Docket	:	A.25-06-017
Exhibit Number	:	CA-05-SA
Commissioner	:	M. Baker
Ad.min Law Judge	:	R. Haga
Witness	:	A. Asadi

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

APPENDIX B

SUPPORTING ATTACHMENTS ON TESTIMONY

PUBLIC

San Francisco, California
December 12, 2025

LIST OF ATTACHMENTS FOR APPENDIX B

Attachment #	Title	Bates No.
Attachment 1	SCE Q4 2020 Quarterly Data Report, February 5, 2021. Available at: https://www.sce.com/outages-safety/wildfire-safety/wildfire-mitigation-plan-documents/wmp-historical-documents	CA-05-0001
Attachment 2	Liberty's response to data request CalAdvocates-LIB-A2506017-006, question 1, September 5, 2025. The internally attached GIS geodatabase file "WEMA_RequestedData.gdb" is available upon request.	CA-05-0005
Attachment 3	*SCE PSPS Post Event Report – November 14 to November 18, 2020*, December 4, 2020.	CA-05-0010
Attachment 4	SCE's response to data request CalAdvocates-SCE-A2506017-001, September 22, 2025.	CA-05-0335
Attachment 5	SCE's response to data request CalAdvocates-SCE-A2506017-001, September 22, 2025.	CA-05-0344
Attachment 6	University of Utah, MesoWest at: https://mesowest.utah.edu/.	CA-05-0347
Attachment 7	American National Standards Institute, AMPP TR1505-2022: Wildfires Damage to Combustion Products, January 21, 2025. Available at: https://blog.ansi.org/ansi/ampp-tr1505-2022-wildfires-impact-on-power-lines/.	CA-05-0349
Attachment 8	Liberty supplemental response to data request CalAdvocates-LIB-A2506017-032, November 18, 2025.	CA-05-0356
Attachment 9	Liberty Utilities 2019 General Rate Case (A.18-12-001), Ex. Liberty-02, Chapter 2: Capital, November 30, 2018.	CA-05-0412
Attachment 10	A.18-12-001, Ex. Cal Advocates-07: Capital, July 23, 2019	CA-05-0455
Attachment 11	Liberty response to data request CalAdvocates-LIB-A2506017-001, September 10, 2025.	CA-05-0478

Attachment #	Title	Bates No.
Attachment 12	Liberty amended response to data request CalAdvocates-LIB-A2506017-011, October 22, 2025.	CA-05-0493
Attachment 13	Archived PSPS Post-Event Reports 2017-2023 are available at: https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season/archived-psps-post-event-reports-2017-2023.	CA-05-0501
Attachment 14	Resolution ESRB-8, July 12, 2018.	CA-05-0508
Attachment 15	Liberty response to data request CalAdvocates-LIB-A2506017-008, September 5, 2025.	CA-05-0518
Attachment 16	Liberty amended response to data request CalAdvocates-LIB-A2506017-017, October 22, 2025.	CA-05-1084
Attachment 17	Liberty response to data request CalAdvocates-LIB-A2506017-037, November 22, 2025.	CA-05-1106
Attachment 18	Liberty response to data request CalAdvocates-LIB-A2506017-035, November 13, 2025.	CA-05-1120
Attachment 19	Liberty response to data request CalAdvocates-LIB-A2506017-029, October 29, 2025.	CA-05-1140
Attachment 20	Liberty's 2016 Electric System Reliability Report, July 15, 2017.	CA-05-1197
Attachment 21 (Confidential)	Liberty response to data request TURN-Liberty-004, November 17, 2025. – Confidential	CA-05-1232
Attachment 22 (Confidential)	Liberty response to data request CalAdvocates-LIB-A2506017-022, September 5, 2025. The internally attached audio files are available upon request. Confidential	CA-05-1243
Attachment 23	Liberty's Revised 2020 Wildfire Mitigation Plan, February 28, 2020.	CA-05-1253

ATTACHMENT 1

SCE Q4 2020 Quarterly Data Report,

February 5, 2021

Available at: https://www.sce.com/outages-safety/wildfire-safety/wildfire-mitigation-plan-documents/wmp-historical-documents

WMP HISTORICAL DOCUMENTS



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- Wildfire Mitigation Plan Discovery/Data Requests

Quarterly Reports

2021 WMP DOCUMENTS

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2020 WMP DOCUMENTS

Wildfire Mitigation Plan

Supporting Documents

Wildfire Mitigation Plan Discovery/Data Requests

Quarterly Reports

Q4 2020 Quarterly Data Report

- SCE Q4 2020 QDR (PDF)
- SCE_20210205_NonConfidential.gdb.zip
- SCE GIS Status Report.xlsx
- SCE Tables 1-12.xlsx

Quarterly Reports

- 2nd Quarterly Report - 2020 WMP Deficiencies (PDF)
- SCE 2020 WMP - SCE Class B Deficiencies (PDF)
- SCE 2020 WMP - SCE Class B Deficiencies-Excel Appendices (ZIP)
- SCE Reply Comments on 2nd QRs (PDF).

CA-05-0003

- SCE Reply Comments on QRs (PDF)

2019 WMP DOCUMENTS

Wildfire Mitigation Plan

Supporting Documents

Wildfire Mitigation Plan Discovery/Data Requests

Quarterly Reports

ATTACHMENT 2

Liberty's response to data request CalAdvocates-LIB-A2506017-006, question 1, September 5, 2025. The internally attached GIS geodatabase file "WEMA_RequestedData.gdb" is available upon request

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-006
Requesting Party:	Public Advocates Office
Originator:	Herman Eng, Herman.Eng@cpuc.ca.gov
cc:	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Date Received:	August 21, 2025
Due Date:	September 5, 2025

Question 1

Please provide a GIS file geodatabase (.gdb) with spatial data for the following:

(a) Line feature layer for Liberty's distribution circuits for November 17, 2020, including the Topaz 1261 circuit with attribute information as requested in Wildfire Mitigation Plan data guidelines (such as circuit name);

(b) Line feature layer for Liberty's transmission circuits; and

(c) Polygon feature layer for National Weather Service (NWS) zones overlapping Liberty's service territory for November 17, 2020.

Response to Question 1:

Please refer to attachment *CalAdvocates-LIB-A250617-006-Q1.zip* for data requested in subparts (a)-(c).

Question 2

Please provide the latitude and longitude coordinates (in decimal degrees to at least 5 decimal places) for the following:

(a) West Pole (Pole 266731) at the origin area;

(b) East Pole (Pole 40288) at the origin area; and

(c) Topaz 1261 R2 recloser.

Response to Question 2:

Liberty understands the term "origin area" to refer to the area where the Mountain View Fire ignited on November 17, 2020 as described in *Liberty-02: Ignition* and *Liberty-03: Prudence of Operations*.

(a) West Pole (Pole 266731): 38.513000, -119.467520

(b) East Pole (Pole 40288): 38.512970, -119.466580

(c) Topaz 1261 R2 Recloser: 38.540520, -119.497830

Question 3

Please provide an Excel file that identifies each Liberty weather station as of November 17, 2020, including the six on the Topaz circuit area as described in *Liberty-03 - Prudence of Operations*, with the following information:

a) Unique ID number or identifier;
b) Name;
c) Latitude (in decimal degrees to 5 decimal places);
d) Longitude (in decimal degrees to 5 decimal places);
e) Installation date;
f) Last inspection date;
g) Last maintenance date;
h) Year of removal (for any weather stations that were eventually removed);
i) The types of data the weather station collected (e.g., wind speed, humidity);
j) How often the weather station collected data;
k) Whether Liberty had a means to receive data automatically or whether the data required a manual pull;
l) Whether the weather station was successfully communicating data as of November 17, 2020;
m) If the weather station was not successfully communicating data, explain why;
n) Which circuit(s) did Liberty use that weather station's data for; and
o) Whether Liberty used the weather station to monitor conditions for Liberty's PSPS events

prior to November 17, 2020.

Response to Question 3:

Liberty objects to this Question as vague and ambiguous as to subpart (o). Subject to and without waiving these objections, Liberty responds as follows: Liberty understands subpart (o) as asking whether Liberty used data from the weather stations to inform its PSPS

decision-making, as of November 17, 2020. As referenced in *Liberty-03: Prudence of Operations*, Part VI.B.1, data from these weather stations provided inputs to Liberty's FPI tool and forecast models behind Liberty's PSPS predictive tool. Localized weather data from Liberty's stations also helped to validate and improve the accuracy of those tools and models. In the event of a PSPS activation, live weather station observations, along with data from field observers, would guide the ultimate decision to de-energize. For information requested in subparts (a)-(n), please refer to attachment *CalAdvocates-LIB-A2506017-006-Q3.xlsx*.

