

February 1, 2023

Via E-Mail

Bear Valley Electric Service, Inc. ("BVES or Bear Valley") hereby transmits for filing the following:

<u>SUBJECT:</u> Q4 2022 BVES Quarterly Notification to the Office Of Energy Infrastructure Safety Regarding BVES's Implementation of its Wildfire Mitigation Plan Pursuant to Public Utilities Code Section 8389(e)(7)

Pursuant to Public Utilities Code ("PUC") Section 8389(e)(7), and the February 16, 2021 Office of Energy Infrastructure Safety ("Energy Safety") Compliance Operational Protocols, Bear Valley submits to Energy Safety this notification detailing the implementation of its approved Wildfire Mitigation Plan ("WMP"), implementation of BVES's most recent safety culture assessment and the recommendations of the most recent safety culture assessment, and a statement of activities and recommendations of the BVES Safety and Operations Committee meetings that occurred during the quarter.

PURPOSE

The purpose of this notification is to comply with the requirements of Section 8389(e)(7), which were added to the Public Utilities Code by Assembly Bill (AB) 1054 on July 12, 2019, and subsequently amended by AB 148 on July 22, 2021, to reflect the transition of the Wildfire Safety Division at the California Public Utilities Commission ("CPUC") to the Office of Energy Infrastructure Safety (OEIS). Section 8389(e)(7) requires electrical corporations to file a notice of implementation of its wildfire mitigation plan with OEIS "on a quarterly basis that details the implementation of both its approved wildfire mitigation plan and recommendations of the most recent safety culture assessment, and a statement of recommendations of the board of directors safety committee meetings that occurred during the quarter." Section 8389(e)(7) also requires that the notification "summarize the implementation of safety committee recommendations from the electrical corporation's previous notification and submission." BVES is simultaneously submitting this notice to the CPUC as an information only submittal.

This notification reports BVES's 2022 fourth quarter ("Q4") WMP activities, recorded Safety Committee meetings, and recommendations of the most recent safety culture assessment.

This Quarterly Notification Letter ("QNL") notification is BVES's fourth quarterly filing for calendar year 2022 and is simultaneously submitted to the CPUC's Safety Policy Division and its Program and Project Supervisor as an information-only submittal.

IMPLEMENTATION OF BVES'S WILDFIRE MITIGATION PLAN

To support sustained implementation and improvement of the WMP, BVES continues to track progress through metrics on applicable initiatives in 10 categories for mitigating wildfire in addition to the quarterly data, which conform to OEIS standards. BVES's quarterly initiative summary presentation includes information submitted to the OEIS under the Quarterly Data Report ("QDR") filings for Q4 2022 prepared in accordance with OEIS Data Guidelines (Version 3.0) of December 14, 2022.

In Attachment A, BVES provides an initiative summary of progress for individual mitigation measures during Q4 2022.

Overview of Significant Achievements and Issues

BVES made significant progress in achieving its WMP initiative targets for 2022.

As of the end of Q4 2022, some of the more significant achievements were:

- Exceeded the 2022 target to harden 412 poles along the main evacuation routes to the Big Bear Lake area. The target was achieved by installing fire resistant wire mesh on the 597 poles. This completes BVES's effort to have all of its evacuation routes hardened by 2022. BVES front loaded this effort to ensure it was completed prior to the fire season.
- Replaced 12.96 circuit miles of 34.5 kV sub-transmission and 4 KV distribution bare wire with covered conductors, which meets the 2022 annual target of 12.9 circuit miles.
- Automated a third substation achieving the annual target of automating three substations.
- Assessed 294 poles for safety factor, which is ahead of the 2022 annual target of 225.
 Also, 212 poles were replaced or remediated by the end of 2022, which is ahead of the 2022 annual target of 165.
- By the end of 2022, 853 poles had been intrusively inspected, which exceeds the annual target of 850.
- A total of 81 attachments were remediated as part of The Tree Attachment Removal Program in 2022. This exceeds the annual target of 80.
- Cleared vegetation to enhance clearance specifications along 86.6 circuit miles, which exceeds the 2022 annual target of clearing 72-circuit miles. Additionally, the vegetation management crews removed 147 hazard trees with strike potential, which is ahead of the 2022 annual target of 88.
- Completed LiDAR surveys, Aerial Thermography and HD Imagery inspections, and 3rd Party Independent Ground Patrol so that any fire hazard discrepancies could be addressed before the fire season.
- Community engagement on PSPS and WMP was at 712 engagements of various types by the end of 2022, which exceeds the 2022 annual target of 360 engagements. Additionally, the stakeholder and community briefs were conducted on the PSPS process.

 By the end of 2022, BVES completed 32.4 circuit miles of detailed inspections of distribution electric lines and equipment along with inspecting vegetation around distribution electric lines. This exceeded the 2022 annual target of 29.6 circuit miles. In addition, 255 miles of patrol inspections were completed meeting the target of 211 circuit miles.

Bear Valley did not meet or exceed its target for the Radford Line Replacement Project to replace poles with fire resistant poles and install covered conductors. Construction work on the Radford Line Replacement Project, which replaces bare wire with covered conductor and wood poles with fire resistant poles in the High Fire Threat District Tier 3, is delayed at least until June 2023 (previously BVES planned to start construction no later than June 2022). The delay is due to the United States Forest Service ("USFS") not approving BVES's permit to construct in time to start and complete construction before the winter weather season in 2022. BVES is working closely with the USFS and has made significant progress in satisfying USFS permitting requirements. BVES believes it is on track to obtain the permit according to the following updated timeline of major permitting milestones:

- Submit revised permit application to USFS for cultural survey- Step Completed
- USFS responds with 6 additional questions, Archaeologist will answer and resubmit – Step Completed
- Receive approval from USFS to conduct cultural survey-5 weeks- Step Completed
- Archaeologist will conduct cultural survey, write up report for NEPA & CEQA then sends to USFS- Step Completed
- USFS completes review of cultural report and submits to SHPO- Anticipated week of 2/13/23
- USFS finalizes CE- Anticipated week of 2/13/23
- USFS publishes CE for 30 day public review- Anticipated week of 2/20/23
- SHPO completes review and accepts cultural report- Anticipated week of 3/13/23
- BVES incorporates cultural report and completes CEQA categorical exemption -Anticipated week of 3/20/23
- USFS signs CE, NEPA process complete-**Anticipated week of 3/27/23**
- BVES files notice of detention with San Bernardino Co. clerk recorder **Anticipated week of 3/27/23**
- Once categorical exemption is filed with county clerk recorder there is a 30 day period for legal challenge-if no challenges-CEQA CE is final

Based on this timeline, BVES anticipates commencing the project in June 2023 depending on snowpack and complete the project by October 2023.

