

**Guidance Advisory Opinion
for the 2023 Wildfire
Mitigation Plans of Electric
Publicly Owned Utilities and
Rural Electric Cooperatives**



Draft October 17 2022



Cover Photos



Shown: **Shrubs Under Utility Lines, Palm Springs**

Shrubs under utility lines can act as ember catchers and prevent the invasion of flammable grasses.



Shown: **Oak Trees in Snow Near Lines**

The WSAB recommends assessment of vegetation beyond the immediate area beneath and closely around power lines.



Shown: **Utility Workers Using Bucket Trucks**

New technologies and protocols can pose safety concerns for implementing workers



Shown: **PG&E Signs Directing Traffic**

Sign providing directions to Pacific Gas and Electric shelter during Public Safety Power Shutoff (PSPS).



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California Wildfire Safety Advisory Board Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives

Background

Following recent catastrophic wildfires in California, Senate Bill (SB) 901 established requirements that utilities file Wildfire Mitigation Plans (WMPs) at the California Public Utilities Commission (CPUC). Assembly Bill (AB) 1054 and AB 111 established the Wildfire Safety Advisory Board (WSAB) consisting of seven members appointed by the Governor, Speaker of the Assembly, and Senate Committee on Rules, and established the Office of Energy Infrastructure Safety (Energy Safety)¹ as a department under the California Natural Resources Agency (CNRA).

To meet its AB 1054 mandate, the WSAB operates as an independent entity from Energy Safety and CNRA, ensuring its ability to provide separate analysis and expert guidance as the basis of its recommendations to Energy on wildfire safety issues. The WSAB acts in an advisory role on wildfire mitigation plans and related issues to Energy Safety, as well as to publicly owned utilities in the State. Each member of the WSAB brings a unique perspective and expertise to their review of WMP requirements and performance metrics. Additional information about the WSAB and its members can be found on its website:

[California Wildfire Safety Advisory Board Website](https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/)
<https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/>².

The current WSAB members are:

- Jessica Block, Chair
- Diane Fellman, Vice Chair
- Ralph Armstrong
- Chris Porter
- John Mader
- Alexandra Syphard

¹Formerly known as the Wildfire Safety Division at the CPUC.

² The Board approves the recommendations found here but individual recommendations may not reflect the views of individual Board members.

2021-2022 Activities and Accomplishments

On July 1, 2021, in keeping with AB 1054 and AB 111, the WSAB relocated within State Government to the California Natural Resources Agency. Prior to the move, the WSAB, during the first half of 2021:

- Held four, public virtual Board meetings; and
- Developed three sets of recommendations to the CPUC Wildfire Safety Division (the precursor to Energy Safety), on large IOU Wildfire Mitigation Plans (WMPs), Small and Multi-Jurisdictional (and ITO) WMPs, and 2022 Wildfire Mitigation Plan Guidelines, Performance Metrics, and Safety Culture Assessments.

Following that move, we continued to maintain the Board's independent voice while moving to our new umbrella agency and its new support and public interaction structures along with a completely new Board staff. During that time the WSAB:

- Held five public Board meetings (three virtual, one in Sacramento and one in San Francisco)³.
- Adopted an Advisory Guidance Opinion providing recommendations to the State's publicly owned utilities for their 2022 Wildfire Mitigation Plans⁴.
- Adopted Recommendations to Energy Safety on additional WMP requirements and performance metrics⁵.
- Adopted Recommendations to Energy Safety on Safety Culture Assessments.⁶

Acknowledgements

The Board also acknowledges that our work and this document would not be possible without the skill, creativity, and expertise of our advisor and staff, Timothy Tutt and Mary Ann Aguayo.

³ [Wildfire Safety Advisory Board, Board Events and Meetings](https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/wsab-events-and-meetings/)

<https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/wsab-events-and-meetings/>

⁴ [2022 POU WMP Advisory Guidance Opinion](https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf)

<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf>

⁵ [WSAB Recommendations on Additional WMP Requirements](https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/recs-on-2023-wmp-additional-reqs-performance-metrics-4.26.22-final.pdf)

<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/recs-on-2023-wmp-additional-reqs-performance-metrics-4.26.22-final.pdf>

⁶ [WSAB Recommendations on Safety Culture Assessments](https://energysafety.ca.gov/wp-content/uploads/wsab-recommendations-on-safety-culture-assessment-final.pdf)

<https://energysafety.ca.gov/wp-content/uploads/wsab-recommendations-on-safety-culture-assessment-final.pdf>

Introduction

The California Wildfire Safety Advisory Board is responsible for reviewing the WMPs of the State's Electric Publicly Owned Utilities' and Cooperatives' (together, POU) and providing advisory guidance about improvements to those WMPs. Public Utilities Code Section 326.2(c) states that the WSAB shall "... **review and provide comments and advisory opinions to each local publicly owned electric utility and electrical cooperative regarding the content and sufficiency of its wildfire mitigation plan and recommendations on how to mitigate wildfire risk.**" The WSAB is the only statewide entity authorized in statute to review and provide guidance on the POU WMPs.

This document fulfills that responsibility and represents WSAB review of the POU's 2022 WMPs and guidance for development of the POU's 2023 WMPs, which in most cases will be the "comprehensive" updates called for by AB 1054⁷. **This is a draft document published to receive public comments, which are due to the 2022-WSAB-POU-Docket by November 4, 2022^{8,9}.**

We once more express our appreciation for the contribution and cooperation from the publicly owned utilities and electric cooperatives through their representative organizations: California Municipal Utilities Association, Southern California Public Power Authority, Northern California Power Agency, and the Golden State Power Cooperative. The WSAB appreciates the efforts that the POU and associations put into to developing these 2022 WMPs as well as previous year's WMPs. We view continued collaboration with these organizations as essential to allow the Board to

⁷ PUC Code 8387(b)(1) says, in part: "Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan."

⁸ See this link for instructions: [Energy Safety Instructions for E-filing](https://energysafety.ca.gov/wp-content/uploads/docs/manuals-instructions/energy-safety-e-filing-overview-information_july-2021.pdf)
https://energysafety.ca.gov/wp-content/uploads/docs/manuals-instructions/energy-safety-e-filing-overview-information_july-2021.pdf

⁹ The WSAB has twice previously fulfilled that statutory obligation. The WSAB provided advisory opinions for the 2021 POU WMPs through the document entitled: *Guidance Advisory Opinion on the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* (December 2020; [2021 POU WMP Advisory Guidance Opinion](https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsd/wsab-pou-guidance-advisory-opinion-approved-12.9.2020.pdf); <https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsd/wsab-pou-guidance-advisory-opinion-approved-12.9.2020.pdf>). Subsequently, the WSAB provided advisory opinions for the 2022 WMPs through the document entitled: *Guidance Advisory Opinion on the 2022 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* (March 2022; [2022 POU WMP Advisory Guidance Opinion](https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf); <https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf>).

meet its statutory responsibilities while being comprehensive, efficient, and respectful of the POU community's unique status.

We also continue to acknowledge key distinctions among the POU entities that can permit refinement in WMP contents for the future, within the statutory requirements. The WSAB looks forward to receiving WMP updates that incorporate the guidance provided here and in our previous two Guidance Advisory Opinions. We offer these recommendations to the POU community to achieve the most effective and appropriate wildfire mitigation measures and strategies for their service territories and customers.

The Board recognizes that its independent, advisory role is distinct from a regulatory role. Our expertise is to “guide” and “advise” POUs towards specific actions. We offer our recommendations based on each Board members specific expertise and understand that only the governing boards and councils can direct actions. The shared goal is to appropriately minimize wildfire and related risks in the POU service areas and the State.

The following areas are the required elements of POU WMPs per PUC Code Section 8387(b), enumerated in AB1054. Our intent in reviewing WMPs in the context of these elements is to identify exemplary practices and to recommend essential additional information requested for future WMPsubmittals by the POUs.

Table 1: List of Statutory Responsibilities					
A	Staff responsibilities	G	Community notification	L	Identify enterprise-wide risk
B	General objectives	H	Vegetation management	M	Restoration of service
C	Program descriptions	I	Infrastructure inspections	N(i)	Monitoring & auditing of WMPs
D	Evaluation metrics	J(i)	Grid design, construction & operation risks	N(ii)	Identifying and correcting deficiencies
E	Lessons learned, metrics application	J(ii)	Vegetation, topographic, & climate risks	N(iii)	Monitoring asset inspections
F	Protocols for reclosers, de-energization, and PSPS mitigation	K	Identification and expansion of higher wildfire threat areas		

The WSAB and staff reviewed the 2022 WMPs that were received from the 50 POU's listed in the following table, along with supplemental information that was filed by some, but not all POU's, providing WMP adoption information, Independent Evaluation reports, and responses to previous WSAB recommendations. Individual observations and recommendations for each of the 50 POU's that submitted 2022 WMPs can be found in Appendix 3.

List of Publicly Owned Utilities with 2021 WMPs Reviewed by the Board¹⁰

Alameda Municipal Power	Lassen Municipal Utility District	Redding Electric Utility
Anaheim Public Utilities	Lathrop Irrigation District	Riverside Public Utilities
Anza Electric Cooperative	Lodi Electric Utility	Roseville Electric Utility
Azusa Light and Water	City of Lompoc	Sacramento Municipal Utility District
City of Banning	Los Angeles Department of Water and Power	San Francisco Public Utilities Commission
City of Biggs	Merced Irrigation District	City of Shasta Lake
Burbank Water and Power	Modesto Irrigation District	Silicon Valley Power (Santa Clara)
Cerritos Electric Utility	Moreno Valley Utility	Port of Stockton Utility
City of Colton Electric Department	City of Needles	Surprise Valley Electrification Corporation
City of Corona	Northern California Power Agency	Transmission Agency of Northern California
Eastside Power Authority	Port of Oakland	Trinity Public Utility District
Glendale Water and Power	Palo Alto Utilities	Truckee Donner Public Utility District
City of Gridley	Pasadena Water and Power Department	Turlock Irrigation District
Healdsburg Electric Department	Pittsburg Power Company	City of Ukiah
Imperial Irrigation District	Plumas-Sierra Rural Electric Cooperative	City of Vernon
Kirkwood Meadows Public Utility District	Power and Water Pooling Authority	City of Victorville
	Rancho Cucamonga Municipal Utility	

¹⁰ As of this October 18 2022 Draft the WSAB is still expecting 2022 WMPs from the following POU's -Banning, Lathrop, Lodi, and Port of Stockton.

The WSAB review of the third round of POU WMPs underscores the striking diversity of the POU community, from some of the largest utilities in the state to the smallest local electricity providers, with a variety of characteristics that affect their wildfire risk profile, at times dramatically. The WSAB notes that approximately half of the reporting POUs have a relatively low likelihood of seeing or causing catastrophic wildfires in their service areas; due to characteristics such as the small size of their service area (which alone is not an attribute sufficient to lower threat), a service territory that is mostly if not wholly urban with no HFTD areas within or abutting, and assets that are wholly or primarily undergrounded, or a combination of these characteristics. The WSAB expects to engage with the POUs, associations, and other stakeholders to tailor future WMPs to be more appropriate in scope to the wildfire threat in those areas, particularly for POUs with lower threat level, as discussed further in this document.

This document is focused on the upcoming comprehensive revisions to WMPs required “at least” every third year by AB 1054, based on the WSAB review of 2022 WMPs (some of which are already relatively comprehensive updates from previous years). In this light, the WSAB is advising that the standard “template” being used by many POUs to organize their WMPs over the last few years should be revised to provide more comprehensive, concise, and tailored information than in previous years. The WSAB proposes a model template in Appendix 1 of this document.

At the same time, the Board notes from reviewing the 2021 and 2022 WMPs that some POUs were not carefully writing or updating their WMPs, leaving text that makes little sense or clearly should have been updated, even if with a minor edit. While many of these were found in the WMPs of POUs that have relatively low wildfire likelihood, some were found even in the WMPs of POUs with significant High Fire Threat areas identified within their service territory. The Board expects that with the upcoming comprehensive revisions, these issues will no longer be found upon review. The WSAB believes that all POUs should take their WMP duties seriously and provide thoughtful descriptions and analysis of the risks that are present within their agency to help the Board and the public better understand each utility’s wildfire situation.

This 2023 Guidance Advisory Opinion is organized as follows. In the main body of the document there are the following sections describing the WSAB’s proposed new WMP “template”, proposed differential reporting based on relative risk, and thematic or general observations and recommendations derived from the 2022 WMP review:

- 1. Wildfire Mitigation Plans and Reporting Based on Threat Level**
- 2. Comprehensive Revision Wildfire Mitigation Plans and WSAB Proposed Template.**
- 3. Specific Topic WSAB Recommendations**
- 4. Conclusion**

Following those sections are four Appendices. Appendix 1 contains the WSAB's proposed Template for Comprehensive WMP Revisions. Appendix 2 contains the "context-setting" template requested to be included in the "Overview" section of comprehensive revision 2023 WMPs (note: this is identical to the CMUA "informational response" template from 2021 which many POUs have already previously filled out and included – but please make current if there are changes). Appendix 3 contains the WSAB's individual POU WMP observations and recommendations, based on review of 2022 WMPs and intended to provide guidance for 2023 comprehensive revision WMPs. When preparing 2023 WMPs, POUs should of course include the more general recommendations in the main body and Appendix 1 template as appropriate, and not solely rely on the specific recommendations in Appendix 3 (note that POUs that have not submitted a 2022 WMP by the date of this publication will have no specific input in Appendix 3). Appendix 4 is intended to provide the WSAB's response to public comments received on the draft Guidance Advisory Opinion.

1. Wildfire Mitigation Plans and Reporting Based on Threat Level

The WSAB has now reviewed three annual WMP filings from the diverse set of POUs required by law to provide those filings and as mentioned in the WSAB's 2022 Guidance Advisory Opinion believes that the significant diversity in the likelihood of a utility-induced wildfire among the POUs points to the reasonableness of diverse wildfire planning and reporting. In this 2023 Guidance Advisory Opinion, the WSAB proposes an initial step to structure interaction with very low-likelihood wildfire POUs. Note that this initial step signals nothing about subsequent steps at this time; the WSAB does not have the authority, nor does it wish to take on the burden of assigning wildfire risk scores to the full complement of POUs in the State.

The WSAB does note that a significant portion of POUs that file WMPs per the statute have no overhead utility assets in High Wildfire Threat Districts. Some of these POUs have completely underground transmission and distribution assets, others have overhead assets but also have service territories that are nowhere near the State's high wildfire threat areas. For these low-wildfire-likelihood POUs, the WSAB proposes a simplified WMP submittal and advisory process.

The WSAB understands that all POUs are required to develop, adopt, and file annual WMPs by statute. However, the WSAB notes that PUC 8387(b)(2) requires POUs to "consider as necessary," as opposed to expressly requiring POUs to "include," the WMP topics listed in that section. In addition, there is language in the CMUA WMP template, continued in the proposed WSAB comprehensive revision template in Appendix 1, that a POU may use to indicate a determination that detailed information in the WMP in any area that is "not necessary."

It is also true that for those POUs with little to no potential for a utility-induced wildfire there seems no need for WSAB recommendations or guidance on how to mitigate wildfire risk on an annual basis. A low-wildfire-likelihood POU may have overhead assets in a non-wildfire area (fully

The poster child for a POU with a low likelihood of inducing a wildfire is the City of Cerritos. This POU has no transmission or distribution assets inside or outside their service area. The lines serving Cerritos's customers are owned by Southern California Edison, and it is that utility that bears any wildfire mitigation responsibilities. Cerritos is basically a precursor to the relatively recent Consumer Choice Aggregators, which provide energy to customers served over IOU distribution assets. While it is important for the State's CCAs to work with the associated IOUs on relevant wildfire-related issues, CCAs are not required to file Wildfire Mitigation Plans. Perhaps the same obligation or lack thereof should apply to the Cerritos POU.

urban, for example) and hence have vegetation management plans to prevent urban fires and asset inspections to minimize disruptions in service, but these plans and actions are arguably not pointed to preventing or minimizing wildfire. The WSAB was not established to provide guidance or advice on all utility safety practices, only those related to wildfires and their prevention. Hence, the WSAB intends to tailor its review and advisory guidance appropriately and expects a greater focus on the comprehensive revisions required at least every three years.

With respect to Independent Evaluations of WMPs, the statute is not specific about how often these should be procured by POU and included in POU filings. For the low-wildfire-likelihood POUs, the WSAB suggests that performing an independent evaluation essentially a pro-forma exercise, with little to no chance of providing useful insights into reducing wildfire risks from already low to nonexistent levels. Hence, the WSAB proposes that these low-wildfire-likelihood POUs need not engage in additional independent evaluations unless their wildfire circumstances change, particularly for the annual updates between the comprehensive revisions.

It remains the individual POU's responsibility to take wildfire mitigation seriously, including the obligation to consider mitigation activities, develop and file mitigation plans, and consider WSAB and Independent Evaluation recommendations, guidance, and advice as appropriate. The WSAB has wildfire expertise and advisory and guidance authority, but no directive or enforcement authority. The POUs must do their own due diligence with respect to wildfire risks and plans, notwithstanding any guidance or advice from the WSAB or Independent Evaluators, nor the degree to which the guidance is followed by the POU.

WSAB RECOMMENDATIONS

- 1. The WSAB invites the POU representative organizations to work with us and develop an approach to streamline the WMP requirements for POUs with low likelihood of wildfires.**
- 2. POUs with no overhead assets within or abutting high wildfire threat areas should consider whether the specific topics listed in 8337(b)(2) are necessary to include in each annual WMP developed and filed with the WSAB.**
- 3. POUs with no overhead assets within or abutting high wildfire threat areas should consider whether hiring an Independent Evaluator is necessary for the annual updates between comprehensive revision WMPs and when hiring an Independent Evaluator is reasonable, such as when the utility's wildfire circumstances substantively change.**

2. Comprehensive Revision Wildfire Mitigation Plans and WSAB Proposed Template

The WSAB would appreciate greater consistency in the upcoming comprehensive revision WMPs (with recognition of the risk-based considerations described above) and hence has proposed a comprehensive revision WMP template found in Appendix 1 (including the context-setting template found in Appendix 2). This template is based on the CMUA template for WMPs that many POU have been following for previous plans, with additions, changes, and recommendations to help achieve the proposed WSAB WMP format.

The WSAB recognizes that some POUs have not used the CMUA template in the past and developed their own comprehensive structures for their WMP filings. The WSAB is not requesting that these POUs alter their detailed and comprehensive WMP to fit within the template, other than to include the helpful context-setting template and cross-reference table. For example, the Imperial Irrigation District has a process whereby an independent evaluator provides a system audit report that admirably informs and supplements their WMP. Likewise, Redding provides a separate system audit and progress report that details the annual programs, plans, results, etc. of the utility's wildfire mitigation efforts. The WSAB finds these approaches valuable and is not requesting that they be discontinued in favor of a consistent WMP-template approach but expects that the sections of the proposed comprehensive revision template be considered.

The "Joint Associations" – CMUA and Golden State Power – filed comments on July 7th about the 2022 POU WMPs, stating that some of the WSAB's 2022 Guidance Advisory Opinion recommendations for the POU 2022 WMPs "... relate to larger efforts currently being considered for the 2023 WMPs, and thus, will only have a limited discussion in the 2022 WMPs." The WSAB appreciates the discussion in those comments about sub-working groups being formed to discuss previous WSAB recommendations, including: 1) developing and refining metrics; 2) vegetation management and data management; 3) identifying assets in HFTDs, including "legacy" equipment; 4) describing grid hardening programs; 5) exploring cost-effective risk modeling; and 6) working to incorporate climate change impacts into risk assessments and decision making. The WSAB looks forward to hearing back from these efforts and seeing the results in the comprehensive revision 2023 WMPs.

Appendix 1 contains the WSAB preferred general template for crafting these WMPs to cover the list of topics recommended for consideration in PUC Section 8731(b)(B). Appendix 2 contains the WSAB preferred context-setting template to be included in comprehensive revision 2023 WMPs. Both documents are based on the previous CMUA templates and previous WSAB recommendations. The table below summarizes the WSAB recommendations included in these Appendices.

2023 WMP (Sub)Section	WSAB Recommendation Summary
Table of Contents	Include a table of contents appropriate for the WMP. Best practice is for the TOC to include dynamic links to the listed sections and subsections.
Executive Summary	For longer WMPs a brief Executive Summary would help review.
Utility Overview and Context	Provide: a short overview description of the utility; the context-setting table (Appendix 2); the statutory cross-reference table (this table with dynamic links if possible); describe the WMP adoption and public comment process (including resolution or equivalent and date if available); and a short description of where the WMP can be found on the utility website (please ensure website information is relatively easily found and up to date, including history).
Purpose of WMP	Similar to previous CMUA template. Update, embellish as desired.
Organization of WMP	Similar to previous CMUA template, with added Executive Summary (if appropriate), Utility Overview sections requested above, and more detail on expectations for metric results and customer/community communication. Update, embellish as desired.
Objectives of WMP	Consider alternative objectives where those make sense for the utility. One might include an objective of minimizing the spread of a wildfire, for example.
Roles and Responsibilities	Consider including alternative roles and responsibilities other than the generic list in previous CMUA template. The WSAB is interested in any specifics that depend on utility characteristics, such as having 100% underground assets or an entirely flat, urban service territory as opposed to the roles for utilities with mountainous terrain in high fire threat areas.
Coordination with Water Agencies or Departments	Describe any coordination involving electric resiliency for essential fire-fighting water facilities and whether proactive pumping or other preparation measures are part of the coordination, if applicable.

