risks and risk drivers;

- Description of wildfire prevention, mitigation, and response strategies and programs;
- Metrics for evaluating the performance of the plan and identifying areas for improvement;
- Review and validation of the plan; and
- Timelines.

III. Objectives of the Wildfire Mitigation Plan

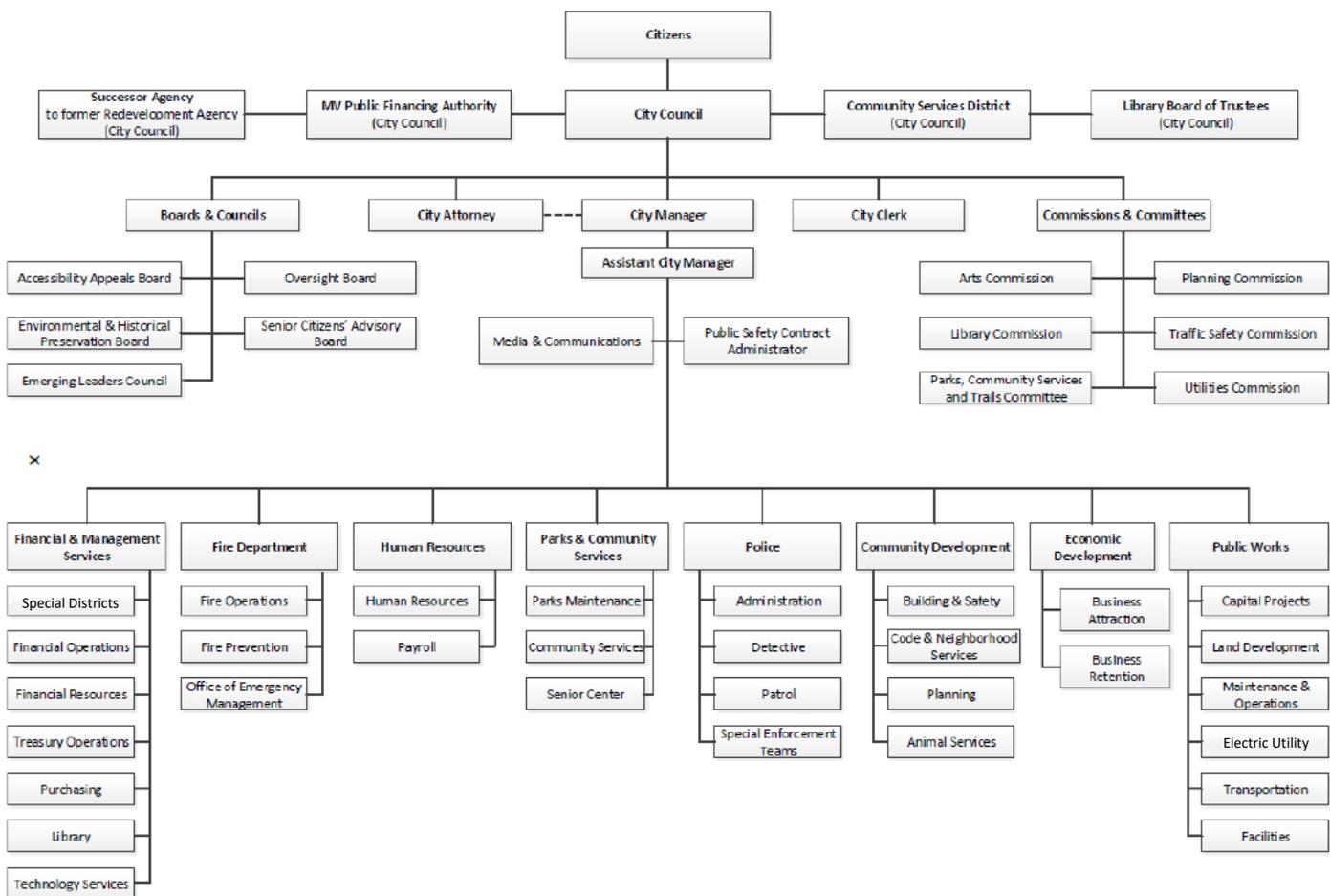
The primary goal of this Wildfire Mitigation Plan is to describe MVU’s existing programs, practices, and measures that effectively reduce the probability that MVU’s electric supply system could be the origin or contributing source for the ignition of a wildfire. To support this goal, MVU regularly evaluates the prudent and cost-effective improvements to its physical assets, operations, and training that can help reduce the risk of equipment-related fires.

The secondary goal of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this plan, MVU assesses new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

IV. Roles and Responsibilities

A. Utility Governance Structure

City of Moreno Valley Organization Chart



The City of Moreno Valley is a general law city that operates under a Council-Manager form of government. MVU is governed by a five-member City Council. Four Council Members are elected by district to staggered, four-year terms, while the Mayor is directly elected. The council appoints the City Manager, who oversees the daily operations of the City. Volunteer Commissions and Boards, as well as several Citizen Advisory Committees help guide the Council in its decisions. The City Council formed a five-member Utilities Commission, whose purpose is to provide additional review for all matters pertaining to MVU. Commissioners are citizen volunteers, appointed by the City Council for three-year terms.

MVU's Wildfire Mitigation Plan is developed by staff and then reviewed by the Division Manager, Public Works Director, Assistant City Manager, City Manager, Utilities Commission, and the five-member City Council. City Council votes on approval and the plan is approved with a majority vote.

MVU funds wildfire mitigation activities through current rate payer revenues. These funds are augmented by grant awards. Mitigation projects typically take the form of revised equipment design standards and system hardening Capital Improvement Projects.

B. Wildfire Prevention

MVU staff, in partnership with its maintenance and operations provider, is responsible for electric facility design, maintenance, and inspection, including vegetation management. Although MVU's electrical distribution system is 100% underground, MVU follows best practices to prevent ignition of wildfires from its equipment. These items include:

- MVU performs routine maintenance of all distribution facilities.
- MVU adheres to a seasonal weed abatement and vegetation management schedule to maintain at-risk sites.
- MVU contracts for seasonal weed abatement services. Standard clearances as defined by General Orders 95, 128, 165, and 174, are maintained as part of routine maintenance cycles. All electric distribution facility equipment requiring repair and maintenance are addressed and corrected as they are identified. Annual inspections and maintenances of MVU substation facilities identified no deficiencies for 2020.
- MVU abides by Municipal Code 6.40 to abate trees, shrubs, weeds, and grass at all MVU facilities. Including Landscaping, vegetation, or improved or unimproved property in any of the following conditions: containing weeds, dry grasses, dead trees, dead shrubs, or any other material which bears seeds of a wingy or downy nature or which by reason of their size, manner of growth or location, constitute a fire hazard or a threat to public health, or containing weeds, vegetation, grasses, trees or shrubs, including, but not limited to sagebrush, chaparral, and Russian Thistle (tumbleweed) which, when dry, will in reasonable probability constitute a fire hazard or be blown onto adjoining property by prevailing winds; trees and shrubs containing dead or fallen limbs or branches that may present a safety hazard; trees or shrubs which are overgrown or contain limbs or branches that restrict, impede or obstruct the use of or obscure the visibility of pedestrians or drivers using the public rights-of-way, easements, sidewalks or roadways; overgrown vegetation likely to harbor vermin, insects or rodents of any kind.
- Electric system operates in a manner that will minimize potential wildfire risks.
- Take all reasonable and practicable actions to minimize the risk of a catastrophic wildfire caused by MVU electric facilities.
- Coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement MVU's Wildfire Mitigation Plan.
- Immediately report fires to local fire department, Emergency Management Program Manager, MVU administration, and other City Officials, pursuant to existing MVU practices and the requirements of this Wildfire Mitigation Plan.