In the interim, BVES will continue to de-energize the Radford Line when load requirements do not require its operation, generally from the end of March through

November of each year. Prior to energizing the Radford Line, BVES will patrol the line. Additionally, when the line is energized, the recloser for that circuit will be placed in manual (no automatic reclosing).

IMPLEMENTATION OF BVES'S MOST RECENT SAFETY CULTURE ASSESSMENT

BVES completed its safety culture assessment in accordance with Resolution WSD-011. BVES staff conducted safety culture assessment surveys during the period of May 12, 2021 to May 26, 2021.

On October 27, 2021, OEIS issued the Safety Culture Assessment ("SCA") report to BVES. BVES accepted the report on October 28, 2021 by letter to OEIS. BVES initiated action to implement the recommendations of the report. The recommendations and status of implementing them are as follows:

1. <u>Recommendation</u>: Embed leadership skills development into the "Engaged Management" 12-month objective to improve the Bear Valley safety culture.

Action to Implement:

- The President personally provided training and coaching to managers and frontline supervisors on how to achieve safety culture improvements through open communications, listening, taking action on employee's concerns, setting the "high standards" example, and constantly emphasizing the important role their employees have in public safety. This training was conducted in December 2021.
- EHS Consultant provided professional training to leadership on performing effective JHAs and monitoring employee and contractor safety performance. Other training areas covered:
 - Skills to enhance leadership's ability to effect positive safety improvements.
 - Importance of addressing safety planning and objectives at BVES's Weekly Management Meeting.
 - o This training was conducted in March 2022.
- Leadership engages in open dialog with employee representatives at monthly management-employee safety committee meetings. This was first implemented at the January management-employee safety committee and is ongoing.
- Each Supervisor conducts weekly meetings with his/her Team where they:
 - Emphasize the role and responsibility each employee has in public safety.
 - Discuss the importance of listening to each other as well as other stakeholders in wildfire mitigation work.
 - Express their openness to receiving suggestions on how to improve public safety.

- Ensure employees know that reporting problems and/or mistakes is critical to public safety.
- Emphasize that work must only be done with the proper tools. If tools are not available or damaged, the work must stop and the situation must be resolved before starting work again. The President emphasized that if production is lost or schedules missed, so be it.
- o This effort was implemented in January 2022 and is ongoing.
- Safety performance is the top line on all manager and supervisor appraisals.
 Performance metric goals have been set. This was implemented on appraisals for 2021 performance and is ongoing.
- EHS contractor has been tasked with checking on the effectiveness of these effort with respect to employees' perceptions of leadership toward safety results are pending. This will be completed in November 2022.
- 2. <u>Recommendation</u>: In collaboration with its vegetation management contractor, BVES develops and implements an action plan to address safety culture issues, in particular regarding the flow of information about wildfire hazard mitigation. In addition, BVES has been working closely with its vegetation management contractor to ensure that the action plan to address safety culture issues is successfully implemented.

Action to Implement:

- The issue was discussed with the vegetation contractor's CEO, Operations Manager, and Safety Group by BVES President. This action was completed in November 2021.
- BVES worked closely with its vegetation contractor Safety Group to address
 the issues identified and to ensure a specific plan was in place to improve
 information flow among contractor employees and between contractor
 employees and supervisors about wildfire hazards. The plan included steps
 to increase compliance with procedures to control workplace and wildfire
 hazards. BVES and its vegetation contractor developed the plan jointly. This
 action was completed in March 2022.
- Vegetation Contractor conducted training with crews and then examined the
 effectiveness of the training through an internal safety culture survey, which
 showed significantly improved results. This action was completed in March
 2022.
- BVES meets with the vegetation contractor's field crews on a weekly basis to discuss safety issues, pass on safety and wildfire mitigation lessons learned, and improve situational awareness of operations and the environment (e.g., discuss high fire threat weather). This action was implemented in November 2021 and is ongoing.

BVES has fully implemented the recommendation of the 2021 SCA.

In August 2022, BVES employees and contractors involved in WMP work completed the 2022 SCA surveys and BVES submitted the documents requested by Energy Safety's SCA Team for the 2022 SCA.

SAFETY AND OPERATIONS COMMITTEE MEETING

On November 10, 2022, BVES's Safety and Operations Committee ("Committee") convened. Chairman Paul Marconi briefed the Committee on current safety items at BVES including Wildfire Mitigation Plan (WMP) compliance, COVID-19 and the plan to re-open offices, safety metrics and performance, and Safety Culture Assessment. He then briefed the Committee on fire season preparations and the status of 2022 WMP initiatives and targets. Chairman Marconi discussed these items and noted several WMP initiative safety accomplishments that improve public safety. Chairman Marconi then briefed the Committee on the 2023-2025 WMP Guidelines and Compliance schedule. The Committee discussed the briefed items, asked questions, which Mr. Marconi addressed, and, based on the information briefed, the Committee did not see the need to alter the initiatives or provide additional direction to management.

Chairman Marconi discussed the 2023 capital budget with respect to public safety WMP projects. He referred the Committee to a draft resolution provided recommending that the Board approve additional capital expenditures in the amount for public safety WMP capital improvement projects. Mr. Hawks recommended some edits to the draft resolution. The Committee discussed the modified resolution, and upon motion duly made, seconded and unanimously carried, the Committee approved the resolution.

There being no further business to come before the Committee, the meeting adjourned.

NOTICE

This filing will be submitted to the Office of Energy Infrastructure Safety, the Executive Director of the California Public Utilities Commission, and posted to the BVES website at https://www.bvesinc.com/safety/wildfire-mitigation-plan.

Sincerely,

/s/ Nguyen Quan

Nguyen Quan Manager, Regulatory Affairs Bear Valley Electric Service, Inc. 630 East Foothill Blvd. San Dimas, California 91773 Email: Regulatory Affairs@bvesinc.com (909) 394-3600 ext. 664

Attachment A

Initiative Summary of Progress for Individual Mitigation Measures during Q4 202



Wildfire Mitigation Plan Quarterly Notification Letter Initiatives Update

Bear Valley Electric Service, Inc.