2023 WMP (Sub)Section	WSAB Recommendation Summary
Coordination with Communication Infrastructure Providers	Describe any successes and/or difficulties coordinating wildfire mitigation activities involving joint use of and or replacement of poles, etc.
Standardized EMS	The WSAB suggests that the standard emergency management system language can be included in an appendix or “attested to”. The WSAB is more interested in utility-specific enterprise risks and responses thereto.
Wildfire Risks and Drivers – System design and maintenance.	Tailor risks from generic list as possible to risks that are truly risks for the specific utility service area. Please provide, as expected by statute, a brief utility-specific description of each risk (how that risk applies in the specific utility service area), briefly describe the prioritization of risks for the utility (what is most important in a service area), and how climatological risks may change going forward, as expected in the statute.
Enterprise-Wide Safety Risks	Describe your methodology for identifying and presenting enterprise-wide safety risks related to wildfires.
Wildfire Prevention Strategies	Provide within these sections any specific information about consideration of climate change affecting the strategies being used or developed or considered for future use.
Weather Monitoring	Provide specific weather monitoring and situational awareness information for the utility, if available. Does the POU use any other weather sources than public/generic? Does the POU really assign standard operating conditions for each day, even if the POU's circumstances would indicate those standard conditions might not apply?
Design and Construction Standards	Call out specifically any instances where the POU is engaged in system design and hardening practices or pilot efforts for purposes of wildfire mitigation that exceed or differ from GO 95 and other industry standards.
Vegetation Management	Call out specifically any instances where the POU is engaged in vegetation management practices or pilot projects for purposes of wildfire mitigation that exceed or differ from NERC, GO 95 and other industry standards.
Inspections	Call out specifically any instances where the POU is engaged in inspection practices or pilot projects for purposes of wildfire mitigation that exceed or differ from CPUC GO 165 and/or GO 95 and other industry standards.
Workforce Training	Describe any changes to standard workforce training related to wildfire mitigation, from wildfire ignition, spread, and mitigation

2023 WMP (Sub)Section	WSAB Recommendation Summary
	itself to the workforce dealing with heavier assets, new grounding requirements, hotter temperatures, higher wind-speeds, etc.
Recloser Policy	Similar to previous CMUA template.
De-energization	Provide specific information about plans to de-energize, either proactively or through relay settings. Avoid using generic conditions and prioritize triggers if possible. Describe the public safety impact of shutting off power, including but not necessarily limited to: potential impacts on first-responders, water-infrastructure (where used for wildfire or where that may affect public health), vulnerable customers, and communication infrastructure. Describe customer notification protocols for wildfire alerts, related outages, potential PSPS outages, relay setting outages, and re-energizations. Include modes and timing of such communications as appropriate.
Community Outreach and Public Awareness	In addition to basic description of communication and outreach efforts, describe any evaluation of customer engagement and outreach activities and lessons learned from such evaluations as appropriate
Restoration of Service	Similar to previous CMUA template
Metrics and Assumptions for Measuring Plan Performance	Develop and report on metrics that are relevant to the specific utility and impactful in that they help to measure and improve POU performance on wildfire mitigation. Consider both performance metrics – tracking wildfire mitigation activities (such as fuse replacements, vegetation management plans and resulting degree of completion), by the utility – and outcome metrics, such as the fire ignitions and wires down metrics in the prior CMUA template. If using a “fire-ignitions” metric, please consider any wildfire-related fire ignitions, whether caused by the utility or not, that can impact the utility’s community or customers. Consider removing the “POU has knowledge of the ignition” statement. Please consider separating metrics to “within” and “without” HFTDs, if appropriate.
Impact of Metrics on the Plan	Please provide data about actual results or performance on metrics chosen for as much historical data as available and appropriate.
Monitoring and Auditing of the Plan	Similar to previous CMUA template.

2023 WMP (Sub)Section	WSAB Recommendation Summary
Identifying and Correcting Deficiencies	In addition to process for identifying and correcting, describe any actual corrections derived from metric tracking, lessons learned, or any other processes that lead the utility to discover and then correct deficiencies.
Monitoring Inspection Effectiveness	Similar to previous CMUA template.
Independent Auditor	The WSAB believes that it is reasonable for POU's to contract with an IE for review of at least the comprehensive revision WMPs required [at least] every three years. If a POU chooses a local fire department or fire chief as independent evaluator, they should document that the expected expertise in safe operation of electrical infrastructure is present in addition to general fire expertise and local knowledge. The resulting IE report should be posted on the wildfire mitigation area of the utility website and filed in the appropriate WSAB docket.

WSAB RECOMMENDATIONS

4. POU's should consider using the WSAB proposed comprehensive revision template described herein for their 2023 WMPs. Even POU's that the WSAB has recommended may have a reduced reporting responsibility due to low likelihood of wildfire should consider the template to establish a new baseline of WMP for future updates.
5. POU's that have not used the previous CMUA template because they have developed their own comprehensive WMP formats may continue that practice, while including the context-setting template and statutory cross-reference table requested if that is not already included and with consideration of incorporating the WSAB requested information from the template as appropriate.

3. Specific Topic WSAB Recommendations

In combination with the risk-based differential reporting and new comprehensive revision template information above, the WSAB has some recommendations on specific topics. In addition to any POU-specific recommendations found in Appendix 3, the WSAB encourages these topic recommendations to be included in the 2023 comprehensive revision WMPs.

Some of these recommendations are reiterated or revised from the WSAB 2022 Guidance Advisory Opinion, in reflection of the Joint Associations' filed comments in July and the WSAB's review of 2022 WMP filings. The Joint Associations' July comments indicated that many POUs may not incorporate the WSAB's 2022 recommendations in their 2022 WMPs due to timing of those recommendations in comparison to the development and adoption of 2022 WMPs by the POU community. This comment is borne out by the WSAB review of 2022 WMPs – many either did not reflect or did not well-integrate into the WMP itself the WSAB recommendations. As the POUs prepare their 2023 WMPs with the WSAB's wildfire threat differentiation and comprehensive revision template sections in this document, the WSAB encourages POUs to refer back to the 2022 recommendations along with those for 2023 provided below for preparation of next year's WMPs.

A. Metric Development and Evaluation

Public Utilities Code Section 8387(b)(2)(D) directs POUs to include in their WMPs “a description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions made that underlie the use of those metrics.” The WSAB is interested in the sub-group mentioned by the “Joint Associations” in their July 7th comment submittal that is considering development of WMP metrics. The WSAB is interested in both performance metrics – measuring how a utility is performing on wildfire mitigation actions such as inspections and vegetation management for a particular period – and “outcome” metrics – measuring events that happen in the utility service area such as fire ignitions and downed utility conductors or other assets. In the end, the WSAB believes the ultimate metric is “wildfires” – whether a wildfire was ignited and had some significant impact on a utility service area – a metric clearly related to the common “fire ignitions” metric.

The WSAB recommends that individual POUs adopt thoughtful, relevant metrics that appropriately reflect the significant variation in circumstances among POUs, including size, location, and asset situation or type. For example, POUs with 100% undergrounded lines still should not be including a “wires down” metric in their WMPs, as that is clearly not relevant or applicable to their situation or helpful to affect improvements in wildfire mitigation processes. In general, the WSAB supports including

a variety of performance and outcome metrics that are appropriate for individual POU. Overall, they should measure something that is helpful to gauge progress when met as expected, and to identify areas for improvement when not met. To affect progress, metrics must be tracked and the results fed into a process that explicitly leads to wildfire mitigation practice improvements. The WSAB is interested in how POU. engage in tracking their adopted metrics and applying the insights gained to consider and make improvements in their wildfire mitigation practices as appropriate.

B. Independent Evaluations

The WSAB continues to believe that Independent Evaluator Reports should serve as a helpful tool for POU. to improve wildfire mitigation planning. Independent Evaluators will not be providing additional benefit to POU. and the purpose of wildfire mitigation unless the IE's robust analysis of each POU. specific plan provides useful areas for improvement or indicates that there is no substantive need for improvement for that POU. The WSAB recommends that IEs review the 2023 comprehensive revision WMPs and provide an analysis that goes beyond simply documenting compliance with the statute to recommend wildfire mitigation changes or improvements that will improve the wildfire risk profile of the utility, if applicable. The WSAB also encourages documentation of IE recommendations, WMP changes, and a secondary IE review and attestation that recommended changes have been considered and result in the conclusion that the utility's WMP meets (or exceeds) statutory requirements (a practice seen in some of the POU IEs and WMPs. The WSAB invites the POU. to comment on the value of IE review for the WMP update years as part of the working groups referenced in the July Joint Associations comments.

C. Grid Assets, Operations, and Inspection

The WSAB believes that POU descriptions of their grid assets, hardening of those assets, and protocols for operating and inspecting those assets to minimize potential incidents that may cause wildfires is improving from year to year. The WSAB appreciates the July Joint Association comments about sub-working groups being formed to (among other topics): 1) evaluate asset management programs, including examining legacy equipment issues; and 2) describe grid design and system hardening programs. The WSAB looks forward to hearing back from these efforts in the 2023 comprehensive revision WMPs and potentially other fora such as workshops or meetings with these sub-working groups or with individual or groups of POU.

In particular, the Board WSAB appreciates the effort to identify and assess those assets that would not be directly subject to the protocols of the CPUC's G.O. 95 due to their construction prior to the G.O. first being adopted. The WSAB greatly looks forward to the information being developed in this effort.

One operational practice that the WSAB recommends POUs consider is the pre-staging of utility personnel at clearing points during de-energization events. Ignitions can occur at these points during these kinds of events and having utility staff on-hand allows for a quick assessment and mitigation of any potential ignitions to prevent them from turning into catastrophic wildfire incidents. The WSAB understands that many POUs do not have the resources to adopt this strategy, and many do not have a wildfire likelihood that would justify the approach. Many POUs do not actively engage in de-energizations and re-energizations in their service territories, so may not see a need for pre-staging. Other POUs may have sufficient situational awareness technology in place to detect ignition problems that pre-staging is deemed unnecessary. Nevertheless, the WSAB encourages consideration of the approach for those POUs where it is sensible.

D. Risk Assessment and Climate Change

The WSAB appreciates the Joint Associations "sub-working" groups focused on cost-effective risk modeling tools and incorporating climate change data into risk assessments and decision making. The WSAB understands that the POU community is diverse in risk and in resources and in many cases have no real need for comprehensive risk modeling tools being employed in the IOU community nor the resources to procure, develop, and maintain and operate these tools. However, the WSAB supports the effort by these sub-working groups to attempt to identify, for those POUs where it is appropriate, cost-effective risk assessment tools to help focus wildfire mitigation activities.

The WSAB also commends the Joint Associations and the POU community for the work effort to understand and incorporate climate change data in risk assessments and wildfire mitigation decision making. Changes in wind speeds, average temperatures, precipitation patterns and moisture content, vegetation types and other climatological factors are likely to impact POU risks and responses to wildfires over the long run, and the WSAB believes it is best to prepare for these changes proactively rather than reacting to them as they happen.

E. Vegetation Management

The WSAB appreciates the Joint Association sub-working group effort to focus on describing vegetation management practices in more detail and evaluate their impact on reducing wildfire related risk, as well as the ecological impact of the treatment options chosen. In particular, the WSAB encourages this effort to explore the risks of widespread invasive annual grasses that extend across the State. These grasses are highly flammable and fire-prone for much of the year and are at a higher risk for ignitions in comparison to native vegetation with higher moisture content. The

WSAB encourages the working group looking at vegetation management to address the issue of what vegetation may replace that “managed” beneath and around assets, to avoid development of potentially risky grasses in cleared areas. POU vegetation management should focus on ecologically relevant replanting and avoid the short-run simple practice of relying on greater clearances.

F. Community Communication and Outreach

The WSAB applauds the utility communication with their customers and communities as an essential component for avoiding significant wildfire impacts on human life, structures, and sensitive areas; understanding that in emergency situations the appropriate general communication structures are in place and should prevail to avoiding confusion through duplicative or contradictory communications.

Many POUs have provided relevant resource information in WMPs that indicated in the event of a wildfire-related power outage, either planned or unplanned, either customer or utility resources exist to help keep power supplied during the potential outage. It is solely in this wildfire-related context and not for long-term resource planning that the WSAB encourages POUs to develop and describe as appropriate backup resource plans for purposes of resiliency and wildfire recovery efforts, in addition to PSPS mitigation. The WSAB wants to better understand the options solely in the wildfire context, as a utility strategy to reduce impacts to customers and the community during a wildfire or associated outage, particularly as newer storage technologies make such mitigation more viable financially and environmentally.

WSAB RECOMMENDATIONS

- 6. The WSAB encourages POUs to refer back to previous WSAB recommendations and incorporate changes as appropriate in their 2023 comprehensive revision WMPs, as indicated in the July Joint Associations comments.**
- 7. The WSAB recommends that individual POUs adopt thoughtful, relevant metrics that appropriately reflect the significant variation in circumstances among POUs, including size, location, and asset situation or type, and provide useful results tracking for the adopted metrics.**
- 8. The WSAB recommends that IEs be procured for at least a review of the 2023 comprehensive revision WMPs and provide an analysis that goes beyond simply documenting compliance with the statute to recommend wildfire mitigation changes or improvements that will improve the wildfire**

risk profile of the utility, if applicable. The WSAB invites the POU to comment on the value of IE review for the WMP updated years.

9. The WSAB appreciates the sub-working groups focused on grid design, system hardening and asset management programs, including examining legacy equipment issues; and greatly looks forward to discussion of the results of these efforts.
 10. The WSAB appreciates the Joint Associations “sub-working” groups focused on cost-effective risk modeling tools and incorporating climate change data into risk assessments and decision making.
 11. The WSAB encourages the working group effort to examine vegetation management practices to explore the risks of invasive annual grasses that extend across the State and focus on ecologically relevant replanting as opposed to the short-run simple practice of relying on greater clearances.
 12. The WSAB continues to encourage information in WMPs about how they and their customers and community minimize wildfire impacts through backup power resources, particularly as new storage technologies make such mitigation more viable financially and environmentally.
-

3. Conclusion

The WSAB thanks the Electric Publicly Owned Utilities and Rural Electric Cooperatives for developing and filing their 2022 Wildfire Mitigation Plans pursuant to the direction provided by AB 1054. The WSAB also greatly appreciates the comments from the Joint Associations in July, describing significant collaborative work being undertaken to address wildfire mitigation issues that have been raised in the WSAB Guidance Advisory Opinions and looks forward to hearing from and working with the POUs to further develop wildfire risk mitigation planning information through meetings, communications, and the 2023 comprehensive revision WMPs.

DRAFT

WSAB Proposed WMP Template for 2023 Comprehensive WMP Revisions

Note that the ***bold italics*** entries below are WSAB proposed additions or recommendations; plain text is from the previous CMUA template.

I. Table of Contents

Include a table of contents appropriate for the WMP. Best practice is for the TOC to include dynamic links to the listed sections and subsections.

II. Executive Summary

For longer WMPs a brief Executive Summary would help review.

III. Utility Overview and Context

A. Utility Description and Context Setting Table

Provide a short overview description of the utility and include the context-setting table, following as appropriate the table format found in Appendix 2.

B. Statutory Cross-Reference Table

Include a statutory cross-reference table showing what section(s), and page numbers if appropriate, each statutory expectation from PUC Code 8337(b)(2) can be found. Best practice is for the sections to be dynamic links to where they are found in the document.

C. Process for Utility Adoption and Submittal of Annual WMP and Opportunities for Public Comment

Describe the process by which the WMP was considered and adopted by the governing body, including any opportunity for public comment and filing with the WSAB. Include the adoption resolution number and date as appropriate. The actual resolution, staff report, cover letter, etc. can be included in an appendix if available.

D. Description of Where WMP Information Can be Found on Utility Website

Provide a short description of how WMP information can be found by the public and other reviewers on the Utility Website. Ensure that the Website information on WMPs is relatively easily found, and while prioritizing the most current and up to date WMP, provide links to previous materials for reviewer context.

E. Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes in detail the range of activities that [POU] is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies, and procedures. This plan is subject to direct supervision by the [POU Governing Board] and is implemented by the [POU executive]. This plan complies with the requirements of Public Utilities Code section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter.

[Option 1 - Municipal POU]: [POU] is a department within the City of [_____].

[Describe how POU's fire prevention efforts fit into the general plan and other safety planning documents. Describe how POU coordinates with fire and other safety departments.]

[Option 2 – Non-municipal POU]: [POU] closely coordinates with local fire and safety officials

F. Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan includes the following elements:

- ***Executive Summary (if appropriate);***
- ***Utility Overview and Context;***
- Objectives of the plan;
- Roles and responsibilities for carrying out the plan;
- Identification of key wildfire risks and risk drivers;
- Description of Wildfire Mitigation Strategies;
- Metrics for measuring the performance of the plan and identifying areas for improvement;
- ***Annual and historical results for metrics;***
- Description of Community outreach and education, ***covering as appropriate communication about wildfire prevention, utility wildfire mitigation efforts and strategies, and potential de-energization and re-energization practices.***

IV. Objectives of the Wildfire Mitigation Plan

The prior proposed CMUA objectives are provided below for reference, but please consider alternative objectives where those make sense for the utility. One might include an objective of minimizing the spread of a wildfire, for example. The WSAB is unsure of the usefulness of the “Minimizing unnecessary or ineffective Actions objective.

A. Minimizing sources of ignition

The primary goal of this Wildfire Mitigation Plan is to minimize the probability that [POU's] transmission and distribution system may be an original or contributing source for the ignition of a fire. [POU] has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. [POU] has implemented those changes consistent with this evaluation.

B. Resiliency of the electric grid

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, [POU] assesses new industry practices and technologies that will reduce the likelihood of a disruption in service and improve the restoration of service.

C. Minimizing unnecessary or ineffective Actions

The final goal for this Wildfire Mitigation Plan is to measure the effectiveness of specific wildfire mitigation strategies. Where a particular action, program, or protocol is determined to be unnecessary or ineffective, [POU] will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or better results.

Optional “As Necessary” Language

Language similar to that below (including explanation of rationale) may be Inserted for any element of PUC 8387(b) that the POU determines does not apply in their situation (for example, a POU with no overhead assets may determine that a vegetation management description is unnecessary in their WMP):

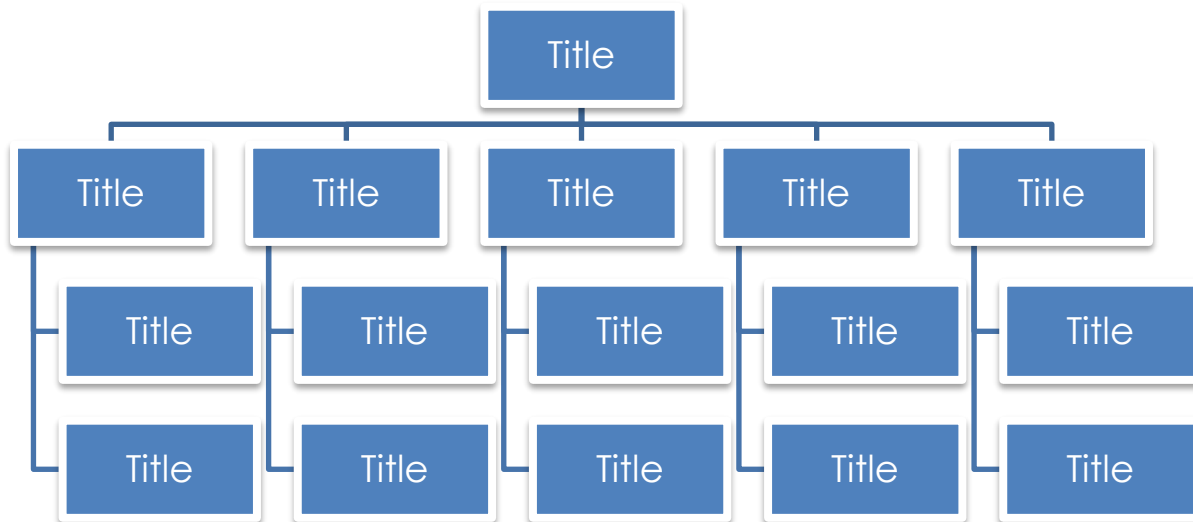
“Pursuant to Public Utilities Code section 8387(b)(2), [POU] has determined that it is not necessary to describe _____ in this Wildfire Mitigation Plan because of the

unique characteristics of the service territory and operations of [POU], including _____.

V. Roles and Responsibilities

A. [POU] roles and Responsibilities

[Optional Org Chart Template]



[Describe POU organizational structure]

[Describe relevant lines of communication during emergencies]

[POU] utility staff have the following responsibilities regarding fire prevention, response and investigation:

- Conduct work in a manner that will minimize potential fire dangers.
- Take all reasonable and practicable actions to prevent and suppress fires resulting from [POU] electric facilities.
- Coordinate with federal, state, and local fire management personnel to ensure that appropriate preventative measures are in place.
- Immediately report fires, pursuant to specified procedures.
- Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained.
- Ensure compliance with relevant federal, state, and industry standard requirements.
- Ensure that wildfire data is appropriately collected.
- Maintain adequate training programs for all relevant employees.

Consider including alternative roles and responsibilities than the generic list above – these tasks are all hopefully standard and essentially performed but the WSAB is interested in any specifics that depend on utility characteristics, such as having 100% underground assets or an entirely flat, urban service territory as opposed to the roles for utilities with mountainous terrain in high fire threat areas.

B. Coordination with water utilities/department

[Option 1 – Municipal Utility]: [Describe coordination with water department, including during wildfires and other emergencies.]

[Option 2 – Non-municipal POU]: [identify relevant water utilities within POU's service territory and describe lines of coordination and communication.]

Describe any coordination involving electric resiliency for essential fire-fighting water facilities and whether proactive pumping or other preparation measures are part of the coordination.

C. Coordination with communication infrastructure providers

[Describe coordination and communication with Communication infrastructure providers].

Describe any successes and/or difficulties coordinating wildfire mitigation activities involving joint use of and or replacement of poles, etc.

D. Standardized emergency management system

The WSAB suggests that the standard emergency management system language can be included in an appendix or “attested to”. The WSAB is more interested in utility-specific enterprise risks and responses thereto.

As a local governmental agency,¹¹ [POU] has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System (“SEMS”) Regulations,¹² 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.¹³ Pursuant to this structure,

¹¹ As defined in Cal. Gov. Code § 8680.2.

¹² 19 CCR § 2407.

¹³ 19 CCR § 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.

[POU] regularly coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. [Describe POU's role within the local and operational level].

[Describe SEMS structure during red flag conditions and during wildfires]

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. [County] serves as the Operational Area and is guided by the [_____] County Disaster Council that is made up of representatives of [_____]. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include [provide a detailed list of relevant school districts, utilities, Fire Districts, non-profits (such as the United Way and/or the American Red Cross), Hospitals, special districts, communications providers, and other similar organizations]. Pursuant to the SEMS structure, [POU] participates in [monthly/quarterly/annual] training exercises. [Describe relevant training exercises generally, and any specific examples relating to wildfires.]

[POU] is a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities during emergencies. [POU] also participate in the Western Energy Institute's Western Region Mutual Assistance Agreement, which is a mutual assistance agreement covering utilities across a number of western states.

