PSPS

DRAFT- REVISION 1

ATTACHMENT 1

Summary of Changes for the 2022 Wildfire Mitigation Plan (WMP) Update Guidelines

Office of Energy Infrastructure Safety

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INTRODUCTION

This document provides a summary of the key changes for the 2022 Wildfire Mitigation Plan Update Guidelines (2022 Guidelines), as well as relevant updates to the Wildfire Mitigation Plan (WMP) process and administrative procedures. The revisions are based on a review of feedback from Office of Energy Infrastructure Safety (Energy Safety) staff, the Wildfire Safety Advisory Board (WSAB), the public, electrical corporations (utilities), and other stakeholders during the previous 2020-2021 WMP submission and evaluation periods.[1] The intent of these changes is to improve the WMP reporting and processes by: 1) clarifying and expanding WMP reporting guidelines, and 2) streamlining the WMP submission and evaluation processes. The 2022 Guidelines retain a similar format, structure, and content to the previous two years' guidelines to ensure that the WMPs remain comparable across the plan cycle.

The updates for the 2022 Guidelines take the form of **Process or Administrative** changes (e.g., improving the organization and presentation of data/information in the WMPs, staggering of WMP submission deadlines, clarifying terminology, requiring the use of cross-referencing, and increasing the use of figures and other visual aids), and **Technical** changes (e.g., new metrics, additional non-spatial data requirements, substantiation of risk modeling methods and decision-making processes, and discussion of model uncertainties).

The 2022 Guidelines incorporate enhancements to support streamlined reporting and evaluation. These enhancements include clarifying definitions of metrics and improvements to tables (in order to better organize reporting structures and post-collection data processing). In some instances, the 2022 Guidelines require utilities to provide a higher level of granularity than previously required to allow Energy Safety and stakeholders to obtain a better understanding of utilities' risk models and decision-making frameworks. The 2022 Guidelines also require utilities to increase the use of visual aids (e.g., figures, tables, decision-making trees, and geospatial maps) in order to more effectively communicate information to Energy Safety and stakeholders.

This document provides an overview of the key changes for the 2022 Guidelines. In addition to this document, the 2022 Guidelines also include:

- Attachment 2: 2022 WMP Update Guidelines Template
- Attachment 3: Table 1-12 Non-Spatial Metrics Data

[1] The 2020 WMP Guidelines can be found at https://energysafety.ca.gov/wp-content/uploads/docs/misc/docket/322133494.pdf (accessed Oct. 15, 2021). The 2021 WMP Update Guidelines can be found at https://energysafety.ca.gov/wp-content/uploads/docs/wmp-2021/attachment-2.2-to-wsd-011-2021-wmp-guidelines-template.pdf (accessed Oct. 15, 2021).

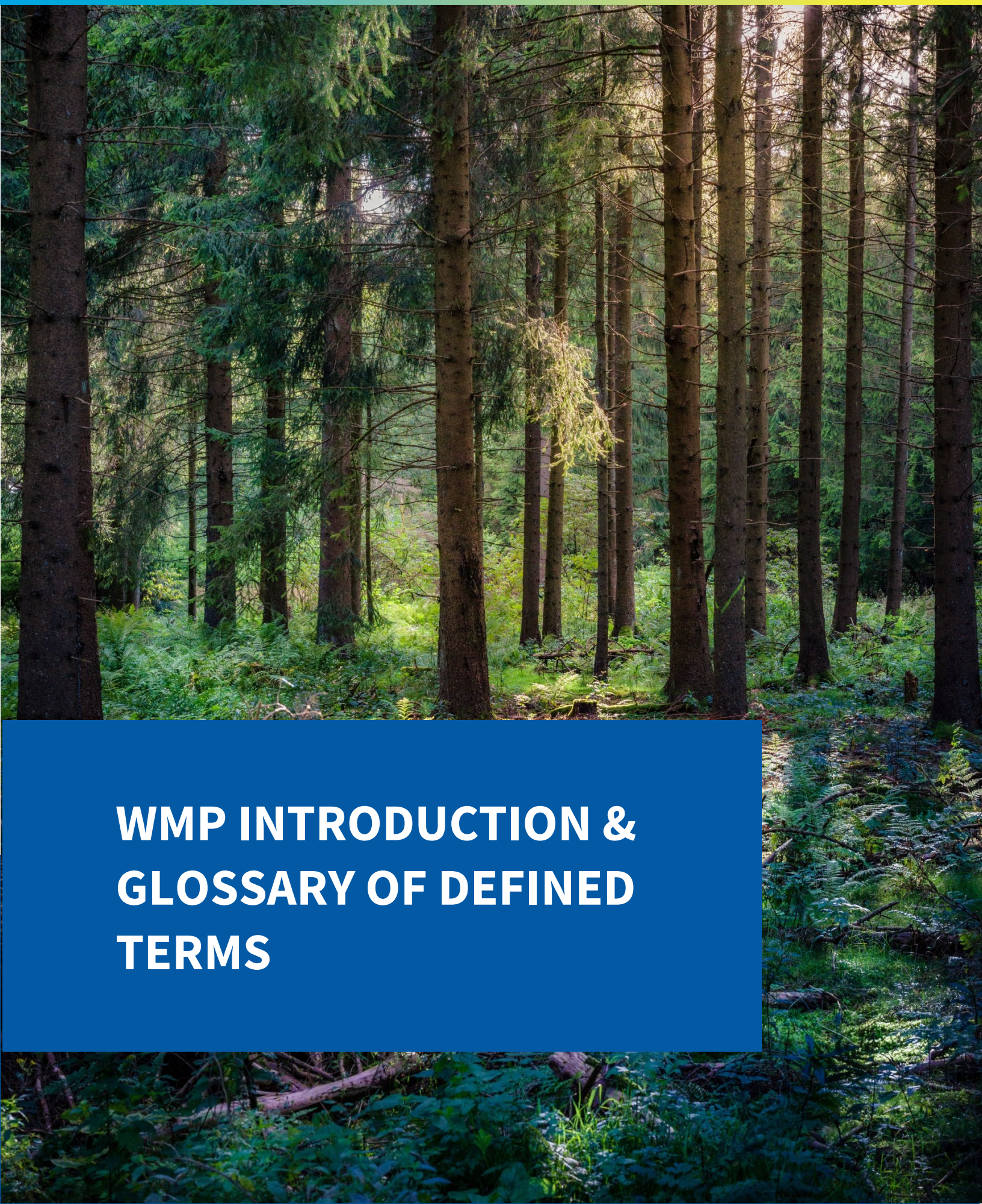
- Attachment 4: 2022 Maturity Model
- Attachment 5: Guidelines for Submission and Review of 2022 WMP Updates

