UTILITY WILDFIRE MITIGATION PLAN

(REVISED FOR CALENDAR YEAR 2025)

Healdsburg Electric Department

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Executive Summary

Established in 1899, Healdsburg's electric department has and continues a historical trend of providing safe, reliable, and affordable electric service to Healdsburg's residents and businesses. Healdsburg's Electric Department is owned by the community and governed by Healdsburg's City Council. This arrangement provides direct local control of the operation and management of the City's electric utility, resulting in utility services that are responsive to community needs and priorities.

The risk of wildfire continues to be a top concern for the entire state of California. The increased risk of devastating wildfires coupled with increased housing within and adjacent to wildland urban interfaces (WUI) requires the City's electric utility to continually rethink past operational procedures, construction standards, and develop new ways to improve upon Healdsburg's record of safe and reliable electric service.

In response to an increasing number of devastating wildfires, Public Utility Code (PUC) 8387 requires publicly owned utilities, such as Healdsburg, to annually prepare and present a wildfire mitigation plan (WMP). Through the WMP, publicly owned utilities can track and monitor construction, maintenance, and operational practices that reduce the risk of utility caused wildfires. As required by PUC 8387 each WMP includes several key components that are foundational to reducing the risk of utility caused wildfires including developing plans to contact critical customers such as police, fire, hospitals, and communication service providers. The WMP also measures past performance through key indicators to identify and correct deficiencies of the WMP, construction practices, and/or operating procedures.

This document is the City of Healdsburg's wildfire mitigation plan and provides City staff with a guideline to implement and track efforts intended to reduce utility caused wildfires. The WMP is not a comprehensive study of the mitigation of wildfires in general, a study of climate change, nor is this plan to respond to and recover from the impacts of wildfires upon electric infrastructures. Those focused studies are left for other bodies of work to allow this document to serve it intent and focus on the mitigation of utility caused wildfires.

Wildfire Policy Statement

It shall be the policy of the City Council of the City of Healdsburg and Healdsburg's Electric Department to construct, maintain, and operate electrical lines and equipment within high fire threat areas in a manner that reduces the risk of utility caused wildfires while maintaining a high level of system reliability.

Purpose of Wildfire Mitigation Plan

The City of Healdsburg's electric service area includes areas considered to be of a high fire threat as identified by the CPUC High Fire Threat Districts (HFTD) and CalFire's Fire Hazard Severity Zones (FHSZ). In general, these areas align closely with the Healdsburg's Wildland Urban Interface (WUI) and are generally described as the areas on and around Fitch Mountain, the Healdsburg Ridge, and the northernmost portions of the City's service territory. CalFire's recent update of FHSZ has identified additional risk areas just outside of Healdsburg, but containing powerlines owned and operated by the City, near the Corporation Yard, Magnolia Lift Station, and the Water Reclamation Facility. Although the CPUC has not updated the HFTD and the obligations for Publicly Owned Utilities, City staff will use CalFire's updated FHSZ maps to inform decisions on construction and operations for Healdsburg's electric system.

The CPUC defined HFTD and CalFire's FHSZ cover roughly one-third of the City's entire service territory. Within this area, the City owns and operates roughly 21 miles of underground primary conductor and 7 miles of overhead primary conductor. Line protection devices that protect overhead and underground primary lines in this area include three feeder breakers, five line-reclosers, and numerous fused cutouts.

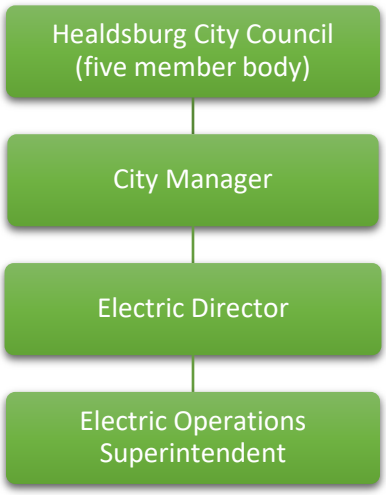
The City's Electric Department takes appropriate actions to help city electric customers prevent and respond to the increasing risk of wildfires. In its role as a public agency, Healdsburg closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies. In its role as a utility, Healdsburg follows applicable design, construction, operation, and maintenance requirements to reduce risks associated with its electric system. This Wildfire Mitigation Plan describes the safety and operational measures Healdsburg follows to reduce the risk of utility caused wildfires. To be clear, the WMP is not intended to be a final set of directions for the City's Utility Department staff. The intent of this document is to create a framework for ever-improving policies, procedures, and metrics that lower the risk of utility caused wildfires. Over time and as warranted, the WMP's policies and procedures will be reviewed, updated, and incorporated into this document with the goal of implementing effective and responsible wildfire mitigation measures that best fit Healdsburg's needs.

Wildfire Mitigation Plan Components (PUC Section 8387)

The City's WMP is organized consistent with the listed consideration of the PUC 8387. Areas of consideration are shown below and are used to develop the key elements that frame the City's wildfire mitigation plan.

Wildfire Mitigation Plan Areas of responsibility [PUC-8387 (b)(2)(A)]

The City's Electric Department is governed by Healdsburg's City Council, managed by Healdsburg's City Manager and Electric Director with day-to-day operations handled by the City's Electric Operations Superintendent.



The City Council is the governing body for the City of Healdsburg and Healdsburg's Electric Department, approving utility policies and utility expenditures such as wildfire mitigation efforts. The wildfire mitigation plan is implemented by the City's Electric Operations Superintendent with oversight provided by the Electric Director and City Manager. Due to the small size of Healdsburg's Electric Department, the Electric Operations Superintendent is responsible for the implementation of many aspects of the plan (inspections, tree trimming, SOPs, etc.). To implement the WMP the superintendent relies on his experience and knowledge of the system and the qualified electrical workers that report to him.

Objective of the Wildfire Mitigation Plan [PUC-8387 (b)(2)(B)]

The main objective of the Plan is to reduce the risk of utility caused wildfires. To achieve this objective, various industry best practices, policies, procedures, and system improvements are reviewed and implemented if they be applicable to the Healdsburg community and Healdsburg's electric distribution system. Additionally, the WMP is intended to track the progress and effectiveness of past practices implemented by previous versions of the WMP. This self-assessment is critical to ensuring that the actions of the WMP effect the intended goal of reducing utility caused wildfires. Healdsburg's Electric Department staff will assess the merits of the WMP

and modifications based upon new information and applicable utility best practices. A key objective of the WMP is to annually identify cost-effective measures that produce the same or improved results in reducing wildfire risk.

Overview of Preventative Strategies and Programs [PUC-8387 (b)(2)(C)]

New and existing strategies and programs will be used to mitigate the risk and impact of utility caused wildfires. These programs rely heavily on adequate staffing levels to implement new construction standards, perform prudent and timely maintenance, and/or complete pro-active replacement of targeted utility equipment. Healdsburg's primary strategies and programs are listed below and are discussed further throughout this document.