VI. Wildfire Risks and Drivers associated with design, construction, operation, and maintenance

(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.

A. Particular risks and risk drivers associated with topographic and climatological risk factors

Tailor risks from generic list as possible to risks that are truly risks for the specific utility service area. Please provide, as expected by statute, a brief utility-specific description of each risk (how that risk applies in the specific utility service area), briefly describe the prioritization of risks for the utility (what is most important in a service area), and how climatological risks may change going forward, as expected in the statute.

Within [POU]'s service territory and the surrounding areas, the primary risk drivers for wildfire are the following:

- Extended drought;
- Vegetation type;
- High winds;
- Steep terrain;
- Lack of early fall rains.

B. Enterprisewide Safety Risks

Describe your methodology for identifying and presenting enterprise wide safety risks related to wildfires.

[Describe enterprisewide safety risks].

C. Changes to CPUC Fire Threat Map

[Note any needed expansion of the borders of the High Fire Threat District].

VII. Wildfire Preventative Strategies

Provide within these sections any specific information about consideration of climate change affecting the strategies being used or developed or considered for future use.

A. High fire threat district

[POU] directly participated in the development of the California Public Utilities Commission's (CPUC) Fire-Threat Map,¹⁴ which designates a High-Fire Threat District. In the map development process, [POU] served as a territory lead, and worked with

¹⁴ Adopted by CPUC Decision 17-12-024.

utility staff and local fire officials to identify the areas of [POU's] service territory that are at an elevated or extreme risk of power line ignited wildfire. [POU] has incorporated the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices.

B. Weather Monitoring

Provide specific weather monitoring and situational awareness information for the utility, if available. Does the POU use any other weather sources than listed? Does the POU really assign one of the listed standard operating conditions for each day, even if the POU's circumstances would indicate those standard conditions might not apply?

[POU] monitors current and forecasted weather data from a variety of sources including:

- United States National Weather Service
- United States Forest Service Wildland Fire Assessment System
- National Fire Danger Rating System
- National Interagency Fire Center – Predictive Services for Northern and Southern California.
- [Other sources]

Each day, [POU] assigns one of four operating conditions based on the relevant weather data and knowledge of local conditions:

- (1) Normal:** During normal conditions, no changes are made to operations or work policy.
- (2) Elevated:** During elevated fire-risk conditions, [describe policy].
- (3) Extreme:** During extreme fire-risk conditions, [describe policy].
- (4) Red Flag:** If the National Weather Service declares a Red Flag Warning for any portion of [POU]'s service territory, then [describe policy].

C. Design and Construction Standards

Call out specifically any instances where the POU is engaged in system design and hardening practices or pilot efforts for purposes of wildfire mitigation that exceed or differ from GO 95 and other industry standards. The WSAB is well aware of those industry standards and the fact that utilities strive to at least meet them and takes that as given.

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

D. Vegetation Management

Call out specifically any instances where the POU is engaged in vegetation management practices or pilot projects for purposes of wildfire mitigation that exceed or differ from NERC, GO 95 and other industry standards. Again, the WSAB is wellaware of the industry standards here and the fact that utilities strive to at least meet them and takes that as given.

[POU] meets or exceeds the minimum industry standard vegetation management practices. For transmission-level facilities, [POU] complies with NERC FAC-003-4. For both transmission and distribution level facilities, [POU] meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. These standards require significantly increased clearances in the High Fire Threat District. The time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. [POU] will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance.

Within the High Fire Threat District, [POU] performs an evaluation of every tree that has the potential to strike overhead facilities if it were to fail. [POU] performs more frequent and detailed inspections of any such trees, and in severe cases will work with the landowner to remove the tree.

[Describe a relevant State Responsibility Area requirements applicable to POU].

E. Inspections

Call out specifically any instances where the POU is engaged in inspection practices or pilot projects for purposes of wildfire mitigation that exceed or differ from CPUC GO 165 and/or GO 95 and other industry standards. Again, the WSAB is well aware of the industry standards here and the fact that utilities strive to at least meet them and takes that as given.

[POU] meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, [POU] inspects electric facilities in the High Fire Threat District more frequently than the other areas of its service territory. Additionally, [POU] staff uses their knowledge of the specific environmental and geographical conditions to determine when areas outside of the High Fire Threat District require more frequent inspections.

[POU] also uses light detection and ranging (LiDAR) surveys in certain areas of its service territory to provide three dimensional depictions of [POU] facilities, terrain, vegetation and other obstacles. This tool helps prioritize obstacles that need to be cleared to maintain safety and reliability.

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

[POU] works to ensure that all inspections to be performed within the High Fire Threat District are completed before the beginning of the historic fire season, typically September 1. [POU] monitors drought conditions and other relevant factors throughout the year to determine if inspections should be completed on a shorter timeframe.

F. Workforce training

Describe any changes to standard workforce training related to wildfire mitigation, from wildfire ignition, spread, and mitigation itself to the workforce dealing with heavier assets, new grounding requirements, hotter temperatures, higher wind-speeds, etc.

[POU] has implemented work rules and complementary training programs for its workforce to help reduce the likelihood of the ignition of wildfires. [Describe specific work rules and training programs.]

G. Recloser Policy

[Describe POU recloser policy including the use of pulse reclosers and other SCADA controlled reclosers. Additionally, describe if the POU changes the relay settings to more quickly or easily de-energize a circuit during certain conditions.]

H. Deenergization

Provide specific information about plans to de-energize, either proactively or through relay settings. Does the POU staff consider each of the generic conditions typically listed equally, or are some prioritized or not included in the specific POU's deliberations?

[POU] has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. [POU] will make a case-by-case decision to shut off power based on the following considerations:

- Red Flag Warnings issued by the National Weather Service for fire weather zones that contain [POU] circuits;
- [POU] staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from weather stations;
- Real-time information from staff located in areas identified as at risk of being subject to extreme weather conditions;
- Input from [POU] fire experts and vegetation experts;
- Input from local and state fire authorities regarding the potential consequences of wildfires in select locations;
- Alternative ways to reroute power to affected areas;
- Awareness of mandatory or voluntary evacuation orders in place;
- Expected impact of de-energizing circuits on essential services;
- Other operational considerations to minimize potential wildfire ignitions, including the blocking of reclosers on the identified circuit(s);
- On-going fire activity throughout [POU] territory and California;
- Ability to notify customers;
- Notifications to local governments and public officials; and
- Potential impacts to communities and customers.

1. Impacts to public safety

[Describe special considerations of the public safety impact of shutting off power, **including but not necessarily limited to: potential impacts on first-responders, water-infrastructure (where used for wildfire or where that may affect public health), vulnerable customers, and communication infrastructure).**

2. Customer Notification Protocols

[Describe customer notification protocols **for wildfire alerts, related outages, potential PSPS outages, relay setting outages, and re-energizations. Include modes and timing of such communications as appropriate.**

VIII. Community Outreach and Public Awareness

[Describe POU outreach, including any engagement with Fire Safe Councils, customer groups, or other similar organizations.]

[Describe any meetings hosted or attended by POU].

[Describe any public service announcements relating to wildfire safety.]

Describe any evaluation of customer engagement and outreach activities and lessons learned from such evaluations as appropriate.

IX. Restoration of Service

[Describe POU's process for restoring service after an outage].

X. Evaluating of the Plan

A. Metrics and Assumptions for Measuring Plan Performance

Develop and report on metrics that are relevant to the specific utility and impactful in that they help to measure and improve POU performance on wildfire mitigation. Consider both performance metrics – tracking wildfire mitigation activities (such as fuse replacements, vegetation management plans and resulting degree of completion), by the utility – and outcome metrics, such as the fire ignitions and wires down metrics in the prior CMUA template. Make sure that the metrics are relevant and meaningful to the utility – for example, consider that a “wires down” metric may not make sense for a 100% underground utility.

[POU] will track two metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; and (2) wires down within the service territory.

Metric 1: Fire Ignitions

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

- [POU] facility was associated with the fire **(Please consider any wildfire-related fire ignitions, whether caused by the utility or not, that can impact the utility's community or customers);**
- 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
- [POU] has knowledge that the fire occurred **(The WSAB does not understand what this part of the potential definition adds, since by definition fires for which the POU has no knowledge cannot be tracked by the POU).**

In future Wildfire Mitigation Plans, [POU] 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. **Consider separating the ignitions metric, if used, between ignitions within and without HFTD areas, as applicable.**

Metric 2: Wires Down

The second metric is the number of distribution and transmission wires downed within [POU's] service territory. For purposes of this metric, a wires down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or on to a foreign object. [POU] will divide the wires down metric between wires down inside and outside of the High Fire Threat District.

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

B. Impact of Metrics on Plan

The WSAB believes that the paragraph below no longer makes sense, since we are no longer in the “initial years”. Provide data about actual results or performance on metrics chosen for as much historical data as available and appropriate.

~~[POU] anticipates that there will be relatively limited data gathered through these metrics, particularly in the initial years. Therefore, it will be difficult to draw meaningful conclusions based on this data. [POU] will evaluate modifying these metrics or adding additional metrics in future years.]~~

C. Monitoring and Auditing the Plan

This Wildfire Mitigation Plan is subject to review by [POU Governing Board]. [POU] will present this plan to [POU Governing Board] on an annual basis. Additionally, a qualified independent evaluator will present a report on this plan to the [POU Governing Board].

D. Identifying and correcting Deficiencies in the Plan

Describe corrections derived from metric tracking, lessons learned, any other processes that lead the utility to discover and then correct deficiencies.

[Describe process for correcting deficiencies in the plan.]

E. Monitoring the effectiveness of inspections,

[Describe POU process for monitoring the effectiveness of its inspections, including inspections performed by contractors.]

XI. Independent Auditor

Public Utilities Code section 8387(c) requires [POU] to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this Wildfire Mitigation Plan. The independent evaluator must issue a report that is posted to [POU's] website. This report must also be presented to [POU Governing Board] at a public meeting.

PUC Code 8387(c) is not specific about when or how often a POU should contract with an independent evaluator, nor the particular qualifications of that evaluator, other than someone "... with experience in assessing the safe operation of electrical infrastructure ...". The WSAB believes that it is reasonable for POUs to contract with an IE for review of at least the comprehensive revision WMPs required [at least] every three years. The WSAB notes that some POUs appear to have never contracted for an independent evaluation. If a POU chooses a local fire department or fire chief as independent evaluator, they should document that the expected expertise in safe operation of electrical infrastructure is present in addition to general fire expertise and local knowledge. The WSAB also requests that the resulting IE report be posted on the wildfire mitigation area of the utility website and filed in the appropriate WSAB docket.

[Describe process for selecting qualified independent evaluator].

[Describe timing and process for the report].

Context-Setting Information Template

Utility Name	[POU]	
Service Territory Size	[] square miles	
Owned Assets	<input type="checkbox"/> Transmission <input type="checkbox"/> Distribution <input type="checkbox"/> Generation	
Number of Customers Served	[] customer accounts	
Population Within Service Territory	[] people	
Customer Class Makeup	Number of Accounts	Share of Total Load (MWh)
	<input type="checkbox"/> % Residential; <input type="checkbox"/> % Government; <input type="checkbox"/> % Agricultural; <input type="checkbox"/> % Small/Medium Business; <input type="checkbox"/> % Commercial/Industrial	<input type="checkbox"/> % Residential; <input type="checkbox"/> % Government; <input type="checkbox"/> % Agricultural; <input type="checkbox"/> % Small/Medium Business; <input type="checkbox"/> % Commercial/Industrial
Service Territory Location/Topography ¹⁵	<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 <input type="checkbox"/> % Herbaceous <input type="checkbox"/> % Shrub <input type="checkbox"/> % Urban <input type="checkbox"/> % Water	
Service Territory Wildland Urban Interface ¹⁶ (based on total area)	<input type="checkbox"/> % 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: [] % Tier 3: [] %	

¹⁵ 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>.

¹⁶ 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.

Prevailing Wind Directions & Speeds by Season	<input type="checkbox"/> Includes maps [Description]
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: [____] miles Overhead Trans.: [____] miles Underground Dist.: [____] miles Underground Trans.: [____] miles
	Explanatory Note 1 - Methodology for Measuring "Miles": [e.g., circuit miles, line miles.]
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [____]
	Explanatory Note 3 – Additional Relevant Context: [e.g., percentage of lines located outside service territory]
Percent of Owned Lines in CPUC High Fire Threat Districts	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2: [____]% Tier 3: [____]%
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: [____]% Tier 3: [____]%
	Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]
Customers have ever lost service due to an IOU PSPS event?	<input 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 type="checkbox"/> Yes <input type="checkbox"/> No
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input 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> [____]

Guidance Advisory Opinion Specific to Each POU Based on 2022 WMP

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Alameda Municipal Power	<ul style="list-style-type: none"> • The WSAB appreciated Alameda providing a separate informational response to the Board's 2021 WMP Guidance Advisory Opinion, including the requested context-setting template, however this template was not included in Alameda's 2022 filing. In the comprehensive revision 2023 WMPs (and beyond) the WSAB encourages the upfront template and other enhancements that are appropriate from WSAB guidance opinions to be included in the WMP itself, eliminating the need to look at a separate document for this helpful information. The WSAB proposed new WMP template for the comprehensive revisions includes this expectation. • The WSAB appreciates Alameda has upgraded the website information about wildfires and wildfire mitigation plans, as requested in the WSAB's 2021 Guidance Advisory Opinion – this is very helpful for public and WSAB review. • Alameda is in an area of the state with very low likelihood of a wildfire, utility-caused or otherwise. Hence, The WSAB understands that the few material changes made in this "update" WMP are reasonable given the low wildfire risk in Alameda's service territory. However, the WSAB encourages Alameda to undertake a more thorough re-examination for next year's comprehensive revision, considering changes along the lines of the WSAB proposed new template, along with another IE Report. The WSAB also encourages Alameda to clarify that we do not "commission" their WMPs, as stated on page 4 of the 2022 WMP. • The WSAB understands statements in their 2022 WMP about not needing an explicit system hardening strategy (although standard system construction practices are followed) and relying on industry standard vegetation management clearances (with no need to examine alternative strategies). Nevertheless, the WSAB appreciates the added description of vegetation management practices included in the 2022 WMP, stating that their tree trimmers are certified arborists that use a minimum clearance of 12 feet.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB continues to value the customer notification protocols of Alameda, using Alameda County's "AC Alert" system where necessary to send voice, text, email, and FEMA wireless alerts, as well as participating in the State's Standardized Emergency Management System. The WSAB appreciates the added information about Alameda customer being unlikely to be affected by a PSPS event (including those instigated by PG&E). • The WSAB appreciates Alameda's description of utility governance and explanation of wildfire responsibilities, and useful listing of potential wildfire risk drivers and prevention strategies. The WSAB believes that Alameda continues to fully explain it's safety and outreach practices. • The WSAB once again notes that Alameda owns or contracts with several generation resources outside its service territory, but does not discuss in their WMP any potential wildfire risks associated with those resources that may impact these resources and adjacent areas. The WSAB again encourages Alameda to add statements regarding wildfire risks, if any, associated with these resources, along with implications to Alameda's customers should these resources be affected by wildfire. • The WSAB notes that Alameda's WMP has metrics identical to previous years, with no updating of the results from tracking those metrics nor any consideration of additional metrics such as performance metrics that can track practices rather than events. The WSAB encourages Alameda to consider additional metrics and provide tracking information so that reviewers can observe progress to plan.
Anaheim Public Utilities	<ul style="list-style-type: none"> • The WSAB again commends Anaheim for an extremely well-written and comprehensive 2022 WMP, which clearly and logically lays out Anaheim's wildfire risks and extensive program efforts to reduce those risks and continues to include the requested upfront utility context template and statutory cross-reference table. The new 2-page Executive Summary is a nice addition, as is WSAB comment and response table. • The WSAB appreciates Anaheim's inclusion of a link to a comprehensive WMP information page on their website. Without

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>the link, however, the WMP information on the web was not easy to find and the WSAB encourages development of a more easily found track to the WMP information from the main Anaheim web page.</p> <ul style="list-style-type: none"> Anaheim again does an exemplary job in their 2022 WMP of describing wildfire prevention plans and strategies, as well as annual progress on those plans, including vegetation management practices, inspection protocols, and situational awareness and system hardening status and projects. Installation of an additional wildfire camera has already proven useful to local agencies and fire dispatch. Undergrounding to reduce PSPS potential, and likely future undergrounding is also a highlight. With respect to vegetation management practices, the WSAB finds Anaheim's description comprehensive and interesting. The WSAB appreciates the detailed information on the spread rates of fires in differing vegetation types and would request that the source of the information be referenced (and/or provided to the WSAB). Anaheim should also clarify in the future what is meant by the term "brush" – some brush such as chaparral when abated can be replaced by more flammable invasive grasses (since chaparral shrubs are evergreen and have higher moisture content). Using goats to remove grass biomass is a preferred strategy. Similarly, the WSAB would like to understand the source of information about the approximately 10 species of trees responsible for 75% of fire ignitions in California. The WSAB notes that many trees, like oaks, can absorb wind-borne embers better than grassland, and that many wildfires begin with grassy vegetation. Anaheim's plan to remove invasive trees and shrubs and replant with native vegetation is commendable. Anaheim's 2022 WMP continues to cover the potential impacts of climate change on wildfire risks well. Anaheim's description of wildfire risk factors in general was exemplary, including the assigning of a "risk owner" to each risk. Anaheim continues to have an excellent selection and description of comprehensive tracking metrics to assess progress on mitigation of wildfire risks, as well as the detailed reporting and auditing of metric data from past years – including the graphic presentation of metric data. The WSAB looks forward to a continuation of well-

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>crafted information about metrics and progress in Anaheim's future WMPs.</p> <ul style="list-style-type: none"> • Anaheim has added more information to their excellent description of its customer outreach and care programs for wildfire preparation. The WSAB appreciates the added channels for emergency notification and communication protocols in place at Anaheim. Anaheim's customer care programs to provide back-up generation options to customers where appropriate and establish a rebate programs for fire-resistant attic insulation and attic vents are commendable and the WSAB is pleased to see reporting about customers participating in these programs. • Although the WSAB supports coordination with telecommunication companies and similar co-users of assets or rights of way, we note that we have no authority to affect the participation of those companies in proposed utility projects as requested by Anaheim.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Anza Electric Cooperative	<ul style="list-style-type: none"> • The WSAB appreciates Anza providing an updated informational response (Addendum) to the WSAB's 2021 Guidance Advisory Opinion, including new responses to the WSAB 2022 Guidance document. However, starting with the upcoming 2023 comprehensive revision WMP, the WSAB encourages Anza to simply include the utility context template and other changes in response to WSAB advice in the WMPs themselves, so that fewer documents need to be filed by Anza and fewer reviewed by the WSAB as we consider additional guidance. • Anza has one of the best initial website paths to a clear and prominent location for the 2022 WMP and related information, with a prominent link on the main webpage. The WSAB encourages Anza once again to also post on this page links to previous WMPs and related information to allow easier public and WSAB tracking of WMP progress. • The WSAB appreciates Anza providing a "redline" version of their 2022 WMP to help focus WSAB review. Given the expectation that the 2023 WMP filed by Anza will be a comprehensive revision and may follow a new template, the WSAB is generally not requesting a redline or changes document next year, as we believe that the number and type of WMP changes may make such a document confusing rather than focusing. • The WSAB appreciates the attention to fire threat mapping and vegetation mapping in the 2022 WMP, along with the recognition of and participation in the California Public Utilities Commission to update and maintain those maps. The WSAB notes that the Cal Fire vegetation maps are based on somewhat older (2014) data that should be updated and recommends that Anza be cognizant of data vintage as it uses those maps for any vegetation management planning. In addition, it is unclear whether the Cal Fire maps contain good information about vegetation density and "greenness", both of which are relevant for wildfire planning. For example, high density of green vegetation may not be as concerning as low density of annual grass vegetation, which can have a higher ignition risk. The planned consideration of fuel moisture sensors can help identify and track this risk.

- The WSAB appreciates the detailed information about Anza's tree trimming and vegetation management practices, including numerical tracking of progress on those practices in Table 3. However, it is unclear exactly what the numbers in the column entitled "Number of Trees" mean when the practice covered is "Clearing 8' around transformers", "vegetation clearance", or "weed and herbicide treatment" – are these involving trees in some sense or some other metric of vegetation. A subsequent sentence suggests that almost 1800 tree "species" were worked on – this is likely individual trees, not "species"? The WSAB would also request additional information about how herbicides and weed treatment were applied at the substations and switch station and whether that has potential for negative public health side effects.
- The WSAB appreciates the detailed progress updates on a variety of grid hardening strategies in the 2022 WMP, a significant improvement over the lack of such progress information in Anza's 2021 WMP. In particular, the WSAB notes discussion of progress on the outage management system, wildfire cameras and wood pole replacements and related measures (particularly on circuits prone to high wind gusts). The WSAB also appreciates the continued consideration of higher strength conductors, wildlife covers, spacers, and non-expulsion fuses (noting that the WMP inadvertently omits the prefix "non").
- Anza has also, commendably, added a variety of new wildfire mitigation practices under consideration to the 2022 WMP, such as a high-impedance fault detector and substation rebuild activity. Of particular note is the consideration and development of a solar plus battery facility that provides islanded microgrid capability to keep a significant portion of Anza's load energized in the event of a systemwide outage.
- The WSAB also calls out Anza's addition of a new student internship in forestry management program, donation of fiber internet service to local firefighting agencies, and purchasing a water trailer to help with local fires. This collaboration with local agencies and assistance in forestry education is commendable.
- The WSAB recommends that Anza consider upgrading metrics in future WMPs beyond the "ignitions" and "wires down" metrics that have been included for some time, including adding some performance metrics related to mitigation activities.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Azusa Light & Water, City of Azusa	<ul style="list-style-type: none"> • The WSAB appreciates Azusa updating their 2022 WMP to move the context setting template and statutory cross-reference table from the previous WMP appendices to the beginning section of the WMP. • The WSAB appreciates that Azusa's website includes links pointing to the 2020 and 2022 WMPs, and the older 2019 IE Report. However, the WSAB finds Azusa's web treatment of wildfire mitigation information confusing. One can get to a decent wildfire mitigation page by searching, with a link to the 2022 WMP and the older 2019 IE report but there is no clear connection to historical WMP information other than that IE report. A separate "popular links" section on the page includes a wildfire mitigation plan link that only points to the older 2020 WMP. The WSAB encourages Azusa to revisit their WMP web presence so that current and historical information can be clearly accessed in a cohesive and transparent process. • With 100% underground assets in high fire threat zones Azusa has a simpler WMP that has been written in a fashion that is easy to understand and visualize. The WSAB encourages Azusa to consider the proposed template for the 2023 comprehensive revision WMPs in Appendix 1. . • The WSAB appreciates that Azusa addressed the unlikely risk of ground transformers as possible sources of wildfire ignition in their 2022 WMP, as requested. • The WSAB appreciates Azusa filing the resolution or agenda item in which their Board approved the 2022 WMP. The WSAB encourages Azusa to include updated or additional information about public comment opportunities as future WMPs are developed and adopted, including any actual public comment or a statement that none was received.