Question 4

Please provide an Excel file that lists all Red Flag Warning (RFW) notifications from 2016-2020 that affected the Topaz 1261 circuit. Each event should be a row. The file should have the following columns:

(a) NWS forecast zone;

(b) RFW Start Date and Time;

(c) RFW End Date and Time;

(d) Total Duration (in minutes);

(e) Name or Identifier of the nearest wind measurement station to the West or East Poles;
- West Pole (Pole 266731): 38.513000, -119.467520
- East Pole (Pole 40288): 38.512970, -119.466580

(f) Latitude (in decimal degrees to 5 decimal places) of this nearest wind measurement station;

(g) Longitude (in decimal degrees to 5 decimal places) of this nearest wind measurement station;

(h) Maximum sustained wind speed recorded at this wind measurement station; and

(i) Maximum gust wind speed recorded at this wind measurement station.

Response to Question 4:

Liberty objects to this Question as overbroad and burdensome to the extent it seeks information not maintained in the ordinary course of business. Subject to and without waiving these objections, Liberty responds as follows:

For information requested in subparts (a)-(i), please refer to attachment *TZP_2016_2020_RFW Data.xlsx*. The nearest weather station that recorded data for the entire time period requested by this Question is Walker RAWS station. Liberty is thus providing data requested in subparts (h) and (i) from this station. As indicated in the attachment *CalAdvocates-LIB-A2506017-006-Q3.xlsx*, the Liberty weather stations nearest to the West and East Poles went into service on May 31, 2019 (LIB-3106/LIB06) and October 20, 2020 (LIB-3130/LIB26) and do not have data for the whole time period requested. Data from all three weather stations are publicly available via

MesoWest: https://mesowest.utah.edu/. Data from the two Liberty weather stations are also publicly available from Western Weather Group: https://liberty.westernweathergroup.com/search.

ATTACHMENT 3

SCE PSPS Post Event Report – November 14 to November 18, 2020
December 4, 2020

DocuSign Envelope ID: 09178974-6C36-4297-B561-E1945197DB58

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Diana S. Gallegos
State Regulatory Affairs
diana.s.genasci@sce.com

December 4, 2020

Leslie Palmer, Director
Safety Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

SUBJECT: SCE PSPS Post Event Report – November 14 to November 18, 2020

Dear Director Palmer:

Southern California Edison (SCE) respectfully submits the attached report in compliance with the Public Safety Power Shutoff (PSPS) Post Event Reporting requirements regarding its PSPS event that began November 14 and ended November 18, 2020.

This report has been verified by an Officer of SCE in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

Sincerely,

DocuSigned by:
Diana S. Gallegos
29E9CB73DB43475...

Diana S. Gallegos
Sr. Advisor, State Regulatory Affairs

cc: ESRB_ComplianceFilings@cpuc.ca.gov

Southern California Edison
Public Safety Power Shutoff Protocol (PSPS)
Post-Event Reporting in Compliance with Resolution ESRB-8 and PSPS OIR Phase 1 & 2 Requirements
November 14 to November 18, 2020

Submitted to:
California Public Utilities Commission
Director of the Safety and Enforcement Division
December 4, 2020

Executive Summary

This report provides information related to the Public Safety Power Shutoff (PSPS) event that occurred in SCE's service territory from November 14, 2020 through November 18, 2020. On November 14, 2020, Southern California Edison (SCE) activated an Incident Management Team (IMT)[1] to manage a Santa Ana weather event where SCE meteorologists and the National Weather Service forecasted high winds, low relative humidity levels and increased fire danger conditions anticipated to potentially require the use of SCE's Public Safety Power Shutoff (PSPS) Protocol which could impact as many as 11,964 customers. SCE Customers in Inyo, Mono, San Bernardino, Kern, Los Angeles, Tuolumne, and Ventura counties were originally in scope with a period of concern initially identified as November 17 at 12:00 am to November 18 at 12:00 pm. During this event, SCE also de-energized two circuits in Kern County and one circuit in Los Angeles County not originally identified to be in scope, when unexpected high wind conditions indicating increased fire danger were observed by meteorologists and weather stations on additional circuits in both Kern and Los Angeles County. Ultimately, SCE pro-actively de-energized 517 customers in areas of Inyo, Mono, Kern, and Los Angeles counties. Power was restored to all customers on November 18 by 9:55 pm.

SCE submits this report to demonstrate its compliance with the directives of Resolution ESRB-8 and the California Public Utilities Commission (CPUC or Commission) PSPS Order to Institute Rulemaking (OIR) Phase 1 (Decision (D.) 19-05-042) and Phase 2 (D.20-05-051) requirements associated with PSPS events. This report explains SCE's decision to call, sustain, and conclude a de-energization event and provides both a summary of the event and the responses to the post-event questions as required by the Commission. SCE submits this report to the Director of Safety and Enforcement Division (SED) and the service lists for Rulemaking R. 18-12-005.

SCE appreciates that PSPS de-energizations pose significant challenges and hardships for its customers and the Public Safety Partners that provide vital services to our communities. SCE recognizes that this is particularly true when the unexpected onset of dangerous weather and fuel conditions requires that SCE take actions quickly and without all the advance notifications contemplated by the CPUC. SCE's decision to activate its PSPS protocol is based on careful consideration of multiple factors, including forecasted weather, fuel conditions, and impacts to Public Safety Partners and the communities we serve. Because SCE takes seriously its responsibilities and understands the impacts of de-energization events, SCE only uses PSPS de-energization when it believes that there are no other reasonable alternatives to mitigate identified risks to public safety that would result from catastrophic wildfire.

SCE remains committed to continuously improving its processes and welcomes input from its customers, Public Safety Partners, community representatives, and local governments on ways we can work together to enhance the existing processes, improve communication and coordination amongst impacted entities, and minimize the impact of PSPS events on all stakeholders.

[1] SCE utilized remote IMT activation due to the impacts of COVID-19.

SCE took the following actions to manage its response during the PSPS event:

1. Activated a Dedicated PSPS IMT to coordinate response operations associated with the potential use of PSPS to maintain public safety. The IMT was activated and operated remotely due to the COVID-19 pandemic.
2. Reached out to the Geographical Coordination Center (GACC)[2] to coordinate regarding its expectation for fire potential over the course of the PSPS event.
3. Provided notifications to Public Safety Partners, critical infrastructure providers, the CPUC, the California Department of Forestry and Fire Protection (CAL FIRE), the California Governor's Office of Emergency Services (Cal OES), and affected SCE customers. Additionally, SCE provided notices to Community-Based Organizations (CBOs), such as Independent Living Centers (ILCs), the American Red Cross, 2-1-1, and Fire Safety Councils.
4. Initiated operating restrictions on impacted circuits, as applicable.
5. Performed field patrols of impacted circuits where possible in preparation for the potential use of the PSPS protocol for de-energization.
6. Deployed Community Crew Vehicles (CCVs) to impacted communities.
7. Performed live field observations of monitored circuits as required during the period of concern to validate actual weather conditions and the need for the use of PSPS for de-energization.
8. Utilized the Public Safety Power Shutoff protocol to de-energize circuits within High Fire Risk Areas (HFRA) as determined necessary by the Incident Commander based on observed conditions utilizing weather stations and/or live field observations
9. Performed post patrols to verify no damage to de-energized circuits in support of restoration activities.

Event Summary November 14 to November 18, 2020[3]

November 14th -- SCE meteorologists notified SCE's Business Resiliency Duty Manager (BRDM) of a weather system that was forecast to bring elevated fire weather for portions of the SCE territory beginning November 17 at 12:00 pm and continuing through November 18 at 12:00 pm. That day, SCE contacted the Southern California Geographical Coordination Center (GACC) and sent the CPUC an email at 12:47 pm to communicate the activation of the dedicated Public Safety Power Shut Off Incident Management Team (PSPS IMT). SCE held a State Executive call at 3:00 pm, and an OEM County Coordination call at 3:30 pm to communicate the weather forecast, potential customers in scope and answer any questions regarding the event.

SCE sent notifications to public safety partners and critical infrastructure providers at 1:40 pm with respect to the circuits projected to be in scope for a potential de-energization. SCE also dispatched pre-patrol resources to begin inspecting identified circuits in scope for the PSPS event. At that point, updated weather forecasts identified circuits in Inyo, Mono, San Bernardino, Kern, and Ventura counties as having circuits that may require the use of PSPS. Approximately 6,388 customers were identified as in scope for this potential event forecast to begin on November 16.

[2] The GACC is the physical location of an interagency, regional operation center for the effective coordination, mobilization, and demobilization of emergency management resources. A coordination center serves federal, state and local wildland fire agencies through logistical coordination of resources throughout the geographic area, and with other geographic areas, as well.