WMP Activity Summary

Not Started Completed/Ongoing Ahead of Plan On Track Off Track Not Currently Scheduled*

7.3.4 - Asset Management & Inspections

Detailed inspections of distribution electric lines and equipment 7.3.4.1

Detailed inspections of transmission electric lines and equipment 7.3.4.2

Improvement of Inspections 7.3.4.3

Infrared inspections of distribution electric lines and equipment 7.3.4.4

Infrared inspections of transmission electric lines and equipment 7.3.4.5

Intrusive Pole Inspections 7.3.4.6 LiDAR inspections of distribution electric lines and equipment 7.3.4.7 LiDAR inspections of transmission electric lines and equipment 7.3.4.8

Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations 7.3.4.9

Other discretionary inspection of transmission electric lines and 7.3.4.10

Patrol inspections of distribution electric lines and equipment 7.3.4.11

Patrol inspections of transmission electric lines and equipment 7.3.4.12 Pole loading assessment program to determine safety factor 7.3.4.13

Quality assurance / quality control of inspections 7.3.4.14

Substation inspections 7.3.4.15

7.3.6 - Grid Operations & Protocols

Automatic Recloser Operations 7.3.6.1

Energization

7.3.6.5

7.3.6.1 7.3.

Protocols for PSPS Re-

Protective Equipment and Device Settings 7.3.6.2

> PSPS Events and Mitigation of PSPS Impacts 7.3.6.6

Crew-Accompanying Ignition Prevention and Suppression Resources and Services 7.3.6.3

Procedures and Training in Conditions of Elevated Fire Risk 7.3.6.4

Personnel Work

Stationed and On-Call Ignition Prevention and Suppression Resources and Services 7.3.6.7

7.3.1 - Risk Assessment & Mapping

A Summarized Risk
Map That Shows the
Overall Ignition
Probability and
Estimated Wildfire
Consequence Along
the Electric Lines and
Equipment
7.3.1.1

Climate-Driven Risk Map and Modeling Based on Various Relevant Weather Scenarios 7.3.1.2

Initiative Mapping and Estimation of Wildfire and PSPS Risk-Reduction Impact 7.3.1.4

Ignition Probability Mapping Showing the Probability of Ignition Along the Electric Lines and Equipment 7.3.1.3

Match Drop Simulations Showing the Potential Wildfire Consequence of Ignitions that Occurs Along the Electric Lines and Equipment 7.3.1.5

7.3.7 - Data Governance

Centralized Repository for Data 7.3.7.1 Collaborative Research on Utility Ignition and/or Wildfire 7.3.7.2

Documentation and
Disclosure of WildfireRelated Data and Algorithms
7.3.7.3

Tracking and Analysis of Near Miss Data 7.3.7.4

7.3.10 - Stakeholder Cooperation & Community Outreach

Community Engagement 7.3.10.1 Cooperation and best practice sharing with agencies outside CA 7.3.10.2

Cooperation with suppression agencies 7.3.10.3

Forest service and fuel reduction cooperation and joint roadmap 7.3.10.4

WMP Activity Summary

7.3.3.8

Pole Loading Infrastructure Hardening and

Replacement Program Based on Pole

Loading Assessment Program

7.3.3.13

7.3.3.7

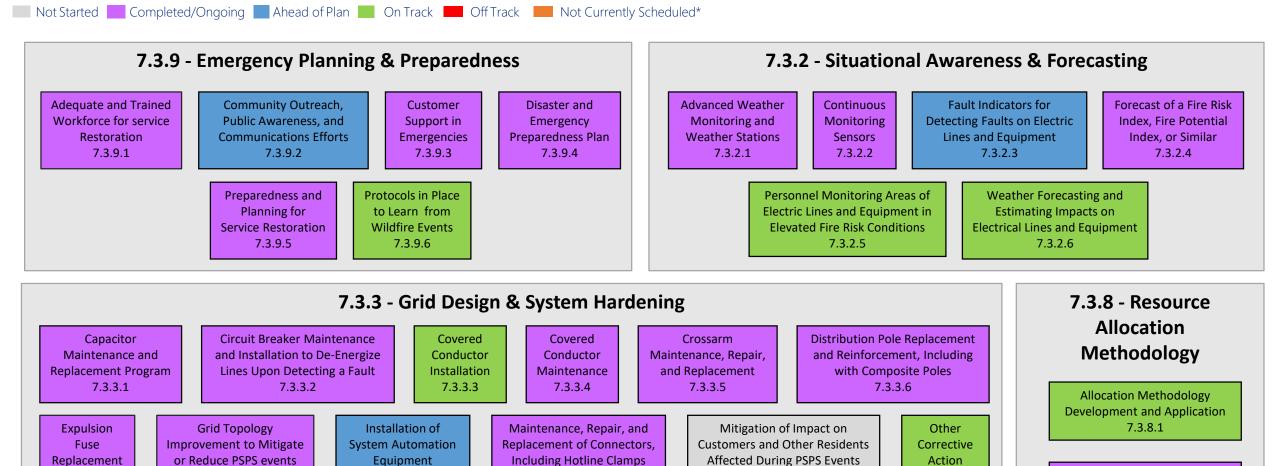
7.3.3.9

Transformers

Maintenance and

Replacement

7.3.3.14



Risk Reduction Scenario

Development and Analysis 7.3.8.2

Risk Spend Efficiency Analysis

7.3.8.3

7.3.3.12

Updates to Grid Topology

to Minimize Risk of

Ignition in HFTDs

7.3.3.17

7.3.3.11

Undergrounding of

Electric Lines and/or

Equipment

7.3.3.16

(*) Not Currently Scheduled – BVES included this Status Icon to indicate where an initiative is not currently identified for this WMP cycle, or, that it is not applicable (BVES does not own or operate assets equal to or greater than 65kV).