- Coordinate with City Emergency Operations Center to disseminate safety warnings, emergency public information, and evacuation notices to local residents.
- MVU adheres to City of Moreno Valley personnel policy 5.11 for Employee Disaster Notification and Reporting.
- Take corrective action when the staff witnesses or is notified that fire protection measures have not been properly installed and maintained.
- Comply with relevant federal, state, and industry standard requirements, including the industry standards established by the California Public Utilities Commission.

C. Wildfire Response and Recovery

Internally, MVU's distribution system is controllable remotely through a Supervisory Control and Data Acquisition (SCADA) system networked to all substations and circuits. MVU field staff utilize hard line telephones, cellular telephones, and portable radios to communicate with internal and external stakeholders during an outage or emergency. MVU's Outage Management System, Utility Maintenance Management System, and Dispatching System all auto-generate notifications to field, office, and administrative staff. MVU is enrolled in several mutual aid networks (APPA, CA Disaster & Civil Defense, CA Utilities Emergency Association) to facilitate expedited response and recovery from severe storms, natural disasters, or mass outages.

The City of Moreno Valley maintains a two-way (LF, HF, VHF, and UHF) mobile and base stations for communications enhanced by repeater system to extend the coverage area. This includes three repeater channels and three unit-to-unit/talk-around channels in the 800 MHz Public Safety band. The City of Moreno Valley owns ten iridium satellite phones that are issued to key personnel in the city during an emergency. Mobile radio communications are available utilizing the Moreno Valley Police Mobile Command Center (MCC). The command center has the capability of patching Sheriff, California Highway Patrol (CHP), Riverside Police, CALFIRE, March Air Reserve Base and Moreno Valley Park Rangers all on the same frequency at the same time. Moreno Valley has an Amateur Civil Emergency Services/Radio Amateur Civil Emergency Services (MV ACES/RACES) group, which operates on ham radio frequencies in support of governmental emergency communications. MV ACES/RACES can augment existing systems and establish communication links with otherwise inaccessible areas. They are also capable of sending live video and audio from an incident site to our City's emergency operations center via the ham radio.

At the county level, a Riverside County Emergency Operations Center (EOC) talk group is programmed into the Omniquest radio and is used to communicate with EOCs within Riverside County during a disaster or emergency. The City of Moreno Valley also has low-band disaster net radios to communicate with all EOCs within Riverside County during a disaster or emergency. This system uses low frequency bands and has several back up channels in case of an outage. Additionally, the City has a portable disaster case radio system. This system allows communications with other agencies such as County Emergency Services, County Fire, County Police, Hospitals, Cities within Riverside County, Moreno Valley Unified School District and Valley View Unified School District.

MVU adheres to California Public Utility Commission GO 95, 128, 165, and 174 for all system infrastructure inspection, maintenance, and reporting.

City of Moreno Valley Office of Emergency Management maintains a city-wide Hazard Mitigation Plan identifying potential fire hazards and mitigation strategies.

City of Moreno Valley also maintains a reporting hotline for all employees to properly notify the city for code violations, hazards, safety concerns, and overgrown landscaping and weeds.

MVU is impacted by Southern California Edison (SCE) Public Safety Power Shutoff (PSPS) events. MVU receives advanced notification from SCE when impacted circuits are being monitored against weather projections for a potential PSPS

event. SCE provides the names of circuits being monitored as well as the impacted City accounts, along with the projected period of concern for the PSPS event. As the situation develops, MVU receives updated data from SCE on weather, circuits and accounts being monitored, and if a PSPS is triggered. MVU monitors the SCE status reports and stages mitigation assets appropriately in advance of a SCE triggered PSPS event. If the PSPS event affects any MVU facilities, MVU customers are notified as early as possible of pending power shutoffs.

When a SCE PSPS event is triggered that impacts MVU facilities, MVU notifies its customers of potential service interruption in a variety of ways. Alert notices are pushed out to customers via the MyMVU mobile application, email blasts, direct telephone communication with critical customers, as well as public messaging available on the MVU web site and through MVU's 24/7 call center. PSPS and outage notices will be translated into Spanish for non-English speakers in the future.

With all of MVU's distribution lines undergrounded, the utility does not de-energize its system during severe weather events. In the event MVU is impacted by an SCE PSPS, MVU does have backup generation assets to keep critical infrastructure operational, including a portable back-up generator that can be distributed to impacted MVU customers.

D. Standardized Emergency Management System

As a local governmental agency,¹ MVU has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System ("SEMS") Regulations,² adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five different levels: field response, local government, operational area, regional, and state.³ Pursuant to this structure, MVU annually coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. When activated, MVU serves as the Utilities Unit Leader under the Operations Section Chief as part of the City of Moreno Valley's Emergency Operations Center. In the event that the incident centered on MVU facilities, MVU would serve as the Operations Section Chief.

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of effort of public, private, and nonprofit organizations. Riverside County serves as the Operational Area and is guided by the California Office of Emergency Services, Southern Region. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include:

¹ As defined in Cal. Gov. Code § 8680.2.

² 19 CCR § 2407.

³ Cal. Gov. Code § 2403(b):

- 1) "Field response level" commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.
- 2) "Local government level" manages and coordinates the overall emergency response and recovery activities within their jurisdiction.
- 3) "Operational area level" manages and/or coordinates information, resources, and priorities among local governments within the operational area and serves as the coordination and communication link between the local government level and the regional level.
- 4) "Regional level" manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code §8600 and between the operational areas and the state level. This level along with the state level coordinates overall state agency support for emergency response activities.
- 5) "State level" manages state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system.