Banning, City of	<p>As of the posting date of this draft document, Banning has not provided a 2022 WMP to the WSAB. Hence, the recommendations and comments below are repeated from the WSAB 2022 Guidance Advisory Opinion.</p> <ul style="list-style-type: none"> • The WSAB appreciates many POU's providing an informational response to the Board's 2021 Guidance Advisory Opinion but did not receive such a filing from Banning. In the 2022 WMPs and beyond, the upfront template, cross-reference table (at the beginning of the WMP), and other enhancements that were generally included in 2021 POU informational responses should be included in the Banning's WMP itself where appropriate, avoiding the need for a separate informational request and response. • The WSAB's 2021 Guidance Advisory Opinion requested information about the adoption and public comment processes for WMPs. Banning's WMPs are clearly adopted by the City Council per the website but the WMPs only say that they will be "presented" to the Council. The WSAB encourages Banning to provide a short paragraph in future WMPs that describes the adoption and public comment processes Banning followed for the WMP being submitted, including resolutions if applicable, along with information about budget processes for any potential or expected mitigation expenses. • The WSAB appreciates Banning's clear and prominent website location for their WMP but notes that the WMP included on the web is the original version 1.0, not the adopted 2020 nor adopted 2021 WMP. The Board encourages Banning to update and include links to the most recent WMP as well as older plans to allow perusal of WMP history. While Banning's 2020 WMP states that an IE Report was developed and posted on the website, and a resolution about the IE Report can be found, the IE Report itself appears unavailable and was apparently not submitted previously to the WSAB. The WSAB encourages Banning to provide the IE Report on the WMP along with any future IE Reports. While Banning's 2021 WMP states that no further IE Reports are planned, the WSAB notes that other POU's have provided updated IE Reports and expects an IE Report for the required future comprehensive revision of Banning's WMP. • While Banning did not submit a "change" document or "redline" document to the WSAB to focus our 2021 WMP review, the WSAB can observe that there were few changes between utility's 2020 and 2021 WMPs. The WSAB does appreciate the updated metrics
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POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>and plan evaluation tables near the end of the 2021 WMP. The WSAB notes several minor errors and outdated leftover information included in Banning's 2021 WMP. For example, both the 2020 and the 2021 WMP have identical language about a "high priority" development of protocols to deal with an SCE PSPS situation. The WSAB encourages Banning to carefully review and update their 2022 WMP, including incorporating the upfront template and cross-reference table and other appropriate information per the Board's 2021 Guidance Advisory Opinion.</p> <ul style="list-style-type: none"> • The WSAB appreciates Banning's descriptions of a variety of actions and plans to reduce wildfire risk, including pilot projects, eventually converting Gilman Street circuit to underground, hardening the Banning Canyon line, adding disconnect devices to Mias Canyon, developing a Key Accounts system, community wildfire discussion meetings (including climate change), better communication and evacuation methods, fire protectant wrap on utility poles, working with customers to underground service drops, and construction and operational changes. The WSAB looks forward to updates on Banning's mitigation progress in future WMPs, while noting that several of the projects proposed in the 2020 WMP appear not to have progressed in the 2021 WMP. • The WSAB appreciates Banning's mention of higher temperatures and dryer vegetation risks due to climate change. The WSAB encourages Banning to also consider the impacts of potential higher wind speeds and an earlier fire season (Banning's 2021 and 2020 WMPs state that fire season historically begins on September 1 each year). • The WSAB is curious about Banning's statement that the development of the open areas consisting of Gilman Ranch and Sunnyslope Cemetery will reduce wildfire risk in those areas. The WSAB encourages more complete analysis or description of the wildfire risk tradeoffs of development in HFTD areas.
Biggs, City of	<ul style="list-style-type: none"> • The WSAB notes that the Biggs 2022 WMP is an "update" in name only – other than changing the date in the footer and removing the last line in the document no other changes were observed. Biggs has a very low likelihood of inducing or suffering from a wildfire, given its service territory, but the WSAB believes that some attention should be paid to the process. In particular, the WSAB suggests that

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>the Biggs 2023 comprehensive revision WMP follow the WSAB proposed new WMP template, including an upfront context setting table and statutory cross reference table to assist in WSAB review, and continue that practice in subsequent WMPs.</p> <ul style="list-style-type: none"> • The WSAB has previously requested information about the adoption and public comment processes for WMPs but Biggs continues to not provide sufficient information in this area. Again, in future WMPs, Biggs should consider adding a short paragraph in describing the WMP adoption process and how public review and comment is accommodated, per the proposed new WSAB WMP template. • The WSAB notes that Biggs has apparently not engaged an IE to review their last three WMPs, including their 2022 WMP. Neither has Biggs posted WMP information or Independent Evaluation information on their website so the public can access and review progress on wildfire mitigation (note that the WSAB has now twice requested this action from Biggs). While Biggs' WMPs suggest that an Independent Evaluator will be engaged to review, there is no evidence that this has happened. The WSAB has recommended that IEs perform a robust evaluation of the contents and substance of the WMPs and encourages Biggs to engage with a qualified Independent Evaluator for the 2023 comprehensive revision WMP required at least every three years by statute. Biggs should secure the services of an Independent Evaluator, and do so urgently. • The WSAB recognizes that due to the central valley location of Bigg's primarily urban service territory, surrounded by farmland, that Biggs' wildfire likelihood appears low. However, without additional effort to complete the 2023 comprehensive revision WMP, include the requested context-setting template and cross-reference table, and provide a modicum of actual details of any mitigation activities being established or considered, the WSAB finds it difficult to properly review the Biggs utilities WMP submittals. The WSAB would like to see information about any consideration of replacing expulsion fuses, evaluating any pre-GO 95 equipment for wildfire risk, and other system hardening, vegetation management, collaboration actions, and operational procedures aimed at reducing wildfire risk. For example, the WSAB still encourages Biggs to provide more description of interaction with PG&E's surrounding electric infrastructure and potential for PSPS interactions there.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Burbank Water and Power	<ul style="list-style-type: none"> • The WSAB appreciates Burbank including the context-setting template as an appendix in their 2022 WMP and directing reviewers to that information with a sentence near the front of the WMP. Though the WSAB had recommended that the template be included near the front of the main body of the WMP, what is most important is that it is included in some fashion and is referenced early in the WMP to direct reviewer attention. While Burbank has a well-developed structure for their WMPs, the WSAB encourages Burbank to consider aspects of the proposed new template in Appendix 1 as they develop their 2023 comprehensive revision WMP. • The WSAB appreciates Burbank's added description of the adoption and public comment processes for their WMPs in the 2022 WMP. The WSAB encourages continued transparency here, including information such as adoption resolutions, as well as information about any necessary budget enhancements or processes for potential or expected mitigation expenses. • The WSAB appreciates Burbank responding to recommendations and upgrading their wildfire mitigation web page in exemplary fashion. The information there is up to date, provides historical context, and is well laid out. The WSAB also appreciates Burbank including a reference to the web page information in their 2022 WMP as requested. • The WSAB appreciates Burbank's inclusion of a "summary of changes" section in their 2022 WMP – this information greatly helps to guide review. As the notion of a comprehensive revision WMP next year implies significant changes, such a section may be overwhelming but the WSAB encourages Burbank to consider providing a similar update section if feasible. The WSAB commends Burbank for continued appropriate and significant changes in many areas of the 2022 WMP, demonstrating a clear commitment to improving wildfire mitigation actions and reporting. • The WSAB commends Burbank's attention to detail in updating their 2022 WMP, including keeping context information such as number of customers and miles of lines up to date, showing increases in underground assets and in overhead pole assets, updating the mitigation activities status in Table 3, and describing progress in a variety of mitigation activities. The WSAB particularly appreciates the added descriptions of replacing overloaded transformers,

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>replacing fuses, replacing deteriorated poles, updating pole loading assessments, updating the composite pole program, updating Burbank's vegetation management progress, adding information about the pilot projects using non-oil filled transformers and pole-mounted sensors, and updating the infrared inspection study information. The WSAB finds particularly useful the summary of mitigation accomplishments in Table 15 – a practice that should perhaps be followed by other POUs. The WSAB also applauds Burbank's relatively rapid effort to replace expulsion fuses in their service area.</p> <ul style="list-style-type: none"> • The WSAB applauds Burbank for a thoughtful addition of a new WMP objective in 2022 – that of hardening and maintaining their system against potential wildfires. This objective provides more focus than the more common objective of minimizing ignitions. • The WSAB appreciates Burbank's inclusion of information tracking risk events per feeder line, noting that there appears to be an increase in such events in some cases. The WSAB would appreciate some analysis or description of the reasons for such increases – are they anomalies or random events or caused by some underlying trend – and whether there are any specific plans to mitigate against the increases. The WSAB also appreciates the addition of a section providing information about risk analysis and drivers but notes that it is rather generic and does not necessarily enlighten reviewers about the utility's risk procedures or awareness. • The WSAB applauds Burbank's continued "internal audit" information in the 2022 WMP, noting that such review of potential wildfire triggering events and mitigation programs and actions to address those is very important. Burbank appropriately points to lessons learned here, looking to improve on mitigation where they have internally identified a potential issue to address. • The WSAB again applauds Burbank for an excellent selection of and description of comprehensive tracking metrics to assess progress on mitigation of wildfire risks, as well as the detailed reporting and auditing of metric data from past years.
Cerritos Electric Utility,	<ul style="list-style-type: none"> • The WSAB appreciates Cerritos providing the context setting template and statutory cross-reference table within the 2022 WMP

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
City of Cerritos	<p>as requested. In the 2022 comprehensive revision WMPs and beyond, this practice should continue, per the WSAB's proposed new WMP template.</p> <ul style="list-style-type: none"> • The WSAB again appreciates Cerritos providing the adoption resolution for their 2022 WMP. We encourage Cerritos to incorporate this adoption information and any relevant mitigation budgeting information within the 2023 comprehensive revision WMP prior to filing with WSAB. • The WSAB appreciates Cerritos' clear and prominent website location of the 2022 WMP (and older IE report) and again encourages Cerritos to revise the link to include connections to older WMPs and IE reports. The Board also encourages a paragraph describing where that information may be found on the website within the 2023 comprehensive revision. • Overall, the WSAB commends Cerritos for a well-written and easy to follow WMP, noting that there are minimal changes from previous versions. Given the fact that Cerritos owns no utility transmission or distribution assets and has a very low likelihood of being associated with a wildfire, the WSAB believes the simplicity and relative lack of updates is reasonable. Cerritos should, however, provide a comprehensive revision WMP that takes into account the proposed new WSAB WMP template.
Colton, City of - Colton Electric Department	<ul style="list-style-type: none"> • The WSAB appreciated Colton providing an informational response to the WSAB's 2021 Guidance Advisory Opinion but notes that Colton did not include the context-setting template in their 2022 WMP as requested in the 2022 Guidance Advisory Opinion. The WSAB encourages Colton to consider following the proposed comprehensive revision template in Appendix 1, including in particular the context setting template. The WSAB recognizes that Colton's WMPs are already somewhat consistent with the template through thoughtful development of objectives, description of goals and strategies, and consideration of metrics that fit the utility's circumstances. • The WSAB is still looking for information about Colton's adoption and public comment processes for their WMPs. The WSAB encourages Colton to include an adoption resolution or similar approval documentation, along with a sentence or two about public

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>participation and comment and about budget processes in their 2023 comprehensive revision WMP.</p> <ul style="list-style-type: none"> • The Board notes that Colton's clear and prominent website location for WMP information only includes the initial 2019 WMP and Independent Evaluation letter. The WSAB encourages Colton to revise the WMP information by adding a prominent link pointing to the latest WMP, with connections to older WMPs and IE Reports and other WMP-related information as appropriate. The WSAB also encourages a paragraph describing where that information may be found on the website within future WMPs. • The WSAB appreciates Colton's thoughtful objectives and tabular information addressing work to accomplish or make progress towards the objectives on an annual, 3-year, and 10-year basis – this is excellent information. The WSAB notes, however, that the information appears to have not been updated from last year's WMP. For at least the work expected to be done prior to the next annual MWP update, the WSAB encourages Colton to provide current updates to help understand how the work is progressing. or drafting a well-organized and easy to follow 2021 WMP. • The WSAB continues to believe that Colton's description of system hardening and recloser and de-energization policies were crafted well. However, the WSAB notes that the information about these ongoing strategies has not been updated from last year's WMP, leaving the WSAB to wonder about progress being made and goals being met. • The Board continues to appreciate Colton's attention to updating evaluation metrics, noting that Colton added a new "vegetation contact" metric in their 2021 WMP and noting in that WMP that the "ignitions" metric that is still included may not be useful, since Colton has seen zero instances historically (The WSAB agrees that a metric that is perhaps too easy to meet may not be truly helpful). The WSAB finds Colton's discussion about metrics thoughtful but notes that this discussion has not really been updated from the 2021 WMP, which seemed to signal that metric changes were to be expected. Words like "The previous WMP ..." may no longer be relevant but have not been updated. The WSAB would also appreciate metric tracking results to be included to indicate the metrics are being used.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Corona, City of	<ul style="list-style-type: none"> • The WSAB appreciates Corona including the expected context-setting template and cross-reference table at the beginning of the 2022 WMP, as requested. Going forward, this practice should be part of the new WMP template proposed by the WSAB. The WSAB also appreciates Corona's response to the recommendation that pad transformer ignition risk be addressed. • Corona continued to submit the adoption resolution for the 2022 WMP and added per WSAB recommendation a statement in the WMP indicating that public comment was allowed for the item. A bit more information would be useful here and will be requested in the new template, indicating whether there was any public comment (or not), and if there was, summarizing that public input or attaching it. Also, as previously requested, some information about WMP-mitigation budget processes and/or mitigation expenses would be useful. In Corona's case, given low wildfire likelihood (caused by utility infrastructure), the WSAB understands there may be little information about mitigation expenditures. • The WSAB still finds it difficult to access Corona's WMP information on the city's website. A search for "wildfire" can find the 2021 WMP but not the 2022 plan nor easily other related information. There is also nothing in the 2022 WMP describing a how to access the plan and related information on the website, nor a link to that information. The WSAB recommends that Corona establish a page under "Reports" where WMP information can be accessed, similarly to the current page providing links to the current and past power content label information. • The WSAB appreciates the additional fire threat maps and photos included in the 2022 WMP. These help to clarify Corona's wildfire risk. Because of the difference between the City boundaries and the broken-up utility service areas, these maps and photos can be difficult to interpret/understand without additional explanation (along with the fact that one map appears to be rotated in orientation). It appears that there are wildfire areas in the service territory per the maps (understanding that the utility infrastructure is underground), yet the context information seems inconsistent with that picture. • The WSAB commends Corona's commitment to continue to work with the Fire Department to reduce risk on the short overhead lines

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>connecting to the SCE system, and particularly appreciates the consideration of adding battery storage to supplement load during a possible SCE PSPS outage.</p> <ul style="list-style-type: none"> • The WSAB notes that Corona still has a tracking metric for “wires down”, which appears to be of little use for a nearly all underground system. The WSAB encourages Corona to develop some performance metrics and consider how generic metrics may or may not apply well to their system.
Eastside Power Authority	<ul style="list-style-type: none"> • The WSAB appreciates Eastside’s inclusion of the requested context-setting template and a statutory cross-reference table in the 2022 WMP. In addition, the added map on page 10 of the WMP greatly helps to provide context for WSAB review. These practices should continue consistent with the WSAB proposed new WMP template. • The WSAB appreciates Eastside’s filing of the adoption resolution for the 2022 WMP and encourages Eastside to additionally include information in their 2023 comprehensive revision WMP about the adoption process and any public comment received. Eastside did include information in the 2022 WMP about situational awareness expenditures being outside their budget constraints and reliance on SCE weather information – understandable for a low wildfire likelihood POU such as Eastside. • The WSAB commends Eastside for upgrading the WMP information on their website to include a full set of current and historical WMP information. • The WSAB observes that Eastside made relatively few changes in their 2022 WMP compared to 2021 (other than the addition of the requested template and cross-reference table and a couple of additional sentences). Given Eastside’s size, lack of relevant assets, and low-likelihood wildfire location this may be reasonable, but the WSAB encourages Eastside to consider additional changes in the 2023 comprehensive revision. For example, the Board encourages Eastside to consider tracking metrics that seem more sensical for the utility, including performance metrics as applicable, rather than continuing with a “wires down” metric when there are no Eastside distribution assets.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Glendale Water & Power	<ul style="list-style-type: none"> • The WSAB commends Glendale for excellent updates to their 2022 WMP, including adding the recommended context-setting template up front and including good responses to the WSAB 2022 Guidance Advisory Opinion. Glendale also provided an excellent summary of recent wildfire mitigation actions, including pole and transformer replacement, undergrounding, enhanced tree trimming, fire wraps, composite crossarms, insulator replacement, identifying and replacing stressed splices, clamps and insulators, Fusesaver installation, and addition of the new Outage Management System. While Glendale has adopted a complete and relevant WMP structure, the WSAB encourages Glendale to consider appropriate aspects of the new proposed template in Appendix 1 as the develop and file their 2023 comprehensive revision WMP. • The WSAB appreciates Glendale providing separate filings with good WMP adoption information – including Council minutes and a Council report. The WSAB encourages Glendale to include such information as perhaps an appendix in the 2023 comprehensive update WMP, avoiding the need for separate filings and review of those filings. • The WSAB commends Glendale's relatively easy to find website location for wildfire information, including a prominent WMP link. The wildfire information is useful for the public and appropriate for the level of wildfire risk in Glendale's area. However, the WSAB Board notes that the WMP link on the website points to Glendale's 2021 WMP, not the current 2022 WMP. The WSAB encourages Glendale to update the link while also continuing to include links to earlier WMPs to allow perusal of WMP history. • The Board commends Glendale's commitment to updating and revising their wildfire mitigation actions as evidenced in their 2022 WMP. The WMP contains good new information about how climate change may impact their efforts, including conducting more stringent pole inspections due to the expectation of increased wind speeds, consideration of conservation voltage reduction to help manage peak perhaps higher peak loads and mitigate stress on overloaded assets, and use of drone and LiDAR technology and enhanced vegetation management to reduce potential wildfire risks. The Board appreciates Glendale's proactive examination of capacitor bank installation protocols to require a neutral that is no longer grounded and wonders if this practice can apply more

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>broadly to existing capacitor banks and the prospect of adding PV and battery storage to improve system reliability.</p> <ul style="list-style-type: none"> On the other hand, the WSAB notes many areas in Glendale's 2022 WMP that perhaps deserved some update attention. For example, it is difficult to tell from the included list of capital projects whether there is any difference from 2021 or whether any of the projects are in the implementation phase. Also, Glendale noted the need for additional wildfire mitigation staff in the 2021 WMP, and the 2022 WMP repeats that need, leading reviewers to wonder if anything progressed. Charts on pages 34 and 35 of the 2022 WMP appear to be not current, reflecting information from the 2016-2018 period. And, the 2022 WMP contains identical language to the 2021 document about a plan to issue an RFP in early 2020 to assess all overhead and underground assets, beginning in 2020, leaving reviewers to wonder if this presumably historical activity happened or was postponed or abandoned. Also, language is identical from the 2021 WMP discussing a budget for an additional generator and added battery capacity in FY 2019-2020, information that it seems should be updated to indicate what exactly happened. Finally, the included City Fire Department's 2-page vegetation management plan in Exhibit B seems minimal and includes a suggested link to the "current version" on the web that not only does not work but is noted to not work in red font in the WMP. The WSAB continues to appreciate Glendale's overarching risk orientation in their WMPs, including an overall mission of minimizing the risk of catastrophic wildfire. Glendale's continued focus on spread of fire as opposed to just ignitions is commendable, looking beyond just utility-caused ignitions to include what happens after any ignition to turn that event catastrophic. The WSAB appreciates Glendale's added statement about protecting against ignitions that are not utility caused but which could threaten utility assets. The WSAB questions whether Glendale has fully considered the risks of focusing too much on removing attention to areas of their service territory where they have no assets or where assets are within 100 feet of a private structure. This seems inconsistent with Glendale's risk approach to consider even non-utility caused wildfire risks. In addition, Glendale and the Glendale Fire Department should be cognizant of risks to homeowners and their vegetation management contractors when they are required to clear or