Vegetation Management – The City's existing vegetation management program (tree trimming) follows the CPUC's General Order (GO95) requirements for vegetation clearance from electric powerlines. Through the WMP, the existing vegetation management program will be continually reassessed and enhanced where needed to further mitigate utility wildfire risk. Specifics of the City's vegetation management program is discussed further within this document.

Public Education and Notification – Public education and notification are key components of the Plan. The Plan identifies how the City informs and notifies the public on the wildfire plan and prepares the public for potential de-energizations (Public Safety Power Shutoffs) of portions of or the entire the electric system.

Situational Awareness – Situational awareness allows City staff to be informed of the status of the City's electric infrastructure and weather conditions conducive to wildfires. City Staff rely heavily on internet weather services and technology but do not forego the value of field observations from the Electric Operations Superintendent, Qualified Electrical Workers (QEW), and other City staff. Starting in 2022, City staff enhanced recloser controls with remote indication and control to monitor system status. In addition to the Electric Department's remote indication and control, qualified electrical workers patrol the City electric system in compliance with General Order 165 (GO165).

Routine Inspections – To ensure the City's electric system remains in good condition the City follows GO165. These routine inspections help ensure that necessary repairs or replacements are identified and corrected in a timely manner. Needed repairs within the fire area will be prioritized and moved up in the Electric Department's work schedule. The Electric Department's Preventative Maintenance and Inspection Program guides staff in the assessment of City electric facilities and will be continually reviewed and revised to incorporate utility best practices.

System Hardening - At the time of reconstruction, the City constructs overhead facilities to meet or exceed CPUC General Order No. 95 (GO 95). Following or exceeding current GO 95 standards helps to ensure that the City's facilities are safe and reliable. Specifically, the City increases pole strength requirements beyond those required by CPUC's GO 95 safety factors (safety factor of 3.0 for existing poles and 4.4 for new/replacement poles). In addition to the increased pole strength, the City has proactively replaced weaker copper conductors to lessen the risk of overhead conductors falling during wind events.

Increased Overhead Conductor Spacing - Overhead conductors can increase the risk of utility caused wildfire. To mitigate that risk, in 2018 Healdsburg staff spoke with a provider supplying covered overhead conductor to assess the value of installing covered conductor in areas of higher fire risk. In that review, the City found that covered conductors are heavier requiring stronger and larger diameter wood utility poles, are subject to the same preventative tree trimming/removal requirements, and that if tree wire falls to the ground line-protection devices may not trip (de-energize) the line in an expedient manner. As such, the City will continue its policy of increasing conductor spacing and increased tree trimming requirements. Increased tree clearance and increasing the spacing between overhead wires is a best practice to reduce tree caused power outages. To further prevent wildfire and power outages the City uses covered jumpers, wildlife guards, and other protective coverings at equipment locations. These coverings minimize wildlife and tree caused outages at equipment locations where conductors and equipment lead-wires have less spacing.

Use of Non-Expulsion Fuses – The use of non-expulsion fuses can reduce the risk of utility caused wildfire by significantly reducing sparks created when a fuse operates (blows). City staff have replaced legacy expulsion fuses within the HFTD with non-expulsion fuses. New construction within the HFTD will use non-expulsion fuses. With the expansion of CalFire's FHSZ maps, City staff will evaluate the need for additional replacement of existing expulsion fuses with non-expulsion.

Elimination of Split Bolt Connectors – The use of split bolt connectors creates system reliability issues and can be an ignition source for wildfires. To mitigate this risk, the City has prohibited the use of split bolt connectors throughout the City's electric system and actively removed split bolt connectors found within high fire threat areas.

CAL FIRE Approved Lightning Arrestors – Lightning arrestors are used to limit the damage caused by lightning strikes to or near utility equipment. While a lightning arrestor can protect conductors and equipment many times over, in some cases a lightning arrestor will catastrophically fail emitting sparks. To limit the risk of these sparks igniting a wildfire, in 2021 the City replaced existing lightning arresters with CAL FIRE approved lightning arrestors within high fire treat areas. Future installations and replacements will be CAL FIRE approved lightning arrestors. As with replacement of expulsion fuses noted above, staff will evaluate the expanded areas of CalFire's FHSZ maps.

Operational Procedures - The safe operation of the City's electric system helps lessen the risk of utility caused wildfires. As a standard practice, the City adjusts system protection settings during red-flag warnings (periods of forecasted high winds and low humidity) and is researching additional field practices (vegetation management, patrols, increased afterhours staffing) to lessen the risk of wildfire. During red-flag warnings the City will revise existing work practices and work locations to further reduce the risk of wildfire. These practices center on limitations of work and stocking work vehicles with wildland water packs during weather conditions conducive to wildfire but include other preventive measures such as increased inspections.

Capital Improvements – As identified by the Electric Director and department staff, Capital improvements will be recommended through the City's 5-year Capital Improvement Program (CIP) and other budgeting processes. This budgeting process occurs at least once every two years, but new projects can be presented to the City Council sooner if required. Recommendations for system wildfire mitigation measures will be based upon their ability to reduce wildfire risk in a cost-effective manner. Past projects have included reconductoring to remove weak #6 copper overheads wires, pole replacements, replacement of expulsion fuses, replacement of self-protected transformers, lightning arrestor replacements, replacement of field recloser controls to provide Supervisory Control and Data Acquisition (SCADA) improving wildfire protection, and the replacement of feeder breakers to improve wildfire protection and provide SCADA.

An undergrounding project, within the CPUC HFTD and CalFire's FHSZ, is funded within the current budget cycle. This project will eliminate roughly 3,400 feet of overhead high-voltage conductor and associated equipment. Additionally, electric department staff continues to develop construction standards and City policies that reduce the risk of utility caused wildfire through the acceleration of undergrounding. Future standards could strengthen and clarify the undergrounding of services when significant remodeling or development occurs and the prohibition of any new overhead power lines within the HFTD.

Staffing & Staff Training – The City will not be able to reduce the risk of wildfire without qualified and experienced staff. Further, electric department staffing must be maintained at appropriate levels with adequate training to maintain staff knowledge and preparedness. This may include cross training to build redundancies within the department and from time-to-time succession planning for known and pending retirements. Additionally, short briefings (tailboards) will be had with staff ahead of weather events forecasted to contain a combination of conditions that favor the rapid spread of wildfire. With a recent rate increase, staff included funding to allow for succession planning for staff nearing retirement. However, other departmental cost increases are competing for these dollars. In most cases this succession planning will require the early and successful recruitment and placement of new staff to allow a reasonable transition period. Additionally, the City will need to consider funding additional positions within the Department to improve wildfire preparedness and remain ahead of regulatory requirements.