7.3.3.10

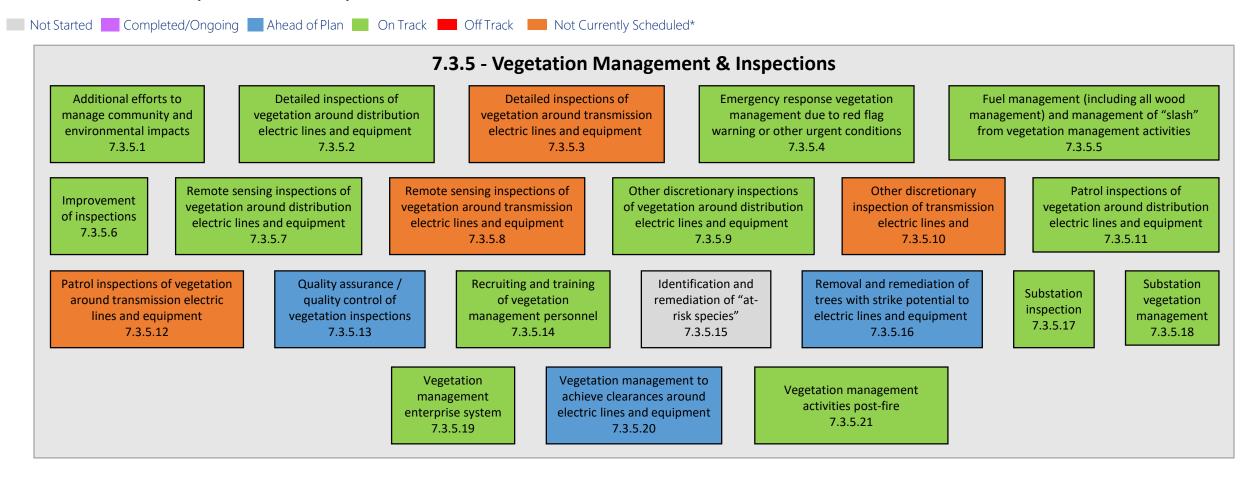
Transmission Tower

Maintenance and

Replacement

7.3.3.15

WMP Activity Summary



7.3.1 - Risk Assessment & Mapping

A Summarized Risk Map That Shows the Overall Ignition Probability and Estimated Wildfire Consequence Along the Electric Lines and Equipment 7.3.1.1

Ignition Probability & Wildfire Consequence Mapping Project

Completed

Ignition Probability Mapping Showing the Probability of Ignition Along the Electric Lines and Equipment 7.3.1.3

Ignition Probability & Wildfire Consequence Mapping Project Completed

Climate-Driven Risk Map and
Modeling Based on Various Relevant
Weather Scenarios
7.3.1.2
Ignition Probability & Wildfire

Ignition Probability & Wildfire Consequence Mapping Project Completed

Initiative Mapping and Estimation of Wildfire and PSPS Risk-Reduction Impact 7.3.1.4

Ignition Probability & Wildfire Consequence Mapping Project

On Track

Match Drop Simulations Showing the Potential Wildfire Consequence of Ignitions that Occurs Along the Electric Lines and Equipment 7.3.1.5

Ignition Probability & Wildfire Consequence Mapping Project

Completed

Contracting with Risk Mapping Resource:

2022 Goal: During 2021 in conjunction with the contracted resource BVES completed its initial Risk Mapping. Due to a lack of historical data the PSPS risk reduction aspect was deferred. For 2022 BVES plans to evaluate the best course of action to add this tool to its Risk Assessment & Mapping program.

Key Actions: BVES continues to evaluate the best course of action to add PSPS Risk Reduction mapping to its Risk Assessment & Mapping program.

7.3.7 - Data Governance

Centralized Repository for Data 7.3.7.1

GIS Data Collection & Sharing

On Track

GIS Data Collection & Sharing Improvements:

BVES continues to work towards a class leading Data Repository. **Key Actions:** BVES continue to work with its contracted experts to update its GIS database as well as develop a more streamlined method for reporting and sharing of information.

Tracking and Analysis of Near Miss Data 7.3.7.4 WMP Metrics Tracking

Ongoing

WMP Metrics Tracking:

BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q2 of 2022 there were no compliance issues identified.

Key Actions: BVES recorded necessary metrics for inclusion in quarterly reporting.

Documentation and disclosure of wildfire-related data and algorithms 7.3.7.3

GIS-Based Apps // Data Sharing Activities

On Track

GIS-Based Applications & Data Sharing Activities:

Key Actions: BVES is an active participant in Energy Safety's Risk Model Working Group and will continue to exchange information and lessons learned from the participants to improve its ability to utilize probabilistic risk models and mapping.



7.3.2 - Situational Awareness & Forecasting

Advanced Weather Monitoring and
Weather Stations
7.3.2.1
Situational Awareness Hardware
Program
Completed

Revised Schedule for 2021 Planned Deployment & Additional Installation:

Volume vs 2022 Goal: BVES does not have any planned weather stations for 2022.

Key Actions: BVES continues to evaluate the needed for future weathers stations in its operating territory.

ne needed for future

Contracting with Risk Mapping Resource:

Volume vs 2022 Goal: During 2021 in conjunction with the contracted resource BVES completed its initial Risk Mapping.

Key Actions: BVES continues to evaluate the need for future improvements to the designed system.

Continuous Monitoring Sensors 7.3.2.2 Situational Awareness Hardware Program

Completed

Situational Awareness Hardware Program:

Volume vs 2022 Goal: BVES does not have any planned HD Cameras for 2022.

Key Actions: BVES continues to evaluate the needed for future HD Cameras in its operating territory.

Personnel Monitoring Areas of Electric Lines and Equipment in Elevated Fire Risk Conditions 7.3.2.5

Forecast of a Fire Risk Index, Fire

Potential Index, or Similar

7.3.2.4

Weather Consultant / Risk

Mapping

Completed

Grid Operations & Protocols
No High-Risk Events
Occurred

Grid Operations & Protocol:

Volume vs 2022 Goal: BVES has established a resource allocation level for the instance where a high fire risk condition occurs.

Key Actions: BVES currently has the resource pool available to combat high fire risk conditions in its operating area.

Fault Indicators for Detecting Faults on Electric Lines and Equipment 7.3.2.3

Situational Awareness Hardware Program On Track

<u>Situational Awareness Hardware Program:</u>

Volume vs Q4 2022 Goal: BVES began this program in Q3 with a target of 30 fault indicator installations in Q4 and 50 in 2022. BVES was able to complete 24 installations in Q4. **Key Actions:** BVES completed and surpassed the 2022 goal of 50 fault indicator installations by installing 99.