Document Structure

This document is organized as follows:

- WMP Introduction and Glossary of Defined Terms
- WMP Section 1: Persons Responsible for Executing the WMP
- WMP Section 2: Adherence to Statutory Guidelines
- WMP Section 3: Actuals and Planned Spending for Mitigation Plan
- WMP Section 4: Lessons Learned and Risk Trends
- WMP Section 5: Inputs to the Plan and Directional Vision for WMP
- WMP Section 6: Performance Metrics and Underlying Data
- WMP Section 7: Mitigation Initiatives
- WMP Section 8: Public Safety Power Shutoff (PSPS)
- WMP Section 9: Appendix
- Attachment 3: WMP Quarterly Report – Non-Spatial Data Template
- Attachment 4: Maturity Model

Each section provides a list of key changes with a brief description of the associated underlying issue. Where applicable, a description may include additional narrative and/or information to help clarify the intent of the new guidelines.



WMP INTRODUCTION & GLOSSARY OF DEFINED TERMS

Issue: Previous WMP Guidelines did not include a standardized electronic file naming convention for WMP submissions or associated data and documentation. This creates administrative challenges for tracking, managing, and organizing the data and document submissions.

New Guideline:

- **New Guideline 0a:** In the Introduction Section, the 2022 Guidelines includes a "Naming Convention" section that identifies specific electronic file naming conventions for each utility's WMP submission and other associated data and document submissions.

Issue: WMPs are often text-heavy and lack visual aids, making them difficult to understand and evaluate effectively or efficiently.

New Guidelines:

- **New Guideline 0b:** In the Introduction Section, the 2022 Guidelines require that WMPs include a variety of visual aids (e.g., maps, summary tables, informatics, diagrams, flow charts, photographs, sample calculations/equations) and other supporting documentation to facilitate communication of concepts and strategies. (Note: This requirement is associated with New Guidelines 4a and 4b.)
- **New Guideline 0c:** In the Introduction Section, the 2022 Guidelines requires that WMPs include section narratives that are clear, concise, and make use of bulleted summary lists. This section also requires cross-referencing and hyperlinking between sections to reduce the duplication of descriptions and narratives. It additionally requires the use of cross-referencing for tables, figures, and other visual aids. PDF submissions must include electronic bookmarks to easily navigate between chapters, main headings, and sub-headings.

Issue: WMPs do not always include targets or performance metrics that are measurable. This limits Energy Safety's ability to monitor, evaluate, and track performance of initiatives over time and against absolute thresholds.

New Guideline:

- **New Guideline 0d:** In the Introduction Section, the 2022 Guidelines require inclusion of measurable targets and performance metrics, particularly in the metrics tables and associated narratives.

Issue: The definition of "at-risk species" needs clarification.

New Guideline:

- **New Guideline 0e:** The glossary formerly defined "at-risk species" as "[s]pecies of vegetation that are particularly likely to contact power lines in the event of high winds and/or ignite if they catch a spark" (2021 WMP Guidelines, p.8); the new definition of "at-risk species" is "[s]pecies of vegetation that have an elevated risk of (1) coming into contact with powerlines, (2) causing an outage or ignition, or (3) igniting easily whether due to inherent flammability characteristics or being in close proximity to potential arcing, sparks and/or other utility equipment thermal failures." This includes identifying "at-risk species" as a function of species-specific characteristics such as growth rate, failure rate of limbs, trunk, and/or roots (as compared to other species), height at maturity, flammability, vulnerability to disease or insects, etc.

Issue: The definition of "invasive species" needs revision to be consistent with industry terminology.

- **New Guideline 0f:** The glossary formerly defined "invasive species" as "[n]on-native species whose proliferation increases the risk of wildfires";[2] the new definition of "invasive species" is "[a] species that is: (1) non-native (or alien) to the ecosystem under consideration and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health."

Issue: The 2021 Guidelines did not include a definition for "slash," which resulted in inconsistent reporting in the WMPs.

New Guideline:

- **New Guideline 0g:** The glossary newly defines "slash" as "[b]ranches or limbs less than four inches in diameter, and bark and split products debris left on the ground as a result of utility vegetation management." This definition is consistent with Public Resources Code Section 4525.7.

Issue: Utilities have used the term "fire season," such as in the phrase "the height of fire season," without defining the term in their WMPs. The period of time called "fire season" may

[2] 2021 WMP Update Guidelines, pg. 10

change according to the particular geographic region in which the utility provides services. The peak season during which fires are likely to occur is likely to vary in particular for utilities with large service areas.

New Guideline:

- **New Guideline 0h:** The glossary newly defines "fire season" as "[t]he time of year that wildfires are most likely to take place for a given geographic region due to historical weather conditions, vegetative characteristics, and impacts of climate change. Goals and targets which have milestones related to the onset, duration, or end of "fire season" or "height of fire season" must be accompanied with calendar dates."

Issue: Pursuant to Senate Bill 533 (2021), WMPs must now identify the circuits with frequent wildfire mitigation-related de-energizations and the measures taken to reduce the number and impact of such de-energizations.

New Guideline:

- **New Guideline 0i:** The glossary newly defines "frequently de-energized circuit" as "[a] circuit which has been de-energized pursuant to a de-energization event to mitigate the risk of wildfire three or more times in a calendar year." (Note: This guideline is associated with New Guidelines 2b and 8b).