[3] The following event summary serves to provide an overview of the event. Additional details regarding specific PSPS requirements are addressed in further detail after this narrative.

November 15th -- SCE held its daily State Executive call at 3:00 pm, an OEM County Coordination call at 3:30 pm and a Critical Infrastructure call at 4:00 pm to communicate the weather forecast, customers in scope and answer any questions regarding the event. SCE emailed participants after the daily calls to provide the briefing materials shared. SCE sent notifications to public safety partners, customers, and critical infrastructure providers at 1:05 pm and 8:23 pm with respect to circuits projected to be in scope. At that point, updated weather forecasts indicated circuits in Inyo, Kern, Mono, San Bernardino, Los Angeles, Tuolumne, and Ventura counties, and approximately 7,283 customers potentially in scope for de-energization during the period of concern now from November 16 at 9:00 pm to November 18 at 12:00 pm

November 16th -- At approximately 8:45 am, weather services advised of the sudden onset of unexpected fire weather conditions in Kern County. This localized weather system impacted additional circuits in Kern county and resulted in two of these circuits rapidly exceeding wind and FPI thresholds. In response, SCE provided notice of imminent de-energization at 9:07 am and at approximately 9:30 am de-energized the Mettler and Cuddeback circuits in Kern county. SCE provided imminent re-energization notices for the Cuddeback circuit at 4:37 pm and the Mettler circuit at 4:36 pm. The Cuddeback circuit was re-energized at 7:51 pm and the Mettler circuit was re-energized at 7:16 pm. SCE held its daily State Executive call at 3:00 pm, an OEM County Coordination call at 3:30 pm and a Critical Infrastructure call at 4:00 pm to communicate the weather forecast, customers in scope and answer any questions regarding the event. SCE emailed participants after the daily calls to provide the briefing materials shared. SCE sent notifications to public safety partners, customers, and critical infrastructure providers at 12:10 pm. At that point, updated weather forecasts indicated Inyo, Mono, San Bernardino, Kern, Los Angeles, Tuolumne, and Ventura counties and approximately 10,345 customers were potentially in scope for de-energization during the relevant period.

November 17th – At approximately 4:00 am the PSPS IMT observed dangerous fire weather conditions exceeding wind and FPI thresholds on circuits in Mono, Inyo, and Los Angeles county. SCE provided imminent notification of de-energization to all of the impacted circuits beginning at 5:09 am and at approximately 7:46 am began de-energizing a total of 397 customers in Mono, Inyo, and Los Angeles Counties as detailed in the table on the following page. The IMT continued to actively monitor weather developments, patrol de-energized circuits for possible restoration, and restore circuits as conditions in the field improved. SCE held its daily State Executive call at 2:00 pm, an OEM County Coordination call at 3:00 pm and a Critical Infrastructure call at 3:30 pm to communicate the weather forecast, customers in scope for de-energization, and to answer any questions. SCE emailed participants after the daily calls to provide the briefing materials shared. At approximately 5:00pm on November 17, SCE also de-energized a portion of the Sand Canyon circuit in Los Angeles County without any imminent notification due to the sudden onset of unexpected fire weather conditions. The Sand Canyon circuit was then added to the November 17 forecasted period of concern for the duration of the PSPS event and a day of notification of potential de-energization was sent to the remaining customers on the circuit. No other portions of the Sand Canyon circuit were de-energized in this event.

November 18th – As hazardous weather conditions subsided, SCE began sending imminent re-energization notifications to public safety partners, critical infrastructure providers, and customers. SCE performed patrols for circuit restoration on de-energized circuits, ultimately restoring power to all circuits by 9:55 pm as detailed in the table below.

The following responses address how SCE complied with all applicable PSPS regulatory requirements, including ESRB-8 and the Phase 1 (D. 19-05-042) and Phase 2 (D. 20-05-051) decisions, during this event.

1. The time, place and duration of the power shutoff event

This event started at 09:31 am on Monday, 11/16/20, and continued through Wednesday, 11/18/20 at 09:55 pm. The event impacted portions of Kern, Mono, Los Angeles, and Inyo counties. The table below provides the timeline for de-energization and restoration for all impacted circuits.

De-Energization/Re-Energization Circuit Timeline

Circuit	Isolation Device[4]	De-Energized Date/Military Time	Customers Affected	Re-Energized[5] (1st load) Date/Military Time	Re-Energized (All load) Date/Military Time
Grapevine Peak	CB	11/16/2020 20:27	4	N/A	11/17/2020 16:20
Frozen	PS0269	11/16/2020 21:54	1	N/A	11/17/2020 16:21
Tufa	RAR0289	11/17/2020 7:45	1	N/A	11/18/2020 21:55
Cain Ranch	CB	11/17/2020 8:41	22	N/A	11/18/2020 8:43
Shovel	RAR0102	11/17/2020 12:06	165	11/17/2020 14:46	11/18/2020 13:44
Birchim	RAR0323	11/17/2020 13:18	3	N/A	11/18/2020 21:15
Birchim	RCS0181	11/17/2020 13:18	173	N/A	11/18/2020 8:13
Reverse Peak	RAR0112	11/17/2020 20:51	24	N/A	11/18/2020 9:42
Additional De-Energizations Not Originally in the Period of Concern[6]					
Mettler	RCS1132	11/16/2020 9:31	8	N/A	11/16/2020 17:16
Cuddeback	PS0875	11/16/2020 9:38	103	11/16/2020 17:48	11/16/2020 17:50
Sand Canyon	RAR0191	11/17/2020 12:55	9	N/A	11/18/2020 14:26

2. The local communities' representatives contacted prior to de-energization, the date on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in General Order 95, Rule 21.2[7]

County	Public Safety Partner	Date	Tier
Inyo	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3

[4] Remote Automatic Recloser (RAR) and Circuit Breaker (CB) denote different types of sectionalizing devices used by SCE
[5] 1st load identifies if the circuit was re-energized in sections based on pre-patrols and weather conditions impacting the ability to re-energize the entire line simultaneously. All Load identifies when the entire circuit was re-energized.
[6] See Attachment A Public Safety Partner Notifications. SCE also contacted other County and State public safety and first responder agencies and local governments for areas that were not de-energized but were within the scope of concern.

County	Public Safety Partner	Date	Tier
Kern	County and State public safety and first responder agencies and local governments	11/14	Tier 2 Tier 3
Los Angeles	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3
Mono	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3
San Bernardino	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3
Tuolumne	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3
Ventura	County and State public safety and first responder agencies and local governments	11/14	Tier 2, Tier 3

3. If unable to provide customers with notice at least 2 hours prior to the de-energization event, provide an explanation in its report.

On November 16, SCE de-energized the Cuddeback and Mettler circuits in Kern county due to sudden onset of dangerous weather conditions related to rapidly escalating wind speeds. Although these two circuits received imminent notification of de-energization, SCE was not able to provide these notices at least two hours prior to the de-energization given the urgent need to initiate de-energization to avoid the risk of a potential ignition. SCE provided notices approximately 23 minutes prior to pro-active de-energization. At approximately 5:00pm on November 17, SCE also de-energized a portion of the Sand Canyon circuit in Los Angeles County without any imminent notification, also due to rapidly escalating wind speeds. The Sand Canyon circuit was then added to the November 17 forecasted period of concern for the duration of the PSPS event and a day of notification of potential de-energization was sent to the remaining customers on the circuit. No other portions of the Sand Canyon circuit, however, were ultimately de-energized in this event.

4. Summarize the number and nature of complaints received as the result of the de-energization event and include claims that are filed due to de-energization.

As of the submission of this report, SCE is not aware of any formal complaints that were submitted to the Commission. SCE Consumer Affairs did receive two complaints through the CPUC's Consumer Affairs Branch related to this PSPS event as detailed below. SCE also submits these additional processed complaints through the CPUC's Consumer Affairs Branch for previous 2020 PSPS events:

PSPS Event Date	Number of Complaints	Nature of Complaints
October 23, 2020	10	• Lack of Information during PSPS Event • Disagrees with use of PSPS
November 3, 2020	2	• Disagrees with use of PSPS
November 14, 2020	2	• Lack of Information during PSPS Event

SCE received feedback from Kern County and the City of Tehachapi related to the de-energization of the Mettler and Cuddeback circuits which had not originally been in scope for this event. Both expressed concerns related to SCE's failure to forecast these circuits as in scope for the PSPS event and the short timeframe for imminent notifications. SCE has met with both Kern county and the City of Tehachapi officials to discuss these concerns and further identify areas of concern for future events. SCE also received numerous questions related to the Shovel circuit from the Acton Town Council. SCE communicated with the Acton Town Council during this event to address these questions.