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>manage on-site vegetation adjacent to live utility assets – it may not be best practice to remove consideration of wildfire mitigation activities in these circumstances.</p> <ul style="list-style-type: none"> • The WSAB continues to applaud Glendale on an exemplary discussion of WMP metrics – more than just “ignitions and wires down” and a solid plan for evaluation of metric results, including questioning whether a metric is truly useful if it is achieved too easily.
Gridley, City of	<ul style="list-style-type: none"> • The WSAB appreciated many POUs providing an informational response to the WSAB's 2021 Guidance Advisory Opinion but did not receive such a submittal from Gridley. The WSAB requests that Gridley include the context-setting template, and statutory cross-reference table, and other WSAB recommendations in their 2023 comprehensive revision WMP, following as appropriate the template provided in Appendix 1. • The WSAB's had previously requested that POUs provide brief information about their WMP adoption and public comment process. Gridley has not provided much information here, other than stating that annual WMPs will be “presented” to the City Council. Gridley should consider adding information in its 2023 comprehensive revision WMPs describing the WMP adoption process and how public review and comment is accommodated, as shown in the template in Appendix 1. • The WSAB notes that Gridley's 2022 WMP is not significantly revised from their 2021 version, perhaps appropriate in an update year for a low wildfire likelihood utility. Nevertheless, the WSAB appreciates updates included such as prioritization and explanation of risks, the HFTD map showing Gridley's lack of intersecting territory, the added list of inspection frequencies, and good added information about customer notification procedures and backup generators. • The WSAB notes that Gridley has apparently not engaged an IE for either the 2020 or 2021 WMPs – none appears to have been posted on their website or filed with the WSAB for the 2020 or 2021 WMPs although Gridley's WMPs suggest that an IE will be done. The WSAB recommended that IEs perform a robust evaluation of the contents and substance of the WMPs and encourages Gridley to engage with a qualified IE for the 2023 comprehensive revision WMP.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB notes that Gridley's WMPs do not contain information about where they can be found on Gridley's website, and it appears that the WMPs are not easily, if at all, located on the Gridley website. The WSAB encourages Gridley to upgrade their WMP website information to include the current WMP, previous WMPs, and any additional WMP-related filings such as IE reports, as well as referring to the web page for this information in their 2023 comprehensive revision WMP. • The WSAB appreciates Gridley providing addition the standard annual tree trimming program, maintenance inspections program, and pole replacement program but adding an effort to install generators to lessen the impacts of de-energization on critical first responders and health and communication infrastructure. This last effort may fit in the de-energization section, but the WSAB submits that the other efforts do not. Similarly, Gridley's addition of a sentence describing performing and prioritizing inspections seems misplaced in the plan auditing and monitoring section.
Healdsburg, City of Electric Department	<ul style="list-style-type: none"> • The WSAB appreciated Healdsburg previously providing an informational response to the Board's 2021 Guidance Advisory Opinion. The WSAB has encouraged Healdsburg to include the context-setting template and cross -reference tables and other relevant information from the informational response in future WMPs but this does not appear to have happened In their 2022 WMP (the WSAB notes that Healdsburg filed an appreciated cover letter explaining timing prevented including some WSAB recommendations but they are still under consideration). In their 2023 comprehensive revision WMP, the WSAB encourages Healdsburg to include this information and consider following the proposed template in Appendix 1. • The WSAB notes that Healdsburg's 2022 WMP is not much changed from their 2021 and 2022 WMPs and encourages Healdsburg to consider recommendations from the WSAB and the IE as they develop and file their 2023 comprehensive revision WMP (considering the template in Appendix 1). Notwithstanding this comment, the WSAB appreciates the updates that have been included in Healdsburg's WMP, including noting the lightning arrestors were replaced, adding information about replacing expulsion fuses, adding information about vegetation management, an adding information about recloser disabling policy being implemented.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Healdsburg's filing of a separate adoption resolution for their 2022 WMP. The WSAB still requests that Healdsburg upgrade information about the adoption and public comment processes for WMPs within the WMP itself by adding information in its 2023 comprehensive revision WMP describing the WMP adoption process and how public review and comment is accommodated, as recommended in Appendix 1. • The Board appreciates Healdsburg's clear website location of WMP information (though it appears that one must search to find it) and commends the detail about the current WMP as well as former WMPs and the 2020 IE Report. The WSAB still encourages a paragraph describing where that information may be found on the website within the 2023 comprehensive revision WMP. • The WSAB notes that Healdsburg continues to not spend much time or text discussing the impact of climate change on mitigation practices in their 2022 WMP and encourages Healdsburg to upgrade their discussion of climate change and potential changes in mitigation practices to address aspects such as higher wind speeds and temperatures in their 2023 comprehensive revision WMP. • The WSAB continues to appreciate Healdsburg's openness to considering additional ways to reduce wildfire risk and encourages Healdsburg to continue to explore alternative mitigation practices, such as revisiting covered conductor and undergrounding potential, looking at strategic irrigation to increase fuel moisture content, and considering customer programs to achieve defensible space and building hardening. • The WSAB applauds Healdsburg for providing current information about tracking metric results in their 2022 WMP, including adding 2021 information on ignitions and inspection records, overhead and underground equipment failure records, moving to a 5-year window for reviewing historic outages, and updating outage response protocols to consider pre-staging workers at times during fire season. The WSAB encourages Healdsburg to continue providing up to date metric tracking results and the utility's learning responses to that tracking.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Imperial Irrigation District	<ul style="list-style-type: none"> Imperial provided a comprehensive informational response to the Board's 2021 Guidance Advisory Opinion in 2021 but did not in 2022. Because of the unique structure of Imperial's WMP filings, providing detailed and informative "progress" or "status" reports in update years, and promising a comprehensive revision in 2023, this is not problematic. In the 2022 comprehensive revision, Imperial should include the context-setting template and cross-reference table, along with any other appropriate responses to WSAB 2021 and 2022 Guidance document. The WSAB appreciates that Imperial has a viable utility-specific structure to their WMP filings but encourages Imperial to consider weaving in the proposed new WSAB WMP template. The WSAB appreciates Imperial's upgraded website posting of the current WMP information – it is easy for the public and WSAB to find. The WSAB still encourages an update to the site to also include prior progress reports information along with the current update report and the pending comprehensive revision WMP. As Imperial continues their GIS and mobile app development for vegetation management, the WSAB is interested in hearing more details. The WSAB notes that the progress report filed states that the mobile app was still in testing, while the previous year's status report indicated the app was expected to be ready in 2021 – is there a rescheduling of that? In the shift towards in-house vegetation management, the WSAB would be interested in seeing more detail about the training program when available (recognizing that this is already likely in Imperial's plans). The WSAB appreciates Imperial's description of the power line clearance field guide implementation identifying areas that need improvement and Imperial planning to act on that information. The WSAB would like to better understand what was identified as needing improvement.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB commends the continuing updating of Imperial's inspection procedures, adding NERC standards, undergoing a WECC mock audit, completing a pole inspection guide, planning a streetlight pole inspection program, and trying to understand how to inspect inside the fence mini-substations on customer property. The WSAB is interested in understanding what improvements were identified and what progress is being made. • The Board commends Imperial's continued attention to additional mitigation activities such as the new pilot project to install bird diverters on one circuit. • As before, Imperial's metrics are exemplary – well developed with clear goals for all metrics and good tracking information and are further improved by the additional tracking implementation of findings from the Independent Evaluator annual survey. The WSAB looks forward to future metric results updates. • The WSAB commends Imperial for comprehensive and serious engagement with an IE process. Imperial promises a new IE Report by the end of the year and provided the annual IE service area survey with good information. • The WSAB appreciates that Imperial has an active goal and protocol to ensure that no new power lines are located within the Cal Fire high fire severity zones, as well as the engagement with stakeholders to update the categorization of zones where it is found appropriate by surveys. • The WSAB notes that metric tracking shows that fire ignitions (from all sources, not necessarily utility infrastructure) and wires down incidents increased in 2021. The WSAB would be interested in understanding the reasons for these increases and interested in understanding whether Imperial can separate out the utility-caused ignitions from other sources in the metric tracking.
Industry, City of	<ul style="list-style-type: none"> • The WSAB appreciates Industry including the expected context-setting template and cross-reference table at the beginning of the 2022 WMP, as requested. Going forward, this practice should be part of the new WMP template proposed by the WSAB. The WSAB also appreciates the WMP section where Industry addresses the 2022 WSAB Guidance recommendations and how they are incorporated.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Industry's addition of responses to our 2022 Guidance document, including describing how the utility has and will respond to the recommendations from the Independent Evaluator. The WSAB appreciates the responsive text added about AMI metering being installed and better communication with community and customers. • The WSAB appreciates Industry's inclusion of the official minutes indicating the Industry Public Utility Commission's adoption of the 2022 WMP within the WMP itself as requested, avoiding the need for a separate submittal document. • The WSAB appreciates Industry including update metric tracking results information for 2021 in the 2022 WMP. The WSAB notes, however, that Industry still includes a "wires down" metric and wonders whether that metric and tracking of results thereof is really useful for a utility with all underground infrastructure. The WSAB encourages Industry to develop metrics that allow for useful tracking of progress and practices, including performance metrics (inspections accomplished, goals met etc.).
Kirkwood Meadows Public Utility District	<ul style="list-style-type: none"> • The WSAB appreciates Kirkwood Meadows for including the context-setting template at the beginning of their 2022 WMP, along with continuing to provide the statutory cross-reference table. The WSAB encourages Kirkwood Meadows to continue this practice and consider using the new proposed WMP template in Appendix 1 as they prepare and file their 2023 comprehensive revision WMP. • The WSAB notes that, though there is not a revision history or redline version of the Kirkwood Meadows 2022 WMP, it is clear that changes have been relatively minor, other than the addition of the context setting template as requested and some metric results tracking information. The WSAB notes that Kirkwood Meadows appears to have based their 2022 WMP on their 2020 WMP, rather than their 2021 WMP, thereby removing information about climate change impacts, enterprise risk management, and vegetation management goals that had been recommended by the Independent Evaluator in 2021. It is also the case that simple updates, such as changing the version number and including the right Table headings (Table 2 should be Table 3) were not made, indicating incomplete attention to updating the WMP. The WSAB expects these issues to be

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>resolved as Kirkwood Meadows prepares and files their 2023 comprehensive revision WMP.</p> <ul style="list-style-type: none"> • The WSAB appreciates the addition by Kirkwood Meadows of tracking results for the WMP metrics being used by the utility. The WSAB encourages continuation of including tracking results as Kirkwood Meadows considers updating metrics as suggested in the proposed comprehensive revision template in Appendix 1. • The WSAB appreciates Kirkwood Meadows posting their 2022 WMP prominently on the main page of their website but notes that the utility did not include a paragraph in the WMP itself pointing to the website location nor add historical WMP information and independent evaluator information on the website as requested in the WSAB 2022 Guidance Advisory Opinion. The WSAB encourages Kirkwood Meadows to upgrade their wildfire mitigation web information and connection in the WMP to the website location in their 2023 comprehensive revision WMP and process to develop and file that document, providing public-facing information for all aspects of the WMP process, including current as well as previous versions of the WMP, IE Reports, and other WMP information as appropriate. • The WSAB encourages Kirkwood Meadows to include more information about the approval process and public comment process for WMPs in their 2023 comprehensive revision WMP, as requested by the WSAB previously. • The WSAB encourages Kirkwood Meadows to engage an Independent Evaluator for the comprehensive revision 2023 WMP, per the proposed template in Appendix 1, and to incorporate recommendations for independent evaluation found there as well as any recommendations derived from the independent evaluator.
Lassen Municipal Utility District	<ul style="list-style-type: none"> • The WSAB appreciates Lassen including the context setting template and statutory cross-reference table near the beginning of their 2022 WMP as requested in the WSAB's 2022 Guidance Advisory Opinion. The WSAB encourages Lassen to continue this practice, as envisioned in the new comprehensive revision template in Appendix 1.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Lassen's inclusion of paragraphs in the 2022 WMP describing Board meetings, public comment opportunities, and WMP adoption processes. The WSAB encourages Lassen to continue this practice and to consider following the related recommendations in the new comprehensive template in Appendix 1, including summarizing any public comment received or stating that none was. • The WSAB notes that Lassen's website posting of WMP information appears to have gone in the opposite direction as WSAB recommendations. The website previously included the 2021 WMP, albeit with a bit of a search, but now appears to include no WMP information at all, not even the current WMP. The WSAB encourages Lassen once again to provide a full complement of WMP information on their website, including current and previous versions of the WMP, IE Reports, and other WMP information as appropriate, in a relatively prominent or obvious location. The WSAB also continues to encourage a paragraph describing where that information may be found on the website within future WMPs. • The WSAB appreciates the addition of substantial information about the impacts and risks of climate change in Lassen's 2022 WMP. The WSAB encourages Lassen to continue to consider climate change impacts as it moves forward to address wildfire mitigation in future WMPs. • The WSAB notes that the 2023 WMP includes the words "informational response" in the footer and has a watermark that says "DRAFT" throughout the document. The WSAB understands that these are non-substantive issues from a wildfire perspective but submits that these apparent errors imply a certain lack of attention to properly and completely updating annual WMPs. • The WSAB appreciates Lassen's continued consideration of and implementation of wildfire mitigation strategies such as testing non-expulsion fuses and similar equipment, enhanced inspections using drones and expanded right of way clearance activities to reduce wildfire risk. The WSAB also appreciates updates about how the Dixie fire delayed some of the testing and other strategies Lassen was contemplating – these kinds of updates are helpful. As a utility with relatively significant territory and surrounding area in the Tier 2 fire risk category, the WSAB encourages Lassen to continue

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>enhanced and innovative investments to reduce wildfire risk and looks forward to further description of the planned operational functionality being added to the SCADA system.</p>
Lathrop Irrigation District	<p>As of the posting date of this draft document, Lathrop has not provided a 2022 WMP to the WSAB. Hence, the recommendations and comments below are repeated from the WSAB 2022 Guidance Advisory Opinion.</p> <ul style="list-style-type: none"> • The WSAB appreciates many POUs providing an informational response to the WSAB's 2021 Guidance Advisory Opinion but did not receive such a submittal from Lathrop. In Lathrop's 2022 and subsequent WMPs, the utility should include the upfront template and cross-reference table indicating where in the WMP responses to statutory requirements can be found and add other information pursuant to the 2021 Guidance Advisory Opinion as appropriate. • The WSAB's 2021 Guidance Advisory Opinion requested information about the adoption and public comment processes for WMPs. Lathrop does a good job of discussing opportunities for public comment but is not 100% clear on adoption of their WMPs, stating only that annual WMPs will be "presented" to the utility's Board of Directors, not mentioning their adoption of such. Lathrop should consider adding to the description of utility Board presentation and adoption in its subsequent WMPs, as recommended in the WSAB's 2021 Guidance Advisory Opinion. • The WSAB appreciated many POUs submittal of a "change" letter or "redline" document to help guide Board review of their 2021 WMP but received no such information from Lathrop. Nevertheless, an examination of Lathrop's 2020 versus 2021 WMPs indicates that very little, if anything, has changed between the two WMPs. The WSAB encourages Lathrop to consider recommendations from the WSAB and make updates in the 2022 and subsequent WMPs, particularly in the 2023 major revision. • The WSAB appreciates the information in the Lathrop 2021 WMP regarding review of the plan for acceptable fire risk by the Lathrop/Manteca Fire District. Given the low likelihood of wildfire for Lathrop, this may be sufficient, but In future WMPs, Lathrop should consider augmenting review by engaging with a certified Independent Evaluator from the OEIS list, found at: OEIS : Case Log.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Lathrop's inclusion in their WMPs of a website link that prominently displays the WMP and other wildfire information. However, the link appears to point to the older 2020 WMP, not the most recent version (which is little changed). The Board encourages Lathrop to point to the most recent WMP on the website and include information about previous WMPs and IR Reports so that the WSAB and public can more easily gauge Lathrop's wildfire status and progress. • The WSAB notes that Lathrop's WMPs have very little, if any, information about changing risks due to climate change. For example, changing climate conditions are frequently described as increasing the length of California's fire season but Lathrop appears to have not considered adjusting the May 1st to October 1st fire season listed in their WMPs. The WSAB encourages Lathrop to consider the impacts of climate change on the fire season and other fire risks in future WMPs. • The WSAB appreciates that Lathrop has provided a comprehensive and detailed 2021 WMP even though due to Lathrop's central valley location and significant undergrounding of lines their likelihood of catastrophic wildfire is very low. The WSAB still encourages Lathrop to provide a more complete description of their interaction with and dependency on PG&E's surrounding electric infrastructure and potential for a PG&E initiated PSPS affecting their customers. One question would be whether there is any backup power owned by or available to Lathrop in the case of an impact by a PG&E PSPS.
Lodi Electric Utility, City of Lodi	<p>As of the posting date of this draft document, Lodi has not provided a 2022 WMP to the WSAB. Hence, the recommendations and comments below are repeated from the WSAB 2022 Guidance Advisory Opinion.</p> <ul style="list-style-type: none"> • The WSAB appreciates many POUs providing an informational response to the WSAB's 2021 Guidance Advisory Opinion but did not receive such a submittal from Lodi. In Lodi's 2022 and subsequent WMPs, the utility should include the upfront template and cross-reference table indicating where in the WMP statutory requirements can be found at the front of the WMP and add other information pursuant to the 2021 Guidance Advisory Opinion as appropriate. • The WSAB's 2021 Guidance Advisory Opinion requested information about public comment and adoption processes for the WMP. The

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>WSAB encourages Lodi to include a short paragraph describing this process in future WMPs, including the adopting resolution for Lodi's WMPs if available.</p> <ul style="list-style-type: none"> • The WSAB appreciates Lodi's submittal of a "change" document to help guide WSAB review of their 2021 WMP and believes that the "Revision Log" approach to this is most helpful, including providing that Revision Log within the WMP itself, making a separate submittal unnecessary. The WSAB encourages Lodi to continue to reflect updates in this manner, particularly as to progress on proposed wildfire mitigation measures and metrics. • The WSAB's 2021 Guidance Advisory Opinion recommended that WMP's include an indication as to where the WMP and related material can be found on the utility website. It does not appear that WMP information is readily available on Lodi's web site. The WSAB recommends that Lodi include a statement about where the WMP can be found in future WMPs and revise the web site to make a clear path to the WMP information. • The WSAB commends Lodi for engaging in a variety of wildfire mitigation strategies, despite having a low likelihood of catastrophic wildfire. These include bushing covers and covered leads to reduce contacts with energized parts, dead-front transformers, high-flash point natural ester transformer and switch fluids and undergrounding for new customers. The WSAB encourages Lodi to continue considering new strategies to reduce already low wildfire risks and looks forward to descriptions of those efforts in future WMPs.
Lompoc, City of	<ul style="list-style-type: none"> • The WSAB appreciates Lompoc's inclusion of the context-setting table and statutory cross-reference table in their 2022 WMP. The WSAB also commends Lompoc for referencing the recommendations in the 2021 Guidance Advisory Opinion and pointing to where responses to those recommendations were added in the plan. The WSAB looks forward to Lompoc's comprehensive revision 2023 WMP and encourages Lompoc to continue to incorporate WSAB recommendations. • The WSAB observes the same commitment to improvement in wildfire mitigation planning in Lompoc's 2022 WMP as in their past submittals.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • Lompoc has added some information about the WMP adoption and public comment processes in their 2022 WMP. The WSAB appreciates the added information but encourages Lompoc to provide some additional specifics per the proposed new 2023 WMP comprehensive revision template in Appendix 2. • The WSAB appreciates Lompoc's updated, clear and prominent website location for their WMPs including adding historical context and also appreciates the inclusion of the website location links in the WMP itself. • The WSAB appreciates Lompoc's revision history information in the 2022 WMP. With the 2023 comprehensive revision WMPs, describing changes from this year's version may prove too complex to be useful, but the WSAB encourages Lompoc to continue revision history information in subsequent WMPs. • Lompoc is to be commended for incorporating more than expected levels of industry standards concerning its design and construction within the HFTD, given the relatively low likelihood of causing or encountering a wildfire. Currently they have completed mitigation projects such as, replacing all mechanical connections with compression, upgrading primary insulators with higher dielectric rated ones (over insulating for intended voltage.) The WSAB notes, however, that it is difficult to see what was completed in the last year, as the WMP states as in the past that Lompoc is "still considering" some strategies. • The WSAB appreciates Lompoc's continued exploration of how to better understand the structural integrity of their infrastructure and tree inventory, particularly including the procurement of a resistograph drill to enhance its adopted annual poles inspection process within the HFTD areas. The WSAB commends Lompoc for a sound and effective wildfire mitigation strategy and for their stated commitment to upgrade plans depending upon the severity of the effects of climate change. The WSAB encourages Lompoc to provide additional information about when they envision examining or implementing any such changes. • The WSAB notes that Lompoc has broad yet broad yet effective method of situational awareness of weather conditions, using

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>information from the fire and police departments as well as city employees and information from the county.</p> <ul style="list-style-type: none"> • The WSAB appreciates Lompoc updating their WMP metrics and encourages Lompoc to start providing results tracking information in the WMPs to aid in understanding the usefulness and impact of the metrics.
Los Angeles Department of Water and Power	<ul style="list-style-type: none"> • The WSAB appreciates LADWP including the context-setting template and statutory cross-reference table in the beginning “Overview” section of their 2022 WMP. The WSAB encourages LADWP to continue this practice and to consider as appropriate the proposed new WMP template in Appendix 1 as they develop and prepare their 2023 comprehensive revision WMP. • The WSAB notes that while LADWP's current 2022 WMP can be found easily on their web site, the utility appears to have reversed course and no longer includes the earlier WMPs present there last year. The WSAB appreciates the addition of WMP information on the Eastern Sierra website and the addition of information in the 2022 WMP describing where to find the web pages with WMP information, along with discussing additional WMP outreach and publicity efforts. However, the WSAB notes that the Eastern Sierra link in the WMP appears to be broken, linking to a “page not found” message (including the words “Oh man. It looks like you are totally lost.”) The WSAB encourages LADWP to upgrade their web information as they develop and file their comprehensive revision WMP. • The WSAB commends LADWP for adding a “Revision History” element in their 2022 WMP – this helps to focus review of the document. While the comprehensive revision 2023 WMP may have such significant changes that a revision list may be overwhelming, the WSAB encourages LADWP to consider finding a way to include useful information about WMP changes. • The WSAB commends LADWP for continuing to update their wildfire mitigation efforts and describing the changes well in their 2022 WMP. The WSAB notes in particular that LADWP has developed or considered new mitigation practices involving avian protection devices, non-expulsion fuses, and undergrounding assets, as well as continuing installation of covered conductor on some lines and continued vegetation management practices. Monitoring 362,000

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>trees and performing tree-trimming on approximately 185,000 is evidence of LADWP's commitment to line clearance.</p> <ul style="list-style-type: none"> • The WSAB appreciates LADWP's updated information about progress in replacing transformers, poles, crossarms, and conductors as well as current wildfire mitigation capital and O&M budget information. The WSAB encourages LADWP to continue to keep the information in their WMPs fresh and current as they develop and file their 2023 comprehensive revision WMP. • The WSAB continues to be impressed by LADWP's workforce training protocols and appreciates the new information in the 2022 WMP about focusing on Qualified Electrical Worker training. • The WSAB commends LADWP for significant improvements in the description of their community outreach and public awareness and collaboration efforts. The WSAB appreciates the new information about notifying neighboring entities about potential impacts from de-energization, outage notification e-mails and social media posting, and emergency communications through the standard SEMS structure. The WSAB is still looking for better information about whether community resources are available for displaced customers in the event of an wildfire evacuation and the status of resource centers and logistical planning for such during a potential PSPS event. • The WSAB notes that LADWP has not included much results tracking or auditing information in the metrics section of their 2022 WMP.
Merced Irrigation District	<ul style="list-style-type: none"> • The WSAB appreciates Merced providing the statutory cross-reference table and context setting template information in their 2022 WMP and requests in the 2023 comprehensive revision WMP that Merced consider following the new WSAB template from Appendix 1. The WSAB notes that Merced's context-setting template in the 2022 WMP left out some expected rows. The WSAB also notes that the template lists over 400 miles of distribution lines while the table on page 19 indicates only 265 miles. • The WSAB also appreciates Merced's inclusion of a bit more information on the adoption process for their WMP, and a pointer to the Web location for the document. The WSAB notes that the link points to the 2021 WMP, not the current 2022 version, and while the

