CITY OF HEALDSBURG
WILDFIRE MITIGATION PLAN
2021 INFORMATIONAL RESPONSE

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

April 20, 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. The City of Healdsburg provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. POUs will provide a narrative response and/or a cross reference to the location in Healdsburg's Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to Healdsburg, the response will provide a brief description supporting this conclusion.

II. CONTEXT SETTING INFORMATION

WSAB requested that POUs 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	City of Healdsburg	
Service Territory Size	[**4.4**] square miles	
Owned Assets	☐ Transmission **X** Distribution ☐ Generation	
Number of Customers Served	[**5,993**] customer accounts	
Population Within Service Territory	[**11,810**] people	
Customer Class Makeup	*Number of Accounts*	*Share of Total Load (MWh)*
	[**82**]% Residential; [**1**]% Government; [**0**]% Agricultural; [**16**]% Small/Medium Business; [**1**]% Commercial/Industrial	[**39**]% Residential; [**8**]% Government; [**0**]% Agricultural; [**44**]% Small/Medium Business; [**9**]% Commercial/Industrial
Service Territory Location/Topography[1]	[8.41]% Agriculture [2.92]% Barren/Other [1.04]% Conifer Forest [0]% Conifer Woodland [0]% Desert [21.71]% Hardwood Forest [11.30]% 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.

	[8.87]% Herbaceous [0.09]% Shrub [44.72]% Urban [1.05]% Water
Service Territory Wildland Urban Interface[2] (based on total area)	[13.04]% Wildland Urban Interface; [10.30]% Wildland Urban Intermix;
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	Tier 2: [55.85]% Tier 3: [0]%
Prevailing Wind Directions & Speeds by Season	*The wind is most often from the west for 7.1 months, from March 8 to October 11, with a peak percentage of 74% on July 30. The wind is most often from the north for 4.9 months, from October 11 to March 8, with a peak percentage of 43% on January 1; (https://weatherspark.com/y/606/Average-Weather-in-Healdsburg-California-United-States-Year-Round)*
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: [**26**] miles of primary circuit Overhead Trans.: [0] miles Underground Dist.: [**38**] miles of primary circuit Underground Trans.: [0] miles
	Explanatory Note 1 – *Miles of line means circuit miles as measured by the linear distance of the circuit not actual feet of conductor installed for all circuit phases.*
Percent of Owned Lines in CPUC High Fire Threat Districts	*Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)*
	Tier 2: [**12**]% (Primary 7.5 miles) Tier 3: [0]%
	Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)
	Tier 2: [0]% Tier 3: [0]%
Customers have ever lost service due to an IOU PSPS event?	**X** Yes ☐ No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	X Yes ☐ 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.

Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	**X** Yes ☐ No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	☐ Yes **X** No

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.	Page: 5
Objectives of the Plan	**PUC § 8387(b)(2)(B):** The **objectives** of the wildfire mitigation plan.	Page: 5
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.	Page: 6
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.	Page: 8
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.	Page: 9
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.	Page: 11
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	Page: 11

	care facilities, and operators of telecommunications infrastructure.	
Vegetation Management	**PUC § 8387(b)(2)(H):** Plans for vegetation management.	Page: 12
Inspections	**PUC § 8387(b)(2)(I): Plans for inspections** of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Page: 12
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.	Page: 13
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.	Page: 15
Enterprise wide Risks	**PUC § 8387(b)(2)(L):** A methodology for identifying and presenting **enterprise wide** safety risk and wildfire-related risk.	Page: 15
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**.	Page: 15
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. (iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections	Page: 16

	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.	https://www.ci.healdsburg.ca.us/907/Attention---Utility-Wildfire-Safety

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 refence 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: *The City of Healdsburg uses rate payer money to fund all wildfire mitigation efforts as well as ongoing inspections, outreach, and preparatory steps necessary to mitigate the risk of wildfire. The City Council, as a community elected body, provides oversight and approval of the City's wildfire mitigation efforts.*

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: *https://www.ci.healdsburg.ca.us/907/Attention---Utility-Wildfire-Safety*

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POUs 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 POUs' 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 POUs 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: The City of Healdsburg's customers may be impacted by the PSPS events ordered by PG&E. The City of Healdsburg is a transmission dependent distribution provider and relies solely on PG&E to provide a constant source of transmission access.

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- What is the relationship between the IOU and the POU during PSPS events?

  POU Response: The City of Healdsburg has worked to improve its relationship and lines of communication with PG&E. While improvement has been made the City wishes to continue to strengthen the relationship between PG&E and POU's, especially with operational discussions.

Does the POU receive advance notification?

POU Response: Yes, but we are still concerned that the advanced notification may not allow the City enough time to notices and prepare our customers for potential outages due to PSPS.

- Is the POU affected at the transmission or distribution level?

POU Response: Healdsburg is a transmission dependent distribution utility and requires PG&E to maintain reliable and consistent transmission service. Loss of PG&E's transmission source creates a citywide outage to a population of over 11,000.

- Is the POU implementing a mitigation strategy for IOU PSPS?

POU Response: The City of Healdsburg is working on mitigation measures for IOU level PSPS events but strongly feels that PG&E needs to design, build, and maintain it is transmission facilities in a manner that is reliability and resilient.