5. The timeline for power restoration (re-energization), in addition to the steps taken to restore power as required in Resolution ESRB-8.

A PSPS event will continue while dangerous fire weather conditions exist, and the threat of a catastrophic wildfire event remains due to these conditions. If circuits are de-energized, those circuits and impacted lines will be inspected to ensure there is no damage before power can be safely restored. Any visual inspection of the power lines typically take place during daylight hours for safety and accuracy. Therefore, patrol and restoration operations may be limited or prolonged during overnight hours. SCE strives to restore all power within 24 hours of de-energization when possible. The timeline for power restoration is detailed in the table below.

Circuit	Isolation Device	IC Authorized Imminent Notification	Post Patrol Initiated	Circuit Fully Re-energized
Grapevine Peak	CB	11/16/2020 16:26	11/16/2020 16:26	11/17/2020 16:20
Frozen	PS0269	11/17/2020 14:28	11/17/2020 14:28	11/17/2020 16:21
Tufa	RAR0289	11/18/2020 10:41	11/18/2020 10:41	11/18/2020 21:55
Cain Ranch	CB	11/18/2020 5:46	11/18/2020 5:46	11/18/2020 8:43
Shovel	RAR0102	11/17/2020 14:14	11/17/2020 14:14	11/18/2020 13:44
Birchim	RAR0323	11/18/2020 19:08	11/18/2020 19:08	11/18/2020 21:15

Circuit	Isolation Device	IC Authorized Imminent Notification	Post Patrol Initiated	Circuit Fully Re-energized
Birchim	RCS0181	11/18/2020 6:31	11/18/2020 6:31	11/18/2020 8:13
Reverse Peak	RAR0112	11/18/2020 5:46	11/18/2020 5:46	11/18/2020 9:42
Mettler	RCS1132	11/16/2020 16:26	11/16/2020 16:26	11/16/2020 17:16
Cuddeback	PS0875	11/16/2020 16:26	11/16/2020 16:26	11/16/2020 17:50
Sand Canyon	RAR0191	11/18/2020 2:40	11/18/2020 2:40	11/18/2020 14:26

6. For any circuits that require more than 24 hours to restore, the utility shall explain why it was unable to restore each circuit within this timeframe in its post event report.

SCE was able to restore power within a 24-hour timeframe to all de-energized circuits.

7. Identify the address of each community assistance location during the de-energization event, describe the location (in a building, a trailer, etc.), and describe the assistance available at each location, and give the days and hours that it was open.

Each of the CCV locations were equipped with ice vouchers or ice, water, firewood, blankets, and customer resiliency kits (containing PSPS program information, mask, gloves, hand sanitizer, solar power battery charger or an LED light with built-in battery). CCV's were used in this event given the scope and size of the event and SCE's ability to adhere to COVID 19 protocols through their use.

CRC/CCV Locations and Details

Type	County	City/Community	Day and Time	Address
CCV	Mono	Bridgeport	8am-10pm (Tuesday)	242 Main Street (between Court House and Market).
CCV	Inyo	Bishop	8am-10pm (Tuesday 8am-10pm (Wednesday)	1361 Rocking W Dr. (Sears Hometown Store
CCV	Kern	Frazier Park	8am-10pm (Tuesday)	3801 Park Dr. (Frazier Mountain Park

8. Any wind-related damage(s) to SCE's overhead equipment in the areas where power is shutoff.

Crews performed post-patrols on de-energized circuits before re-energization to ensure safe operating conditions. No wind-related damage was found on SCE's overhead equipment during patrol in the areas where power was shutoff.

9. All factors considered by SCE in its decision to shut off power, including wind speed, temperature, humidity, and vegetation moisture in the vicinity of the de-energized circuits

SCE's decision to shut off power is dynamic and was made by considering the following factors during this PSPS event:

- Ongoing assessments from our in-house meteorologists using high-resolution weather models, data from SCE weather stations and publicly available weather stations.
- The SCE Fire Potential Index (FPI), a tool that utilizes weather data, fuel conditions, and vegetation moisture content to rate the daily fire potential across our region. SCE uses the following metrics to rate ignition potential -- Low - 11.99, Elevated - 12-14.99 and Extreme - 15 and above
- Wind trends[8] and speeds, particularly when they exceed or are expected to exceed National Weather Service Wind Advisory levels (defined as 31 mph sustained wind speed and 46 mph gust wind speed) or exceed the top 1% of historical wind speeds in the area. Wind speeds are particularly important when we consider them in combination with other local conditions, such as dry vegetation that could present a true hazard for the community. Wind speed thresholds may also be adjusted based on other factors or circuit design.

SCE considered the following specific factors to inform de-energization decisions:

Circuit Name	Isolation Device	Weather Station	Wind Sustained	Gust Sustained	Threshold Sustained	FPI Value	Reasons for De-Energization
METTLER	RCS1132	SCE CUMMINGS VALLEY	27	40	23/37	12	• Exceeded Threshold • Exceeded FPI
CUDDEBACK	PS0875	SCE CUMMINGS VALLEY	27	40	23/37	12	• Exceeded Threshold • Exceeded FPI
GRAPEVINE PEAK	CB	GRAPEVINE PEAK (RAWS)	32	40	31/46	12.07	• Exceeded Threshold • Exceeded FPI
FROZEN	PS0269	GRAPEVINE PEAK (RAWS)	32	40	31/46	13.08	• Exceeded Threshold • Exceeded FPI
TUFA	RAR0289	SCE BODIE STATE PARK	26	38	31/46	13.06	• High Wind Trend • Exceeded FPI
CAIN RANCH	CB	SCE RUSH CREEK	28.8	56.2	31/46	13.18	• Exceeded Threshold • Exceeded FPI
SHOVEL	RAR0102	SCE SIERRA PALOMA	22.8	31.9	25/40	12.18	• High Wind Trend • Exceeded FPI

[8] SCE defines wind trends as increasing wind speeds that are projected to exceed threshold

Circuit Name	Isolation Device	Weather Station	Wind Sustained	Gust Sustained	Threshold Sustained	FPI Value	Reasons for De-Energization
SAND CANYON	RAR0191	SCE MAGIC MOUNTAIN TRUCK TRAIL	36	49	31/46	13.34	• Exceeded Threshold • Exceeded FPI
BIRCHIM	RAR0323	SCE ROUND VALLEY	32.5	49.8	31/46	14.08	• Exceeded Threshold • Exceeded FPI
BIRCHIM	RCS0181	SCE PINE CREEK	27.6	50.1	31/46	14.08	• Exceeded Threshold • Exceeded FPI
REVERSE PEAK	RAR0112	SCE CRESTVIEW RADIO	16.1	48.2	31/46	12.47	• Exceeded Threshold • Exceeded FPI

10. Evaluation of alternatives to de-energization that were considered, and mitigation measures used to decrease the risk of utility-caused wildfire in the de-energized area and an explanation of how the utility determined that the benefit of de-energization outweighed the potential public safety risks:

SCE sets thresholds based on SCE's risk-informed assessment of the potential for a catastrophic wildfire should an ignition occur under the conditions presented. Under such conditions, the harm to life and property resulting from a catastrophic wildfire vastly outweighs the impacts of the de-energization necessary to eliminate the potential of ignition. Additionally, SCE only uses de-energization when no other alternatives will mitigate this fire risk and to the extent possible, minimizes the impact by limiting the de-energization to the smallest number of customers possible through segmentation of impacted circuits, where possible.

In all PSPS events, SCE uses sectionalizing through RAR devices or switches when available within a reasonable period to isolate and de-energize only the necessary portions of circuits. While avoiding de-energization entirely is not always possible, SCE takes these steps to reduce the impacts of de-energization on the community, considering the impacts of the de-energization on its stakeholders within the overall risk posed by the prevailing weather conditions, its de-energizations thresholds, and the unacceptable public safety risk of catastrophic wildfire ignition.

11. A copy of all notifications, the timing of notifications, the methods of notifications and who made the notifications (the utility or local public safety partners).

A copy of all notifications and the timing of notifications can be found in Attachment A - Public Safety Partner Notifications, Attachment B - Critical Infrastructure and Customer

Notifications, and Attachment C - PSPS Activation Customer Notification Messaging. All PSPS event notifications to key stakeholders, including Public Safety Partners and customers, are delivered via voice, email, and TTY (telecommunication device for the hearing impaired) formats as per the preference of the recipient. Notifications are offered in multiple languages. All notifications were made by SCE.

12. Number of affected customers broken down by all classifications including residential, medical baseline, commercial/industrial, etc.