Weather Forecasting and Estimating Impacts on Electrical Lines and Equipment 7.3.2.6

Weather Consultant
Support Requirement
Met

Weather Consultant for Weekly Reporting:

2022 Goal: BVES currently has a weather consultant on payroll who supports the weather forecasting and analysis necessary.

Key Actions: Additional task for quarterly aggregation of High Wind Warning and Red Flag Warning accounts to support Quarterly Data Reports.

7.3.3 - Grid Design & System Hardening

Covered Conductor Installation 7.3.3.3.1 **Covered Conductor**

Replacement Program

Ahead of Plan

Covered Conductor Replacement Program:

Volume vs Q4 2022 Goal: BVES planned to complete a total of 12.9 circuit miles by the end of Q4. BVES was able to complete total of 12.96 by Q4. The target for 2022 is 12.9 circuit miles. **Key Actions:** BVES was able to complete 2.61 circuit miles of

covered conductor instillation. BVES met its 2022 Target.

Covered Conductor 7.3.3.3.2

Covered Conductor Replacement Program -Radford

Delayed

Covered Conductor Replacement Program - Radford:

Volume vs 2022 Goal: BVES has had to adjust its target for 2022 to 0 circuit miles.

Key Actions: Due to not being able to obtain permits from the U.S. Forest Service BVES will not be able to start work on this project until 2023.

Distribution Pole Replacement and Reinforcement. Including with Composite Poles 7.3.3.6.1

Distribution Pole Replacement and Reinforcement - GO 95 **Projects**

Distribution Pole Replacement and Reinforcement - GO 95 Projects:

Volume vs 2022 Goal: There are no current targets for this initiative in 2022.

Key Actions: Initiative targets will be evaluated for future calendar years.

Distribution Pole Replacement and Reinforcement, Including with Composite Poles 7.3.3.6.2

Covered Conductor Project – Radford Line

Other Corrective Action 7.3.3.12.1

Tree Attachment Removal Program **Completion Toward 80 Attachment Removals for the Year:**

Volume vs Q4 2022 Goal: BVES removed 32 tree attachments in Q4 of 2022, totaling 83 out of 80 planned for 2022.

Key Actions: BVES plans to remove 80 tree attachments in 2022. BVES will remove tree attachments in association with other work as well.

Other Corrective Action 7.3.3.12.2 **Evacuation Route**

Hardening Ahead of Plan **Evacuation Route Hardening:**

Volume vs 2022 Goal: BVES planned to harden 412 poles in 2022 as part of its Evacuation Route Hardening Program. 412 wood poles were hardened in Q1 with a wire mesh protective coating. BVES hardened an additional 185 poles in Q3 & Q4.

Key Actions: BVES was able to meet its 2022 Goal of 412 poles hardened in Q1 of 2022. BVES has now hardened 597 poles in 2022.

Covered Conductor Project -Radford Line:

Volume vs 2022 Goal: There are no current targets for this initiative in 2022.

Key Actions: Initiative targets will be evaluated for future calendar years.

Distribution Pole Replacement and Reinforcement, Including with Composite Poles 7.3.3.6.3

Evacuation Route Hardening-Pilot

2020 Completed Route Hardening Pilot:

Volume vs 2022 Goal: The BVES does not have an established goal for this pilot as it was completed in 2020.

Distribution Pole Replacement and Reinforcement, Including with Composite Poles 7.3.3.6.4

Evacuation Route Hardening Ahead of Plan

Evacuation Route Hardening:

Volume vs 2022 Goal: BVES planned to harden 412 poles in 2022 as part of its Evacuation Route Hardening Program. 412 wood poles were hardened in Q1 with a wire mesh protective coating. BVES hardened an additional 185 poles in Q3 & Q4. **Key Actions:** BVES was able to meet its 2022 Goal of 412 poles hardened in Q1 of 2022. BVES has now hardened 597 poles in 2022.

Undergrounding of electrical lines and/or equipment 7.3.3.16 **Ongoing Routine Undergrounding Projects**

Ongoing Routine Undergrounding Projects:

Volume vs Goal: BVES will continue to reassess the need for potential undergrounding projects and will continue to exchange information with other utilities on the advantages and disadvantages of UG and covered conductors through working groups. BVES will watch carefully for any advances in UG installation, especially those that reduce the price point while maintaining GO 128 minimum specifications.

7.3.3 - Grid Design & System Hardening

Expulsive Fuse Replacement 7.3.3.7

Fuse Replacement Program

O Remaining

Mitigation of Impact on Customers and Other Residents Affected During PSPS Events 7.3.3.11.1

Energy Storage Project
Planned

Installation of System
Automation Equipment
7.3.3.9.1
Grid Automation Program

Installation of System
Automation Equipment
7.3.3.9.2
Grid Automation Program //

FLISR

Installation of System Automation Equipment 7.3.3.9.3

Grid Automation Program //
Fuse Trip Saver

0 Conventional Fuses Remaining:

Volume vs 2022 Goal: There are no current targets for this initiative in 2022.

Key Actions: This initiative was completed in 2021.

5 MW/ 20 MWh Energy Storage Facility Planned in 2023:

2022 Goal: Seek siting location and work on associated agreements.

Key Actions: BVES is still in the process of siting the storage device.

Grid Automation:

Volume vs Q4 2022 Goal: BVES planned to connect 1 substations to SCADA in Q4 of 2022. BVES was able to connect one substation to SCADA in Q4.

Key Actions: BVES has connected 3 substations to SCADA as of O4.

Grid Automation FLISR Project:

Volume vs 2022 Goal: Complete the project deliverables which includes software/system instillation.

Key Actions: This project/program will be completed in 2022.

Grid Automation Fuse Trip Saver Project:

Volume vs 2022 Goal: There are no activities planned for this initiative in 2022.

Key Actions: This project/program will begin in 2023.

Grid Topology Improvement to Mitigate or Reduce PSPS events 7.3.3.8

Grid Topology Improvements

Completed

Mitigation of Impact on Customers and Other Residents Affected During PSPS Events 7.3.3.11.2

BVPP Phase 4 Upgrade Project

Planned

Grid Topology Improvements - Completed:

Volume vs Goal: BVES will install sectionalizing devices as the need is determined. Currently, there are sufficient sectionalizing devices in the system; zero are planned in 2022.

Key Actions: No actions were taken for this initiative in Q4 of 2022.