Wildfire Preparedness, Response, and Recovery – To minimize the chaotic nature typical of any emergency, this plan outlines necessary steps to prepare, respond, and recover from weather events conducive to wildfire. Throughout the year these procedures will be reviewed and revised as needed to improve the City's ability to reduce the risk of utility caused wildfires.

Key Performance Metrics [PUC-8387 (b)(2)(D)]

The purpose of the Plan is to reduce wildfire caused by utility equipment and the incident rate of utility caused wildfires as a primary metric. However other metrics exist to determine if the risk of wildfire mitigation is being reduced. Five primary metrics are identified below and will be used to measure the effectiveness of the City's wildfire mitigation efforts.

Metric 1: Ignitions caused by Utility Equipment
This metric will be tracked by City staff and reported annually. For the purposes of this plan and the annual reporting, an ignition caused by City owned utility equipment is a sustained ground fire of combustible vegetation. To be tracked by the City, staff must have knowledge of the ignition and will track (at a minimum) the date, time, location, and equipment involved for each ignition.

Metric 2: Inspection Records & Maintenance
System inspections and timely maintenance are leading methods to improve safety and system reliability. Inspections of overhead lines in the fire threat areas will begin in the spring of each year. Needed maintenance or repairs identified during these inspections will be tracked and given priority in the work schedule with higher priority repairs moved up in the Electric Department's work schedule. Each identified maintenance task or repair will be reported annually.

Metric 3: Vegetation Maintenance
Throughout the year, the City maintains proper vegetation clearance from utility lines by contracting with qualified high-voltage tree trimmers and at times augments this work with City staff. Under the terms of the contract, the contractor is required to report their work plan to the City and ensure that proper vegetation clearance from powerlines is met at all times. Vegetation management performed within the high fire threat areas will be tracked throughout the year and reported annually.

Metric 4: Overhead Equipment Failures
Failure of overhead electric utility equipment can be a source of wildfire ignitions. Therefore, the rate of failures of overhead electric equipment, within the high fire threat areas, will be tracked and reported on an annual basis. Any patterns that emerge will be used to proactively replace utility owned equipment.

Metric 5: Outage Response Time

Utility response time to power-outages and other service-calls is a measurable metric that indicates the City's response time to mitigating unsafe conditions related to electric utility equipment. To track and gauge response time, staff's after-hours response time to power-outages or City owned equipment failures will be recorded throughout the year. Staff response time, from the time of the first call for service to the time they arrive on site, will be tracked for every confirmed power outage and reported annually. This metric will be used to determine the need for afterhours staffing during extreme weather events.

Metric 6: System Reliability
The inclusion of systemwide reliability indices will track the total number of unplanned primary outages per year, the System Average Interruption Duration Index (SAIDI), and the System Average Interruption Frequency Index (SAIFI). With each outage, there is a chance for arcing that may result in ignition of vegetation. Tracking these reliability indices will help to understand trends in the occurrence of outages. A higher occurrence of outages may indicate a higher risk for utility caused wildfires.

Previous metrics related to wildfire [PUC-8387 (b)(2)(E)]

PUC 8387 requires consideration of how previous versions of the WMP's metric have informed the current WMP. Metrics are compared below.

Metric 1 Ignition Caused by Utility Equipment: During the 2023 calendar year there were no known vegetation ignition.

WMP Year	Date	Equipment & Location	Description of Cause
2020	no utility related wildfires		
2021	no utility related wildfires		
2022	9/26/2022	R-03 S. Fitch Mtn Rd	Bird stored acorns within wildlife bushing covers. This caused tracking across the bushings and eventually melted the covers. Melted covers caused a pole fire which started a small vegetation fire.
2023	no utility related wildfires		
2024	no utility related wildfires		

Metric 2 Inspection Records & Maintenance: To prepare for the wildfire season Electric Department staff completed several different inspections in 2024. These inspections include visual and intrusive inspections of existing facilities as well as inspections of vegetation clearance from overhead powerlines. The number of inspections are tracked through the assignment of mapping grids. Each grid covers roughly 34 acres and depending upon the existing construction within, a grid may have more or less overhead facilities requiring inspections. To balance workloads from

year to year, the number of grids are assigned based upon the equipment within and inspection timelines for that equipment type. The table below provides a summary of the inspections completed since 2020.

Type of Inspection (Fire Area)	2020 Grids Due	2020 Grids Complete	2021 Grids Due	2021 Grids Complete	2022 Grids Due	2022 Grids Complete	2023 Grids Due	2023 Grids Complete	2024 Grids Due	2024 Grids Complete
Overhead Visual Inspections	56	56	54	54	54	54	54	54	54	54
Overhead Detailed Inspections	8	8	3	3	38	38	5	5	6	6
Vegetation Clearance	56	56	54	54	54	54	54	54	54	54
Wood Pole Intrusive Inspections	3	3	0	0	30	30	7	7	31	31

From the inspections, maintenance tags were created for any issues found. Tags are prioritized based upon asset condition and whether the asset is located within the HFTD.

Metric 3: Vegetation Maintenance: The City's standard is to maintain vegetation clearance throughout the year. Therefore, trimming within the fire area happens continuously. To confirm proper clearance throughout the year inspections are also performed on a frequent basis. This year's contract period ended June 30, 2024 with a new 12-month contract beginning July 1, 2024. At the end of the initial contract vegetation was confirmed to have the required clearance. One vegetation related primary outages occurred within calendar year 2024, versus five vegetation outage in the previous year. The decrease is largely attributed to fewer winter storms of 2024 versus the winter of 2023.

Calendar Year	Date	Equipment & Location	Cause Detail
2020	no vegetation related outages		
2021*	12/15/2021	Fuse 144 – Hasset Lane	Tree fell through line during December wind event
2022*	4/16/2022	Fuse 54 – S. Fitch Mtn	tree limb broke-off and blew into the line
2023	1/7/2023	Fuse 145 Reed Ct	Winter storm, tree limb fell and broke pole
2023*	1/14/2023	Fuse 76 N Fitch Mtn	Winter storm, live oak fell into phone line
2023	2/21/2023	Fuse 131 Grant Ave	Wind blew branch into line
2023*	2/21/2023	Fuse 44 University	Wind blew branch into line

2023	6/21/2023	Fuse 61 W. Grant St	Branch broke out of redwood
2024	2/4/2024	Fuse 87 836 University	Tree limb in line due to winter wind storm

**Indicates vegetation related primary outages that occurred within the HFTD.*

Metric 4: Overhead Equipment Failures: Five equipment failures resulting in outages from the transformer level up to primary level outages occurred during calendar year 2024. It is note worth that, again in 2024, several failures of Fault Tamer fuse links occurred but they only impacted individual transformers and not the primary system. These failures appear to be a result of manufacturing defects and City staff continue to monitor for additional failures. Two of the equipment failures where from underground cable, protected by non-expulsion fuses.