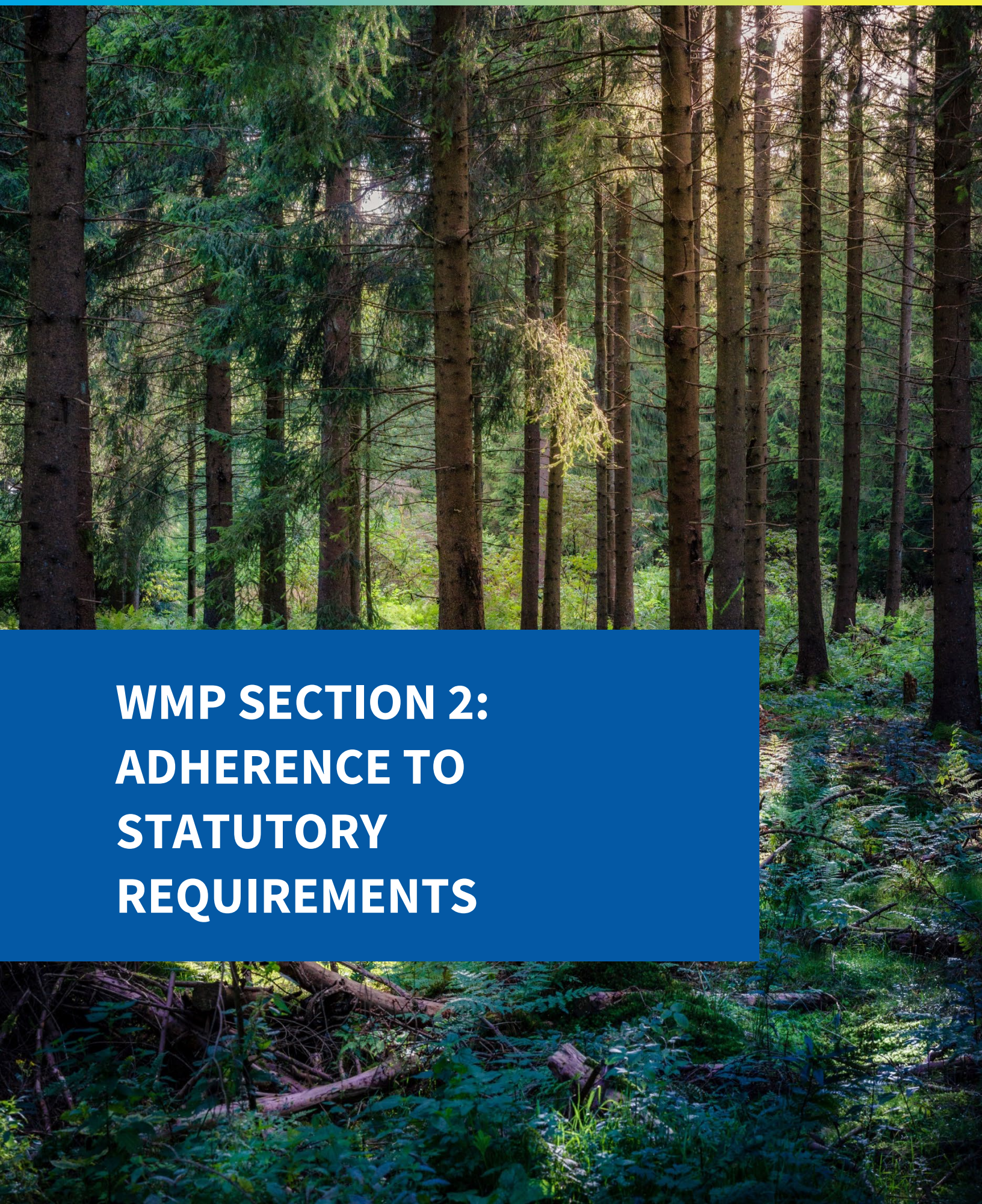
Issue: The term "utility-ignited wildfire" needs clarification.

New Guideline:

- **New Guideline 0j:** "Utility-ignited wildfire" has been replaced by "utility-related ignition." The 2022 Guidelines reflect this change, including Table 2 of Attachment 3.

WMP SECTION 1: PERSONS RESPONSIBLE FOR EXECUTING THE WMP

There are no major updates to the section “Persons Responsible for Executing the WMP” for 2022.



WMP SECTION 2: ADHERENCE TO STATUTORY REQUIREMENTS

Issue: In some past WMP submissions, verification of statutory requirement compliance was missing or difficult to find.

New Guideline:

- **New Guideline 2a:** WMPs must provide both section and page number referencing the location of where each statutory requirement is addressed, as well as provide a link to the appropriate location(s) in the document.

Issue: Due to the increased scale, scope, and frequency of impacts of de-energization to mitigate the risk of wildfires, the California state government recently approved Senate Bill (SB) 533 (2021).[3] This bill requires WMPs to identify circuits that have been de-energized frequently to mitigate the risk of wildfire and the measures taken, or planned to be taken, by the utility to reduce the need for, and impact of, future de-energization of those circuits. This includes the estimated annual decline in circuit de-energization and the de-energization impact on customers. It also includes the "replacing, hardening, or undergrounding [of] any portion of the circuit or of upstream transmission or distribution lines."

New Guideline:

- **New Guideline 2b:** Pursuant to SB 533, Section 8 of the WMP now requires utilities to identify circuits with frequent wildfire mitigation-related de-energizations and the measures to be taken to reduce the need for and impact of such de-energizations. (Note: This guideline is associated with New Guidelines 0i and 8b.)

[3] SB 533 (2021) text: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB533 (accessed Oct. 15, 2021).

WMP SECTION 3: ACTUALS AND PLANNED SPENDING FOR MITIGATION PLAN

Issue: The directions in the 2021 Guidelines did not align between the information requested in WMP Table 3.2-1 and the preceding text about whether actual or projected costs to ratepayers require reporting.

New Guideline:

- **New Guideline 3a:** Table 3.2-1 and the language preceding the table must now include both actual and projected cost increases to ratepayers for 2017-~~2023~~2022.

WMP SECTION 4: LESSONS LEARNED AND RISK TRENDS

Issue: WMPs are often text-heavy and lack visual aids, making comprehension and evaluation more difficult and inefficient.

New Guidelines:

- **New Guideline 4a:** Section 4.1 now requires WMPs to include an overview map of the utility's service area and grid. In addition, WMPs must also include visual/graphical representation of major lessons learned from 2020 and 2021. (Note: This requirement is associated with New Guidelines 0b and 4b, with respect to the increased use of visual aids throughout the WMPs.)

- **New Guideline 4b:** Section 4.2.1 now requires the inclusion of maps. (Note: This requirement is associated with New Guidelines 0b and 4a, with respect to the increased use of visual aids throughout the WMPs). New text is in ***bold italics*** below:

  Present a map of the highest risk areas identified within the current High Fire Threat District (HFTD) tiers of the utility's service territory as a figure in the WMP. Discuss fire-threat evaluation of the service territory to determine whether a modification to the *HFTD* is warranted (e.g., expansion beyond existing Tier 2 and Tier 3 areas). ***If the utility believes there are areas in its service territory that are not currently included in the HFTD but are required to be prioritized for mitigation efforts, then the utility is required to provide a process outlining the formal steps necessary to have those areas considered for recognition in the CPUC-defined HFTD.***[4] Include a discussion of any fire threat assessment of its service territory performed by the utility, highlighting any changes since the prior WMP. In the event that the utility's assessment determines the fire threat rating for any part of its service territory is insufficient (i.e., the actual fire threat is greater than what is indicated in CPUC's Fire Threat Map and High Fire Threat District designations), the utility is required to identify those areas for potential HFTD modification, based on the new information or environmental changes***, showing the differences on a map in the WMP***. To the extent this identification relies upon a meteorological or climatological study, a thorough explanation and copy of the study must be included as an Appendix to the WMP.