BVPP Phase 4 Upgrade Project Planned in 2023:

2022 Goal: There are no activities planned for this initiative in 2022.

Key Actions: This project/program will begin in 2023.

Updates to Grid Topology to Minimize Risk of Ignition in HFTDs 7.3.3.17

Grid Topology Improvements

Completed

Grid Topology Improvements - Completed:

Volume vs Goal: BVES will install sectionalizing devices as the need is determined. Currently, zero are planned in 2022. **Key Actions:** No actions were taken for this initiative in Q4 of 2022.

Pole Loading Infrastructure
Hardening and Replacement
Program Based on Pole Loading
Assessment Program
7.3.3.13

Pole Loading & Replacement Program 197 Poles Assessed

Pole Assessment Program:

Volume vs Q4 2022 Goal: The goal for end of Q4 was to replace 165 poles as part of the pole loading & assessment process. BVES was able to replace 197 poles as of end Q4.

Key Actions: BVES has replaced 197 of its targeted 165 poles for 2022.

7.3.3 - Grid Design & System Hardening

Capacitor Maintenance and Replacement Program 7.3.3.1

Complete / Ongoing

Crossarm Maintenance, Repair, and Replacement 7.3.3.5

Complete / Ongoing

Circuit Breaker Maintenance and Installation to De-Energize Lines Upon **Detecting a Fault** 7.3.3.2

Complete / Ongoing

Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps 7.3.3.10

Complete / Ongoing

Covered Conductor Maintenance 7.3.3.4

Complete / Ongoing

Transformers Maintenance and Replacement 7.3.3.14

Complete / Ongoing

BVES Maintenance Best Practice:

The following Grid Design and System Hardening initiatives are covered under ongoing maintenance of sub-transmission and distribution facilities and are not separated as unique WMP initiatives.

7.3.10 - Stakeholder Cooperation & Community Outreach

Community engagement

7.3.10.1

Community Outreach Program

Exceeded Targets

Community Outreach Program:

Volume vs Q4 2022 Goal: BVES had planned to conducted at minimum 90 outreach activities. BVES recorded 250 outreach activities 278% of target for Q4.

Key Actions: Grizzly Newspaper advertisements are posted during the week (M-F) for either WMP or PSPS and BVES will have 1 advertisement broadcasted each month.

Cooperation and best practice sharing with agencies outside CA 7.3.10.2

On Track

Cooperation and sharing with agencies outside CA:

Volume vs 2022 Goal: Currently BVES has attended two utility conferences in 2022 that include wildfire mitigation best practices.

Key Actions: BVES will participate in another utility conference in Q4 2022 and develop a plan for 2023.

Cooperation with suppression agencies 7.3.10.3

Coordination On Track

Cooperation with suppression agencies:

Volume vs 2022 Goal: BVES has cooperative discussions with local suppression agencies. BVES plans to have further discussion with suppression agencies and determine if there are additional actions that can be taken to improve their program. **Key Actions:** BVES established plans to engage in coordination efforts based on PSPS activations, which will include suppression agencies.

Forest service and fuel reduction cooperation and joint roadmap 7.3.10.4

On Track

Cooperation with forest service and fuel reduction:

Volume vs 2022 Goal: Currently BVES has some cooperative discussions in forest service and fuel reduction cooperation and joint roadmap programs. BVES plans to have discussions with their forest service contacts to determine the applicability of these programs to improve their overall program. **Key Actions:** BVES plans to engage U.S. Forest Service in this

area.

Not Started Completed/Ongoing Ahead of Plan On Track Off Track

7.3.4 - Asset Management & Inspection

Detailed inspections of distribution electric lines and equipment 7.3.4.1

Detailed Inspection Program
Ahead of Schedule

Infrared inspections of distribution electric lines and equipment 7.3.4.4

UAV Thermography Program
On Track

Intrusive Pole Inspections
7.3.4.6
Intrusive Pole Inspection Program

On Track

LiDAR inspections of distribution electric lines and equipment 7.3.4.7

LiDAR Inspection Program

On Track

Detailed Inspection Activities

Volume vs Q4 2022 Goal: BVES set a target of 29 circuit miles by end of Q4.

Key Actions: BVES was able to complete 32.41 circuit miles of inspection by the close of Q4 2022.

UAV Inspection Activities

Volume vs 2022 Goal:211 circuit miles were scheduled for 2022. **Key Actions:** BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Intrusive Pole Inspections

Volume vs Q4 2022 Goal: BVES planned to assess 850 poles in 2022.

Key Actions: BVES was able to complete 853 intrusive inspections in 2022.

LiDAR Inspection Activities

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022. **Key Actions:** BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations
7.3.4.9.1

Third Party Ground Patrol

On Track

Contracted Third Party Inspection

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022.

Key Actions: BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting 3rd party ground patrol inspections of the entire system annually.

Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations
7.3.4.9.2

UAV HD Photography/Video Program On Track

Improvement of Inspections 7.3.4.3

Ongoing Effort

UAV HD Photography/Video Program

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022.

Key Actions: BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Improvement of Inspections:

Key Actions: BVES is always trying to optimize its inspections and is open to changes/adaptations leading to a better process. BVES is working on upgrading inspection documentation tool for use in the field.

7.3.4 - Asset Management & Inspection

Patrol inspections of distribution electric lines and equipment 7.3.4.11

Patrol Inspection Program
On Track

Patrol Inspection within the Service Area

Volume vs Q4 2022 Goal: BVES targeted 211 circuit miles inspected by Q3 2022. BVES was not able to complete its Q3 target but was able to achieve its annual target of 211 by conducting 255.16 circuit miles by the close of 2022.

Key Actions: BVES exceeded its goal of 211 circuit miles by conducting 255.16 circuit miles of inspection in 2022.

Pole loading assessment program to determine safety factor 7.3.4.13

Pole Loading & Replacement Program

Ahead of Plan

Pole Loading & Replacement

Volume vs Q4 2022 Goal: BVES targeted 225 pole assessments by close of Q4 2022. BVES was able to conduct 87 pole assessments in Q4 2022. BVES has conducted 381 pole assessments as of close Q4 2022.

Key Actions: BVES conducted 381 pole assessments in 2022.

Quality assurance / quality control of inspections 7.3.4.14

Quality Control of Inspections
Planned

Quality Control for Electrical Inspections Program

Volume vs Goal: BVES has not yet established quantitative or qualitative targets for the planned quality control program and therefore, have no quarterly units to report in the Quarterly Advice Letter.