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>versions are fairly similar, the WSAB encourages Merced to upgrade the WMP web presence for the 2023 comprehensive revision WMP, including that filing as well as links to historical WMP information.</p> <ul style="list-style-type: none"> As the WSAB reviews Merced's WMPs, we understand that geographical location of its Infrastructure well outside of the designated HFTD areas and the investment in undergrounding 85% of its circuits implies that Merced has a very low likelihood of causing or being impacted by a catastrophic wildfire. The WSAB appreciates that despite their low wildfire likelihood status, Merced yet provides descriptive (if minimal) WMPs and follows prudent and responsible operation and inspection practices at the utility. The WSAB encourages Merced to consider following the proposed WMP template in Appendix 1 for the 2023 comprehensive revision. The WSAB appreciates the additional explanation in the 2022 WMP about the risk of a PSPS event affecting Merced's customers through the Turlock intertie being slight. The WSAB would still like to better understand this risk and requests description of any plans to procure alternative power, sources, such as battery storage systems, to mitigate against loss of power through that intertie in a wildfire situation (PSPS or otherwise). The WSAB also continues to request that Merced include the tracking of metric results as recommended in Merced's 2019 IE Report and WSAB guidance documents; the inclusion of customer communication information in the WMP (as opposed to a separate informational response as previously), and information as available about unidentified risks and legacy equipment. In addition, the WSAB notes that on page 28 the 2022 WMP still describes the document as the "initial" WMP.
Modesto Irrigation District	<ul style="list-style-type: none"> The WSAB appreciates Modesto's continued inclusion of a context-setting template and statutory cross-reference table in their 2022 WMP. However, the WSAB requests that in the upcoming 2023 comprehensive revision WMP that Modesto include more of the context template from Appendix 2, and, while Modesto has a good WMP structure, requests consideration of the proposed new comprehensive revision template in Appendix 1 as appropriate. The WSAB notes that Modesto has added or altered information about customer participation in Board meetings with respect to

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>consideration of their WMPs and added a sentence about Modesto's budget processes. The WSAB encourages Modesto to consider upgrading the information provided here by following including the requested information in the proposed new comprehensive revision template in Appendix 1.</p> <ul style="list-style-type: none"> • The Board commends Modesto's treatment of WMP information on their website, including clear and prominent links to the latest 2022 WMP as well as links to historical WMP information to allow perusal of WMP history. • The WSAB notes that Modesto's 2022 "update" WMP includes some changes from the 2021 document but many of those appear to be removals of information rather than additions. Perhaps Modesto had good reasons for those removals about CalFire 2021 map updates, a statement about the utility not considering PSPS due to low fire risk in their service area, information about potential PSPS and resulting impacts on customers, and information about 2020 metric results but the WSAB is curious about the changes. In addition, the WSAB observes that there were no changes to Modesto's design and construction standards information – an area that it seems reasonable to have updated. The WSAB encourages Modesto to materially update their WMP information in the 2023 comprehensive revision WMP, considering the provisions listed in Appendix 1. • The WSAB appreciates Modesto including more information about the potential impacts of climate change on wildfire risks in their 2022 WMP but notes that the added information is largely generic, not specific to Modesto's specific territory and possible risk changes considering that some of Modesto's "expanded" territory (also served by PG&E) abuts Tier 2 HFTD area. • The WSAB commends Modesto's new statement about following NERC and WECC standard policies for managing de-energization or outage contingencies and promise to describe in further detail in the 2023 comprehensive revision WMP. The WSAB continues to question whether Modesto is fully considering whether their customers may be impacted by an IOU PSPS or other power supply failure and how they as a utility manage such impacts.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Moreno Valley Utility	<ul style="list-style-type: none"> • The WSAB appreciates Moreno Valley adding the statutory cross-reference table at the beginning of their WMP and continuing to include a version of the context-setting template. The WSAB notes that the context information in the 2022 WMP appears inconsistent with the fire threat maps included in 2022 WMP (as well as the original context information provided in the earlier informational response). The current context table in the 2022 WMP shows no Moreno Valley territory in CPUC or CalFire elevated threat zones, but the included maps and prior context information show territory in those zones. The additional paragraph after the fire maps stating that Moreno Valley does not own assets nor serve customers in the elevated threat areas does not clear up the confusion adequately, as the maps appear to show streets and potential customers in those zones and the earlier context information stated that there were assets in those areas. The WSAB believes that the issue is likely some confusion about underground versus overhead assets. In the 2023 comprehensive revision WMP, the WSAB encourages Moreno Valley to clear up this confusion. • While the WSAB appreciates Moreno Valley's attempt at completeness by including the informational response from 2021 at the end of the 2022 WMP, it would be preferable to integrate the information in that response into the WMP itself. Having the information separate requires additional review effort by the WSAB. It also exacerbates the confusion noted above, adding another inconsistency about assets in wildfire zones. Finally, the WSAB continues to note that the link in that response to the web location of the earlier (and only, to our knowledge) independent evaluation report is faulty. • The WSAB commends Moreno Valley for the significant upgrade to the WMP information on their website. Moreno Valley's WMP information is logically situated and complete with links to all previous WMP filings. • The WSAB notes that Moreno Valley has repeated from the 2021 WMP that they are exploring the possibility of back feeding the distribution system using customer owned battery storage systems but has not indicated any progress or results of that exploration. The WSAB would be interested in understanding where Moreno Valley stands in this exploration.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates the added information providing updated tracking results for the fire ignitions metric. The WSAB encourages Moreno Valley to continue to provide metric results tracking and to consider additional metrics beyond just fire ignitions, including performance metrics as applicable, in the 2023 comprehensive revision WMP.

<p>Needles, City of</p>	<ul style="list-style-type: none"> • The WSAB appreciates Needles including the context-setting template and statutory cross-reference table at the beginning of their 2022 WMP, as requested. The WSAB encourages Needles to continue this practice and to consider using appropriate parts of the proposed new 2023 comprehensive revision template in Appendix 1 as they prepare and file their next WMP. • The WSAB notes that Needles has not included any additional information about the adoption and public comment processes for WMPs in their 2022 document. The WSAB encourages Needles to include adoption information in future WMPs describing briefly the adoption and public comment processes Needles followed for the WMP being submitted, along with information about budget processes for any potential or expected mitigation expenses, per the proposed new 2023 comprehensive revision template. • The WSAB notes that Needles has not included updated information about their wildfire mitigation plans on their website. The WSAB can find a link to the initial WMP from 2019 and what appears to be a duplicate link pointing to the same WMP but suggesting that it is a “review” of the WMP, perhaps an independent evaluation report. The WSAB encourages Needles to provide a clear and prominent WMP page that includes older as well as current information to allow perusal of WMP history, that is – public access to former WMPs and IE Reports. The WSAB also requests that Needles include information in their 2023 comprehensive revision WMP about where on their website such information can be found. • The WSAB notes that there were few if any substantive changes between Needles' 2021 and 2022 WMPs, other than adding the context setting template and statutory cross-reference table as noted above. While the WSAB believes that minimal changes in an update year are reasonable given Needles' low likelihood of catastrophic wildfire, the WSAB encourages Needles to look more substantively at changes for the 2023 comprehensive revision WMP. The WSAB notes that Needles may have intended to add 2021 metrics but left yellow highlighted number signs in the table instead, and that in the final section of the WMP Needles uses the word “part” when they appear to mean “party”. The WSAB suggests that these minor errors are an indication of lack of sufficient attention, and believes they will be cleared up when Needles files their 2023 comprehensive revision WMP.
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POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Northern California Power Agency	<ul style="list-style-type: none"> • The WSAB appreciates NCPA's well-written and complete WMP, which clearly and logically lays out NCPA's wildfire risks and extensive program efforts to reduce those risks, as in last year's WMP. The WSAB notes, however, that there could have been more changes from the 2021 WMP in this 2022 update. There remains, for example, text on page 6 that indicates that the current WMP was initiated in 2019 and on page 7 a statement that this WMP was presented at an NCPA committee meeting – this is confusing as the 2022 updated is a complete WMP in itself. In the comprehensive revision in 2023, the WSAB expects that text like this will be resolved. • The WSAB appreciates NCPA's incorporation of the context-setting template, statutory cross-reference table, and approval process for the WMP in attachments or near the front of document. The Board notes that an up-front location is easiest for reviewers, particularly for the context-setting template. Similarly, the WSAB appreciates the record of changes from the previous update found in Appendix B. The 2023 comprehensive revision WMP with consideration of the proposed new WSAB WMB template may have so many changes that such a record becomes overwhelming, but in general the WSAB applauds the practice of pointing out what changes have been made in WMP updates, • The WSAB appreciates NCPA's revised webpage treatment of wildfire mitigation plan information, with a clear policy reports link to the full set of WMPs from onset through 2022. In addition, NCPA added to the 2020 WMP information about where to find WMP information on the website as requested. • The WSAB applauds NCPA's inclusion of Appendix 4 containing the 2022 IE report and including text responsive to the WSAB 2022 Guidance Advisory Opinion (changes detailed in Attachment B). • The WSAB appreciates the added information about communication and collaboration in the 2022 WMP including statements indicating coordination with PG&E and Calpine with respect to geothermal assets and lines, information about emergency operating procedures and emergency communications, and join inspection ride-alongs with Cal Fire. • The WSAB thanks NCPA for the added information about risks specific to NCPA generation arising from residual fuel loads and

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>potential soil instability in previous wildfire areas; updated facility maintenance actions, and specific hazards to address in the TVMP.</p> <ul style="list-style-type: none"> • The WSAB applauds NCPA for recognizing and adding the new fall-in tree hazard ignitions metric and for including good and up to date metric results tracking information.
Oakland, Port of	<ul style="list-style-type: none"> • The WSAB encourages Oakland to do a comprehensive revision of its WMP in 2023, as required by law, and to follow the new proposed WSAB template for the comprehensive revision (found in Appendices 1 and 2) to the extent reasonable for a low-likelihood utility such as Oakland. In particular, the WSAB would appreciate Oakland including the context setting template and statutory cross-reference table in the early Overview section of the WMP (these were supplied in an informational response last year) and the WSAB has recommended incorporating those into WMPs themselves near the beginning of the documents. • The WSAB recognizes that Oakland has little to no likelihood of causing or being impacted by a wildfire, and hence calls Oakland's attention to the WSAB's recommendations for differential risk-based wildfire planning and reporting. • The WSAB recognizes that very little has changed in Oakland's three WMPs (2020, 2021, and 2022) filed in the docket. In the 2022 WMP, Oakland did appropriately remove the statement: "This is the first year of a Port WMP", which was present in each of the previous two WMPs. Oakland also removed a reference to incorporating independent evaluator recommendations, presumably in recognition of the fact that Oakland appears to have not arranged for an Independent Evaluation since the initial 2019 effort. While the Port of Oakland has a very low likelihood of causing or encountering catastrophic wildfire, the WSAB nevertheless encourages Oakland to arrange for an independent evaluation per the law and consider recommendations from that effort and the WSAB for their 2023 comprehensive revision WMP. • The WSAB also requests that Oakland provide or clarify information about the adoption and public comment process for their WMP, following if possible the guidance in the new proposed WSAB Comprehensive Revision template.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> The WSAB appreciates the Port of Oakland's clear pointer to WMP information on the utilities page of the website but notes that the page has not been updated to include the latest WMP, nor to include historical WMP information, save for the initial 2019 WMP. The WSAB encourages Oakland to update it's WMP information and IE information on the website and to include a paragraph in the 2023 Comprehensive Revision WMP that points to the location of this WMP information on the web.
Palo Alto, City of	<ul style="list-style-type: none"> The WSAB appreciates Palo Alto including the context-setting template and cross-reference table at the beginning of their 2022 WMP, along with other enhancements requested by the WSAB in our 2021 and 2022 Guidance Advisory Opinions. Additionally, the WSAB likes the added detail about WMP adoption, with plans being presented to the Advisory Committee. For the 2023 comprehensive revision WMP, these practices should remain, per the proposed new WSAB WMP template. The WSAB appreciates the redlines in the 2022 Palo Alto WMP – they help greatly to focus our review on the document changes. For the 2023 comprehensive revision WMP the changes may be so significant that redlines would be distracting and overwhelming as Palo Alto follows the proposed new WSAB WMP template. The WSAB thanks Palo Alto for upgrading their WMP information on their website as requested. The web access is now clear and simple. The WSAB appreciates the comprehensiveness and detail in Palo Alto's 2021 WMP, particularly the updated status of proposed wildfire reduction activities found in Appendix E of the 2022 Palo Alto WMP. The Board applauds Palo Alto's continued examination of wildfire risk and mitigation strategies, including the new risk assessment study of the Foothill area, the "in-use" status of the new weather station, the new fiberglass crossarm policy, the proactive pumping of water to "ready" for a wildfire, and the new undergrounding policy for the HFTD portion of the Palo Alto service area. It is clear to the WSAB that much progress is being made on vegetation management, situational awareness, and grid hardening projects. The WSAB looks forward to additional progress reports in upcoming WMPs, particularly about the status of undergrounding in the HFTD area.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>The WSAB also commends Palo Alto for committing to continued vegetation management to mitigate wildfire risk in the HFTD until the undergrounding project is complete.</p> <ul style="list-style-type: none"> • The WSAB greatly appreciates Palo Alto's additional descriptions of city climate change actions, and encourages continued attention to this crucial issue, including revisited consideration of drone technology or explaining in more detail why it is inappropriate in this case. • The WSAB appreciates and commends Palo Alto's detailed PSPS policies, including the new PSPS customer communication policy (found in Appendices F and G). In addition, the WSAB welcomes the consideration of backup generation to potentially limit the customer impact of PSPS and other outages in the area. • The WSAB looks forward, as promised in the 2022 Palo Alto WMP, to the consideration of new metrics (including performance metrics) in the 2023 comprehensive revision WMP, and thanks Palo Alto for including information in the current WMP about metric tracking results (0 fire ignitions).
Pasadena Water and Power Department	<ul style="list-style-type: none"> • The WSAB appreciates Pasadena for providing a partial context-setting template in their 2022 WMP. The WSAB notes, however, that the template is incomplete and that Pasadena's 2022 WMP lacks other WSAB-requested information, such as the statutory cross-reference table, information about public comment on the plan, and information about where on the website the plan and other WMP-related information can be found. informational response to the Board's 2021 Guidance Advisory Opinion. For the 2023 comprehensive revision WMP, the WSAB encourages Pasadena to consider full use of the WSAB proposed template in Appendix 1. • The WSAB appreciates Pasadena engaging an Independent Evaluator for the 2022 WMP and posting that report on their website as well as filing with the WSAB. However, the WSAB notes that the IE report contains recommendations that Pasadena has apparently not incorporated in their 2022 WMP, nor indicated that they will incorporate in future WMPs. For example, the IE report recommends replacement of expulsion fuses in Pasadena's high fire threat areas, but this strategy appears to be unmentioned in Pasadena's 2022 WMP.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Pasadena upgrading their web information about WMPs – with a clear link to the 2022 WMP and the new Independent Evaluation Report. The WSAB encourages Pasadena to include links on the wildfire mitigation information page link to historical WMP information, including the 2020 and 2021 WMPs as well as ancillary documents like IE reports and separate submittals to the Board. The WSAB also notes that Pasadena's WMP website discusses progress on mitigation strategies that do not appear to be mentioned in the WMP or in previous WMPs, such as the “de-energization” of assets in Millard Canyon by replacing high-voltage with low-voltage wires. The WSAB believes that the WMP is an appropriate venue to describe such strategies and encourages Pasadena to more fully cover their efforts in the 2023 Comprehensive Revision WMP. • The WSAB appreciates Pasadena's inclusion of a “revision history” near the end of the WMP so that reviewers can get an idea of upgrades, changes and improvements over time. The WSAB notes, however, that the row for the latest revision is dated xx/xx/xxxx and presumes that a real date was supposed to be entered prior to approval or filing • The WSAB would appreciate more information in future WMPs about progress on the Capital Improvement Project and master plan, identifying whether the projects described there are being considered, in pilot state, in progress, nearing completion, or completed, along with some assessment of the efficacy of the strategies. The WSAB appreciates the updated budget table in the 2022 WMP but finds it difficult to provide specific guidance without more detail about strategies. • The WSAB appreciates Pasadena's listing of wildfire mitigation design requirements, including installing covered triplex conductors in some cases, installing more robust higher wind loading poles, increased conductor spacing, and undergrounding of primary system assets in the Tier 3 HFTD. However, the WSAB notes the WMP is lacking information about the effectiveness of these efforts and about prioritization and percentages of assets so treated. Pasadena's WMP mentions a master plan for completing these and other measures, but the master plan nor any detailed summary of

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>that is not provided, making it difficult to gauge Pasadena's progress to plan.</p> <ul style="list-style-type: none"> • The WSAB likes the upgrade in the WMP where specific design and construction risks are tabulated with identified mitigation strategies for each risk. More description like this would be useful to better understand how Pasadena is identifying, prioritizing, and addressing service-territory specific risks. • The WSAB appreciates the inclusion of tracking results for the identified metrics in the 2022 WMP. Pasadena should continue this practice for any metrics determined to be appropriate in the 2023 comprehensive revision WMP. • The WSAB appreciates Pasadena meeting and at times exceeding industry standard vegetation management protocols (noting that the IE report recommends some vegetation management improvements) but it is not easy to gauge the effectiveness of these measures. The WSAB believes that performance metrics and additional detail would help here. • The WSAB sees additional information about customer communication during outages in Pasadena's 2022 WMP but would appreciate more explanation of the Everbridge system – the screenshot included would benefit from some discussion of its use and importance.
Pittsburg Power Co (Island Energy)	<ul style="list-style-type: none"> • The WSAB appreciates Pittsburg's added introductory section with good information about the utility and service area but does not want this to take the place of the context-setting template that other POUs have filled out and submitted. In the 2023 comprehensive revision WMP, Pittsburg is encouraged to include the context-setting template as requested, and follow where appropriate the new proposed WSAB WMP template, which includes that context setting table. • On the other hand, Pittsburg did provide a revision log table and the statutory cross-reference table near the front of their 2022 WMP. These help as well to guide the WSAB and public review of their WMP. The WSAB notes that a revision log table may not be necessary for the 2023 comprehensive revision WMP, as it is

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>expected that the revisions will be extensive and make the log table perhaps too long and complicated to create.</p> <ul style="list-style-type: none"> • The WSAB appreciates the inclusion of more information concerning the adoption and review process for Pittsburg's WMP as requested. The WSAB encourages Pittsburg to also include an actual adoption resolution (with dates if appropriate) for the 2023 comprehensive revision WMP and subsequent documents. • The WSAB appreciates the additions and changes in Pittsburg's 2023 WMP that indicate that the Everbridge email and text notification system to communicate power shutoff and other wildfire related messages to customers is in operation that provided more and better detail about weather monitoring and, system maps. The WSAB also finds useful the added context information about there being no HFTD in the service area, nor any water or wastewater treatment facilities that may be adversely impacted by a de-energization event. • The WSAB thanks Pittsburg for adding a description of grid hardening strategies to their 2023 WMP, including expected undergrounding with potential future development and plans to underground all overhead facilities at end of life, with proper vegetation management until that time. • The WSAB notes that while Pittsburg has the “generic” metrics of ignitions and wires down in their 2023 WMP, Exhibit D appears to provide tracking result for several additional metrics. The WSAB has encouraged POUs to develop additional metrics beyond the two most commonly included in previous WMPs, such as performance metrics, and it appears that Pittsburg has done that from Exhibit D. The WSAB encourages additional clarity on metrics and tracking in the comprehensive revision 2023 WMP, with a full listing of metrics being tracked (which the WSAB encourages to be relevant and include performance metrics) and a good historical accounting of performance related to those metrics. • Again, the WSAB appreciates that Pittsburg's 2023 WMP includes a list of wildfire risks but notes that the statute requires description and prioritization of those risks in the WMP, and such description appears to be largely lacking in Pittsburg's 2022 WMP. Although the Board recognizes that due to location and substantial undergrounding of

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>circuits Pittsburg's likelihood of induced wildfire appears low, the WSAB encourages Pittsburg in the 2023 comprehensive revision WMP to consider what risks in the main apply to Pittsburg's territory and describe those wildfire risks in more detail.</p>
Plumas-Sierra Rural Electric Co-Op	<ul style="list-style-type: none"> • The WSAB appreciates Plumas-Sierra's inclusion of the requested context setting template and cross-reference table in Exhibits G and H at the end of the 2022 WMP. This information is very helpful for WSAB review of the WMP. The WSAB encourages Plumas-Sierra to follow the proposed comprehensive revision WMP template in Appendix 1 for consistency but continuing to include the information is most important for Board review. • The WSAB notes that Plumas-Sierra has not added information about the adoption and public comment processes followed in their 2022 WMP, as requested in the 2021 and 2022 Guidance Advisory Opinions. The WSAB encourages Plumas-Sierra to follow the proposed comprehensive revision WMP template in Appendix 1, and include information about WMP adoption and public comment on the document, including summarizing any public comment, as they develop and submit their 2023 comprehensive revision WMP. • The WSAB commends Plumas-Sierra for upgrading their website to include a clear and prominent link to their WMP, as requested in the 2021 and Guidance Advisory Opinions. The WSAB encourages Plumas-Sierra to add to their wildfire mitigation web presence by providing public-facing information for all aspects of the WMP process, including previous versions of the WMP, IE Reports, and other WMP information as appropriate. The WSAB also encourages a paragraph within future WMPs describing where that information may be found on the website. • The WSAB cannot see any evidence that an Independent Evaluation was developed and presented to Plumas-Sierra's Board or posted on the website, for either the 2020, the 2021, or the 2022 WMPs, and the WSAB encourages Plumas-Sierra to follow through on the statutory obligation to engage a qualified independent evaluator and post the resulting evaluation on their website along with other WMP information. • The WSAB appreciates the good addition of information about climate change and impacts on wildfire risks in Plumas-Sierra's 2022