Agency/ Dept.	Mailing Address	Contact	Phone	Fax
AMR American Medical Response	879 Marlborough Ave. Riverside, CA. 92507		951.782.5234	951.782.5617
AMR American Medical Response	879 Marlborough Ave. Riverside, CA. 92507	Dispatch	877.267.6622	951.782.5605
Kaiser Permanente: Medical Center	12815 Heacock Moreno Valley, CA. 92552	Administration	951.601.6327	951.601.6181
Kaiser Foundation Moreno Valley: Community Hospital	27300 Iris Ave. Moreno Valley, CA. 92555	Facilities Services Manager	951.251.6594	951.251.6601
Moreno Valley Fire/Office of Emergency Management	14177 Frederic St. Moreno Valley, CA 92553	Emergency Management Program Manager	951.413.3800	951-413-3801
Moreno Valley: Special Districts	14331 Frederick Street Moreno Valley, CA 92253	Division Manager	951.413.3480	
Moreno Valley: Fire Dept.	14177 Frederick Street Moreno Valley, CA. 92553	Fire Marshal	951.413.3370	
Moreno Valley: Fire Dept.	22850 Calle San Juan De Los Lagos Moreno Valley, CA 92553	Fire Chief	951.486.6780	951.486.6790
Moreno Valley: Operations & Maintenance	14177 Frederick Street Moreno Valley, CA. 92553	Manager	951.413.3160	951.413.3141
Moreno Valley: Police Dept.	22850 San Juan De Los Lagos Moreno Valley, CA. 92552	Police Chief	951.486.6700	
Moreno Valley: Public Works	14177 Frederick Street Moreno Valley, CA. 92553	Public Works Director	951.413.3100	951.413.3141
Moreno Valley Traffic & Transportation	14177 Frederick Street Moreno Valley, CA. 92553	City Traffic Engineer	951.413.3140	951.413.3140
Moreno Valley: City Management	14177 Frederick Street Moreno Valley, CA. 92553	City Manager	951.413.3020	
Moreno Valley: Facilities Management	14177 Frederick Street Moreno Valley, CA. 92553	Division Manager	951.413.3740	
Moreno Valley: TV3	14177 Frederick Street Moreno Valley, CA. 92553	Media & Production Supervisor	951.413.3056	951.413.3053
Moreno Valley: Unified School District	25634 Alessandro Blvd. Moreno Valley, CA. 92553	Maintenance Supervisor	951.571.7865	951.571.7811
Riverside Medical Clinic: Canyon Springs Plaza	6405 Day Street Moreno Valley, CA. 92552	Facilities	951.321.6331	951.248.6703
Riverside County: Dept. of Environmental Health	4065 County Circle Riverside, CA.	Deputy Director	951.358.5172	951.358.5017
Riverside County: Dept. of Environmental Health	4065 County Circle Riverside, CA.	Supervising Environmental Health Specialist	951.358.5172	951.358.5017
Riverside County: Dept. of Environmental Health	800 S. Sanderson Ave. #200 Hemet, CA. 92545	Supervising Environmental Health Specialist	951.766.2824	
Riverside County: Dept. of Environmental Health	800 S. Sanderson Ave. #200 Hemet, CA. 92545	Supervising Environmental Health Specialist	951.766.2824	
Riverside Regional: Medical Center	26520 Cactus Ave. Moreno Valley, CA. 92552	Deputy Director	951.955.4878	951.955.8405
Riverside Regional: Medical Center	26520 Cactus Ave. Moreno Valley, CA. 92555	Chief of Hospital Plant Op.	951.486.4066	951.486.4105
Val Verde: Unified School District	975 W. Morgan Street Perris, CA. 92581	Emergency Services	951.940.6100 ext. 10672	951.940.6118
Val Verde: Unified School District - March Middle School	15800 Indian Ave	Director of Facilities, Maintenance, & Purchasing	951.940.6136 ext. 10652	
Verizon Public Relations		Director of Public Relations	(213) 800-3184	
Eastern Municipal Water District	Central Control 2270 Trumble Road Perris, CA 92572-8300		951.928.3777 ext. 6265	951.928.6170
Davita Canyon Springs Dialysis	22555 Alessandro Blvd Bldg. 5		951.653.6400	
Kaiser Permanente	27200 Iris Ave Medical Bldg.		951.353.4359	
United States Postal Services	23800 Cactus Ave	Facility Manager	951.697.4661	
Waste Management	17700 Indian St	Fleet Manager - Fleet Maintenance	951.601.1129 951.339.6681	

Pursuant to the SEMS structure, MVU participates in annual training exercises. Training exercises include workshops, tabletop exercises, and field drills. A sample of topics covered include; earthquake safety, disaster response & management, active shooter, crisis leadership, and NIMS/SEMS/ICS compliance.

MVU is a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities during emergencies and provides mutual aid. MVU also participates in the American Public Power Association Mutual Assistance Agreement, which covers public utilities across the United States. The City of Moreno Valley is a participant in the California Disaster and Civil Defense Mutual Aid Agreement which allocates state resources to cope with any type of disaster.

V. Wildfire Risks and Drivers Associated with Design, Construction, Operation, and Maintenance

A. Particular Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors

Due to MVU's distribution system being 100% underground, there is limited risk specific to wildfires. As an undergrounded utility, MVU does not monitor prevailing wind speed or direction. Weather intelligence monitoring assets have not been installed on the MVU distribution system due to the associated costs and limited benefit the utility would gain from collecting such data.

B. Enterprise-wide Safety Risks

The safety risks discussed below apply to the City of Moreno Valley as a municipal jurisdiction and include both Moreno Valley Utility and Southern California Edison service territories.

Earthquake profile - There are three major faults/fault zones that directly affect Moreno Valley. They are the southern section of the San Andreas Fault, the San Jacinto Fault Zone, and the Elsinore Fault Zone. The San Jacinto Fault Zone is considered to be the most active fault in Southern California. It is the closest fault to Moreno Valley and runs through the eastern portion of the city, followed by the Elsinore Fault Zone which is located approximately 12-18 miles south of Moreno Valley. The San Andreas Fault Zone is located approximately 15-20 miles north of Moreno Valley. The largest earthquake to occur within 100 miles of Moreno Valley was the 7.4 magnitude Hector Mine earthquake in 1999.

The City of Moreno Valley could be affected by large earthquakes occurring in many parts of the Southern California region. However, the degree to which the earthquakes are felt, and the damages associated with them may vary. At risk from earthquake damage are critical facilities, buildings, bridges, highways and roads; hazardous materials facilities; sewer, water, and natural gas pipelines; earth dams; petroleum pipelines; and private property located in the city. The relative or secondary earthquake hazards, which are liquefaction, ground shaking, amplification, and earthquake-induced landslides, can be just as devastating as the earthquake. The USGS estimates that there is a greater than 99% chance of a major earthquake occurring within 31 miles of Moreno Valley within the next 50 years.

Flooding profile - There are four types flooding conditions that exist within the Moreno Valley area: flooding in defined watercourses; ponding; sheet flow; and dam inundation. Flooding within defined watercourses occurs within drainage channels and immediately adjacent floodplains. Ponding occurs when water flow is obstructed due to manmade obstacles such as the embankments of SR-60 and other roadways, where they cross-defined watercourses. Sheet flow occurs when capacities of defined watercourses are exceeded and water flows over broad areas.

Known flood-prone areas as noted in the General Plan as well as recorded in city maintenance files, include:

- Along the Quincy Channel between Cottonwood Avenue and Cactus Avenue.
- An extensive floodplain that extends along the Oliver Street alignment from a point north of Alessandro Boulevard to John F. Kennedy Drive and extending in a southwesterly direction as far as the northeast corner of Morrison Street and Filaree Avenue and the northeast corner of Nason Street and Iris Avenue.