Key Actions: Currently on track to discuss framework for formal controls development for internal and third-party inspection patrols.

Substation inspections 7.3.4.15

GO-174 Substation Inspection Program

On Track

Substations Inspected

Volume vs Q4 2022 Goal: BVES targeted 144 substation inspections by close of Q4 2022. BVES was able to complete 144 substation inspections in 2022. **Key Actions:** BVES plans to conduct 36 substation inspections per quarter with an annual target of 144 substation inspections.

7.3.5 - Vegetation Management & Inspection

Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment 7.3.5.2

Detailed Inspection

Program

Exceeded Target

Detailed Inspection Activities:

Volume vs Q4 2022 Goal: BVES set a target of 29 circuit miles by end of Q4. BVES plans to conduct 29 circuit miles of inspection in 2022. **Key Actions:** BVES was able to complete 32.41 circuit miles of inspection by the close of 2022 exceeding its annual target of 29 circuit miles.

Emergency Preparedness and Response Program:

Volume vs Goal: BVES did not record an emergency in Q4 of 2022; therefore, use of the Emergency Preparedness & Response Program was not required.

Emergency response vegetation management due to red flag warning or other urgent conditions 7.3.5.4

Emergency Preparedness & Response Program

Improvement of inspections 7.3.5.6

Quality Control of Inspections

Improvement of Inspections:

Volume vs Q4 2022 Goal: One vegetation management audit was planned for Q4 2022. BVES was able to complete 1 vegetation management audits in Q4 2022. BVES has conducted 5 audits as of Q4 2022.

Key Actions: BVES plans to conduct one audit per quarter with an annual target of 4 vegetation management audits in 2022.

Identification and remediation of "at-risk species" 7.3.5.15

Planned

Remediation of At-Risk Species:

Key Actions: BVES and its contractors account for at risk species when doing field work and evaluation. Cycle Breaker vegetation is are an example of what may be recorded. Remediation as a separate initiative is considered for the future with no set program/project at this time.

Remote sensing inspections of vegetation around distribution electric lines and equipment 7.3.5.7

LiDAR Inspection Program

LiDAR Inspection Activities

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022.

Key Actions: BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Other discretionary inspections of vegetation around distribution electric lines and equipment 7.3.5.9.1

Third Party Ground Patrol

Contracted Third Party Inspection

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022.

Key Actions: BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Other discretionary inspections of vegetation around distribution electric lines and equipment 7.3.5.9.2

UAV HD
Photography/Video
Program

UAV HD Photography/Video Program

Volume vs 2022 Goal: 211 circuit miles were scheduled for 2022.

Key Actions: BVES completed 211 circuit miles in Q3, fulfilling the goal of conducting infrared inspections of the entire system annually.

Patrol inspections of vegetation around distribution electric lines and equipment 7.3.5.11

Patrol Inspection Program

Patrol Inspection within the Service Area

Volume vs Q4 2022 Goal: BVES targeted 211 circuit miles inspected by Q3 2022. BVES was not able to complete its Q3 target but was able to achieve its annual target of 211 by conducting 255.16 circuit miles by the close of 2022.

Key Actions: BVES exceeded its goal of 211 circuit miles by conducting 255.16 circuit miles of inspection in 2022.

Not Started Completed/Ongoing Ahead of Plan On Track Off Track

7.3.5 - Vegetation Management & Inspection

Quality assurance / quality control of vegetation inspections 7.3.5.13

Quality Control of Inspections
53 QC Reviews

Recruiting and training of vegetation management personnel 7.3.5.14

Vegetation Management Program
Staffing
Met Targets

Removal and remediation of trees with strike potential to electric lines and equipment 7.3.5.16

Enhanced Vegetation Management Program

Fuel management (including all wood management) and management of "slash" from vegetation management activities
7.3.5.5

Enhanced Vegetation Management Program

Contractor Meets Requirements

Quality Control for Electrical Inspections Program

Volume vs Q4 2022 Goal: BVES planned to conduct 18 quality controls reviews in Q4 2022. BVES was able to conduct 52 quality control reviews in Q4 2022.

Key Actions: BVES plans to conduct 18 quality control reviews per quarter with an annual target of 72 quality control reviews in 2022. BVES was able to conduct 132 reviews in 2022.

Resource Allocation & Training:

BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q4 of 2022, there were no compliance issues identified. **Key Actions:** BVES reviewed staffing program and methodology

Mid-Year Detailed Inspection Activities

Volume vs Q4 2022 Goal: BVES planned to remove/remediate 22 hazardous trees in Q4 2022. BVES was able to remove/remediate 31 hazardous trees in Q4 2022.

Key Actions: BVES plans to remove/remediate 88 trees in 2022. BVES removed/remediated 147 trees in 2022.

Enhanced VM Program Inspection

Key Actions: This is a contractor lead initiative. Following the monthly substation inspections identified vegetation concerns and their associated waste are removed by the contractor per the contract. At which point BVES is notified, and the inspection and removal is logged.

Substation inspection 7.3.5.17

GO-174 Substation Inspection Program

Inspected & Cleared Vegetation

Substation vegetation management 7.3.5.18

Substation Vegetation
Management Inspections &
Corrections

Substations Inspected

Volume vs Q4 2022 Goal: BVES targeted 144 substation inspections by close of Q4 2022. BVES was able to complete 144 substation inspections in 2022. **Key Actions:** BVES plans to conduct 36 substation inspections per quarter with an annual target of 144 substation inspections.

Substation Inspection

Key Actions: This is a contractor lead initiative. Following the monthly substation inspections identified vegetation concerns and their associated waste are removed by the contractor per the contract. BVES is then notified, and the inspection and removal is logged.

Vegetation management enterprise system 7.3.5.19

GIS Data Collection & Sharing
Trimmed Trees Logged

GIS Data Collection & Sharing:

Volume vs 2022 Goals: BVES continues to work towards a class leading Data Repository.

Key Actions: BVES continue to work with its contracted experts to update its GIS database as well as develop a more streamlines method for reporting and sharing of information.