  List, describe***, and map geospatially (where geospatial mapping is applicable)*** any macro trends impacting ignition probability and estimated wildfire consequence within utility service territory, highlighting any changes since the prior WMP submission.

[4] As there is no formal or standard process for modifying the HFTD maps defined by the CPUC, utilities may use an approach similar to the one used by SCE during the 2019 WMP review process, described in D.19-05-038, p. 53. For this process, SCE submitted a petition to modify D.17-12-024 to recognize SCE-identified HFRA as HFTD Tier 2 areas in August 2019.

- **New Guideline 4c:** Section 4.5.2 now requires the inclusion of maps to visualize key metrics such as frequency of Red Flag Warnings (RFW), frequency of High Wind Warnings (HWW), distribution of Access and Functional Needs (AFN) customers, wildland-urban interface (WUI) areas, and urban/rural/highly urban electrical assets. Updates are indicated in ***bold italics*** below:

  > Report details on the calculation of the metrics below. For each metric, a standard definition is provided with statute cited where relevant. ***The utility*** must follow the definition provided and detail the procedure they use to calculate the metric values aligned with these definitions. The utility must cite all data sources used in calculating the metrics below. ***In addition, the utility must include ~~maps~~GIS layers showing ~~contours/heat maps of~~ Red Flag Warning (RFW) frequency and High Wind Warning (HWW) frequency~~,~~ (use data from the previous 5 years, 2016-2021), as well as ~~maps~~GIS layers for distribution of Access Functional Need (AFN) customers, ~~wildland-urban interface (WUI),~~and urban/rural/highly rural customers, and disadvantaged communities[5] in its service territory~~. These maps must include an overlay of the utility's transmission & distribution lines and other relevant electrical equipment (e.g., substations) within the utility's service territories~~.[6]***

Issue: The 2021 Guidelines did not explicitly define the required details or format for reporting the models for ignition probability, wildfire risk, or PSPS risk.

New Guideline:

- **New Guideline 4d:** Section 4.5 requires that WMPs include new reporting subsections and details for the models the utility uses for ignition probability, wildfire risk, and PSPS risk. The required subsections are listed below, with new or extensively modified headings shown in ***bold italics***.
  - Purpose of the model
  - Relevant terms
  - ***Data elements***
  - ***Modeling assumptions and limitations***
  - ***Modeling methodology***
  - ***Model uncertainty***
  - ***Model verification and validation***

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[5] ~~Energy Safety recommends using CalEnviroScreen and Senate Bill 535 to identify disadvantaged communities.~~

[6] Energy Safety acknowledges potential security concerns regarding aggregating and presenting critical electrical infrastructure in map form. Utilities may provide ~~any map~~maps or GIS layers required by these Guidelines as a confidential attachment where necessary.

- ***Modeling frequency***
- ***Timeline for model development***
- Application and results
- ***Key improvements from working group***

Issue: The 2021 Action Statements require each utility to submit a Progress Report by November 1, 2021 that addresses the remedies provided for each "Key Area for Improvement" identified by Energy Safety. The 2021 Action Statements also require each utility to address the remedies provided for each "Additional Area for Improvement" in its 2022 WMP Update. There is no specified WMP section for providing such information.

New Guideline:

- **New Guideline 4e:** Each utility's 2022 WMP Update must include a new section, Section 4.6. This section must provide a table that summarizes the progress made on each identified "key area for improvement". The table must include references and hyperlinks to the specific sections of the 2022 WMP Update and/or Appendices that provide the additional detail and documentation for each area for improvement. The 2022 Guidelines include a summary table template, Table 4-6.1, that utilities must use for this summary table.

WMP SECTION 5: INPUTS TO THE PLAN AND DIRECTIONAL VISION FOR WMP

Issue: In Table 5.3-1 "List and description of program targets, last 5 years," WMPs have lacked information on performance versus target values for objectives such as the number of poles brushed or circuit miles of power lines hardened in comparison to the target numbers for each year. This limited the reviewer from comparing target values with performance values for a given year.

New Guideline:

- **New Guideline 5a**: Table 5.3-1 "List and description of program targets, last 5 years" includes columns for target values.