- Along Heacock Street and Lateral A of the Perris Valley Channel between Cactus Avenue and a point north of the intersection of Lateral A and Indian Street (next to March Air Reserve Base).
- Along Sunnymead Boulevard between Frederick Street and Graham Street.
- Along Pigeon Pass Road, between Sunnymead Ranch Parkway and Lawless Road.
- Along Moreno Beach Boulevard, between Juniper Avenue and Locust Avenue.
- Along Highland Avenue, between Redlands Boulevard and Alessandro Boulevard.
- Along Locust Avenue, between Moreno Beach Boulevard and northerly city limits.
- Along Heacock Street, between Lake Summit Drive and Reche Vista Drive.
- Along Hubbard Street, between Skyland Drive and Ironwood Avenue.
- Along Cottonwood Avenue, between Nason St and Martha Crawford Street.
- Alessandro Boulevard, between Gilman Springs Road and Theodore Street.
- Neighborhood bounded by Alessandro Boulevard, Brodiaea Avenue, Redlands Boulevard, and Merwin Street.
- Miramontes Court, north of Via Solana Court.
- Easterly side of neighborhood east of Perris Boulevard, between Covey Road and Manzanita Avenue.

VI. Wildfire Preventative Strategies

A. High Fire Threat District

MVU directly participated in the development of the CPUC’s Fire-Threat Map,⁴ which designates a High-Fire Threat District. In the map development process, MVU coordinated with Southern California Edison Company (SCE) and determined that because MVU’s system is entirely undergrounded, that SCE would serve as territory lead for the region served by MVU. MVU has incorporated the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

B. Design and Construction Standards

MVU’s electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. MVU treats CPUC General Orders (GO) 95 and 128 as a key industry standard for design and construction standards for underground electrical facilities. MVU meets or exceeds all standards in GO 95 and 128. Additionally, MVU monitors and follows, as appropriate, the National Electric Safety Code.

C. Vegetation Management

MVU meets or exceeds the minimum industry standard vegetation management practices. For transmission-level facilities, MVU complies with NERC FAC-003-4, where applicable. For both transmission and distribution level facilities, MVU meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) CPUC GO 95, 128, 165, and 174.

D. Inspections

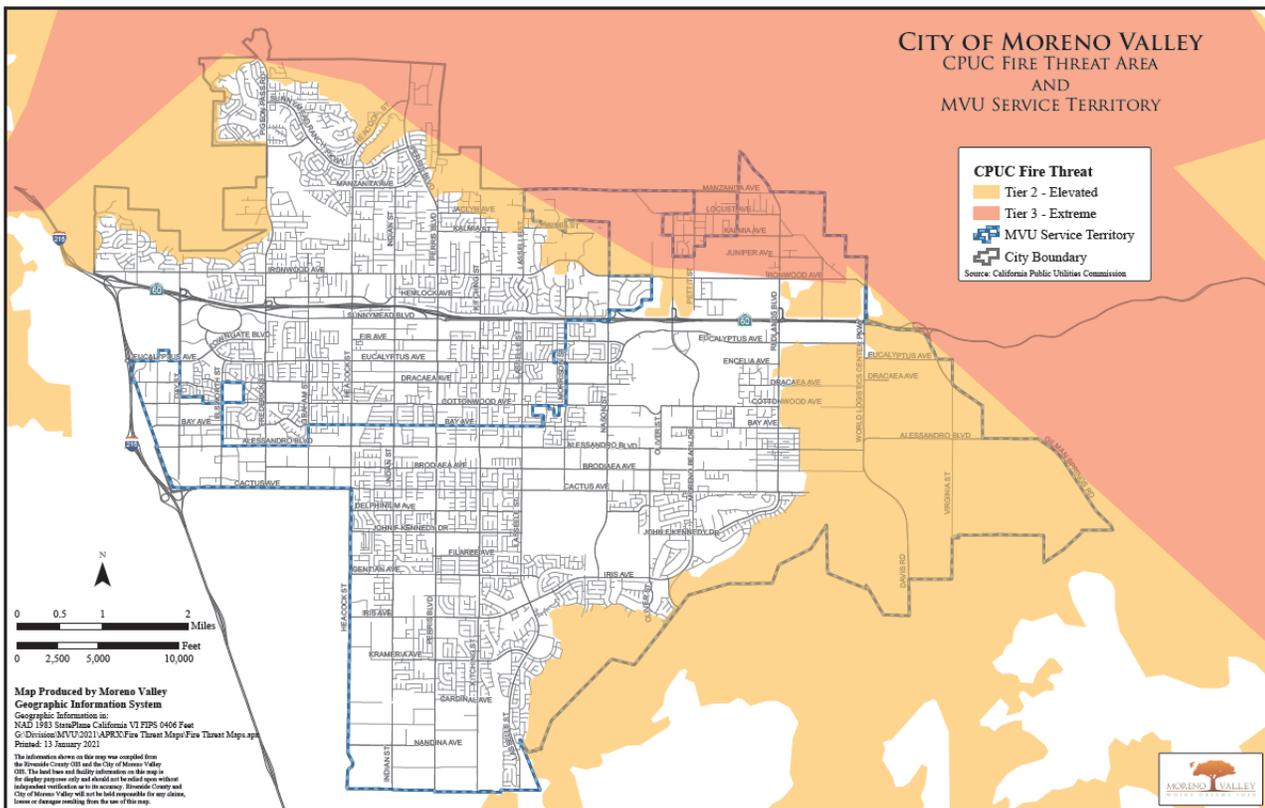
MVU meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and 174. Pursuant to these rules, utilities inspect electric facilities in the High Fire Threat District more frequently than the other areas of its service territory. As described above, MVU currently does not have any overhead power lines located within or near the High-Fire Threat District within the CPUC’s Fire Threat Map. However, MVU staff uses their knowledge of the specific environmental and geographical conditions of MVU’s service territory to determine if any particular areas require more frequent inspections.

⁴ Adopted by CPUC Decision 17-12-024.