- Does the POU have its own permanent or temporary generation, (or customer provision of same) allowing it to withstand an IOU PSPS?

POU Response: As a full-service City, Healdsburg's Public Safety and other facilities have backup generation in place. Healdsburg also has developed 3MW of floating solar that, if paired with utility scale battery storage, could provide some level of power during a transmission level PSPS event.

- Does the POU distribute back-up generators to customers?

POU Response: Currently the City does not provide backup generation to customers.

- Does the POU deenergize their own lines when a wildfire threat looms, even if it is not labelled a PSPS?

POU Response: If the situation warrants it, the City will de-energize lines to protect public safety.

- In the above instance, what customer communication takes place?

POU Response: Warning notices go out as soon as possible, communications will be repeated leading up to the planned outage, special needs and ambulatory customers are provided additional noticing. When power is expected to be restored, customers are again noticed of the estimated time of service restoration.

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:*** *Please see page 11 of the 2021 Wildfire Mitigation Plan for more information. Customer outreach is a multi-phase approach with many redundant messages being provided.*

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:*** *Healdsburg's approach to grid hardening is discussed in page 6 of the WMP. Healdsburg's is working to strength the overhead system and proactively replace weak or aging components. Further the City has an aggressive tree trimming program that exceeds GO-95 requirements.*
>
> 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, this helps to identify critical customers that may need to take additional action to prepare for PSPS events.

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

  POU Response: Yes, the City reviews alternatives for system hardening and implements those that are cost effective and meaningful to reducing wildfire risk.

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

  POU Response: Customer outreach and education regarding the potential for PSPS events. This includes helpful tips and confirming of emergency contact information.

- For POUs 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: City of Healdsburg, as a full-service city, is integrated with the water and wastewater department. These departments have prepared for power outages by installing backup generation and work closely with the POU when weather conditions favor red-flag warnings, rapid spread of wildfire, or power outages.

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

POU Response: Yes, water and wastewater facilities are prepared for power outages through fixed backup generation or the use of mobile backup generation.

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

POU Response: The City has access to mobile generation units to support water and wastewater needs.

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

POU Response: Due to PG&E's recent PSPS events, many customers are installing permanent backup power. This includes both battery storage and traditional fossil fuel power generators.

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

POU Response: Yes, the City has the ability to sectionalize our system but does not allow islanding of the primary distribution system during PSPS events.

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

POU Response: Sectionalizing is very useful to limit the scope of PSPS events.

- Can the utility sectionalize in a localized fashion?

POU Response: Yes, we have many options to sectionalize our lines to improve reliability and maintain power.

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: *The City patrols overhead lines to confirm tree clearance, condition of system equipment, and to identify any issues that could cause an outage or spark wildfires. To better*

understand system performance lines are patrolled before an after significant wind events to identify the amount and condition of vegetation present before and after an event.

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: *Healdsburg works with other POUs to identify best practices and new equipment that may reduce the risk of utility caused wildfires. This may include improved operational procedures or proactive replacement of utility equipment.*

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: Healdsburg's general approach to risk assessment is to visually inspect lines frequently, maintain vegetation clearance s greater that GO 95, and to proactively replace weak or deteriorating facilities. 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, the city does not have facilities at higher elevations exposed to more extreme winds.

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

  POU Response: Healdsburg primarily plans to address vegetation concerns and system hardening (system strength) as core mitigation measures.

- 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: Healdsburg exceeds primary voltage tree clearance requirements and increases pole safety factors beyond those required of GO95. The City also increases the frequency of visual inspections beyond those required of GO165.

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:*** *From and only weather source (weatherspark) The wind is most often from the west during the summer and the north in the winter. During Red Flag Warnings, the wind is strong and blows offshore. During weather events the City uses a variety of weather sources including direct reports from the National Weather Service. Staff rely on both the online and direct forecasts to assess what operational procedures should be implemented to lessen the risk of wildfire.*

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:*** Healdsburg' vegetation plan largely trims trees beyond industry requirements and looks to remove hazard trees where necessary. The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:
>
> The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Describe how vegetation management in the HFTD or Fire Threat Zones differs from other areas, including within private property and urban landscaping.

  POU Response: To improve system reliability Healdsburg employees the same level of tree trimming in the HFTD to all other areas of the City; we have only one standard and that standard exceeds GO95.

- Describe any enhanced vegetation management that goes beyond the minimum G.O. 95 standard.

  POU Response: Healdsburg exceeds the clearance requirements for primary line and contracts to maintain that clearance year-round.

- Describe how the POU tracks new vegetation growth that occurs in areas that has previously been cleared or treated.

POU Response: Healdsburg's tree trimming contractors are required to maintain clearance throughout the contract period. This requires both the contractor and the City to perform additional visual patrols and, in some cases, multiple trimmings per year.

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: *Healdsburg's contract for tree trimming requires the contractor staff and make available to the City a certify arborist. Further the City, in collaboration with other POUs, shares best practices for vegetation management.*

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

POU Response: *The has implemented increased trimming to remove vegetation close to overhead lines and increased conductor spacing to lessen the chances of vegetation falling through the lines, contacting more than one phase.*