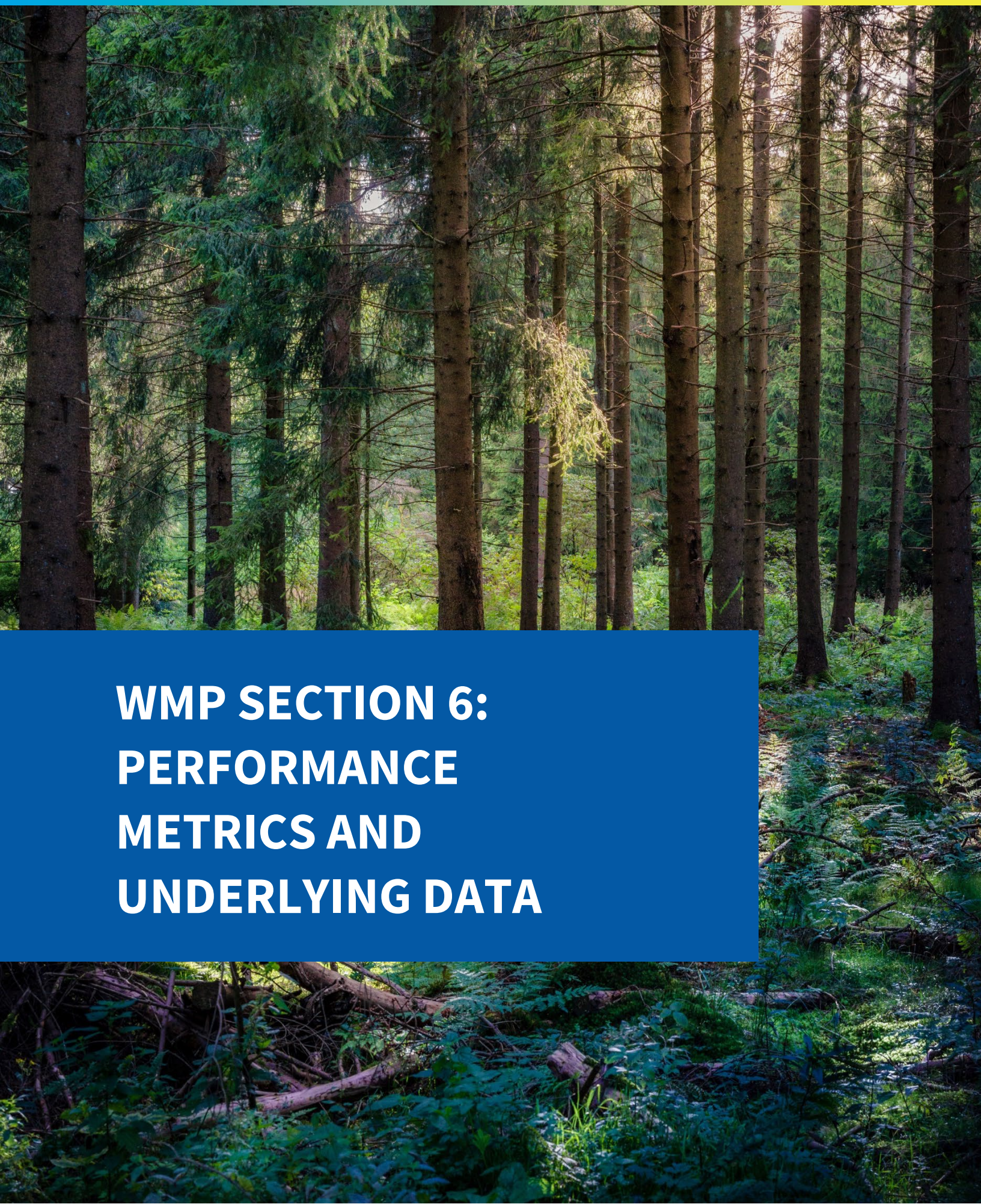
Issue: WMPs have lacked quantitative vegetation management targets. Energy Safety requires auditable, quantitative vegetation management targets to complete its statutory responsibilities pursuant to Public Utilities Code 8386.3(c)(5).

New Guideline:

- **New Guideline 5b**: Table 5.3-1 includes several required quantitative program targets for vegetation management (e.g., "Vegetation Inspections that are audited ~~annually~~). It is expected that the utilities provide additional VM targets beyond those required. The identification of other VM targets and units for those targets (e.g., for inspections, customer outreach, enhanced vegetation management, etc.) are at the discretion of the utility.

Issue: Utilities must demonstrate that program targets prioritize high-risk areas.
New Guideline:

- **New Guideline 5c**: Table 5.3-1 includes an additional column titled "Target%/Top-Risk%" that requires utilities to identify the percentage of the target that will occur in the highest risk areas. Narrative guidance is provided in Section 5.3 of Attachment 2.



WMP SECTION 6: PERFORMANCE METRICS AND UNDERLYING DATA

There are no major updates to the section “Performance Metrics and Underlying Data” for 2022.

WMP SECTION 7: MITIGATION INITIATIVES

Issue: Utilities did not provide information in their WMPs on how they used risk modeling outcomes to inform decision-making processes, circuit prioritization, and mitigation selection.

New Guideline:

- **New Guideline 7a:** Utilities are required to discuss how risk modeling outcomes are used to inform decision-making processes and used to prioritize mitigation activities; provide detailed descriptions including clear evaluation criteria[7] and visual aids (such as flow charts or decision trees); and provide an appendix (including use of relevant visual aids) with specific examples demonstrating how risk modeling outcomes are used in prioritizing circuit segments and selecting mitigation measures.

Issue: Section 7.1 of the 2021 Guidelines did not require the utility to provide detailed geospatial maps or other visual aids in the WMP. Energy Safety staff and stakeholders rely on visual aids and maps to better understand and assess a utility's wildfire mitigation initiatives, decision-making processes, outcomes, etc.

New Guidelines:

New Guideline 7b: Section 7.1 requires ~~that~~ utilities to provide a ~~map~~GIS layer showing ~~generalized~~ wildfire risk (e.g., MAVF~~) on transmission and distribution infrastructure using a color gradient (i.e., from red for high risk to green for lower risk~~).

A. **New Guideline 7c:** Section 7.1 requires ~~geospatial maps~~utilities to provide GIS layers[8] for ~~Grid Design~~the following grid hardening initiatives: covered conductor installation;[9] undergrounding of electrical lines and ~~System Hardening mitigations. The map~~/or equipment; and removal of electrical lines. Features must ~~show the transmission and distribution grid with each line distinguished by its~~have the following attributes: state of hardening ~~and~~, type of hardening where known (i.e~~.g~~., undergrounding ~~or~~, covered conductors~~), such as:~~, or removal), and expected completion date. Provide as much detail as possible (circuit segment, circuit-level, etc.). The layers must include the following:

~~a. Currently not hardened and no plan to harden within next 10 years~~

~~b. Currently hardened line~~

~~c.~~a. Hardening planned ~~by June 1 of current year~~for 2022

[7] "Evaluation criteria" should include all points of considerations including any thresholds and weights that may affect the outcome of their decision, as well as a descriptor of how it is evaluated (i.e., given a risk score, using SME expertise to determine that score, using a formula).

[8] Energy Safety acknowledges potential security concerns regarding aggregating and presenting critical electrical infrastructure in map form. Utilities may provide ~~any map~~maps or GIS layers required by these Guidelines as a confidential attachment where necessary.

[9] For a definition of "covered conductor installation" see Section 9 of Attachment 2.

~~d.~~b. Hardening planned ~~by Sep 1 of current year~~for 2023
~~e.~~c. Hardening planned ~~by next Annual WMP Update~~for 2024
~~f. Hardening planned within the next 3 years~~
~~g. Hardening planned within the next 10 years~~

B. **New Guideline 7d:** Section 7.1 requires ~~geospatial maps for~~ utilities to provide a GIS layer for planned Asset Management and Inspections~~. The map~~ in 2022. Features must ~~show~~include the ~~transmission and distribution grid with each line distinguished by the~~following attributes: type, timing, and prioritization of asset inspection. Inspection types must follow the same types described in Section 7.3.4, Asset Management and Inspections, and as applicable, should not be limited to patrols and detailed inspections.