Calendar Year	Equipment Failures Systemwide	Failures within Fire Area
2020	3	0
2021	5	0
2022	3	0
2023	5	4

Metric 5: Outage Response Time: Response time (time to first switching operation) for primary level outages ranged from 43 to 50-minutes with an average response time of 46-minutes. In 2024, the tight range of response time is due to several outages occurring during normal staffing hours when electric crews are within the City. 2024 average response time is improved from last year due to fewer afterhours outage. Consideration of pre-staging qualified electrical workers ahead of significant fire-weather is warranted.

Calendar Year	Response Time Range (min)	Average Response Time (min)
2020	17-60	41
2021	30-75	52
2022	6-58	31
2023	20-104	61
2024	43-50	46

Metric 6: System Reliability: The inclusion of systemwide reliability indices allows the tracking the total number of unplanned primary outages per year, the System Average Interruption Duration Index (SAIDI), and the System Average Interruption Frequency Index (SAIFI). A more reliable system (lower numbers) will have fewer outages and therefore fewer instances of arcing (faults) that could spark a wildfire. The data below is for unplanned primary level outages throughout the City's distribution system, including major events. Transmission and secondary level outages are excluded from this data. Calendar year 2024's number of outages remained at five for the year but included fewer (one) tree related outage during a winter storm event. In 2024 two large outages, both affecting more than 1,000 customers, occurred due to animals. These two outages represented over 97% of customer outage minutes during calendar year 2024. One of these large outages

occurred during a period of elevated wildfire risk. The lack of reclosing and requirement to thoroughly patrol the high-voltage lines prior to re-energizing increased the duration of outage.

Year	Total Customers	No. of Outages	SAIDI	SAIFI
2019	5959	5	8.37	0.05
2020	5971	5	13.76	0.05
2021	6020	7	42.67	0.36
2022	6047	8	8.46	0.10
2023	6062	5	11.34	0.08
2024	6185	5	49.56	0.64

Disabling Reclosers & De-Energization [PUC-8387 (b)(2)(F)]

As a key component of the WMP, the use of automatic reclosing on circuit breakers and line reclosers serving the HFTD and FHSZ will be disabled when the National Weather Service issues red-flag warnings affecting any portion of the City electric service territory. Additionally, during Red-Flag warnings the City will implement recloser settings that shorten the time a fault will exist (faster tripping). In general, these settings include lowering instantaneous trip settings and improving the detection of ground faults. Staff will continue to monitor these settings and look for additional utility best practices for implementation within Healdsburg's distribution system.

For public safety, City staff may pro-actively de-energize (turn off power) all or portions of the City's electric distribution system. De-energization of City facilities may occur due to one or more of the following conditions.

1) Upon the request of Healdsburg's Fire Department, Healdsburg's Police Department, CAL-FIRE or other State or local public safety agencies.
2) When energized powerlines subject to high winds or other weather or atmospheric conditions may create a substantial public safety risk.
3) When real-time information from qualified City staff indicates that high winds or wind driven vegetation or other combustible debris are threatening City owned electric utility equipment.
4) When PG&E de-energizes the City's transmission source. The City has no control over PG&E's decision to de-energize Healdsburg's transmission source.

As time permits, de-energization of City owned high-voltage powerlines will be coordinated between the City Manager's Office, Electric Department, and City Public Safety Departments. The decision to de-energize City owned powerlines will be communicated to the City Manager's office as soon as practical.

Customer Notification Procedures [PUC-8387 (b)(2)(G)]

Customer notification is an important component and consideration of the Wildfire Mitigation Plan. The City's customer notification procedures starts with customer education and continues with relevant updates when weather conditions are conducive to wildfires. Customer education will be predominantly through printed material, social media, and the City's webpage. Real-time communications leading up to and during a potential de-energization event will be predominantly through social media and other technology resources immediately available to City staff (NIXEL or other forms of reverse dialing electric customers).

Leading up to and during an event and ideally 72-hours in advance, City staff will coordinate customer notifications through the City Manager's office, City Emergency Operations Center (EOC), or other means available to City staff at the time of the event. The City Manager, as EOC Director, or the EOC Coordinator (Fire or Police Chief) may activate the City's Emergency Operations Plan. To provide the fastest means of notifying electric customers, the City will rely on automated phone calls and social media. Social media and automated alerts may include reverse phone calls, Facebook, NIXEL, and/or Nextdoor.

The City will make efforts to communicate with critical facility operators, such as hospitals, emergency centers, fire departments, public utilities/agencies, schools, and telecommunications providers before, during, and after any PSPS event affecting their City supplied electric service. Communication with critical facilities will be primarily through automated phone call but operators of these critical facilities will also be encouraged to monitor the City's Facebook page and signup for automated emergency alerts from the City.

City staff will continue to reach out to the community on an ongoing basis regarding the risks of wildfire. This will include the encouragement of City electric customers, first responders, and operators of critical facilities to update their contact information such that the City can reach them should a de-energization event need to occur.

Appendix D indicates areas of Healdsburg that have the potential for PSPS events. The graphic indicates areas affected by either transmission level PSPS events or distribution level PSPS events. This information is based upon both the City of Healdsburg's distribution system and information provided by PG&E regarding their distribution and transmission systems. Wildfire and PSPS customer outreach will be emphasized within areas shaded in blue.

Vegetation Management Program [PUC-8387 (b)(2)(H)]

To reduce power outages, promote safety and comply with required vegetation clearance, the City contracts with a qualified vegetation management contractor. This contractor is responsible for maintaining vegetation clearance from energized overhead conductors. The City's clearance requirements, which meet or exceed the requirements of GO-95, apply throughout the City, not just within the HFTD. Contractors are, in general, required to meet the City's tree clearance requirements as summarized below.

- Primary (12,000 volts) - trim to 7-feet and maintain no less than 4-feet of clearance during the contract period.

- Secondary (480 volts and below) - trim to 3-feet and maintain no less than 1 foot of clearance during the contract period. (pole to pole configuration).
- Service drop - maintain 6-inches during contract period (pole to customer weather head).
- Poles and Streetlights - trim a 3-foot radius around entire length of poles and streetlights during contract period (excluding customer poles).
- Guy Wires - trim to 3 feet and maintain no less than 1 foot of clearance during the contract period. (pole to pole configuration).
- Substation – 3-feet clearance from outside of wall from ground level to top of tree.
- When trimming, contractors must assume at least two-feet of line sag and at least one-foot of horizontal movement in both directions in addition to the clearances listed above.