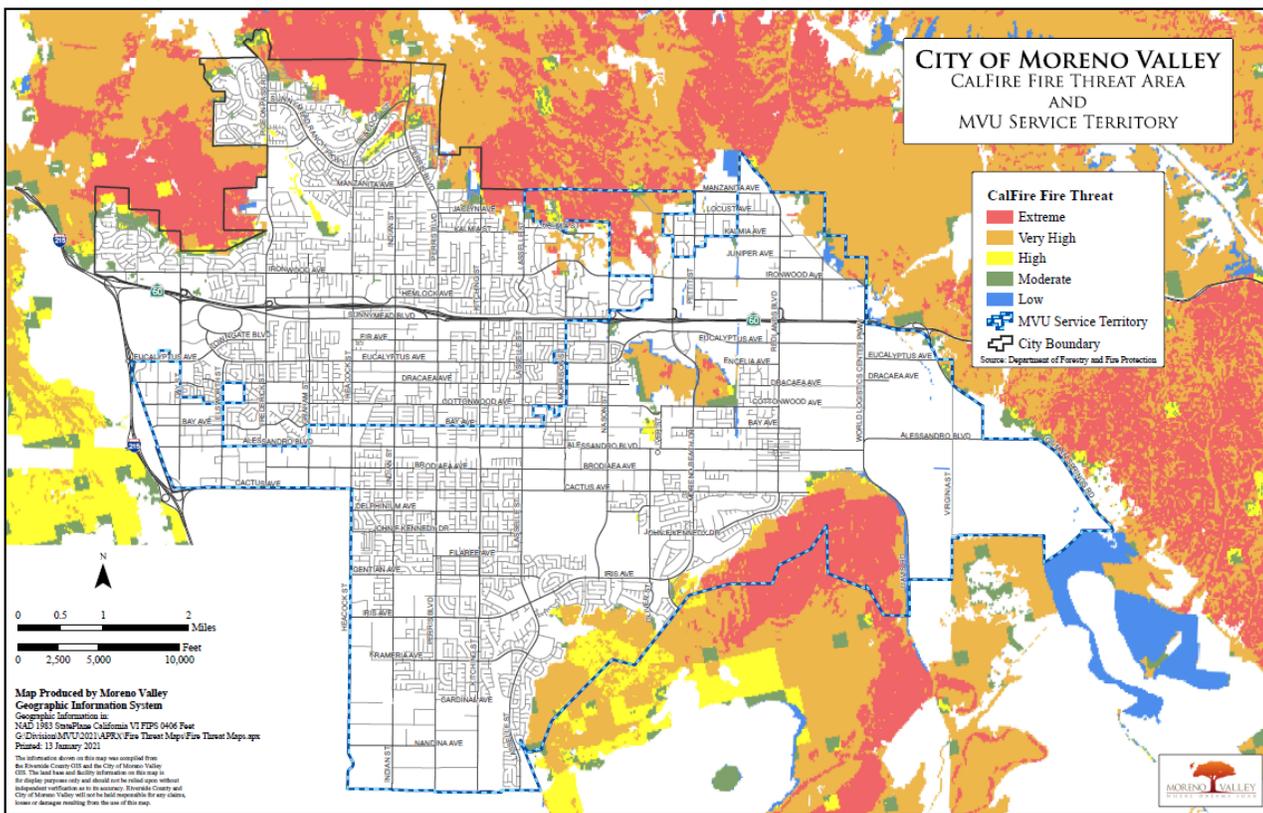
If MVU staff discovers a facility in need of repair that is owned by an entity other than MVU, MVU will issue a notice to repair to the facility owner and work to ensure that necessary repairs are completed promptly.

MVU has conducted an analysis of all circuits to identify essential facilities and prioritize the deployment of back-up power facilities. Grant funding is also being sought to install back-up generation at additional strategic facilities throughout the service territory. MVU is fully capable of sectionalizing any outage to mitigate the number of customers impacted. This mitigation technique will also be employed during PSPS events to reduce any service interruptions to MVU customers. MVU will explore the possibility of back feeding the distribution system with customer owned battery storage systems.

E. California Public Utility Commission Wildfire Threat Map



F. CalFire Fire Threat Map



G. Reclosing Policy

MVU's system is 100% underground. Reclosers are not installed on underground circuits. MVU does not change substation relay settings.

H. De-energization

MVU has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. Due to the minimal risk of MVU's electrical supply facilities causing a power-line ignited wildfire, MVU is not adopting specific protocols for de-energizing any portions of its electric distribution system. MVU will re-evaluate this determination in future updates to this Wildfire Mitigation Plan.

VII. Restoration of Service

MVU's electric distribution system is completely underground. However, MVU is interconnected with SCE's transmission and distribution systems, much of which is overhead and exposed to wind, rain and lightning. This is MVU's primary source of vulnerability to potential electrical service interruptions during rain and wind storms such as the ones that can be precipitated by El Nino.

MVU's underground electric distribution system is designed, and has been constructed, with redundant sources of feed. These do not guarantee the elimination of outages but can facilitate service restoration and reduce the duration of such outages.

Preparation in advance of predicted storms: Since, as discussed in the introduction, the primary trouble source during storms is outages on SCE's transmission and distribution lines, many of which are overhead, MVU will patrol, to the extent practical, SCE's primary interconnect lines for any potential trouble spots including but not limited to broken tree

limbs or other vulnerabilities. MVU will also double check the loading conditions of our underground lines to satisfy ourselves that alternate sources have the capacity to serve the electric load (customers) in the event that it is necessary.

MVU's underground system will be patrolled in advance of storms for any open trenches or excavations at construction sites to minimize water intrusion into the underground system. Although the underground system is designed to operate under such conditions, small pinholes in splices or cable can cause problems, including possible electrical shorts/faults, that can interrupt service to customers. Likewise, after the storm, each underground vault, manhole or other structure will be inspected for water intrusion and pumped, when necessary, in accordance proper utility practice and environmental guidelines.

All vehicular equipment, man-lifts, tools and appurtenances will be thoroughly inspected for proper operation. All operating personnel will be placed on standby in the event of weather-related problems.

The MVU Operations and Call Center will be appropriately staffed for handling of trouble calls from customers and dispatching to field personnel.

Call Center support includes:

- Outage Management System (OMS)
- Field Dispatching
- Customer Callbacks

Response Prioritization:

- First Priority: Response to imminent threats to life and/or public property
- Second Priority: Removals of immediate hazards (fallen trees, power poles, etc.)
- Third Priority: Clearing of arterial roadway
- Fourth Priority: Maintenance of traffic control/closures to prevent potential accidents
- Fifth Priority (Post Storm Activity): Follow-up work such as addressing storm-related potholes and residual clean-up of all streets that have remained in a "passable and drivable" state

Referral Protocol:

- Flooding of structures on private property- Residents will be advised to call 911 for Fire Department assistance
- Facilities associated with other government agencies (RCFCD) or private utilities will be referred to appropriate agencies/company
- All storm related issues involving streets, curbs and gutters, sidewalks, residential trees in the right of way, catch basins, and miscellaneous drainage facilities will be referred to the City's Maintenance and Operations Division.

During EOC activation period, all routine maintenance programs and requests will be suspended and deferred.

VIII. Evaluation of the Plan

A. Metrics and Assumptions for Measuring Plan Performance

MVU will track the following metric to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions caused by utility equipment.

Metric 1: Fire Ignitions

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

- MVU facility was associated with the fire;
- The fire was self-propagating and of a material other than electrical and/or communication facilities;
- The resulting fire traveled greater than one linear meter from the ignition point; and
- MVU has knowledge that the fire occurred.

In future Wildfire Mitigation Plans, MVU will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

Reporting Year	Fire Ignitions
2021	0
2020	0
2019	0

B. Impact of Metrics on Plan

In the initial years, MVU anticipates that there will be relatively limited data gathered through the metric. However, as the data collection history becomes more robust, MVU will be able to identify areas of its operations and service territory that are disproportionately impacted. MVU will then evaluate potential improvements to the plan.

C. Monitoring and Auditing the Plan

This Wildfire Mitigation Plan will be presented to the MVU Utilities Commission and the Moreno Valley City Council. MVU will present updates to this plan to the MVU Utilities Commission and the City Council on an annual basis.