Vegetation management to achieve clearances around electric lines and equipment 7.3.5.20

Enhanced Vegetation Management Program

Circuit Miles Cleared:

Volume vs Q4 2022 Goals: BVES planned to cleared 72 circuit miles by close Q4 2022. BVES was able to clear 12.38 circuit miles in Q4 2022 bring the YTD total to 86.84. **Key Actions:** BVES plans to clear 72 circuit miles in 2022. With the 12.38 cleared in Q4 BVES has cleared 86.84 circuit miles in 2022.

7.3.5 - Vegetation Management & Inspection

Additional efforts to manage community and environmental impacts 7.3.5.1

Contracted Forester Service //
Environmental Impact Mitigation
Activities

Quality Control for Electrical Inspections Program

Volume vs Goal: BVES will continue to conduct outreach with the USFS, CAL FIRE, and Big Bear Fire Department to develop collaborative measures in the area of fuels management. BVES will also exchange information with other utilities to determine best practices in this area of managing community and environmental impacts on the vegetation management program.

Vegetation Management Activities Post-Fire 7.3.5.21

Veg Management Activities Post-Fire

Vegetation Management Activities Post-Fire:
Volume vs Goal: BVES will consider example preparatory vegetation management activities performed by similar IOUs in response to a wildfire and make updates, as necessary. BVES will consult with CAL FIRE, other utilities, and vegetation contractors to develop a list of preparations that would be beneficial to have in place in the event the

service area experiences a wildfire.

7.3.6 - Grid Operations & Operating Protocols

Automatic Recloser Operations 7.3.6.1 **Grid Automation Program**

Completed

Fault Interrupters - IntelliRupters Pulsing Auto Reclosers - Completed Cycle Work:

Volume vs Goal: BVES plans to install S&C's Pulse Closer Fault Interrupters across its major 34 kV system auto-reclosers that was completed in 2020. **Key Actions:** None planned for 2022.

Protective equipment and device settings 7.3.6.2

Protective Equipment and Device Settings:

Key Actions: All protective device settings are logged and controlled by Engineering. The settings are set based on coordination studies. BVES does not use special Fast Settings for fire season.

Protective Equipment and Device Settings

Crew-Accompanying Ignition Prevention and Suppression Resources and Services 7.3.6.3

Emergency Preparedness & Response Program

No Emergency Events

Stationed and On-Call Ignition
Prevention and Suppression
Resources and Services
7.3.6.7
Emergency Preparedness &
Response Program

Ongoing

Emergency Preparedness & Response Program:

BVES has an established program in place. BVES continues to monitor all aspects of the program for compliance. During the period Q4 of 2022, there were no emergency events that would require the use of said program.

Key Actions: There were no key actions related to this program in Q4 of 2022.

Personnel Work Procedures and Training in Conditions of Elevated Fire Risk 7.3.6.4

PSPS Program & Procedures
Ongoing

Protocols for PSPS Re-Energization 7.3.6.5 PSPS Program & Procedures

Established

PSPS Events and Mitigation of
PSPS Impacts
7.3.6.6
PSPS Program & Procedures

O PSPS Events

PSPS Program & Procedure:

BVES has an established program and procedures in place. BVES continues to monitor all aspects of the program for compliance. During the period Q4 of 2022 there were no PSPS events that would require the use of said program.

Key Actions: There were no key actions related to the Program as there were no PSPS events.

Not Started Completed/Ongoing Ahead of Plan On Track Off Track

7.3.9 - Emergency Planning & Preparedness

Adequate and Trained Workforce for Service Restoration 7.3.9.1 **Resource Allocation** Methodology

Completed

Resource Allocation Methodology:

BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q4 of 2022, there were no compliance issues identified.

Key Actions: Staffing for service restoration was reviewed and declared adequate. In the instance of a service restoration event BVES will review the results and re-evaluate staffing if necessary.

Community Outreach, Public Awareness, and **Communications Efforts** 7.3.9.2

Community Outreach Program

Targets Exceeded

Community Outreach Program:

Volume vs Q4 2022 Goal: BVES had planned to conducted at minimum 90 outreach activities. BVES recorded 250 outreach activities 278% of target for

Key Actions: Grizzly Newspaper advertisements are posted during the week (M-F) for either WMP or PSPS and BVES will have 1 advertisement broadcasted each month.

Disaster and Emergency Preparedness Plan 7.3.9.4 **Emergency Preparedness**

& Response Program

Established

Customer Support in Emergencies 7.3.9.3 **Emergency Preparedness** & Response Program

Established

Preparedness and Planning for Service Restoration 7.3.9.5

Emergency Preparedness & Response Program

Ongoing

Protocols in Place to Learn from Wildfire Events 7.3.9.6 **Emergency Preparedness** & Response Program **In Progress**

Emergency Preparedness and Response Program:

Volume vs Q4 2022 Goal: BVES did not record an emergency in Q4 of 2022. This means that the use of the Emergency Preparedness & Response Program was not required.

7.3.8 - Resource Allocation Methodology

Allocation Methodology Development and **Application** 7.3.8.1 **Resource Allocation**

Methodology

Program In Process

Resource Allocation Methodology [Primary]:

BVES has an established program in place and continues to monitor all aspects of the program for additional staff. During the period Q4 of 2022, there were no gap issues identified.

Key Actions: BVES routinely reviewed staffing program needs.

Risk Reduction Scenario **Development and Analysis** 7.3.8.2

Ignition Probability & Wildfire Consequence Mapping Completed

Contracting with Risk Mapping Resource

2022 Goal: During 2021 in conjunction with the contracted resource BVES completed its initial Risk Mapping. Due to a lack of historical data, the PSPS risk reduction aspect was deferred. For 2022, BVES plans to contract with Technosylva to develop real-time fire modeling capabilities.

Key Actions: BVES continues to evaluate the best course of action to add PSPS Risk Reduction mapping and has engaged a contractor for additional modeling support. BVES has a contract with Technosylva and is making progress on project goals.

Risk Spend Efficiency **Analysis** 7.3.8.3 **Ignition Probability & Wildfire Consequence** Mapping **In Progress**

Contracting with Risk Mapping Resource

2022 Goal: BVES completed its initial Risk Mapping in 2021 in conjunction with a contracted resource. Due to a lack of historical data, the PSPS risk reduction aspect was deferred. For 2022 BVES plans to evaluate the best course of action to add this tool to its Risk Assessment & Mapping program.

Key Actions: BVES continues to evaluate the best course of action to add PSPS Risk Reduction mapping to its Risk Assessment & Mapping program.