Through the contract period, the City's contractor is to prune and remove vegetation hazards and maintain the clearances noted above throughout the contracted period. This includes removal of dead branches overhanging primary conductors. Portions of dead, old decadent, rotten trees, or portions of trees weakened by decay or disease that may contact the line from the side or fall on the line, must be trimmed to eliminate the hazard.

With this version of the WMP, City staff plan to continue the review of clearance requirements and easements for the ability to increase clearance at the time of trimming. Additional clearance at the time of trimming may help the City further reduce outages and the frequency of trimming within the HFTD.

Wildfire Inspection Program [PUC-8387 (b)(2)(I)]

Starting each year in the month of May, a qualified City employee shall perform a visual patrol of all overhead supply wires within the HFTD (Tier 2 or 3). This patrol shall review specific items related to wildfire mitigation such as;

- Proper vegetation clearance from primary and secondary wires
- Condition of wood poles, cross-arms, and other support structures
- Review and prioritize pending maintenance tags within the high-fire threat areas.

Before and after a Red-Flag Warning covering a portion of the City's service territory, City staff may perform a visual patrol of overhead primary and secondary conductors within the HFTD and FHSZ. This patrol is intended to identify vegetation clearance and/or equipment issues that can be quickly corrected before a weather event. A patrol following the Red-Flag event will document, by photo, any fallen vegetation, damaged facilities, or other potential causes of power outages.

The findings of these patrols will be recorded and reviewed by the Electric Director and Electric Operations Superintendent. The Electric Director and Superintendent will review the patrol results to determine the system's performance during an event (outages, vegetation, damaged facilities). The intent of these patrols and data collection, before and after wind events, is to better predict system performance under future weather events.

Wildfire Risks [PUC-8387 (b)(2)(J)]

This section of the plan identifies, describes, and prioritizes wildfire risks and drivers found within the City's service territory. The identified risks are separated into two categories; i) risks associated with design, construction, operation, and maintenance of the City's electrical equipment and facilities and ii) risks associated with topographic and climatological factors within the City's service territory.

i. Risk associated with the design, construction, operation, and maintenance of the City's electric system include the following (listed in order of priority).
    1) Vegetation near or adjacent to City electric lines presents the highest risk for utility caused wildfires. Mitigation of this risk is done through the routine and thorough performance of tree trimming to provide adequate clearance from power lines. The City will continue to evaluate the need to limit trimming (performance of work) within the fire area during the fire season or at times of elevated fire risk.
    2) Overhead Utility Equipment presents a risk of utility wildfire that can be mitigated through design standards, alternate equipment, proactive replacements, and adjusted work practices. To mitigate the risk of utility caused wildfire, the City will enact the strategies discussed within the WMP. These strategies will be reviewed annually for their effectiveness in reducing the risk of wildfire.
    3) An additional risk for the City is the limited number of field and office staff able to support utility wildfire mitigation efforts. The City currently employees four journey-level line-workers and one apprentice line-worker. Staff available for program oversight and program direction are limited to the City's Electric Director and Electric Operations Superintendent. The summer and fall months are periods of typical vacation but also are times most conducive to wildfire. Staffing levels can be reduced due to planned vacations and present increased risk in preparing for and responding to wildfire conditions.
    4) Reclosing or the automatic testing of faulted powerlines can increase the risk of utility caused wildfires. To lessen this risk, the City disables reclosing during red-flag warnings affecting the City's service territory. Additionally, the City has implemented faster tripping of line-reclosers and feeder breakers during weather events conducive to the rapid spread of wildfire.
    5) Recently the City experienced a large fiber optic communication deployment, attaching new communication lines to over 80% of the City's utility poles. During this process the communication provider's contractor created hundreds of GO95 infractions, some so significant they required multiple stop work orders. Third party attachers on joint use poles can increase the risk of wildfires as the quality of work and speed of corrections is far below any acceptable utility standard. This is further compounded as the true regulatory oversight for these attachers is the CPUC and not the City.

6) Certain work practices or operations can increase the risk of utility caused wildfire. To reduce the risk of wildfire, Staff incorporates operational procedures to limit work activities during weather conducive to wildfire, to clarify inspection practices within the fire-threat areas and revise other work procedures, as necessary.

ii. Topographic and climatological risks include the following (listed in order of priority).

a) Volume of vegetation (fuels) in high-fire threat areas increases the risk and speed of which wildfire can spread. Increasing vegetation clearance, and immediately removing those trimmings from the area, lowers the risk of wildfire. Additionally, the City's active and ongoing weed abatement program reduces the amount of fuels within the fire area and Urban Wildland Interface (WUI) further reducing the risk of wildfire.

b) Periods of significantly low humidity can dry vegetative fuels and create an increased risk of ignition. The City will monitor the National Weather Service alerts related to forecasted fire weather watch and/or red-flag days affecting the City's service territory to remain aware of the elevated risks.

c) High sustained winds and strong wind gusts can down trees, break branches, or damage utility equipment. The City will monitor the National Weather Service for high-wind warnings, watches, and/or advisory affecting the City's service territory to remain aware of these events. Increasing vegetation clearance, weed abatement programs, and exceeding GO 95 design standards reduces the risk of wildfire caused by these events.

d) Extended droughts or continued periods of below average rainfall can increase dry vegetative fuel loads, leading to an increase in wildfire risk. Prolonged droughts can also weaken or kill trees. The City's vegetation management program requires the identification and removal of diseased, dying, or hazard trees adjacent to the City's electrical lines. Routine visual inspections allow the City to remain aware of this risk factor. Steep terrain and areas difficult to access are present within the HFTD of the City's service territory. Steep terrain can increase the speed and spread of wildfire and limit access delaying response times of local firefighting agencies. While the terrain and access cannot be changed by the Electric Department, prudent utility operations within the fire area can reduce the likelihood of utility caused wildfires.

e) Housing and community activities within wildland urban interfaces (WUI) can increase the risk of wildfire. The City has zoning and land use policies that help mitigate the risk of wildfire associated with activities in the WUI. Additionally, the City manages an aggressive weed abatement program to reduce wildfire risks.

f) Wildfire history within and adjacent to the City's electric service area, shown in Appendix B, are indicators of the risk of wildfire. In review of historical wildfires, the City can confirm that the HFTD covering the City's service area

are in fact at higher risk for wildfire.

Identification of Areas of Higher Risk [PUC-8387 (b)(2)(K)]

In 2017, Healdsburg's City Council directed City staff to submit to the CPUC updates to the City service territory that defined high-fire threat areas (Tier 2). The area defined by the City Council closely aligned with the City's Wildland Urban Interface (WUI) and contain areas of improved property and structures adjacent to wildland vegetation (fuels) with potentially delayed or restricted fire response due to narrow and windy roads and steep terrain. These areas were defined as Tier 2 and provided to the CPUC's fire mapping process.

In working with the CPUC mapping team, the area was further refined and is shown in Appendix A. In accordance with this map, the City operates and maintains electric facilities within this area in a manner that reduces the risk of utility caused wildfires.