D. Identifying and Correcting Deficiencies in the Plan

Based on the recommendations of the MVU Utilities Commission and the Moreno Valley City Council, MVU will correct any identified deficiencies.

E. Monitoring the Effectiveness of Inspections

MVU reviews and evaluates its reliability indices regularly to monitor inspection and maintenance procedures. SAIDI, SAIFI, CAIDI, and MAIFI statistics show that MVU maintains an electric system that operates well below the State and National averages for outage incidents per the American Public Power Association’s eReliability Tracker program. MVU’s Utility Maintenance Management System (UMMS) is used to collect all data subject to GO165. The UMMS prepares monthly inspection and maintenance reports for all electric distribution facilities. Maintenance history for each piece of equipment is archived in the UMMS. Additionally, MVU’s substation inspection and maintenance program complies with GO 174 guidelines as well as manufacturer specifications, standards, and recommendations. MVU performs monthly inspections of all substation components including recording and analysis of all alarms, fluid levels, meters, and Load Tap Changer settings.

Although MVU does not fall under the jurisdiction of the California Public Utilities Commission (CPUC), MVU has cooperated with the CPUC’s Utilities Safety and Reliability Branch and their requests for periodic audits. The audit in October 2008 noted no GO 95 infractions, and identified two GO 128 infractions to MVU Pad Mounted Electric structures. Repairs were made to correct the violation the day they were identified by the CPUC. Again, in March of 2013 the CPUC audit identified three vegetation obstructions that were immediately corrected in the field as they were identified. No additional infractions have been identified by the CPUC.

MORENO VALLEY UTILITY WILDFIRE MITIGATION PLAN 2021 INFORMATIONAL RESPONSE

RESPONSES TO WILDFIRE SAFETY ADVISORY BOARD'S 2021 GUIDANCE ADVISORY OPINION

June 21, 2021

I. PURPOSE OF THIS 2021 INFORMATIONAL RESPONSE

The California Wildfire Safety Advisory Board (WSAB) issued the *Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* (“2021 WSAB Guidance Advisory Opinion”) on December 15, 2020. MVU provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. POU’s will provide a narrative response and/or a cross reference to the location in MVU’s Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to MVU, the response will provide a brief description supporting this conclusion.

II. CONTEXT SETTING INFORMATION

WSAB requested that POU’s provide an informational table to assist the Staff and Board member in understanding the unique characteristics of each POU.

Table 1: Context-Setting Information

Utility Name	Moreno Valley Utility	
Service Territory Size	33.48 square miles	
Owned Assets	<input type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input checked="" type="checkbox"/> Generation	
Number of Customers Served	6,524 customer accounts as of December 2020	
Population Within Service Territory	214,982 [estimate]	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	88.21% Residential; 1.42% Government; 0.03% Agricultural [pumping]; 7.84% Small/Medium Business; 2.50% Commercial/Industrial	24.12% Residential; 1.70% Government; 0.21% Agricultural [pumping]; 2.49% Small/Medium Business; 71.48% Commercial/Industrial
Service Territory Location/Topography¹	<input type="checkbox"/> % Agriculture <input type="checkbox"/> % Barren/Other <input type="checkbox"/> % Conifer Forest <input type="checkbox"/> % Conifer Woodland <input type="checkbox"/> % Desert <input type="checkbox"/> % Hardwood Forest <input type="checkbox"/> % Hardwood Woodland	

¹ This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: <https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

	<input type="checkbox"/> % Herbaceous <input type="checkbox"/> % Shrub 100% Urban <input type="checkbox"/> % Water
Service Territory Wildland Urban Interface² (based on total area)	100% Wildland Urban Interface; <input type="checkbox"/> % Wildland Urban Intermix;
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	<input type="checkbox"/> Includes maps Tier 2: 30% Tier 3: 10%
Prevailing Wind Directions & Speeds by Season	<input type="checkbox"/> Includes maps MVU is 100% underground and does not collect prevailing wind data.
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: 0 miles Overhead Trans.: 0 miles Underground Dist.: 79 miles Underground Trans.: 0 miles
	Explanatory Note 1 - Methodology for Measuring "Miles": [line miles]
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [NA]
	Explanatory Note 3 – Additional Relevant Context: [NA]
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% Tier 3: 0%
	Explanatory Note 4 – Additional Relevant Context: [NA]
Customers have ever lost service due to an IOU PSPS event?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has developed protocols to pre-emptively shut off	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

² This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, available at https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf.

electricity in response to elevated wildfire risks?	
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then provide the following data for calendar year 2020: <i>Number of shut-off events:</i> [____] <i>Customer Accounts that lost service for >10 minutes:</i> [____] <i>For prior response, average duration before service restored:</i> [____]

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that POUs provide a clear roadmap as to where each statutory requirement is addressed within the POU WMP.

Table 2: Cross References to Statutory Requirements

Requirement	Statutory Language	Location in WMP
Persons Responsible	PUC § 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section 4 Page 5
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section 3 Page: 4
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the preventive 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.	Section 6 Page 10
Evaluation Metrics	PUC § 8387(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.	Section 8 Page 13
Impact of Metrics	PUC § 8387(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.	Section 8 Page 14
Deenergization Protocols	PUC § 8387(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.	Section 6 Page 12

Customer Notification Procedures	PUC § 8387(b)(2)(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section 4, 7 Page 7, 13
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section 6 Page 10
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section 6 Page 10
Prioritization of Wildfire Risks	PUC § 8387(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: (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. (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.	Section 5 Page 9
CPUC Fire Threat Map Adjustments	PUC § 8387(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.	NA
Enterprisewide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.	Section 5 Page 9
Restoration of Service	PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Section 7 Page 12
Monitor and Audit	PUC § 8387(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 (i) Monitor and audit the implementation of the wildfire mitigation plan. (ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.	Section 8 Page 14

	(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.	
Qualified Independent Evaluator	PUC § 8387(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.	http://www.moval.org/mvu/pubs/MVU-WildfireMitigationPlanEvaluation.pdf

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 14 specific recommendations that POUs are requested to address in their 2021 WMPs. As specified in Public Utilities Code § 8387(b)(1), each POU is required to perform a comprehensive revision to the POU’s WMP at least once every three years. Pursuant to this guidance, the POUs will be updating their WMPs based on the direction of their local governing boards within this 3-year cycle. Because the WSAB’s recommendations have been provided after the initial WMP submission, the POUs will have varying capacities to fully address each recommendation in their 2021 WMP. This Section IV restates each of the WSAB recommendations and provides an opportunity for each POU to do one or more of the following: (1) provide a narrative response to the recommendation; (2) provide a cross reference to where in the POU’s WMP this topic is addressed; (3) describe why the recommendation is not applicable to the POU; or (4) inform the WSAB of the POU’s intent to address the recommendation at the point of the POU’s next comprehensive revision, occurring in either the 2022 or 2023 WMP.

A. Plan Structure

WSAB Recommendation #1: Provide context-setting information about the POU and provide a simple guide to where the statutory requirements are addressed within the WMP.