A detailed description of the number of affected customers broken down by all classifications including residential, medical baseline, commercial/industrial, etc. is provided in Attachment B-Customer and Critical Infrastructure Notifications.

13. An explanation of the circumstances that resulted in failure to communicate a potential pro-active de-energization event, if any.

On November 16, SCE de-energized the Cuddeback and Mettler circuits in Kern county due to sudden onset of dangerous weather conditions related to rapidly escalating wind speeds. Although these two circuits received imminent notification of de-energization, SCE was not able to provide these notices at least two hours prior to the de-energization given the urgent need to initiate de-energization to avoid the risk of a potential ignition. SCE provided notices approximately 23 minutes prior to pro-active de-energization. At approximately 5:00pm on November 17, SCE also de-energized a portion of the Sand Canyon circuit in Los Angeles County without any imminent notification, also due to rapidly escalating wind speeds. The Sand Canyon circuit was then added to the November 17 forecasted period of concern for the duration of the PSPS event and a day of notification of potential de-energization was sent to the remaining customers on the circuit. No other portions of the Sand Canyon circuit, however, were ultimately de-energized in this event.

14. Each electric investor-owned utility shall enumerate and explain the cause of any false communications in its post event reports by citing the sources of changing data.

SCE notes that its PSPS notices before potential de-energization only provide a warning to customers of a possible de-energization event. SCE notices are designed to give customers notice that a de-energization could take place and a time frame within which the event is most likely to occur so that customers can act and prepare. Given the unpredictability of weather on the ground, however, SCE's advance notices do not affirmatively confirm that a circuit *will be* de-energized. In fact, for clarity, SCE does not provide any affirmative confirmation of de-energization in its notifications until an actual de-energization has taken place.

SCE believes this event could be viewed as an example of a false-negative communication since we were unable to provide all of the required advance notice of de-energization to Public Safety Partners, critical infrastructure providers, or customers on three circuits during this event given the rapid onset of hazardous weather conditions. Additionally, as discussed below, any advance notifications to customers who were not de-energized, although not viewed by SCE as false positives, are being reported here for transparency purposes. SCE provided notice to 11,964 customers of potential de-energization but not all of these customers were de-energized.

15. A description and evaluation of engagement with local and state public safety partners in providing advanced education and outreach during the de-energization event.

Advanced education and outreach of this Public Safety Power Shutoff event was communicated to all impacted counties projected to be in scope, emergency management officials, CalOES, and the Commission before any forecasted weather was anticipated to impact the SCE service territory. Updates were provided throughout the event using the CalOES PSPS Notification Form, daily situational awareness and coordination calls and individual contact with Public Safety Partners in the affected counties.

16. For those customers where positive or affirmative notification was attempted, an accounting of the customers (which tariff and/or access and functional needs population designation), the number of notification attempts made, the timing of attempts, who made the notification attempt (utility or public safety partner) and the number of customers for whom positive notification was achieved.

SCE only tracks critical care customers for positive or affirmative receipt of notification attempts. Notifications are made daily as these customers remain on potentially impacted circuits. There were 8 critical care customers requiring secondary verification and SCE was able to make positive contact with all of them during this event. SCE regularly requests updated contact information from all critical care customers.

17. A description of how sectionalizing, i.e., separating loads within a circuit, was considered and implemented and the extent to which it impacted the size and scope of the de-energization event.

There were 11,964 total customers in scope for potential de-energization during the period of concern for this event across all known circuits. There were an additional 123 customers not in scope for the period of concern that SCE had to ultimately de-energize. SCE reduced the number of customers de-energization to 517 customers total using switching playbooks that identified sectionalizing devices to limit the scope of the event. SCE used RAR devices to separate and isolate the de-energization areas, limiting the de-energization impacts as detailed in the table on page 5 of this report. During the process of sectionalizing, 229 customers temporarily lost power (for approximately 2 minutes) but SCE is not including this in the count of de-energized customers due to the fact that this was an extremely short, momentary loss of power during switching operations.

18. Lessons learned from the de-energization events.

SCE continues to evaluate lessons learned from all 2020 PSPS events and is considering potential improvements within that context.

19. Any recommended updates to the guidelines adopted in Resolution ESRB-8 and this decision.

SCE notes that its PSPS notices before potential de-energization) only provide a warning to customers of a possible de-energization event. SCE notices are designed to give customers notice

that a de-energization could take place and a time frame within which the event is most likely to occur so that customers can take action and prepare. Given the unpredictability of weather on the ground, however, SCE's advance notices do not affirmatively confirm that a circuit *will be* de-energized. In fact, for clarity, SCE does not provide any affirmative notifications until an actual de-energization has taken place.

SCE believes that its notices are correct and factual. The definition of false positive is subject to interpretation about which notifications should be included. Impending de-energizations could reasonably be interpreted as notifications of imminent de-energization 1-4 hours before outages. SCE believes, however, that the Commission may be interested in all the advance notices of a possible de-energization to such customers. Consequently, in an effort to assure transparency and full compliance, SCE will treat them here as potential "false positives", see above, within the meaning of the PSPS guidance. SCE would appreciate any additional Commission clarification or guidance on this issue to assure it is fully compliant.

SCE notes that "false positives" typically refer to decisions made, or actions taken based on erroneous information. Differences between notifications and actual de-energizations, however, do not stem from incorrect data, but rather from actual ground conditions varying from forecast conditions. This variance is inherent because of the constantly changing nature of emergent weather. SCE hopes that the Commission will take this into consideration when clarifying the definition of false positives going forward.

DocuSign Envelope ID: 3DE65647-016E-4D69-B3BA-00E912ED28A5

Officer Verification

I am an officer of the applicant corporation herein and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing document are true.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 4th day of December 2020 in Cerritos, California

DocuSigned by:
Erik Takayesu
420B7563894B477...

Erik Takayesu
Vice President,
Transmission, Substations & Operations

Attachment A
Public Safety Partner Notifications

Notification ID	Message Title	Sent On	Notes
635796893731308	Important: SCE Initial Notice for PSPS Event in KERN County on 11/17/2020	Nov 14, 2020 14:25:20 PST	This was sent prematurely to an SCE internal list and to limited external public safety partners in Kern County, but not the circuit distribution list. The correct notification was sent to the county at 1658.
635796893731388	Important: SCE Initial Notice for PSPS Event in VENTURA County on 11/17/2020.	Nov 14, 2020 16:45:22 PST	
635796893731393	Important: SCE Initial Notice for PSPS Event in SAN BERNARDINO County on 11/17/2020	Nov 14, 2020 16:55:21 PST	
635796893731396	Important: SCE Initial Notice for PSPS Event in KERN County on 11/17/2020	Nov 14, 2020 16:58:36 PST	
635796893731397	Important: SCE Initial Notice for PSPS Event in INYO County on 11/17/2020	Nov 14, 2020 17:00:46 PST	
635796893731402	Important: SCE Initial Notice for PSPS Event in MONO County on 11/17/2020	Nov 14, 2020 17:05:39 PST	

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 2:26 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in KERN County on 11/17/2020.

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Please refer to the attached file for status and periods of concern for specific circuits in your county.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: SCE may shut off power on one or more circuits in your area. For more information, visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 4:46 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in VENTURA County on 11/17/2020.
Attachments: SCE+LNO+POC+VENTURA+2020-11-14+Rpt+#1.xlsx

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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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Web and Maps

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Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 4:56 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in SAN BERNARDINO County on 11/17/2020.
Attachments: SCE+LNO+POC+SAN+BERNARDINO+2020-11-14+Rpt+#1.xlsx

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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in SAN BERNARDINO County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

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Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
DOBLE	SAN BERNARDINO		Doble ; Upper Holcomb Valley ; Arrastre Flats ; Furnace Canyon	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	1200-1500	1	0	1	0	0	2
SCOUT	SAN BERNARDINO		Northeast of Fawnskin	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	1200-1500	4	0	0	0	0	4
UTE	SAN BERNARDINO		North of Big Bear ; Apple Valley	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	1200-1500	0	0	0	0	0	0

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 4:59 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in KERN County on 11/17/2020.
Attachments: SCE+LNO+POC+KERN+2020-11-14+Rpt+#1.xlsx

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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0000-0600	0	0	0	0	0	0
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0000-0600	4615	1	81	79	17	4793

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 5:01 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in INYO County on 11/17/2020.
Attachments: SCE+LNO+POC+INYO+2020-11-14+Rpt+#1.xlsx

Please click here to acknowledge receipt of this message
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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: SCE may shut off power on one or more circuits in your area. For more information, visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #1

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BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-0000	535	4	10	9	2	560

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 5:06 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in MONO County on 11/17/2020.
Attachments: SCE+LNO+POC+MONO+2020-11-14+Rpt+#1.xlsx