In 2021, the CPUC finalized and approved the Tier 2 area covering Healdsburg's service territory. The finalization and approval of this area aligns closely with City's WUI but does exclude some areas of developed lands. The City is monitoring updates to fire-threat maps by various state agencies. Should these maps be finalized and effect changes within the City's service territory, the City will consider any needed updates to our utility maps and replacement of utility equipment.

In 2025, CalFire released updated Fire Hazard Severity Zones (FHSZ) for the Local Responsibility areas (LRA) within Sonoma County. For Healdsburg's electric service territory and surrounding areas, CalFire identified additional areas of elevated risks not included in previous versions of CalFire's maps. City staff plan to review the additional areas for application of the City's standard wildfire mitigation design standards, operations, and construction practices.

Methodology for Identifying Enterprise-Wide Safety and Wildfire Risks [PUC-8387 (b)(2)(L)]

To determine the level of risk to the City's electric system and service territory, City staff review historic outages within the wildland urban interface and their associated causes to assess wildfire risk. Outages that have the potential for causing wildfires are noted and reviewed for potential corrective actions. On a rolling five-year window, the number of sustained outages is tracked to establish trends. The City must use a five-year rolling window due to the low number of outages on an annual basis.

To assess the risk of wildfire throughout the City's service territory and adjacent areas, City staff reviewed historical fires as well as vegetation and terrain surrounding the City. This annual review helps to confirm the need for wildfire mitigation as well as identify areas of potential threat to the City's infrastructure.

Process for restoring power after de-energization [PUC-8387 (b)(2)(M)]

Due to either the City proactively de-energize powerlines, a loss of the City's transmission source, or following the operation of a protective device, power lines will be re-energized in the following manner.

1) Overhead facilities in high fire threat areas must be patrolled by a qualified electrical worker and visually found to be clear of trouble, damage, or vegetation before re-energizing.
2) If damaged facilities are found, those facilities will be isolated such that sections of overhead lines that have been inspected and are not damaged can be safely re-energized restoring power to customers. To the extent additional resources are needed to repair the damage, the City will leverage mutual aid agencies and contractors to obtain needed material and qualified personnel.
3) Any damaged facilities or vegetation issues will be documented and photographed before being repaired or cleared.
4) Repairs to damaged facilities will be performed consistent with City and utility construction standards and then re-energized.

Wildfire Process & Procedure [PUC-8387 (b)(2)(N)]

i) The Plan's oversight, monitoring, and auditing will occur at least annually with any lessons learned being prioritized for incorporation into the plan, related standards, and procedures. The City's Electric Director will collect the results of oversight and monitoring of the program. This may include the use of qualified external stakeholders and consultants. If required for implementation, City staff will present this plan to the City Council for their consideration and action.

ii) The identification of deficiencies and areas of improvement will be noted through the annual auditing process or as issues are identified. City Staff may implement deficiency mitigation, remediation, and/or improvements at any time in a continued effort to mitigate wildfires.

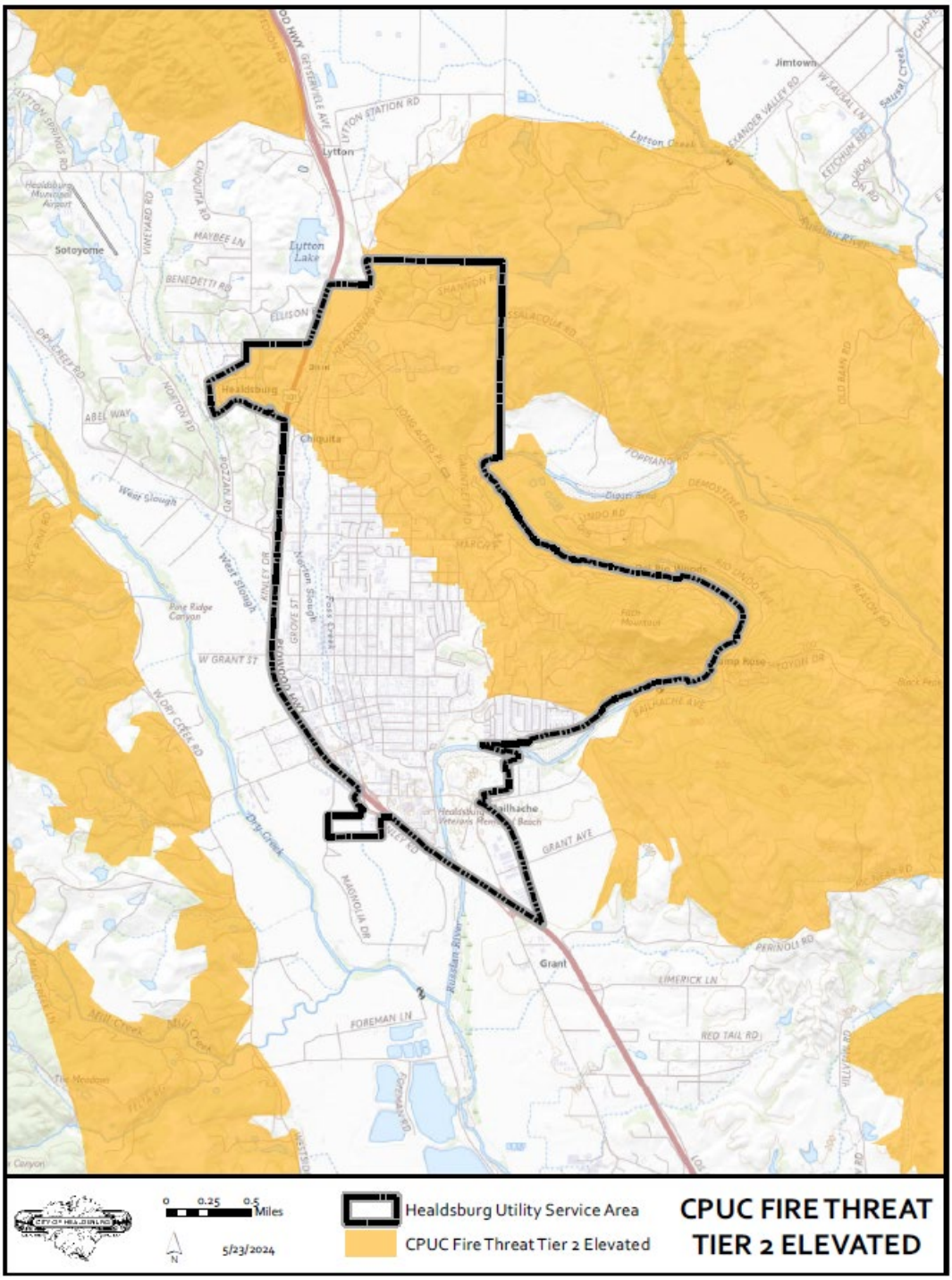
iii) Quality control of inspections (line, equipment, & tree), construction standards, and operating procedures will be the responsibility of the City's Electric Operations Superintendent. Through the scheduling of inspections, review of inspections performed, and the completion of any maintenance work found, the Electric Superintendent shall track and record the effectiveness of operations and maintenance staff.