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>WMPs, including suggesting that as the climate changes there will likely be necessary changes to Plumas-Sierra's wildfire mitigation strategies, such as altering recloser policies, adding situational awareness assets, and increasing local cooperation. The WSAB encourages Plumas-Sierra to continue to evaluate and report on climate change in their service area in the 2023 comprehensive revision WMP.</p> <ul style="list-style-type: none"> • The WSAB continues to see excellent information about Plumas-Sierra's wildfire mitigation programs and practices in their 2022 WMP but notes that in this WMP "update" there appears not to be much description of how strategies being considered or implemented have changed from year-to-year. For example, the discussion of Plumas-Sierra's tree attachment policies in the 2022 WMP includes identical language to that in the 2021 WMP – that the utility is "in the process of developing recommendations", leaving the WSAB to wonder what progress was made in such development, if any. The WSAB looks forward to updated information about Plumas-Sierra mitigation programs and understanding of relative risks, including risks of de-energization versus fire danger in more detail in the 2023 comprehensive revision WMP. • In general, the WSAB appreciates Plumas-Sierra's practice of including generic information such as tables from GO 95 and 165 in the Appendix, while providing utility-specific text about construction protocols, inspections, and vegetation management in the main body of the WMP.
Power and Water Resource Pooling Authority	<ul style="list-style-type: none"> • The WSAB appreciates PWRPA providing in response to the Board's 2021 Guidance Advisory Opinion some additional context information in two paragraphs at the beginning of their 2022 WMP, additional sentences about the vegetation and rural (no WUI interface nature of the utility area, and the inclusion of the statutory cross-reference table. However, in the comprehensive revision 2023 WMP (and subsequent WMPs), the WSAB encourages PWRPA to include the full context-setting template and other WSAB requests in our Guidance Advisory Opinions. Such inclusion is part of the proposed new WSAB WMP template, established for the 2023 comprehensive revision WMPs. • The WSAB appreciates the inclusion of redline text showing changes between the 2021 and 2022 WMPs, though there were clearly not

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>very many changes. The 2023 comprehensive revision WMP, following as appropriate the new proposed WSAB WMP template, may have too many changes to make redline text a useful help for WMP review but the WSAB in general encourages information about changes in the WMPs from year to year.</p> <ul style="list-style-type: none"> • The Board appreciates reference in the informational response showing the website location of the 2022 PRWPA WMP. PWRPA should consider creating a more direct link to WMPs on the webpage, since there is no “search” feature and one would have to understand the placement under “legal notices”, which is not logically apparent, to find the WMP information. • The WSAB appreciates the information in the WMP regarding review of the plan for acceptable fire risk by local fire district personnel. Given the low likelihood of catastrophic wildfire for PWRPA, this may be sufficient, but in the comprehensive revision 2023 WMP the WSAB encourages PWRPA to also engage with a qualified and certified Independent Evaluator to review the WMP.
Rancho Cucamonga Municipal Utility	<ul style="list-style-type: none"> • The WSAB appreciates Rancho Cucamonga's continued inclusion of a context-setting template and the addition of the statutory cross-reference table near the front of their 2022 WMP. The WSAB also appreciates that the utility updated their template with revised customer information – these templates need to be kept up-to-date as utility circumstances change, particularly with relation to assets in high wildfire threat areas. The WSAB encourages Rancho Cucamonga to continue including and updating this information and consider the proposed template in Appendix 1 as they prepare and file their 2023 comprehensive revision WMP. • The WSAB appreciates Rancho Cucamonga's clear and prominent website location for WMP information and the inclusion of some historical WMP information, as well as the addition of a paragraph and link to that information in the 2022 WMP itself as requested. The WSAB notes that the 2022 update WMP appears not to be available on the page and encourages Rancho Cucamonga to keep the page up to date. • The WSAB appreciates Rancho Cucamonga's many changes in the 2022 WMP from the 2021 version, including new paragraphs describing coordination with SCE, discussing outage communication

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>in more detail, talking about weather data monitoring, and describing the underground nature of Rancho's assets along with additional information from the previous informational response. In addition, the WSAB appreciates Rancho Cucamonga including some responsive text to the 2022 Guidance Advisory Opinion but notes that it appears the specific Rancho Cucamonga points in that document were not addressed. The WSAB encourages Rancho to continue a relatively robust practice of updating their WMPs.</p> <ul style="list-style-type: none"> • The WSAB applauds the new situational awareness pilot at Rancho Cucamonga, adding three fire-monitoring sensor cameras along the foothills, including pictures and maps related to that new effort. Given the low likelihood of catastrophic wildfire for Rancho Cucamonga this addition shows a proactive approach to preventing and mitigating potential wildfires, even those not utility related. • The WSAB notes that Rancho Cucamonga still has included a generic "wires down" metric in their WMP, even with all assets reportedly underground. The WSAB appreciates the updated metric tracking results in the WMP but encourages Rancho Cucamonga to consider more relevant metrics, including performance metrics, in their 2023 comprehensive revision WMP.
Redding Electric Utility, City of Redding	<ul style="list-style-type: none"> • The WSAB finds Redding's 2022 WMP only a slight update to last year's but continues to commend Redding on a well-written WMP with good responses to the WSAB 2021 recommendations. Redding published their WMP earlier than most, and hence could not include any response to the WSAB 2022 recommendations. Hence, the WSAB reiterates its recommendation that the context-setting template, cross-reference table, and other enhancements included in the informational response be incorporated in the appropriate sections of the WMP itself, preventing the need to look at different places in the WMP (the main body and an Appendix) to get a full response picture, as envisioned in the proposed new WSAB WMP template. • The WSAB reiterates its 2022 Guidance Advisory Opinion recommendation that Redding provide a short paragraph in future WMPs that describes the adoption, public comment, and any altered budget processes within the WMP itself, as envisioned by the proposed new WSAB WMP template.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB commends Redding for a clear and prominent website location for WMP information and applauds the detail and variety of documents available on that page, including links to allow perusal of WMP history. One small note, the WMP page text talks about Redding being obligated to submit its annual WMP to the CPUC, rather than the WSAB, and this should be corrected to avoid public confusion. • The WSAB greatly appreciates the referenced separate 2021 Auditing report and finds this information very useful but notes that this was not filed to the docket so the review process involved finding the document separately. This document contains tremendous information about Redding's implementation of wildfire mitigation strategies, lessons learned, etc. – it is in many ways more useful than the WMP itself in its current form. The WSAB requests that Redding file and perhaps more prominently point to this audit report document and find a way to incorporate the annual strategy progress reporting more concretely within the filed WMP. • The WSAB ad previously appreciated Redding's submittal of a "change" document including an explanation of changes and a redlined version of the WMP, as well as a "version history" section in the WMP itself – this was very helpful for prior review. The WSAB notes that the revision history portion of the 2022 WMP merely states "removed in public version", and requests that Redding find some way to include that information in the future. Because there is expected to be significant changes in the comprehensive revision 2023 WMP, the WSAB is not explicitly requesting a redline document, as that may be more confusing than helpful. . • The WSAB applauds Redding's comprehensive description of wildfire mitigation strategies, including steel transmission poles, 12 kV RC-4292 exempt equipment, and strong isolation capability. Redding's wildfire mitigation efforts seem thorough and efficiently planned and make clear that Redding continues to seek improvement with future mitigation technologies. The WSAB also greatly appreciates the information in Redding's 10-year capital improvement plan, particularly the new table in Appendix D, but notes that an update appears to have been missed on page 18, which states that the program specifics are being designed and will be completed by mid-2021, 6 months prior to the date of the WMP.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB recommends that Redding explore evaluation of all pre GO 95 equipment for wildfire risks, consider changes to system operating procedures to post observers at critical system points during potential de-energization and re-energization actions (if not already monitored with situational awareness), and evaluate the current carrying and interruption ability ratings relative to loading and fault duties for all equipment in the high fire threat areas. • One wildfire question that the WSAB encourages Redding to discuss more in future WMPs is the impact of climate change on wildfire risks and potential mitigation actions to address those increased risks. The WSAB notes that there is very little information related to climate risks and potential changes in those risks in the Redding WMP. • The WSAB would still appreciate Redding providing some description as to whether there are wildfire-related reliability concerns deriving from sources and systems such as the Western Area Power Authority and the U.S. Bureau of Reclamation that have significant footprints in the area around Redding.

**Riverside
Public Utilities
Department**

- The WSAB continues to believe that Riverside prepares complete and well-written WMPs and continues to be responsive to WSAB guidance and advisory recommendations, including continuing and updating the utility context-setting template information. The WSAB encourages Riverside to continue that track record as they develop and file their 2023 comprehensive revision WMP, with due consideration of the proposed template for that in Appendix 1.
- The WSAB appreciates Riverside's filed cover letter indicating that their website had been upgraded to include current WMP information as well as historical WMP documents and the addition of a link to the website information in the WMP. The WSAB notes however, that the claimed updated website information appeared not to be available and the link did not work. The WSAB encourages Riverside to address these issues in their 2023 comprehensive revision WMP and actions.
- The WSAB notes that Riverside's 2022 WMP includes minimal changes from the 2021 WMP and recognizes their cover letter statement about the timing not being adequate to consider previous WSAB recommendations. The WSAB appreciates the promise to address WSAB recommendations in the 2023 comprehensive revision WMP and looks forward to reviewing that document. The WSAB does appreciate the updated Section VII in the WMP, with information about the new 2020 weather station now integrated, the utilization of the video network that was installed in 2020, new efforts to undertake enhanced infrared inspections of lines in the HFTD, and working to update standard operating procedures for wildfire practices in the high fire threat areas.
- The WSAB notes that Riverside has not updated language from the 2021 WMP that promises an Independent Evaluation selection in late 2021 or early 2022 and wonders if an IE was engaged or if that expectation as slipped. The WSAB expects Riverside to engage an IE for the 2023 comprehensive revision WMP.
- The WSAB appreciates the added metric tracking results information in the 2022 WMP, including the explanation of the one utility triggered ignition event in 2021. The WSAB encourages Riverside to continue updating metric results and explaining significant issues in future WMPs.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Roseville Electric Utility, City of Roseville	<ul style="list-style-type: none"> • The WSAB applauds Roseville for an exemplary job of including WSAB guidance and advice in their 2022 WMP, including the context-setting template and cross-reference table at the beginning of the WMP and adding to the text of the WMP in response to other WSAB input. In addition, the WSAB finds Roseville's graphics very helpful and applauds their WMP cover art. • The Board's appreciates the significant additional background information provided by Roseville about BANC, WAPA, and the utility itself. It's very helpful for setting the context of Roseville's territory, assets, and potential wildfire risk. • The Board commends Roseville's addition of graphics and detailed information about steps for public participation in and comment on the WMP. Again, it helps our review to better understand the steps the WMP goes through locally. • The WSAB thanks Roseville for upgrading their WMP information on their website, with a clear and prominent location under "reports and publications" and a full set of information showing WMPs and related information over time. y shows the recent 2022 WMP and associated IE Report and the Board encourages Roseville to also include links to allow perusal of WMP history, that is – public access to former WMPs and IE reports, • The WSAB appreciates Roseville including an additional map showing underground assets in relation the "open space" in their service territory, which does not have any HFTD or areas per the CPUC map. The WSAB also appreciates the information about recent installation of non-expulsion fuses and other fault-tame equipment in this space, which is simply a ravine that runs through the relatively flat city. • While Roseville has indicated that their customers are unlikely to experience an IOU-related PSPS event, the WSAB appreciates the additional detail an explanation about PSPS potential included in the WMP as requested. • The WSAB also is pleased about the new and useful detail added to the Roseville WMP about vegetation management. The WSAB particularly appreciates clarity in the WMP about where Roseville actually exceeds minimum standards with a 10' from the line trim

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>standard. Additionally, information describing the use of herbicides is appreciated.</p>
<p>Sacramento Municipal Utility District</p>	<ul style="list-style-type: none"> • The WSAB appreciates SMUD including the expected context-setting template and continuing to include the cross-reference table at the beginning of the 2022 WMP, as requested. Going forward, this practice should be part of the new WMP template proposed by the WSAB. • The WSAB thanks SMUD for including sections in their 2022 WMP that cover changes from previous versions and additional budgeting and adoption information. • The WSAB commends SMUD for an exemplary description of comprehensive wildfire mitigation strategies in their 2022 WMP. In particular, the WSAB appreciates the updates about completed work, including: the UARP 4KV breaker update project, replacement of fuses in the UARP 4KV system with non-expulsion fuses, the high-resolution drone images project, the undergrounding of two lines in the UARP, and the deadend termination x-ray evaluation project. • The WSAB also appreciates SMUD's regular inspection and patrol of trees, including aerial photo review to identify tree mortality or insect infestation. • The WSAB sees SMUD's new goal of 30+ feet of clearance in the HFTD distribution system but wonders whether that replaces SMUD's consideration of distributed generation in this area in last year's WMP. The WSAB also suggests SMUD pay attention to what is replacing the cleared vegetation, as grass invasion can be a problematic ignition source in some cleared areas. • While SMUD's service territory has never experienced a catastrophic wildfire and considers their service territory to be relatively risk due to its mostly urban nature, but SMUD should consider potential risks from wildfires in surrounding grasslands. Many of the worst fires in California have started in grass, and most structure loss in the state has occurred in non-forested areas. The WSAB suggests that it is important to consider the potential role of grass fires, which move very fast and proven dangerous to firefighters as well as residents. SMUD may want to consider vegetation management strategies that aim to reduce or remove grass biomass, such as mowing

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>immediately before grass cures and during fire-safe weather conditions.</p> <ul style="list-style-type: none"> • The WSAB appreciates SMUD's recognition that the fire season is likely now a year-round concern and SMUD's consultation of subject matter experts for risk evaluation. On the latter, the WSAB believes it would be helpful for our review to know who these experts are and what their qualifications are. • The WSAB commends SMUD for continuing to pilot unique and innovative mitigation strategies, such as applying fire retardant materials to poles, as well as continued consideration of strategies such as additional non-expulsion fuses, steel poles, covered conductors, and additional undergrounding. The WSAB did not see extensive updating about these potential strategies in the 2022 WMP and looks forward to updates in future WMPs. • The WSAB appreciates SMUD's descriptions of additional wildfire training for works in the UARP and added customer communication methods, including banners in the SMUD lobby and on smud.org, updates on the website to list of wildfire-related public communications, and the new voluntary signup program for vulnerable customers. • The WSAB again commends SMUD's extensive set of metrics for evaluating their WMP, including substantial rewrites and increases in the number and diversity of SMUD's metrics. The Board looks forward to substantive information on SMUD's progress by these metrics in future WMPs.
San Francisco Public Utilities Commission	<ul style="list-style-type: none"> • The WSAB appreciates SFPUC including the context-setting template near the beginning of their 2022 WMP, along with significant useful maps and detail about the utility. In addition, the WSAB is impressed by the documented improvements from prior WMP iterations, including many responsive changes to previous WSAB Guidance Advisory Opinion recommendations. • The WSAB commends SFPUC for upgrading their website information on wildfire mitigation plans to clearly point to the 2022 WMP as well as include links to all historical WMP documents. This allows easiest WSAB and public examination of WMP progress within the website.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • SFPUC is to be commended for examining its protocols for weather monitoring and making changes in response to lessons learned from the Abernathy fire, preparing to add fuel moisture levels to their monitoring structure. The WSAB applauds SFPUC for working with Technosylva to develop a smaller utility monitoring and risk model, which could benefit other POUs upon development. • The WSAB commends SFPUC's for a comprehensive and up-to-date description of their wildfire prevention plans and strategies, including vegetation management practices, inspection protocols, and situational awareness and system hardening status and projects. There were many significant and important updates to strategies and their progress in the 2022 WMP, including descriptions of the SFPUC climate change collaboration and coordination committee; additions to vegetation management protocols (including describing removal of problem trees outside the right of way); hot/cold wash and other inspections; situational awareness information; and continued plans to replace fuses, install covered conductor, and strategically underground equipment related to their remote small hydro assets. The WSAB encourages SFPUC to prioritize replacing fuses and lightning arrestors with exempt equipment as these introduce multiple potential failure points. • The WSAB appreciates SFPUC's updated description of wildfire risk factors in their service territory and around their assets outside the service territory. In particular, the WSAB commends the addition of the overloaded transformer risk factor and looks forward to the promised related load study as well as additional information and detail in this area in the future. • The WSAB commends SFPUC for progress shown on collaborative activities, through establishment of the Wildfire Mitigation Planning Group, description of collaboration with PG&E, and working with CalFire – including procurement of a new Firehawk helicopter. • The WSAB appreciates the additions in the 2022 WMP to the already clear and comprehensive description in the 2021 WMP of the process for public comment on SFPUC's WMP and the adoption process for the document. This council approval and wildfire mitigation budget information is helpful.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB recommends that SFPUC consider change to their operating protocols (or additional documentation for clarity) to post observers at clearance points such as reclosers or SCADA switches to identify equipment failure during de-energization and re-energization, as ignitions can result at these points during those actions. • The WSAB appreciates the updated information on metric tracking results in the SFPUC 2022 WMP – current data helps to evaluate utility progress and practice on wildfire mitigation.
Shasta Lake, City of	<ul style="list-style-type: none"> • The WSAB notes that Shasta Lake did not include the context-setting template or other information in the informational response to the Board's 2021 Guidance Advisory Opinion in their 2022 WMP as requested. The WSAB greatly encourages Shasta Lake to consider following the proposed WSAB WMP template in Appendix 1 for the 2023 comprehensive revision WMP. Inclusion of details on risks, assets, and strategies as recommended in that template will go a long way to providing more confidence that Shasta Lake is on the right path with respect to wildfire mitigation. • As mentioned in the WSAB's 2022 Guidance Advisory Opinion, Shasta Lake did make significant updates between their 2020 and 2021 WMPs in the areas of wildfire risk descriptions and preventative strategies, as well as incorporation of the previously separate inspection plan and vegetation management plan as appendices. The WSAB looked forward to continued updates as appropriate in future WMPs but notes that there were only minimal and non-substantive changes between the 2021 and the 2022 WMPs. In fact, the 2022 WMP still implies that the document is "... the first iteration of this plan." Again, considering use of the WSAB proposed template from Appendix 1 would go a long way to resolving the lack of updates in this version. • The WSAB would still appreciate more information about the adoption and public comment processes for Shasta Lake's WMPs and encourages the utility to provide a short paragraph in future WMPs that describes the adoption and public comment processes utility followed for the WMP being submitted, along with information about budget processes for any potential or expected mitigation expenses (as requested in the Appendix 1 template).

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Shasta Lake's wildfire information on their website but notes that the information was still not prominently located. While the most recent 2022 WMP is available at the site, the historical information related to the wildfire mitigation plan responsibilities is not logically collected – the 2019 Independent Evaluation Report is not easy to find (note as well that the link to the location of that report in the informational response last year did not work). The WSAB encourages Shasta Lake to upgrade to a clear and prominent WMP page that includes the current WMP as well as older information, to allow the WSAB and public to track progress on wildfire mitigation. • The WSAB is still interested in more information about Shasta Lake's contention that the Forest Service constrains their vegetation management plans based on aesthetic and environmental concerns and encourages Shasta Lake to consider alternatives to herbicide use and work with the Forest Service to resolve concerns. The WSAB is also interested in hearing more about Shasta Lake's plans to shore up water supply during emergencies such as during the Carr fire, where hydrants may have lost ability to fight fires with a longer outage. • The WSAB would appreciate more information from Shasta Lake regarding the risk of generation or balancing authority supplies being interrupted by wildfire. Shasta Lake's IE Report indicated a couple of PSPS events affecting a limited number of their customers and the WSAB believes Shasta Lake's WMPs should better describe this risk and the mitigation actions the utility is considering or taking to address them. • The WSAB encourages Shasta Lake to consider replacements of PRC-4292 non-exempt equipment (fuses, lighting arrestors, etc.), replacing with exempt equipment in the high fire threat areas. The WSAB also encourages Shasta Lake to evaluate their assets in the high fire threat areas, comparing their current carrying and interruption ability ratings to equipment loading and evaluate all pre-GO 95 equipment. • The WSAB recommends that Shasta Lake consider configuration changes to standard operating procedures for de-energization and re-energization actions in the high fire threat areas – pre-staging

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>observers at clearance points (switching points) if not well-monitored by situational awareness assets.</p>
	<ul style="list-style-type: none"> • The WSAB appreciates SVP's inclusion of the context-setting template and the statutory cross reference table as Appendices B and C in their draft 2022 WMP as requested. The WSAB would prefer that this information be included near the front of the WMP as part of an "overview" section, in keeping with the proposed new WSAB WMP template. • The WSAB notes that in SVP's cover letter for the 2022 WMP it is stated that the filed WMP is a draft that will be replaced in the docket once adopted by SVP's board in September. The WSAB will update this document, as appropriate, once the final WMP is provided, and notes that a final 2022 WMP appears to be present on the SVP website along with an Independent Evaluator report on the WMP. The WSAB requests that these documents be provided to the docket. • The WSAB notes that the cover letter also states that SVP did a "comprehensive revision" in this WMP. SVP is free to do a comprehensive revision to their WMP's whenever they wish, as the law simply states that these be done "at least" once every three years. However, there do not appear to be significant changes from the 2021 WMP to this SVP 2022 WMP. The WSAB requests that SVP consider following the proposed new WMP template, intended to provide guidance for the comprehensive revisions, in next year's WMP. • The Board notes that SVP's WMPs do not contain information about where they can be found on SVP's website, and it appears that the WMPs are not easily, if at all, located on the SVP website. The Board's 2021 Guidance Advisory Opinion recommended that WMPs be posted in a prominent, easily located position on a utility's website. • The WSAB appreciates SVP's added information about vegetation management activities. The WSAB commends SVP for not using herbicides and growth regulators and appreciates the information about vegetation management practices for their remote assets in Glenn and Tehama counties as requested.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB understands that due to the urban location of SVP's service territory and circumstances around SVP's remote transmission assets that SVP's likelihood of encountering catastrophic wildfire issues appears low. The WSAB appreciates the added paragraphs in the 2023 WMP concerning enterprise safety risks and standard procedures developed for those. The WSAB continues to encourage SVP to describe wildfire risks related to the remote transmission assets in somewhat more detail, include some risk prioritization information, and describe in more detail the interaction with PG&E's surrounding electric infrastructure assets. • The WSAB appreciates the additional information about the use of expulsion fuses and installation of raptor guards. The 2023 WMP documents that the expulsion fuses are not a significant risk given the location and states that SVP has no further plans for grid hardening at this time. The WSAB understands that SVP has a relatively low likelihood of inducing or facing a wildfire, but would encourage SVP to continue to pay attention to new wildfire mitigation technologies that may be appropriate for the utility in the future. • The WSAB thanks SVP for including tracking results for the two metrics established in the WMP, stating that there were zero wires down and zero ignitions in 2021. The WSAB still encourages SVP to develop some performance metrics that allow reviewers to gauge how the utility is proceeding in their wildfire mitigation strategies.
Stockton Utility, Port of Stockton	<p>As of the posting date of this draft document, Stockton has not provided a 2022 WMP to the WSAB. Hence, the recommendations and comments below are repeated from the WSAB 2022 Guidance Advisory Opinion.</p> <ul style="list-style-type: none"> • The WSAB appreciates many POUs providing an informational response to the Board's 2021 Guidance Advisory Opinion but did not receive such a submittal from the Port of Stockton. In Stockton's 2022 and subsequent WMPs, the utility should include the upfront template and cross-reference table indicating where in the WMP statutory requirements can be found and add other information pursuant to the 2021 Guidance Advisory Opinion as appropriate. • While the Port of Stockton's WMPs do not go beyond statutory requirements nor document any significant new initiatives to reduce wildfire risk beyond normal vegetation management and system