New Guideline 7e: Section 7.1 requires ~~a geospatial map~~utilities to provide a GIS layer illustrating where enhanced clearances (12 feet or more) were achieved in 2020 and 2021, and where the utility plans to achieve enhanced clearances in 2022. ~~The utility~~Feature attributes must ~~indicate graduated~~include clearance ~~distances beyond~~distance greater than or equal to 12 feet, if such data is available, either in ranges or as discrete integers (e.g., 12-15 feet, 15-20 feet, etc. OR 12, 13, 14, 15, etc.).

Issue: Section 7.3.2 of the 2021 Guidelines did not explicitly require utilities to report on the impacts of climate change on risk-informed analysis and/or risk modeling approaches.

New Guideline:

- **New Guideline 7f:** Section 7.3.2 "Risk assessment and mapping" newly requires the utility to provide maps demonstrating medium and long-term climate trends, and describe how the utility incorporates these climate trends into risk models or other risk-informed analyses that inform mitigation selection/prioritization and decision-making processes.

Issue: Section 7.3.2 of the 2021 Guidelines did not explicitly require that the utility report on the use of risk-informed approaches as the basis for selecting and/or prioritizing mitigation initiatives.

New Guideline:

- **New Guideline 7g.:** Section 7.3.2 requires that utilities report additional details regarding the use of risk-informed methods to identify and prioritize mitigation initiatives.

Issue: In Section 7.3.2, Subsection "Vegetation and management Inspections" of the 2021 Guidelines requested information about initiatives numbered 46, 47, and 64 that resulted in

utilities sometimes providing duplicate responses. Additionally, the existing definitions for each initiative did not indicate a required level of detail or content for each initiative, making comparisons across the utilities challenging. (Note: This issue is also identified in Section 9: Appendix, with associated New Guidelines 9b and~~,~~ 9c~~, and 9d~~).

New Guidelines:

- **New Guideline 7h:** Initiative No. 45 reads: "Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment."
- **New Guideline 7i:** Initiative No. 46 reads: "Detailed inspections and management practices for vegetation clearances around transmission electrical lines and equipment."
- ~~**New Guideline 7j:** Initiative No. 64 reads: "Additional vegetation management practices beyond regulatory requirements and recommendations."~~

Issue: In Section 7.3.2, Subsection "Vegetation and management Inspections" initiative No. ~~49~~48 "Fuel management" of the 2021 Guidelines, the title and description of the fuel management initiative did not explicitly include management practices for all wood types, including downed wood. As a result, utilities did not report on the management of all wood management practices.

New Guideline:

- **New Guideline ~~7k~~7j:** Initiative No. ~~49~~48 reads: "Fuel management, and management of all wood and 'slash' from vegetation management activities." The definition in Section 9 has also been updated accordingly.

Issue: In Section 7.3.2, Subsection "Vegetation and management Inspections" of the 2021 Guidelines did not include an initiative activity for post-fire vegetation management activities. As a result, utilities did not report on their respective policies or practices on how they managed vegetation after a fire incident. In some cases, best practices were not implemented after major wildfire incidents.

New Guideline:

- **New Guideline ~~7l~~7k:** A new initiative, No. ~~65~~64, titled "Vegetation management activities post-fire" is included.

Issue: In Section 7.3.2, subsection "Grid operations and protocols" of the 2021 Guidelines did not include a section on protective equipment (fuses, reclosers, etc.) and device settings.

New Guideline:

- **New Guideline ~~7m~~7l:** A new initiative, No. ~~67~~66, titled "Protective equipment and device settings" is included.

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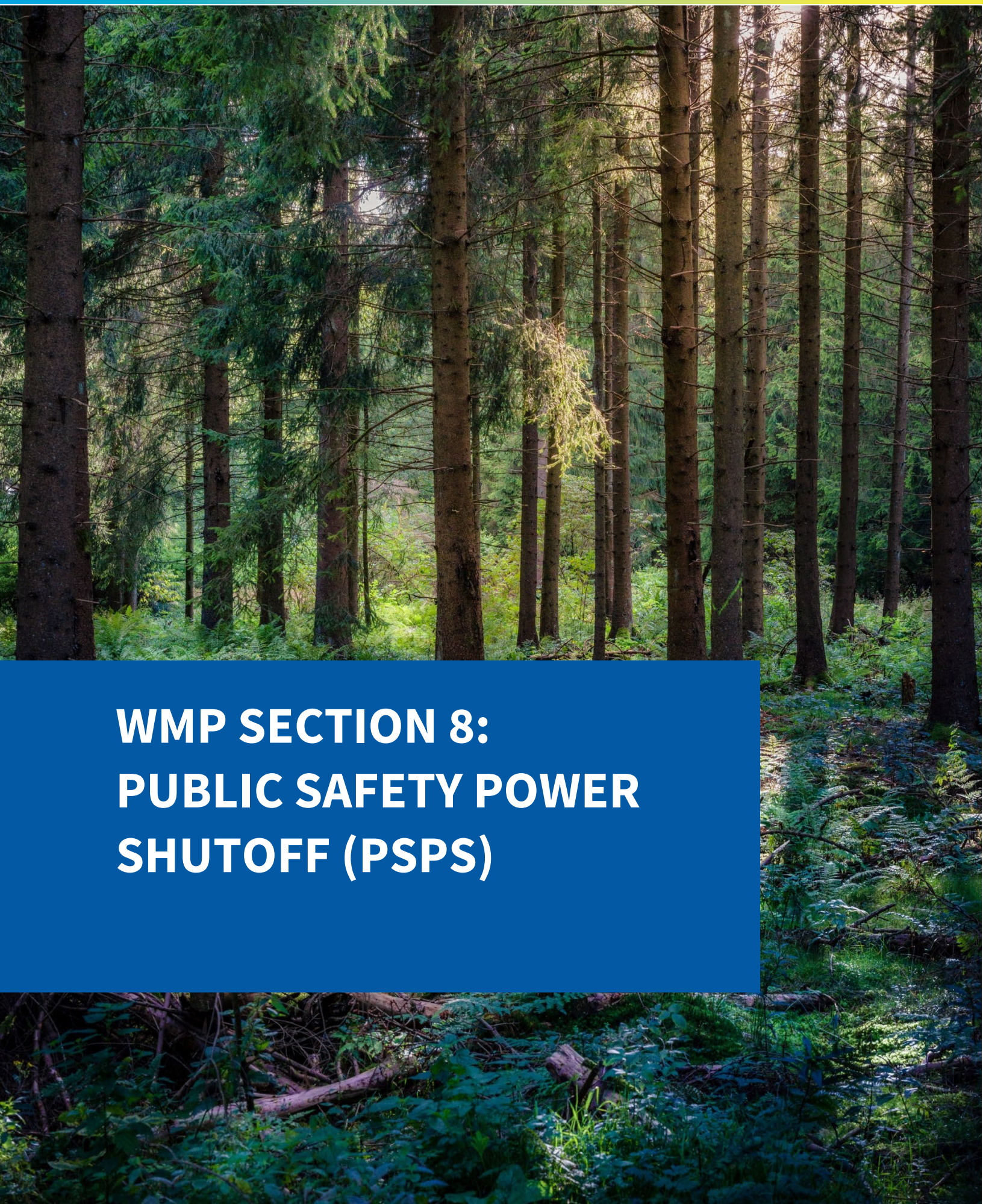