iv) City staff will continue to review and consider new utility equipment meant to reduce the risk of wildfire. Equipment will be reviewed for the effectiveness and applicability to the City's electric system including the evaluation of non-expulsion fuses, tree-wire, the use of lightning arrestors, undergrounding, and other equipment.

v) As needed, but at least every five years, City staff will review system protection settings to ensure proper coordination and possible improvements to reduce the risk of wildfire mitigation. A review of protection device settings is necessary to ensure system faults

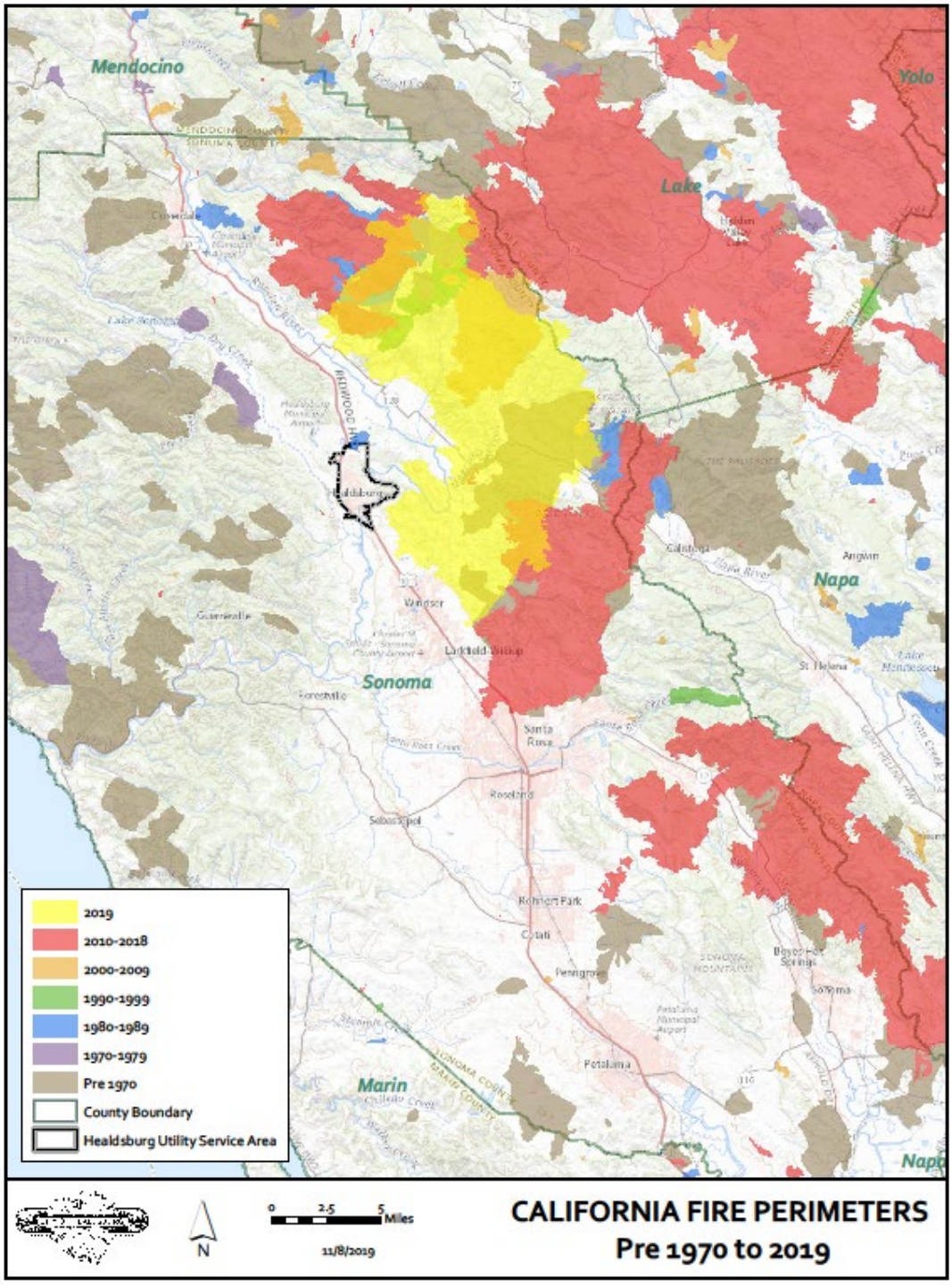
are cleared in a proper and expedient manner and that current and appropriate best utility practices are being implemented.

APPENDIX A – HEALDSBURG'S HIGHER FIRE THREAT DISTRICT (CPUC APPROVED 8/19/2021)