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>inspection work, the WSAB believes that this path is reasonable given the Port of Stockton's low likelihood of catastrophic wildfire.</p> <ul style="list-style-type: none"> • The WSAB appreciated many POUs submittal of a "change" letter or redlines document to help guide WSAB review of their 2021 WMP but received no such information from the Port of Stockton. Nevertheless, an examination of the Port of Stockton's 2020 versus 2021 WMPs indicates that very little has changed between the two WMPs, other than updating the ignition and lines down metrics to reflect zero instance in each case in 2020. The WSAB notes that no changes in response to the Board's 2021 Guidance Advisory Opinion were made for the 2021 WMP. While the Port of Stockton has low likelihood of catastrophic wildfire, the WSAB nevertheless encourages the Port of Stockton to consider recommendations from the WSAB and make updates in the 2022 and subsequent WMPs, particularly in the 2023 major revision. • The WSAB appreciates the inclusion of the adopting resolution for the Port of Stockton's 2021 WMP. The WSAB encourages the Port of Stockton to continue to incorporate this information within subsequent WMPs, describing the WMP adoption process and how public review and comment is accommodated. • The WSAB appreciates the Port of Stockton's posting of the 2021 WMP on their website, and while it could be more prominent believes that the current structure is adequate. The WSAB notes that apparently the 2020 WMP and any information about the earlier IE Report are not present. The WSAB encourages the Port of Stockton to continue to provide public-facing information for all aspects of the WMP process, including the current version of the WMP, historical WMPs, and IE Reports. • The WSAB appreciates the information in the WMP regarding review of the plan for acceptable fire risk by the Port of Stockton's Fire Marshall. Given the low likelihood of catastrophic wildfire for the Port of Stockton, this may be sufficient, but In future WMPs, the Port of Stockton should consider augmenting review by engaging with a certified Independent Evaluator from the OEIS list.
Surprise Valley	<ul style="list-style-type: none"> • The WSAB commends Surprise Valley on a comprehensive and well - written 2023 WMP, full of data and maps that outline the wildfire situation in the service territory. The WSAB notes that the WMP is

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
Electrification Corporation	<p>largely similar to last year's WMP (appropriate for an "update" year, perhaps) and looks forward to additional updates and information in Surprise Valley's 2023 comprehensive revision WMP. The WSAB encourages consideration of the proposed 2023 comprehensive revision template in Appendix 1, though recognizes that Surprise Valley has developed a reasonable WMP structure to date. The WSAB particularly encourages Surprise Valley to provide the context-setting template at the beginning of the WMP as requested to allow for a quick assessment of the wildfire context for the utility.</p> <ul style="list-style-type: none"> • The WSAB appreciates being able to quickly and easily access Surprise Valley's 2022 WMP and earlier Independent Evaluation report on their website. The WSAB also appreciates that the 2022 WMP references that the WMP is available on their website. The WSAB encourages Surprise Valley to add historical WMP information on the wildfire web page and to provide a more specific link to the page in the 2023 comprehensive revision WMP. • The WSAB appreciates the continued direct and clear attention paid in Surprise Valley's 2021 WMP about climate change. The WSAB looks forward to updated information in this area as Surprise Valley develops and adopts their 2023 comprehensive revision WMP and encourages Surprise Valley to take the next step in that WMP to consider how the changing climate may directly affect wildfire risks and potential mitigation strategies, in light of potentially longer fire seasons, higher wind speeds, and lower moisture content in vegetation. • The WSAB thanks Surprise Valley for the updated data in their 2023, including annual load and average peak load information, expulsion fuse replacement progress, and updated asset descriptions (showing growth in line assets, mostly outside of HFTDs), keeping these descriptions current. The WSAB notes, however, that other information should likely have been updated but apparently has not been. Examples include: 1) B timeframe initiatives in the 2021 WMP were to be implemented before the coming fire season, but their status has not changed; 2) language about "currently looking into drone arial patrols" is unchanged from the 2021 WMP (making the WSAB wonder if there was any progress there); 3) data about non-expulsion fuses on page 51 has not been updated (and so is inconsistent with earlier change); pilot project information has

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>not changed (was there progress, results?); and a statement about including discussion on how metrics and previous WMP performance has informed the current WMP “in the next annual revision” is identical to the wording in the 2021 WMP.</p> <ul style="list-style-type: none"> • The Board appreciates the added information about there being no public comment during the draft period and the note that the WMP was adopted in the Spring of 2020 but notes that this appears to describe an earlier public comment process and WMP. The WSAB would prefer that the current 2022 WMP's public comment an adoption process would be described and expects that the information in this area will be updated for the 2023 comprehensive revision WMP. • The WSAB is concerned that Surprise Valley expects a significant reduction in VM costs with the installation of non-expulsion fuses because there is no longer a need to maintain a radius of mowed grasses under distribution poles with these fuses. While the WSAB can see some change as appropriate with the use of non-expulsion fuses, there likely would remain a need for pole clearances, particularly if there are invasive grasses developing, as a continued wildfire mitigation strategy.
Transmission Agency of Northern California	<ul style="list-style-type: none"> • The WSAB appreciates TANC's filed cover letter including the previously requested informational response and a description of WMP changes in the 2022 WMP. The WSAB recognizes that TANC is a unique POU, with only one transmission line asset and no distribution assets or retail customers as described in the cover letter filing. The WSAB commends TANC for providing comprehensive and well-written WMPs that lay out TANC's unique wildfire risks and extensive program efforts to reduce those risks. The WSAB encourages TANC to include including the context-setting template from the informational response within the WMP itself in the 2023 comprehensive revision WMP as they consider the proposed template in Appendix 1 for that document. • The WSAB continues to extoll TANC's excellent web information regarding their current and historical wildfire mitigation plans and related information. • The WSAB finds the detailed updates of and information about wildfire mitigation strategies in Table V-1 very helpful in our review,

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>easily and concisely summarizing the progress of strategies such as drone pilots, infrared and corona imaging and inspection, tower inspections, and access road maintenance. While there were few other changes in the 2022 TANC WMP, these updates provide essential information. The WSAB expects that there may be more dramatic changes in the 2023 comprehensive revision WMP and encourages TANC to consider appropriate aspects of the template in Appendix 1, while recognizing that TANC has developed a good WMP framework already.</p> <ul style="list-style-type: none"> • The WSAB does note that a couple of errors have crept into the 2022 WMP on pages 2 where a trailing sentences was inadvertently added to objective 5 and on page 16 where a closing sentence inadvertently escaped the Contact by Foreign Object bullet. In addition, the WSAB notes that although TANC has a good set of WMP metrics they have included no tracking results information for those metrics to help understand their value and TANC's mitigation progress. The WSAB expects that in the 2023 comprehensive revision WMP these issues will be resolved.
Trinity Public Utility District	<ul style="list-style-type: none"> • The WSAB appreciates Trinity filing along with their 2022 WMP a separate “informational response” containing the requested context-setting template, statutory cross-reference table, and brief answers to the WSAB’s input to Trinity in the 2022 Guidance Advisory Opinion. The WSAB encourages Trinity to include this information within their 2023 comprehensive revision WMP, as opposed to in a separate filing. The WSAB recognizes that timing of the 2022 Guidance Advisory Opinion may have affected Trinity’s ability to integrate this information in their 2022 WMP. • The WSAB commends Trinity for a well-written and complete WMP, though as an update it is fairly similar to the 2021 WMP. The WSAB encourages Trinity to consider the elements in the proposed new template in Appendix 1 for their comprehensive revision 2023 WMP, while recognizing and applauding that Trinity’s WMP structure already goes well beyond the previous CMUA template. • The WSAB appreciates the submittal of a separate “informational response” document providing additional information in response to the 2022 Guidance Advisory Opinion. The WSAB notes that there are minimal changes in the 2022 “update” WMP in comparison to the 2021 document and the additional information provided assists

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>our review. Again, in the 2023 comprehensive update WMP, the WSAB requests that revisions, including any response to this 2023 Guidance Advisory opinion, be included within the WMP itself for easier review. The WSAB encourages Trinity to develop their 2023 comprehensive revision WMP to include updates that are not apparent in the 2022 “update” WMP. For example, Table 2 lists mitigation programs/activities and their timeframes, and the WSAB wonders why those activities intended in the 2021 WMP to be “implemented before the coming fire season” were not updated to show completion or altered to an “annual” schedule. Also, the 2022 WMP has identical language to the 2021 WMP indicating that about 25% of fuses have been replaced with CAL FIRE exempt equipment, leaving the WSAB to wonder if there has been progress in that area in 2021-22. Similarly, the WSAB could find no updates of Trinity’s tree attachment project nor the four pilot projects noted again in the 2022 WMP (though there was separate information provided in the “informational response” about some of these efforts). Minor issues in the 2022 WMP include statements that public comments will be included in Appendix G (as opposed to Appendix I) and that information about a Board presentation will be added to section 9.1.3 after the Fall of 2019.</p> <ul style="list-style-type: none"> • On the other hand, the WSAB again commends Trinity’s adoption of innovative wildfire mitigation techniques such as drone inspections and appreciates updates in the WMP on this effort and on the LiDAR/GIS project. In addition, the WSAB welcomes the new investment in satellite image technology to assist in vegetation management. The WSAB encourages Trinity to continue to develop and explore mitigation strategies and looks forward to updates in the 2023 comprehensive revision WMP. The WSAB appreciates Trinity’s response that they will continue to research building hardening and construction techniques to minimize ignition risk. • The WSAB appreciates Trinity’s statement in their separate “informational response” that reporting metrics are presented to their Board regularly but encourages Trinity to also include information on the tracking results for metrics in the 2023 comprehensive revision WMP, noting that both the 2021 and 2022 WMPs promise such discussion “in the next revision”. • The WSAB commends Trinity for a detailed and comprehensive treatment of board approval and adoption processes and public

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<p>comments received (in Appendix I). However, the WSAB notes that this good information refers back to the initial adoption of the WMP in 2019 and encourages Trinity to update their information about Board adoption and public comment received with more current information, if available.</p> <ul style="list-style-type: none"> • The WSAB encourages Trinity to upgrade their website information about wildfire mitigation plans to point to the current WMP rather than the older 2020 WMP and include links to historical WMPs and related filings so that the public can be informed of Trinity's WMP progress over time. The WSAB also desires a specific link to the web WMP information in the 2023 comprehensive revision WMP. • The WSAB did not see a response to our caution in the 2022 Guidance Advisory Opinion to be careful in reducing vegetation management practices as they move away from expulsion fuses and encourages Trinity to consider this caution in the 2023 comprehensive revision WMP and in their vegetation management activities. <p>+</p>
Truckee Donner Public Utility District	<ul style="list-style-type: none"> • The WSAB appreciates that Truckee Donner included the context setting template at the beginning of their 2022 WMP as requested. However, the WSAB notes that Truckee Donner did not include a statutory cross reference table, requested by WSAB in the 2021 and 2022 Guidance Advisory Opinions. The WSAB encourages Truckee Donner to include these and other requested or ancillary information directly in the 2023 comprehensive revision WMP. The WSAB also encourages Truckee Donner to consider aspects of the proposed new comprehensive revision WMP template in Appendix 1, while acknowledging that Truckee Donner has developed and employed a reasonable and well-written WMP structure and document to date. • The WSAB notes that the previously filed wind speed maps and fire threat maps (from 2021 WMP filing) are not integrated into the 2022 Truckee Donner WMP and would request that such information generally be included within WMPs themselves as appropriate to avoid having to review a variety of documents from a variety of filing periods. In contrast, the WSAB appreciates the inclusion of the previously separate vegetation management plan as Exhibit G in the 2023 WMP as well as the addition of the pole replacement ranking tool description in Exhibit H.

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	<ul style="list-style-type: none"> • The WSAB commends Truckee Donner for including significant discussion of the responses to the WSAB 2022 Guidance Advisory Opinion as well as the summary of changes to the 2022 WMP. This information is greatly appreciated, and the WSAB encourages Truckee Donner to continue this collaborative/responsive practice in future WMPs. The WSAB notes that there may be such significant changes in the 2023 comprehensive revision WMP that a listing of changes may be more confusing than productive. • The WSAB appreciates Truckee Donner's attention to updating their WMPs from year to year, including in the 2022 WMP substantive changes related to: 1) undergrounding assets to a key regional rural medical facility; 2) participation in a regional, coordinated water/climate study; and 3) added NISC OA module that enhances Truckee Donner's MDMS system. Other substantive updates provided additional useful information about removal of dead and dying vegetation, SCADA and reclosers, delay of non-expulsion fuse implementation, leveraging of workforce training with partners, the Nixie notification system, and restoration of service after a Nevada Energy instigated PSPS event. The WSAB commends and appreciates this proactive updating of the annual WMP information. • The WSAB appreciates the added explanation in the 2022 WMP that due to Truckee Donner's high- mountain, short growing season, service area there is reduced concern about invasive grasses being established in cleared areas around assets. The WSAB also applauds Truckee Donner's practice of using minimal or no herbicides, again in part to the high mountain nature of their service area. • The WSAB commends Truckee Donner's recognition in the 2022 WMP that "fire season" may extend in time beyond the June-December timeframe mentioned in the 2021 WMP. • The WSAB notes Truckee Donner's statement that they only intend to engage an Independent Evaluator every three years and believe that this practice is generally reasonable while noting that in specific circumstances for specific utilities more frequent independent evaluation may be appropriate. The WSAB encourages Truckee Donner to engage an independent evaluator for the 2023 comprehensive revision WMP.

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Turlock Irrigation District	<ul style="list-style-type: none"> • The WSAB appreciates Turlock including the context-setting template at the beginning of their WMP as well as continuing to include the statutory cross-reference table. Turlock has an exemplary WMP structure and the WSAB encourages the utility to continue providing complete and well-written WMPs while considering the section recommendations in the proposed template in Appendix 1 when developing and filing their 2023 comprehensive revision WMP. • The WSAB thanks Turlock for including the adoption resolution with the WMP as well as additional information about public comments as the WMP is developed and considered by their Board. The WSAB has also previously requested some simple information about how WMP strategies and actions are budgeted but Turlock has not responded to this request. • The WSAB appreciates Turlock's relatively easy to find website location for the 2022 WMP but encourages Turlock to also include links to former WMPs and related material to allow perusal of WMP history so that the public and reviewers can understand Turlock's ongoing progress on wildfire mitigation. • The WSAB appreciates the significant changes in Turlock's 2022 WMP, including new information that evaluations of undergrounding and covered conductor determined these strategies were not warranted, deployment of a new weather station in Diablo Grande, and the 2022 action plan. The WSAB looks forward to updates on the action plan strategies listed in the 2023 comprehensive revision WMP. • On the other hand, the WSAB notes that on page 42 an update would seem reasonable as the second paragraph on the page appears to be referring to notifying customers about an earlier potential de-energization but says this happened "... just before the publication of this plan, language identical to last year's WMP. Also, page 45 still discusses public outreach in relation to the original 2019 WMP, which seems outdated. The WSAB expects that these minor issues will be resolved with Turlock's 2023 comprehensive revision WMP. • The WSAB has previously appreciated Turlock's discussion of climate change their WMPs but encourages Turlock to take the next step

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	<p>and consider how such changes may affect wildfire mitigation activities. For example, would the likelihood of higher winds lead to changes in wind loading calculations for new construction and retrofits.</p> <ul style="list-style-type: none"> • The WSAB applauds Turlock’s comprehensive and clear description of metrics for evaluation of their WMPs but does have a few questions. First, the WSAB wonders about the value of the “red-flag warning” metric – red-flag warnings cannot be affected by Turlock or any mitigation actions Turlock takes. That results related to other metrics may be analyzed differentially with more or fewer red-flag days does not seem to justify the explicit metric. Second, Turlock continues to have a metric about conventional blown fuses but has also stated they no longer have those fuses – perhaps that metric can be retired. Third, there is paragraph explaining the “faults with no cause” metric but no such metric appears in the metric table. Additionally, it would seem like there has been enough history to start considering and tracking metric results in the WMP. The WSAB would appreciate such information in the 2023 comprehensive revision WMP.
Ukiah, City of	<ul style="list-style-type: none"> • The WSAB appreciated Ukiah providing an informational response to the WSAB’s 2021 Guidance Advisory Opinion but notes that the utility has not incorporated the information from that response, particularly the helpful context-setting template and statutory cross-reference table within the filed 2022 WMP as requested in the 2022 Guidance Advisory Opinion. The WSAB encourages Ukiah to consider these recommendations and consider following the new proposed template in Appendix 1 for their upcoming comprehensive revision WMP. • The WSAB notes that Ukiah did not include any additional information in the WMP about the adoption and public comment processes for their WMPs as requested in the 2022 Guidance Advisory Opinion. The WSAB encourages Ukiah to consider adding to their 2023 comprehensive revision WMP information about their WMP adoption process and accommodation of public review and comment, including describing any public comment received, per the template in Appendix 1. The WSAB encourages the added information to be current, rather than describing initial WMP actions in 2019.

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	<ul style="list-style-type: none"> • The WSAB notes that Ukiah has made relatively minimal changes from the 2021 WMP in their 2022 “update” WMP. The WSAB notes with appreciation the slightly added information about pole clearing in some cases now using a 12-foot radius rather than 10 foot, increased clearances from assets that are close to high fire threat areas, and revised description of the drone IR inspection effort. However, many other areas of the WMP are not updated, including any consideration or additions in response to the IE recommendations, updated or added metric tracking results information, and no change to the 2021 statement that the utility “intends to create” a formalized IR inspection program. While minor, the WSAB notes that the footer for the 2022 WMP refers to an earlier WMP – Revision 2 from December 2020. The WSAB expects that with the comprehensive revision WMP, Ukiah will consider the Appendix 1 template and provide a significantly enhanced WMP next year. • The Board appreciates Ukiah's clear and prominent website location for their WMP information but notes that the page only contains links to the 2019 WMP and 2020 Independent Evaluation. The WSAB encourages Ukiah to include a prominent link to the current WMP as well as sub-links to previous versions of the WMP and IE Reports and WMP-related filings. The WSAB also encourages including a paragraph describing where the WMP web page information may be found in their 2023 comprehensive revision WMP next year. • The WSAB has appreciated the Appendix A information about Ukiah's Wildfire Prevention Program but believes that in the 2023 comprehensive revision the information there should be incorporated in the main body of the WMP, as appropriate. In many cases the information seems duplicative in intent and this could cause inconsistencies or confusion in the document and it's review. For example, both the main body of the WMP and Appendix A have “objectives” sections and strategy descriptions
Vernon Public Utility, City of Vernon	<ul style="list-style-type: none"> • The WSAB appreciates Vernon including the expected context-setting template and cross-reference table at the beginning of the 2022 WMP, as requested, avoiding the need for a separate filing. The Board encourages Vernon to do the same with the WMP adoption information – incorporate within the WMP – for a similar reason. Going forward, this practice should be part of the new WMP template proposed by the WSAB.

POU	WSAB Advisory Guidance for Each POU Based on 2022 WMP
	<ul style="list-style-type: none"> • The WSAB appreciates Vernon's clear and prominent website location for the 2022 WMP, under "regulatory reports", but notes that the older 2020 WMP and 2021 WMP's are not found there so that the WSAB and public can easily view the WMP history. In addition, the WSAB notes that Vernon's link to the IE Report from 2019 appears to be to just a cover letter, not the entire IE Report, and encourages Vernon to include the entire report. • The WSAB appreciates that Vernon provided tracking results information for their "number of ignitions" metric and "wires down" metric for 2019-2021. The WSAB encourages Vernon to develop performance metrics that aim to provide relevant information about how mitigation activities themselves are progressing (inspections accomplished per goal, etc.).
Victorville Municipal Utility Services	<ul style="list-style-type: none"> • The WSAB appreciates Victorville including the context-setting template and cross-reference table in the beginning sections of the 2022 WMP as previously requested and the additional paragraphs describing public input and adoption processes for Victorville's WMPs. The WSAB encourages Victorville to continue including and updating this information as appropriate in the comprehensive revision 2023 WMP and encourages Victorville to consider the new proposed template for that in Appendix 1. • The WSAB appreciates Victorville adding a bit of information about their budgeting for weed control and understands their added statement that they have minimal vegetation management risks due to the undergrounded nature of their assets. The WSAB also appreciates the added claim that their customers are unlikely to be affected by an IOU PSPS event. • The WSAB notes that Victorville has apparently not included the 2022 WMP or related WMP information on their website. The link in the statutory cross reference table pulls up the original 2019 WMP, not an independent evaluation report. The 2022 WMP is not available, it would appear, on the Victorville website. The WSAB encourages Victorville to upgrade their website information and check their links to provide current and historical WMP information in a clear and prominent location. Providing historical WMPs and information on the website allows easier Board and public tracking of WMP efforts over time.

**Reserved for Comment-Response Table for
2023 POU Guidance Advisory Opinion**

Commenting Entity	Comment	WSAB Comment Response