WMP SECTION 8: PUBLIC SAFETY POWER SHUTOFF (PSPS)

Issue: The 2021 Guidelines did not require the utility to report on the methodologies used to determine acceptable levels of risk or consequences of both PSPSs and wildfires.

New Guideline:

- **New Guideline 8a:** Section 8.2 newly requires the utility to describe the following:

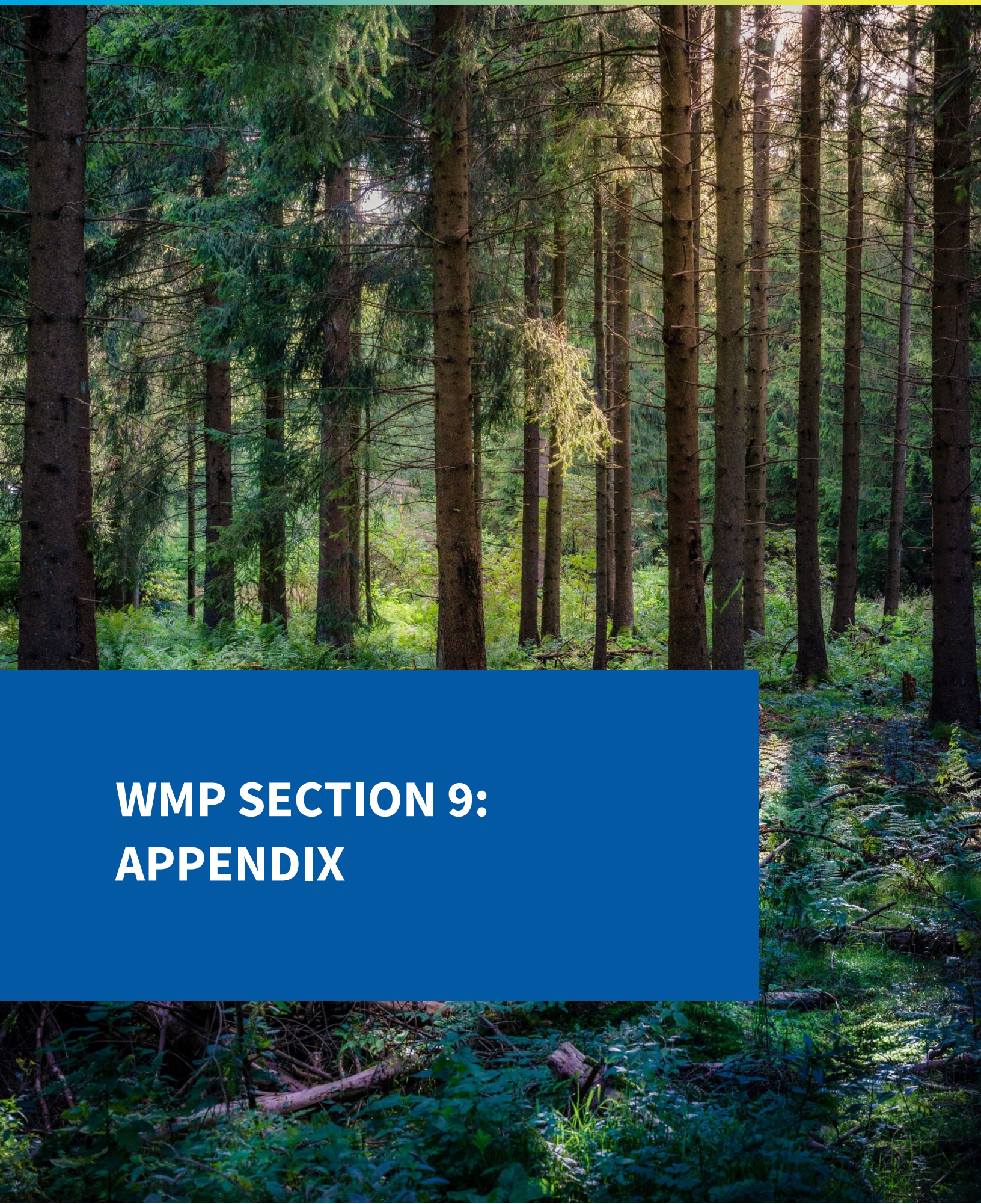
  > "Method used to evaluate the potential consequences of PSPS and wildfires. Specifically, the utility is required to discuss how the relative consequences of PSPS and wildfires are compared and evaluated. In addition, the utility must report the wildfire risk thresholds and decision-making process that determine the need for a PSPS."

Issue: Due to increased scale, scope, and frequency of impacts of de-energization practices to mitigate the risk of wildfires, the California state government recently approved Senate Bill (SB) 533 (2021).[10] This bill requires each utility's WMP to identify circuits that have been de-energized frequently to mitigate the risk of wildfire and the measures taken, or planned to be taken, by the utility to reduce the need for, and impact of, future de-energization of those circuits. This includes the estimated annual decline in circuit de-energization and de-energization impact on customers. It also includes the "replacing, hardening, or undergrounding [of] any portion of the circuit or of upstream transmission or distribution lines."

New Guideline:

- **New Guideline 8b:** Pursuant to SB 533, Section 8 of the WMP requires utilities to identify circuits with frequent wildfire mitigation related de-energizations and the measures to be taken to reduce the need for and impact of such de-energizations. (Note: This guideline is associated with New Guidelines 0i and 2b.)

[10] SB 533 (2021) text: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB533 (accessed Oct. 15, 2021).



WMP SECTION 9: APPENDIX

Definitions of initiatives activities by category

Issue: Utilities currently do not report on pole clearance targets consistently in their WMPs. The utility must include pole clearance targets per Public Resources Code 4292.