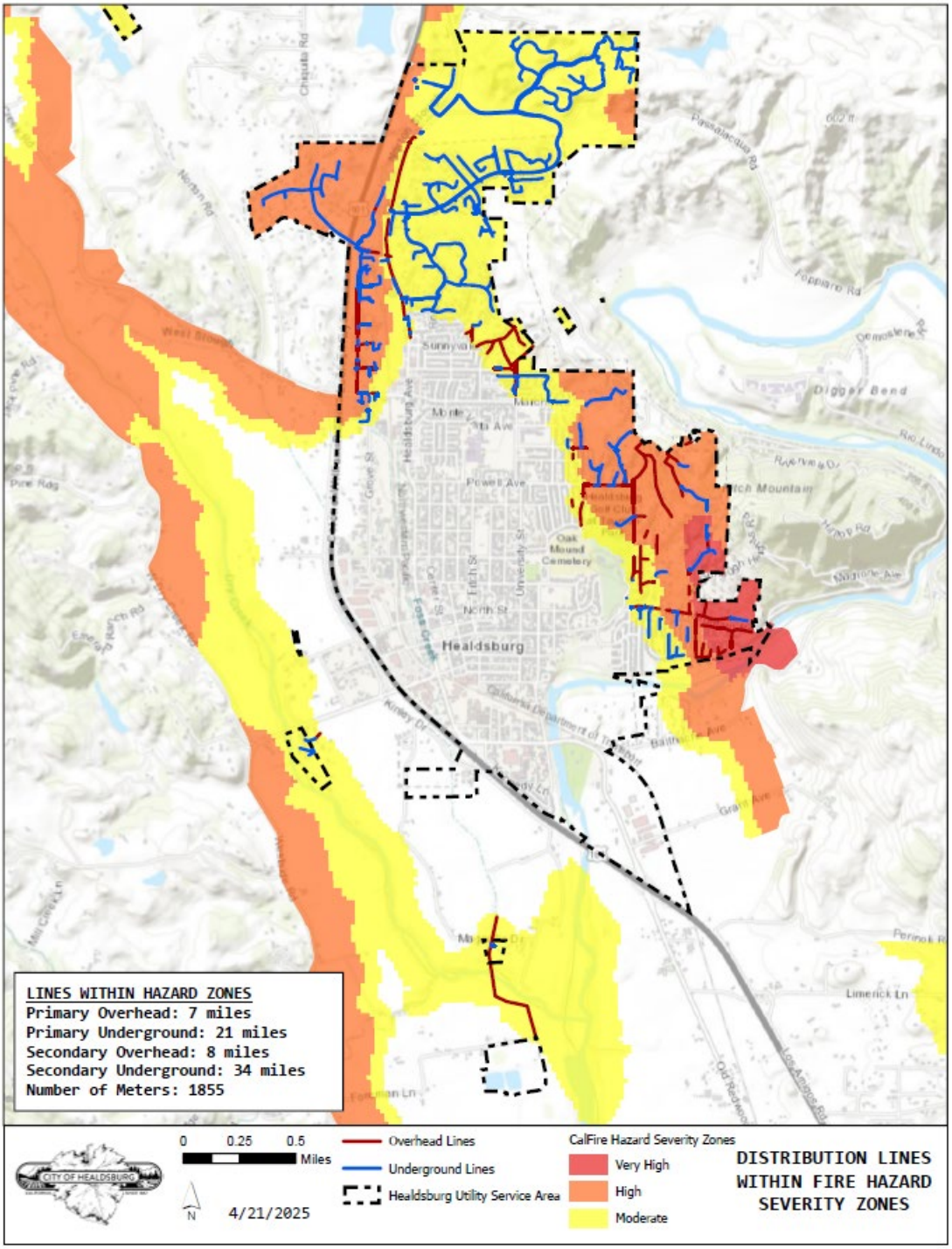
The above graphic shows the CPUC fire threat areas that affect the City of Healdsburg's Service territory.

APPENDIX B – LOCAL WILDFIRE HISTORY



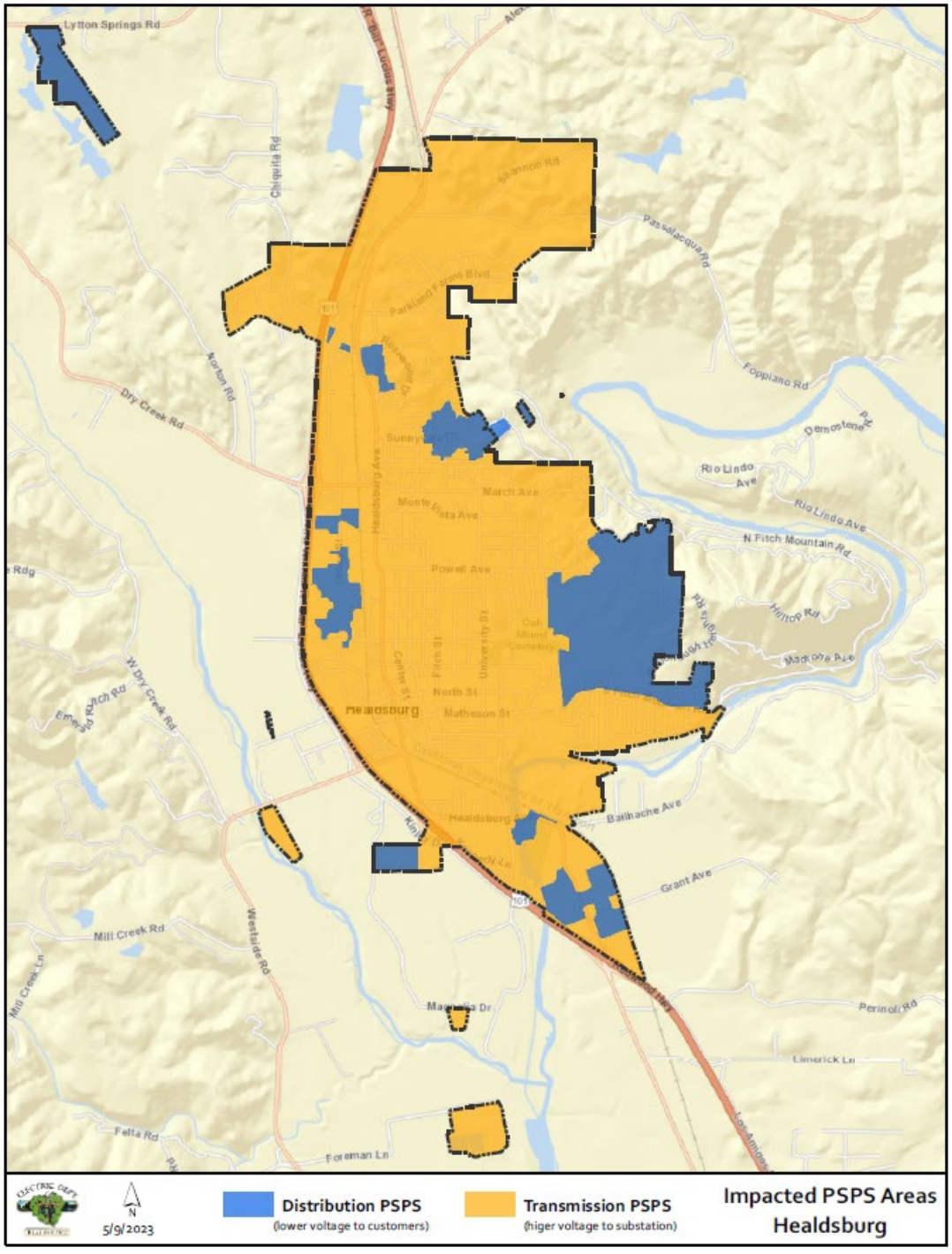
The above graphic shows historical wildfires in and around the City of Healdsburg. These historical fires help inform the City of the risk of wildfire.

APPENDIX C – DISTRIBUTION LINES WITHIN FIRE THREAT AREAS



The above image approximates the footage of over-head and underground high-voltage distribution line within the HFTD. Of the City's roughly 60 miles of distribution line, 30 are overhead. Of the 30 miles of overhead only 7 miles or one-quarter are within the HFTD.

APPENDIX D – AREAS LIKELY TO BE IMPACTED BY PSPS



The above image indicates areas more likely to be impacted by public safety power shutoffs (PSPS). The areas shaded in orange (entire service area) are likely to be impacted by transmission level PSPS events. Areas shaded in blue indicate areas likely to be impacted by distribution level (more localized) PSPS events.