POU Response: See Sections II and III above.

WSAB Recommendation #2: Provide a short description of the POU’s public review and approval (if required) for the WMP. This description may also include a brief explanation of the funding mechanisms for wildfire mitigation efforts.

POU Response: MVU's Wildfire Mitigation Plan is developed by staff and then reviewed by the Division Manager, Public Works Director, Assistant City Manager, City Manager, Utilities Commission, and the five-member City Council. City Council votes on approval and the plan is approved with a majority vote.

MVU funds wildfire mitigation activities through current rate payer revenues. These funds are augmented by grant awards. Mitigation projects typically take the form of revised equipment design standards and system hardening Capital Improvement Projects.

WSAB Recommendation #3: Identify where the POU has posted the most recent Independent Evaluator (IE) Report and if your POU plans to enhance future IE reports, please summarize in what ways.

POU Response: <http://www.moval.org/mvu/pubs/MVUWildfireMitigationPlanEvaluation.pdf>

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POU's to integrate these recommendations into the WMPs.

POU Response: This document is intended to include, as appropriate, responses to the recommendations in the WSAB’s Guidance Advisory Opinion for the POU’s 2021 WMP. This document also represents the combined effort of the POU industry associations to further the development of a template to respond to the WSAB’s Guidance Advisory Opinion in a future reporting WMP cycle.

B. Customer Impacts

WSAB Recommendation #5: Describe the potential impact investor-owned utilities (IOU) public safety power shutoff (PSPS) events could have on POU customers and how the POU manages these impacts. For POU's that are also balancing authorities, describe the criteria for wildfire related de-energizations. Responses shall only provide aggregated information that does not provide customer-specific information or other potentially sensitive data.

POU Response: Alternative 2: MVU’s customers may be impacted by the PSPS events ordered by SCE. The following provides responses to specific questions included in the WSAB’s 2021 WSAB Guidance Advisory Opinion:

<ul style="list-style-type: none"> • What is the relationship between the IOU and the POU during PSPS events? <i>POU Response:</i> MVU is an active partner in minimizing the impacts of SCE-initiated PSPS events. Additionally, MVU utilizes circuit-level PSPS details from SCE to notify potentially-impacted MVU customers.
<p>Does the POU receive advance notification? <i>POU Response:</i> Yes, MVU receives potential PSPS event communications from SCE beginning one week prior to the forecasted event.</p>
<ul style="list-style-type: none"> • Is the POU affected at the transmission or distribution level? <i>POU Response:</i> SCE-initiated PSPS events affect MVU at the sub-transmission level.
<ul style="list-style-type: none"> • Is the POU implementing a mitigation strategy for IOU PSPS? <i>POU Response:</i> Yes, as MVU expands its distribution system, redundant circuitry is installed to sectionalize and isolate PSPS outages and reduce the number of affected customers.
<ul style="list-style-type: none"> • Does the POU have its own permanent or temporary generation, (or customer provision of same) allowing it to withstand an IOU PSPS? <i>POU Response:</i> Yes, MVU maintains both permanent and portable generation facilities to protect critical City and MVU facilities from PSPS.
<ul style="list-style-type: none"> • Does the POU distribute back-up generators to customers? <i>POU Response:</i> MVU has a single portable generator unit to distribute in the community as needed.
<ul style="list-style-type: none"> • Does the POU deenergize their own lines when a wildfire threat looms, even if it is not labelled a PSPS? <i>POU Response:</i> No.
<ul style="list-style-type: none"> • In the above instance, what customer communication takes place? <i>POU Response:</i> NA
<ul style="list-style-type: none"> • Is the POU a Balancing Authority Area? If yes, describe any applicable criteria for wildfire related de-energization. <i>POU Response:</i> No.

WSAB Recommendation #6: Describe the utility customer communication plans with respect to wildfires and PSPS, and in particular describe the methods, content and timing used to communicate with the most vulnerable customers, such as Access and Functional Needs (AFN) customers, medical baseline customers, non-English speakers, and those at risk of losing water or telecommunications service.

POU Response: MVU is impacted by Southern California Edison (SCE) Public Safety Power Shutoff (PSPS) events. MVU receives advanced notification from SCE when impacted circuits are being monitored against weather projections for a potential PSPS event. SCE provides the names of circuits being monitored as well as the impacted City accounts, along with the projected period of concern for the PSPS event. As the situation develops, MVU receives updated data from SCE on weather, circuits and accounts being monitored, and if a PSPS is triggered. MVU monitors the SCE status reports and stages mitigation assets appropriately in advance of a SCE triggered PSPS event. If the PSPS event affects any MVU facilities, MVU customers are notified as early as possible of pending power shutoffs.

When a SCE PSPS event is triggered that impacts MVU facilities, MVU notifies its customers of potential service interruption in a variety of ways. Alert notices are pushed out to customers via the MyMVU mobile application, email blasts, direct telephone communication with critical customers, as well as public messaging available on the MVU web site and through MVU's 24/7 call center. PSPS and outage notices will be translated into Spanish for non-English speakers in the future.

C. The Grid

WSAB Recommendation #7: Provide details on each POU's system hardening and grid design programs, including: (1) the goals of the programs and the risk any particular program is designed to mitigate; (2) approach to PSPS mitigation and prevention; and (3) identify any resource shortages.

POU Response: MVU's approach to grid hardening is discussed in Section 4, 6, and 8 of MVU's WMP. The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Does the POU perform a circuit-by-circuit analysis to identify essential facilities (and whether they have backup power) like hospitals, communication centers, and community resource centers?

POU Response: Yes.

- Does the POU assess system hardening measures that could be installed to prevent PSPS for those facilities?

POU Response: Yes.

- In what way does the POU prepare these facilities for a PSPS or another wildfire related de-energization event?

POU Response: MVU’s distribution system is designed with the ability to sectionalize and isolate individual circuits to prevent widespread outages related to PSPS. Additionally, MVU openly communicates forecasted SCE initiated PSPS events to potentially impacted customers to mediate impacts.

- For POU’s that power water utilities or supply water themselves, if that water is used for drinking and firefighting, are certain projects being undertaken to harden the system for water delivery purposes?

POU Response: NA

- Are pump stations self-contained or have some level of fire protection? Is the supply to sewage treatment plants hardened?

POU Response: NA

- Is supplemental generation available such as backup batteries or backup power facilities?

POU Response: Yes.

- Are the majority installed by the customers themselves or the utility?

POU Response: Battery storage is mostly installed by the customer.

- Can the utility open and close taps? Can the utility back-feed?

POU Response: NA

- Are there wildfire related circumstances wherein either of these tactics would be useful?

POU Response: With MVU’s distribution system completely underground neither of these tactics have bearing or impact on wildfire mitigation.

- Can the utility sectionalize in a localized fashion?

POU Response: Yes.

WSAB Recommendation #8: Describe annual visual patrols on potentially impacted circuits and the risks the POU is inspecting for. Describe whether and how system inspections lead to system improvements. Describe line patrols before, during, and/or after a critical fire weather event, such as a Red Flag Warning with strong winds, or following a fire that burned in areas where electric facilities are or could have been impacted.