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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: SCE may shut off power on one or more circuits in your area. For more information, visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

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    - 800-684-8123 is for all other billing and service inquiries.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #1

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BANTA	MONO		Lee Vining ; Lee Vining Canyon	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1200	131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-0000	535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	1	0	0	0	0	1
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	66	1	14	1	0	82
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	236	0	4	1	1	242
STROSNIDER	MONO		Bridgeport City	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1500	373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0900-1800	103	0	3	0	0	106

Notification ID	Message Title	Sent On	Notes
635796893731520	Important: SCE Initial Notice for PSPS Event in LOS ANGELES County on 11/16/2020	Nov 14, 2020 20:38:57 PST	
635796893731522	Important: SCE Update Notice for PSPS Event in Ventura County	Nov 14, 2020 20:41:03 PST	
635796893731525	Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County	Nov 14, 2020 20:43:07 PST	
635796893731526	Important: SCE Update Notice for PSPS Event in KERN County	Nov 14, 2020 20:46:08 PST	
635796893731529	Important: SCE Update Notice for PSPS Event in MONO County	Nov 14, 2020 20:49:17 PST	
635796893731531	Important: SCE Update Notice for PSPS Event in INYO County	Nov 14, 2020 20:50:46 PST	

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:39 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in LOS ANGELES County on 11/16/2020.
Attachments: SCE+LNO+POC+LOS+ANGELES+2020-11-14+Rpt+2.xlsx

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Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: SCE may shut off power on one or more circuits in your area. For more information, visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
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How to Contact Us

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    - 800-684-8123 is for all other billing and service inquiries.
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    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
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RIDGE	LOS ANGELES		Gorman ; Peace Valley	Initial					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	308	0	19	9	0	336

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:41 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Ventura County.
Attachments: SCE+LNO+POC+VENTURA+2020-11-14+Rpt+2.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

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TENNECO	VENTURA		Staufer ; Lockwood Valley	Update					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	3	1	0	0	0	3

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:43 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County.
Attachments: SCE+LNO+POC+SAN+BERNARDINO+2020-11-14+Rpt+2.xlsx

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
DOBLE	SAN BERNARDINO		Doble ; Upper Holcomb Valley ; Arrastre Flats ; Furnace Canyon	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1500	1	0	1	0	0	2
SCOUT	SAN BERNARDINO		Northeast of Fawnskin	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1500	4	0	0	0	0	4
UTE	SAN BERNARDINO		North of Big Bear ; Apple Valley	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1500	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:46 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+KERN+2020-11-14+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
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Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

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FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	Initial					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	Update					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL
RIDGE	KERN		Frazier Park ; Lebec	Initial					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	27	0	15	1	0	43
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	Update					11/14/2020		11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	4610	1	79	79	17	4786

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:49 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+POC+MONO+2020-11-14+Rpt+2.xlsx

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Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
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- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

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BANTA	MONO		Lee Vining ; Lee Vining Canyon	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-2100	6	0	0	0	2	6
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	1	0	0	0	0	1
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	66	1	14	1	0	82
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	Initial					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0600-1800	229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-1800	103	0	3	0	0	106

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Saturday, November 14, 2020 8:51 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+2020-11-14+Rpt+2.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/14/2020 Circuit List All Counties Report #2

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BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Update					11/14/2020		11/15/2020		11/16/2020		11/17/2020	0300-2100	529	4	10	9	2	554

Notification ID	Message Title	Sent On
635796893732343	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 15, 2020 12:26:19 PST
635796893732349	Important: SCE Update Notice for PSPS Event in VENTURA County.	Nov 15, 2020 12:31:09 PST
635796893732355	Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County.	Nov 15, 2020 12:34:55 PST
635796893732363	Important: SCE Update Notice for PSPS Event in KERN County.	Nov 15, 2020 12:38:01 PST
635796893732372	Important: SCE Update Notice for PSPS Event in MONO County.	Nov 15, 2020 12:41:07 PST
635796893732374	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 15, 2020 12:43:56 PST
635796893732388	Important: SCE Initial Notice for PSPS Event in TUOLUMNE County on 11/17/2020.	Nov 15, 2020 12:52:48 PST

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:26 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+POC+LOS+ANGELES+County+2020-11-15+Rpt+1.xlsx

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Southern California Edison LNO Circuit List with Periods of Concern

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RIDGE	LOS ANGELES		Gorman ; Peace Valley	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		335	0	34	10	0	379

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:31 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in VENTURA County.
Attachments: SCE+LNO+POC+VENTURA+County+2020-11-15+Rpt+1.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
TENNECO	VENTURA		Staufer ; Lockwood Valley	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		4615	1	81	79	17	4793

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:35 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County.
Attachments: SCE+LNO+POC+SAN+BERNARDINO+County+2020-11-15+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in SAN BERNARDINO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

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- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #1

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DOBLE	SAN BERNARDINO		Doble ; Upper Holcomb Valley ; Arrastre Flats ; Furnace Canyon	No Change					11/15/2020		11/16/2020		11/17/2020	0300-1500	11/18/2020		1	0	1	0	0	2
SCOUT	SAN BERNARDINO		Northeast of Fawnskin	No Change					11/15/2020		11/16/2020		11/17/2020	0300-1500	11/18/2020		4	0	0	0	0	4
UTE	SAN BERNARDINO		North of Big Bear ; Apple Valley	No Change					11/15/2020		11/16/2020		11/17/2020	0300-1500	11/18/2020		0	0	0	0	0	0

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:38 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+KERN+County+2020-11-15+Rpt+1.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #1

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FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		0	0	0	0	0	0
RIDGE	KERN		Frazier Park ; Lebec	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		4615	1	81	79	17	4793

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:41 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+POC+MONO+County+2020-11-15+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
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How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #1

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BANTA	MONO		Lee Vining ; Lee Vining Canyon	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	No Change					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020	0600-1200	535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		1	0	0	0	0	1
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		66	1	14	1	0	82
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	Initial					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	Update					11/15/2020		11/16/2020		11/17/2020	0900-1500	11/18/2020		229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Update					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		103	0	3	0	0	106

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:44 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+County+2020-11-15+Rpt+1.xlsx

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Southern California Edison LNO Circuit List with Periods of Concern

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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Schedlite ; Mesa ; West Bishop ; east of Grouse Mountain	No Change					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020	0600-1200	535	4	10	9	2	560
SABRINA	INYO		Aspendell ; Coats Meadows	Initial					11/15/2020		11/16/2020		11/17/2020	0900-1200	11/18/2020		183	0	4	0	0	187

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 12:53 PM
To: SCE Liaison Officer
Subject: Important: SCE Initial Notice for PSPS Event in TUOLUMNE County on 11/17/2020.
Attachments: SCE+LNO+POC+TUOLUMNE+County+2020-11-15+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to projected weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE County. SCE is also notifying customers on the affected circuits about the potential shutoff, giving them time to prepare.

SCE has opened its Emergency Operations Center and activated an Incident Management Team to monitor the weather and other conditions in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Please refer to the attached file for status and periods of concern for specific circuits in your county.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: SCE may shut off power on one or more circuits in your area. For more information, visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #1

Note 1 : Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2 : Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3 : 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4 : Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5 : Please refer to Definitions tab for additional information.
Note 6 : Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat ; Tuolumne Meadows ; Dana Meadows	Initial					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		3	0	26	0	0	29

Notification ID	Message Title	Sent On
635796893732796	Important: SCE Update Notice for PSPS Event in TUOLUMNE County.	Nov 15, 2020 20:05:19 PST
635796893732799	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 15, 2020 20:08:37 PST
635796893732801	Important: SCE Update Notice for PSPS Event in VENTURA County.	Nov 15, 2020 20:10:33 PST
635796893732803	Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County.	Nov 15, 2020 20:12:50 PST
635796893732808	Important: SCE Update Notice for PSPS Event in KERN County.	Nov 15, 2020 20:15:28 PST
635796893732812	Important: SCE Update Notice for PSPS Event in MONO County.	Nov 15, 2020 20:18:12 PST
635796893732814	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 15, 2020 20:20:14 PST

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:06 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in TUOLUMNE County.
Attachments: SCE+LNO+POC+TUOLUMNE+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat ; Tuolumne Meadows ; Dana Meadows	Update					11/15/2020		11/16/2020		11/17/2020	0600-0000	11/18/2020		3	0	26	0	0	29

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:09 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+POC+LOS+ANGELES+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1 : Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2 : Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3 : 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4 : Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5 : Please refer to Definitions tab for additional information.
Note 6 : Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RIDGE	LOS ANGELES		Gorman ; Peace Valley	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		335	0	34	10	0	379