New Guideline:

- **New Guideline 9a:** Section 9, Category E, "Vegetation management and inspection," requires the utility to report on statutory requirements for pole clearance targets per Public Resources Code 4292, as well as report on this program target in Table 5.3-1.

Issue: ~~Due to the similar nature of~~For initiatives numbered ~~46, 47~~45 and ~~64 of~~46 Section 7.3.2 of the 2021 Guidelines, Subsection "Vegetation management and inspections," many utilities provided ~~duplicate information for these initiatives. Linked to new requirements 7g, 7h, and 7i, the 2022 Guidelines require the utilities to report on three new distinct vegetation management initiatives. However, in the Appendix, Category E still includes the existing definitions for each of the previous initiatives numbered 46, 47, and 64.~~ information regarding both inspections and maintenance of vegetation.

New Guidelines:

- **New Guideline 9b:** Update title of No. ~~46~~45 to "Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment" to ~~combine previous Nos. 46 and 64 to~~ consider both inspections and maintenance of distribution electrical lines in one initiative activity. The definition has been updated accordingly, with the addition of "Describe the frequency of inspection and maintenance programs."
- **New Guideline 9c:** Update title of No. ~~47~~46 to "Detailed inspections and management practices for vegetation clearances around transmission electrical lines and equipment" to ~~combine previous Nos. 47 and 64 to~~ consider both inspections and maintenance of transmission electrical lines in one initiative activity. The definition has been updated accordingly, with the addition of "Describe the frequency of inspection and maintenance programs."
- ~~**New Guideline 9d:** Update title of No. 64 to "Additional vegetation management practices beyond the regulatory requirements and recommendations" to provide an opportunity for utilities to identify additional or "enhanced" vegetation management practices. The definition has been updated accordingly.~~

Issue: In Section 7.3.2, subsection "Vegetation management and inspections" initiative No. ~~49~~48 "Fuel management" of the 2021 Guidelines, the title and description of the fuel management initiative did not explicitly include management practices for all wood types,

including downed wood. As a result, utilities did not report on the management of all wood management practices.

New Guideline:

- **New Guideline ~~9e~~9d:** The definition has been updated to clarify other wood management practices (e.g., downed wood other than "slash").

Issue: "Vegetation management and inspections" does not include an initiative activity for post-fire vegetation management activities.

New Guideline:

- **New Guideline ~~9f~~9e:** A new initiative activity has been added as No. ~~65~~64 titled "Vegetation management activities post-fire" to provide an opportunity for utilities to identify post-fire vegetation management practices. A definition has been added accordingly.

Issue: "Vegetation management and inspections" initiative activity titled "Quality assurance / quality control of inspections" does not specify reporting the percentage of vegetation inspected or maintained annually.

New Guideline:

- **New Guideline ~~9g~~9f:** The definition of the "quality assurance / quality control of inspections" initiative has been updated to also require "identification of the percentage of vegetation that undergoes the inspection process annually, to be included as a performance target in Table 5.3-1, along with other statutory vegetation management targets." The title newly reads: "Quality assurance / quality control of vegetation management."

Issue: "Vegetation management and inspections" initiative activity titled "Recruiting and training of vegetation management personnel" does not require information on methods to improve training programs.

New Guidelines:

- **New Guideline ~~9h~~9g:** The definition of the "Recruiting and training of vegetation management personnel" initiative has been updated to also require "discussion of continuous improvement of training programs and personnel qualifications."

Section 9.3 – Covered Conductor Installation Reporting

Issue: Utilities were not required to report details of many aspects of their covered conductor programs. Implementation of the covered conductor programs appear to vary greatly between the utilities.

New Guideline:

- **New Guideline 9j:** Utilities must report on specific aspects of their covered conductor program, such as the methodology, key assumptions, decision-making processes, design, implementation, long-term operations, and other relevant program activities.

Section 9.4 – Undergrounding Implementation Reporting

Issue: Utilities were not required to report details of many aspects of their undergrounding programs.

New Guideline:

- **New Guideline 9j:** Utilities must report on undergrounding implementation, such as the methodology, key assumptions, decision-making processes, design, implementation, long-term operations, and other relevant program activities.

ATTACHMENT 3: WMP QUARTERLY REPORT – NON-SPATIAL DATA TEMPLATE

Issue: In the 2021 Guidelines, Table 2 of Attachment 2.3 (now Attachment 3) titled "Recent performance on outcome metrics" did not break out the risk event and utility-related ignition outcome metrics by different HTFD tiers or wind warning statuses. For proper understanding and evaluation of the outcome metrics over time, Energy Safety requires additional categorizations based on HFTD tiers and wind conditions.

New Guideline:

- **New Guideline 2.3a:** Table ~~3~~2 of Attachment 3 includes additional entries (rows) to delineate the outcome metrics data by HTFD tier and wind condition ("wind warning status~~").~~") for risk events and utility-related ignitions.

Issue: In the 2021 Guidelines, utilities were required to report on ignition data in both Table 7.1 and Table 7.2. As a result, Energy Safety and other interested parties had to refer to both tables to get a complete picture of ignitions, making evaluations more inefficient. In addition, Table 7.2 included separation columns for HFTD tiers and line types. This limited the use of Excel's filtering tools to view specific attributes of interest.

New Guidelines:

- **New Guideline 2.3b:** Table 7.1 no longer includes ignition data, while Table 7.2 includes ignition data previously reported in Table 7.1.

- **New Guideline 2.3c:** Table 7.2 requires the utility to report on HFTD tier(s) and line type(s) in rows, allowing the use of Excel's filtering tool.

Issue: Due to all the updates identified in Section 7 of this document, the existing data requested in Table 12 of Attachment 3 are no longer current.

New Guidelines:

- **New Guideline 2.3d:** Table 12 reflects all mitigation initiatives including the new requirements in Section 7 of the 2022 Guidelines (e.g., new initiative No. 65 on post-fire vegetation management practices).

ATTACHMENT 4: MATURITY MODEL

Issue: The 2021 Guidelines changed capability 32 in the Maturity Model from the 2020 Guidelines. However, the 2021 Guidelines did not update the supporting documentation defining the maturity level or survey questions to reflect this revision. In addition, for consistent maturity model evaluations across the 3-year plan cycle, Energy Safety did not intend for any Maturity Model changes.

New Guideline:

- **New Guideline 2.4a:** The 2022 Guidelines are consistent with the 2020 Guidelines with respect to capability 32 "Ignition prevention and suppression."

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