POU Response: MVU meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and 174. Pursuant to these rules, utilities inspect electric facilities in the High Fire Threat District more frequently than the other areas of its service territory. As

described above, MVU currently does not have any overhead power lines located within or near the High-Fire Threat District within the CPUC's Fire Threat Map. However, MVU staff uses their knowledge of the specific environmental and geographical conditions of MVU's service territory to determine if any particular areas require more frequent inspections.

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

MVU has conducted an analysis of all circuits to identify essential facilities and prioritize the deployment of back-up power facilities. Grant funding is also being sought to install back-up generation at additional strategic facilities throughout the service territory. MVU is fully capable of sectionalizing any outage to mitigate the number of customers impacted. This mitigation technique will also be employed during PSPS events to reduce any service interruptions to MVU customers. MVU will explore the possibility of back feeding the distribution system with customer owned battery storage systems.

MVU's Utility Maintenance Management System (UMMS) is used to collect all data subject to GO165. The UMMS prepares monthly inspection and maintenance reports for all electric distribution facilities. Maintenance history for each piece of equipment is archived in the UMMS. Additionally, MVU's substation inspection and maintenance program complies with GO 174 guidelines as well as manufacturer specifications, standards, and recommendations. MVU performs monthly inspections of all substation components including recording and analysis of all alarms, fluid levels, meters, and Load Tap Changer settings.

Although MVU does not fall under the jurisdiction of the California Public Utilities Commission (CPUC), MVU has cooperated with the CPUC's Utilities Safety and Reliability Branch and their requests for periodic audits. The audit in October 2008 noted no GO 95 infractions, and identified two GO 128 infractions to MVU Pad Mounted Electric structures. Repairs were made to correct the violation the day they were identified by the CPUC. Again, in March of 2013 the CPUC audit identified three vegetation obstructions that were immediately corrected in the field as they were identified. No additional infractions have been identified by the CPUC.

WSAB Recommendation #9: Describe options considered by POU (including through the joint efforts of the POU associations) to identify previously unidentified risks that could lead to catastrophic wildfires.

POU Response: The California Municipal Utilities Association (CMUA) will be holding a special meeting of its Wildfire Preparedness, Response, and Recovery Working Group this fall, which will be focused on risk drivers for power-line caused catastrophic wildfires and innovative mitigation options. CMUA plans to invite a broad range of utility staff, state agency staff (including the WSAB), industry experts, and academics to participate in this discussion. As part of this meeting, the working group will discuss unidentified wildfire risk drivers and mitigation measures that could address these risks. Based on the input provided during this meeting, CMUA will produce a publicly-available, post-meeting report that summarizes the group’s conclusions and recommendations. MVU’s staff will participate in CMUA’s meeting and will discuss any changes that MVU has made to its operations in response to the conclusions and recommendations of the working group in a future WMP.

D. Risk Assessment

WSAB Recommendation #10: Describe the particular wildfire risks associated with system design and construction such as topography and location near the HFTD areas of another utility’s service territory. Describe any G.O. 95 exempt assets and possible updates to G.O. 95 that could facilitate more resilient utility transmission and distribution assets.

POU Response: MVU’s assessment of wildfire risks is discussed in Section 5 of MVU’s WMP. The following provides responses to specific questions included in the WSAB’s 2021 WSAB Guidance Advisory Opinion:

- Are there design or construction issues related to the utility’s specific topography or geographic location that the Board should be aware of?

POU Response: No.

- How will the utility address risks associated with facilities requiring power that abut a Tier 2 or Tier 3 HFTD?

POU Response: MVU will continue to underground all system distribution facilities, as well as employ grid-hardening measures where appropriate.

- How does the utility assess its risks associated with system design and construction?

POU Response: MVU’s electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. MVU treats CPUC General Orders (GO) 95 and 128 as a key industry standard for design and construction standards for underground electrical facilities. MVU meets or exceeds all standards in GO 95 and 128. Additionally, MVU monitors and follows, as appropriate, the National Electric Safety Code.

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- What design and construction standards has the POU implemented that go beyond G.O. 95 or other General Order standards related to design and construction?

POU Response: MVU undergrounds all electric distribution facilities.

E. SITUATIONAL AWARENESS TECHNOLOGY

WSAB Recommendation #11: Provide context-setting information about the prevailing wind directions and speeds, differentiated by season, along with average weather conditions by season. Describe how and why situational awareness technology is installed, and where on the system. Describe the decision-making process regarding the installation of situational awareness technology, including constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively. Identify any other agencies, utilities, or fire professionals that the data from these devices is shared with.

POU Response: As a 100% underground utility, MVU does not collect wind/weather data. MVU shares service territory with SCE who maintains a robust meteorology division. Relevant weather data should be sourced from SCE.

F. VEGETATION MANAGEMENT

WSAB Recommendation #12: Describe treatment plans for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

POU Response: MVU's vegetation management program is discussed in Section 6 of MVU's WMP.

MVU staff, in partnership with its maintenance and operations provider, is responsible for electric facility design, maintenance, and inspection, including vegetation management. Although MVU's electrical distribution system is 100% underground, MVU follows best practices to prevent ignition of wildfires from its equipment. These items include:

- MVU performs routine maintenance of all distribution facilities.
- MVU adheres to a seasonal weed abatement and vegetation management schedule to maintain at-risk sites.

- MVU contracts for seasonal weed abatement services. Standard clearances as defined by General Orders 95, 128, 165, and 174, are maintained as part of routine maintenance cycles. All electric distribution facility equipment requiring repair and maintenance are addressed and corrected as they are identified. Annual inspections and maintenances of MVU substation facilities identified no deficiencies for 2020.
- MVU abides by Municipal Code 6.40 to abate trees, shrubs, weeds, and grass at all MVU facilities. Including Landscaping, vegetation, or improved or unimproved property in any of the following conditions: containing weeds, dry grasses, dead trees, dead shrubs, or any other material which bears seeds of a wingy or downy nature or which by reason of their size, manner of growth or location, constitute a fire hazard or a threat to public health, or containing weeds, vegetation, grasses, trees or shrubs, including, but not limited to sagebrush, chaparral, and Russian Thistle (tumbleweed) which, when dry, will in reasonable probability constitute a fire hazard or be blown onto adjoining property by prevailing winds; trees and shrubs containing dead or fallen limbs or branches that may present a safety hazard; trees or shrubs which are overgrown or contain limbs or branches that restrict, impede or obstruct the use of or obscure the visibility of pedestrians or drivers using the public rights-of-way, easements, sidewalks or roadways; overgrown vegetation likely to harbor vermin, insects or rodents of any kind.

WSAB Recommendation #13: List the qualifications of any experts relied upon, such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology. Specify the level of expertise of the POU staff that manages the contractors performing vegetation management. Describe measures each POU takes to ensure that POU staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD).

POU Response: NA

WSAB Recommendation #14: Describe whether the POU has considered innovative and alternative approaches to vegetation management.

POU Response: NA