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:11 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in VENTURA County.
Attachments: SCE+LNO+POC+VENTURA+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
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TENNECO	VENTURA		Staufer ; Lockwood Valley	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		4615	1	81	79	17	4793

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:13 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in SAN BERNARDINO County.
Attachments: SCE+LNO+POC+SAN+BERNARDINO+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in SAN BERNARDINO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
DOBLE	SAN BERNARDINO		Doble ; Upper Holcomb Valley ; Arrastre Flats ; Furnace Canyon	All Clear					11/15/2020		11/16/2020		11/17/2020		11/18/2020		1	0	1	0	0	2
SCOUT	SAN BERNARDINO		Northeast of Fawnskin	All Clear					11/15/2020		11/16/2020		11/17/2020		11/18/2020		4	0	0	0	0	4
UTE	SAN BERNARDINO		North of Big Bear ; Apple Valley	All Clear					11/15/2020		11/16/2020		11/17/2020		11/18/2020		0	0	0	0	0	0

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:16 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+KERN+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
CONDOR	KERN		Bear Valley Springs	Initial					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		1383	0	48	45	5	1481
FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		0	0	0	0	0	0
RIDGE	KERN		Frazier Park ; Lebec	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	No Change					11/15/2020		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		4615	1	81	79	17	4793

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:18 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+POC+MONO+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BANTA	MONO		Lee Vining ; Lee Vining Canyon	Update					11/15/2020		11/16/2020		11/17/2020	0600-0000	11/18/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Update					11/15/2020		11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-0600	535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Update					11/15/2020		11/16/2020		11/17/2020	0600-0000	11/18/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Update					11/15/2020		11/16/2020		11/17/2020	0600-2100	11/18/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Update					11/15/2020		11/16/2020		11/17/2020	0600-2100	11/18/2020		1	0	0	0	0	1
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Update					11/15/2020		11/16/2020		11/17/2020	0600-2100	11/18/2020		66	1	14	1	0	82
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	Update					11/15/2020		11/16/2020		11/17/2020	0600-0000	11/18/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Update					11/15/2020		11/16/2020		11/17/2020	0600-2100	11/18/2020		236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	Update					11/15/2020		11/16/2020		11/17/2020	0900-2100	11/18/2020		229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	No Change					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	No Change					11/15/2020		11/16/2020		11/17/2020	0300-2100	11/18/2020		103	0	3	0	0	106

Mark Bodziak

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Sunday, November 15, 2020 8:20 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+County+2020-11-15+Rpt+2.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/15/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
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Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Schedlite ; Mesa ; West Bishop ; east of Grouse Mountain	Update					11/15/2020		11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-0600	535	4	10	9	2	560
SABRINA	INYO		Aspendell ; Coats Meadows	All Clear					11/15/2020		11/16/2020		11/17/2020		11/18/2020		183	0	4	0	0	187

Notification ID	Message Title	Sent On
646242254192832	Important: SCE Re-Energize Notice for PSPS Event in KERN County.	Nov 16, 2020 18:13:34 PST

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 6:14 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in KERN County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: CUDDEBACK**
- **Segment: 1**
- **County: KERN**
- **Unincorporated County Area: Golden Hills; Along SR 202 in Kern Co.**
- **Re-Energized Date: 11/16/2020**
- **Re-Energized Time: 1751**

- **Circuit: METTLER**
- **Segment: 3**
- **County: KERN**
- **Unincorporated County Area: Bear Valley Springs; Cummings Valley; Highline Rd.**
- **Re-Energized Date: 11/16/2020**
- **Re-Energized Time: 1716**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254192811	Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.	Nov 16, 2020 17:54:02 PST
645967376285941	Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.	Nov 16, 2020 20:06:46 PST

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 5:54 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: FROZEN**
- **County: KERN**
- **Segment: 1**
- **Unincorporated County Area: Wheeler Ridge; Grapevine; Tejon Ranch; Lebec**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

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- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 8:07 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: CONDOR**
- **County: KERN**
- **Segment: ALL SEGMENTS**
- **Unincorporated County Area: Bear Valley Springs**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

CA-05-0113

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
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- Access information on weather conditions at sce.com/fireweather.
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How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
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Notification ID	Message Title	Sent On
645967376285953	Important: SCE Update Notice for PSPS Event in TUOLUMNE County.	Nov 16, 2020 20:29:19 PST
645967376285966	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 16, 2020 20:51:34 PST
645967376285967	Important: SCE Update Notice for PSPS Event in VENTURA County.	Nov 16, 2020 20:56:40 PST
645967376285973	Important: SCE Update Notice for PSPS Event in KERN County.	Nov 16, 2020 21:07:46 PST
645967376285975	Important: SCE Update Notice for PSPS Event in MONO County.	Nov 16, 2020 21:13:33 PST
645967376285977	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 16, 2020 21:16:51 PST

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 8:30 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in TUOLUMNE County.
Attachments: SCE+LNO+POC+TUOLUMNE+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Mossline Flat ; Tuolumne Meadows ; Dana Meadows	No Change					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		3	0	26	0	0	29

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 8:52 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+POC+LOS+ANGELES+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

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Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
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RIDGE	LOS ANGELES		Gorman ; Peace Valley	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		335	0	34	10	0	379

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 8:57 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in VENTURA County.
Attachments: SCE+LNO+POC+VENTURA+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

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TENNECO	VENTURA		Staufer ; Lockwood Valley	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		4616	1	81	79	17	4794

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 9:08 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+KERN+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

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CONDOR	KERN		Bear Valley Springs	Imminent De-Energized	All Segments	11/16/2020	2006		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		1383	0	48	45	5	1481
CUDDEBACK	KERN		Golden Hills ; Along SR 202 in Kern Co	Re-Energized	Segment 1	11/16/2020	1751		11/16/2020		11/17/2020		11/18/2020		11/19/2020		332	0	7	3	0	342
FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	Imminent De-Energized	Segment 1	11/16/2020	1754		11/16/2020	2100-0000	11/17/2020	0000-0900	11/18/2020		11/19/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	De-Energized	All Segments	11/16/2020	2027		11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		0	0	0	0	0	0
METTLER	KERN	TEHACHAPI		Re-Energized	Segment 3	11/16/2020	1716		11/16/2020		11/17/2020		11/18/2020		11/19/2020		493	0	10	17	4	524
METTLER	KERN		Bear Valley Springs ; Cummings Valley ; Highline Rd	Re-Energized	Segment 3	11/16/2020	1716		11/16/2020		11/17/2020		11/18/2020		11/19/2020		493	0	10	17	4	524
RIDGE	KERN		Frazier Park ; Lebec	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		4616	1	81	79	17	4794

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 9:14 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+POC+MONO+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BANTA	MONO		Lee Vining ; Lee Vining Canyon	Update					11/16/2020		11/17/2020	0900-0000	11/18/2020		11/19/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Update					11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-1800	11/19/2020		535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		1	0	0	0	0	1
GULL LAKE	MONO		June Lake Down Canyon	Initial					11/16/2020		11/17/2020		11/18/2020		11/19/2020		361	1	8	3	0	373
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		66	1	14	1	0	82
REVERSE PEAK	MONO		June Lake Village and Loop ; Crestview	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		484	0	46	5	0	535
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	No Change					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	Update					11/16/2020		11/17/2020	1200-0000	11/18/2020		11/19/2020		229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	Update					11/16/2020		11/17/2020	0300-0900;1200-0000	11/18/2020		11/19/2020		373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Update					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		103	0	3	0	0	106

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 9:17 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+County+2020-11-16+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Update					11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-1800	11/19/2020		535	4	10	9	2	560

Notification ID	Message Title	Sent On
645967376285959	Important: SCE De-Energize Notice for PSPS Event in KERN County at 2027.	Nov 16, 2020 20:41:35 PST
645967376286007	Important: SCE De-Energize Notice for PSPS Event in KERN County at 2154.	Nov 16, 2020 22:15:12 PST

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 8:42 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in KERN County at 2027.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: GRAPEVINE PEAK**
- **County: KERN**
- **Segment: ALL SEGMENTS**
- **Unincorporated County Area: Along Grapevine Creek South of Grapevine City**
- **De-Energized Date: 11/16/2020**
- **De-Energized Time: 2027**

- **Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.**

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

CA-05-0135

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 10:15 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in KERN County at 2154.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: FROZEN**
- **County: KERN**
- **Segment: 1**
- **Unincorporated County Area: Wheeler Ridge; Grapevine; Tejon Ranch; Lebec**
- **De-Energized Date: 11/16/2020**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.

- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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  - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
635796893733521	Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.	Nov 16, 2020 09:06:28 PST
635796893733549	Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.	Nov 16, 2020 09:16:12 PST

Mara Kahunale Portlock

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 9:07 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: METTLER**
- **County: KERN**
- **Segment: 3**
- **Unincorporated County Area: Bear Valley Springs; Cummings Valley; Highline Rd**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.

- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Mara Kahunale Portlock

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 9:16 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: CUDDEBACK**
- **County: KERN**
- **Segment: ALL Segments**
- **Unincorporated County Area: Golden Hills; Along SR 202 in Kern Co.**
-
- **Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.**

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

CA-05-0142

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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Notification ID	Message Title	Sent On
635796893733646	Important: SCE De-Energize Notice for PSPS Event in KERN County at 0932.	Nov 16, 2020 10:24:11 PST
635796893733661	Important: SCE De-Energize Notice for PSPS Event in KERN County at 0939.	Nov 16, 2020 10:30:49 PST

Mara Kahunale Portlock

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 10:24 AM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in KERN County at 0932.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: METTLER**
- **County: KERN**
- **Segment: 3**
- **Unincorporated County Area: Bear Valley Springs; Cummings Valley; Highline Rd**
- **De-Energized Date: 11/16/2020**
- **De-Energized Time: 0932**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

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        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Mara Kahunale Portlock

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 10:31 AM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in KERN County at 0939.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: CUDDEBACK**
- **County: KERN**
- **Segment: 1**
- **Unincorporated County Area: Golden Hills; Along SR 202 in Kern Co.**
- **De-Energized Date: 11/16/2020**
- **De-Energized Time: 0939**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
635796893733801	Important: SCE Update Notice for PSPS Event in TUOLUMNE County.	Nov 16, 2020 11:43:12 PST
635796893733806	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 16, 2020 11:45:25 PST
635796893733811	Important: SCE Update Notice for PSPS Event in VENTURA County.	Nov 16, 2020 11:48:04 PST
635796893733826	Important: SCE Update Notice for PSPS Event in KERN County.	Nov 16, 2020 11:58:08 PST
635796893733833	Important: SCE Update Notice for PSPS Event in MONO County.	Nov 16, 2020 12:00:57 PST
635796893733840	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 16, 2020 12:03:15 PST

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 11:43 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in TUOLUMNE County.
Attachments: SCE+LNO+POC+TUOLUMNE+County+2020-11-16+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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    - 800-684-8123 is for all other billing and service inquiries.
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    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
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Note 5: Please refer to Definitions tab for additional information.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat ; Tuolumne Meadows ; Dana Meadows	No Change					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		3	0	26	0	0	29

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 11:46 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+POC+LOS+ANGELES+County+2020-11-16+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RIDGE	LOS ANGELES		Gorman ; Peace Valley	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		335	0	34	10	0	379

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 11:48 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in VENTURA County.
Attachments: SCE+LNO+POC+VENTURA+County+2020-11-16+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
TENNECO	VENTURA		Staufer ; Lockwood Valley	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		4616	1	81	79	17	4794

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 11:58 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+KERN+County+2020-11-16+Rpt+1.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

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CONDOR	KERN		Bear Valley Springs	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		1383	0	48	45	5	1481
CUDDEBACK	KERN		Golden Hills ; Along SR 202 in Kern Co	De-Energized-Partial	Segment 1	11/16/2020	939		11/16/2020	0900-1500	11/17/2020		11/18/2020		11/19/2020		332	0	7	3	0	342
FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		0	0	0	0	0	0
METTLER	KERN	TEHACHAPI		De-Energized-Partial	Segment 3	11/16/2020	932		11/16/2020	0900-1500	11/17/2020		11/18/2020		11/19/2020		493	0	10	17	4	524
METTLER	KERN		Bear Valley Springs ; Cummings Valley ; Highline Rd	De-Energized-Partial	Segment 3	11/16/2020	932		11/16/2020	0900-1500	11/17/2020		11/18/2020		11/19/2020		493	0	10	17	4	524
RIDGE	KERN		Frazier Park ; Lebec	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	No Change					11/16/2020	2100-0000	11/17/2020	0000-0600	11/18/2020		11/19/2020		4616	1	81	79	17	4794

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 12:01 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+POC+MONO+County+2020-11-16+Rpt+1.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BANTA	MONO		Lee Vining ; Lee Vining Canyon	No Change					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Update					11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-0300;0900-2100	11/19/2020		535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Update					11/16/2020		11/17/2020	0900-2100	11/18/2020		11/19/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Update					11/16/2020		11/17/2020	1200-2100	11/18/2020		11/19/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Update					11/16/2020		11/17/2020	1200-2100	11/18/2020		11/19/2020		1	0	0	0	0	1
GULL LAKE	MONO		June Lake Down Canyon	Initial					11/16/2020		11/17/2020	1200-1800	11/18/2020		11/19/2020		361	1	8	3	0	373
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Update					11/16/2020		11/17/2020	1200-2100	11/18/2020		11/19/2020		66	1	14	1	0	82
REVERSE PEAK	MONO		June Lake Village and Loop ; Crestview	Initial					11/16/2020		11/17/2020	1200-1800	11/18/2020		11/19/2020		484	0	46	5	0	535
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	No Change					11/16/2020		11/17/2020	0600-0000	11/18/2020		11/19/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Update					11/16/2020		11/17/2020	1200-2100	11/18/2020		11/19/2020		236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	No Change					11/16/2020		11/17/2020	0900-2100	11/18/2020		11/19/2020		229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	No Change					11/16/2020		11/17/2020	0300-2100	11/18/2020		11/19/2020		373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Update					11/16/2020		11/17/2020	0600-2100	11/18/2020		11/19/2020		103	0	3	0	0	106

Nora Mendoza

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Monday, November 16, 2020 12:03 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+County+2020-11-16+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/16/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Update					11/16/2020		11/17/2020	0300-0000	11/18/2020	0000-0300,0900-2100	11/19/2020		535	4	10	9	2	560

Notification ID	Message Title	Sent On
645967376286188	Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County at 0313.	Nov 17, 2020 03:32:00 PST
645967376286303	Important: SCE Imminent De-Energize Notice for PSPS Event in VENTURA County.	Nov 17, 2020 05:38:12 PST
645967376286283	Important: SCE Imminent De-Energize Notice for PSPS Event in LOS ANGELES County.	Nov 17, 2020 05:17:14 PST
645967376286288	Important: SCE Imminent De-Energize Notice for PSPS Event in MONO County.	Nov 17, 2020 05:23:19 PST
645967376286314	Important: SCE Imminent De-Energize Notice for PSPS Event in MONO County.	Nov 17, 2020 05:43:23 PST

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 3:32 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in KERN County at 0313.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: TENNECO**
- **County: KERN**
- **Segment: 5,6,7,8 9**
- **Unincorporated County Area: Pine Mountain Club ; Pinon Pines Estate; Lake of the Woods; Frazier Park**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 5:38 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in VENTURA County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: TENNECO**
- **County: VENTURA**
- **Unincorporated Areas: Staufer; Lockwood Valley**
- **Segment: 5,6,7,8,9**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

CA-05-0171

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 5:17 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in LOS ANGELES County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: SHOVEL**
- **County: LOS ANGELES**
- **Segment: 3**

- **Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.**

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.

CA-05-0173

- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 5:23 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in MONO County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: TUFA**
- **County: MONO**
- **Unincorporated Area: Chinatown; Mono City; and Mono Lake**
- **Segment: 2**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

CA-05-0175

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Joseph Richardson Williams

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 5:44 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in MONO County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: CAIN RANCH**
- **County: MONO**
- **Segment: ALL SEGMENTS**
- **Unincorporated County Area: Tioga Gas Mart; Pumice Valley**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254193480	Important: SCE Imminent De-Energize Notice for PSPS Event in Mono County	Nov 17, 2020 08:52:24 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 8:53 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in Mono County

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: CONWAY**
- **County: MONO**
- **Segment: All Segments**
- **Unincorporated County Areas: North Conway ; Willow Springs ; Bridgeport Feeder**

- **Circuit: DYNAMO**
- **County: MONO**
- **Segment: All Segments**
- **Unincorporated County Areas: Dunderberg Mill ; Bridgeport Feeder**

- **Circuit: PICKLE MEADOWS**
- **County: MONO**
- **Segment: All Segments**
- **Unincorporated County Areas: Bridgeport Valley to Pickle Meadows**

-
- **Circuit: ROBINSON CREEK**
- **County: MONO**
- **Segment: 1**
- **Unincorporated County Areas: Bridgeport Valley to Twin Lakes**

-
- **Circuit: STROSNIDER**
- **County: MONO**
- **Segment: All Segments**
- **Unincorporated County Areas: Bridgeport City**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will

be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254193446	Important: SCE De-Energize Notice for PSPS Event in Mono County at 0746	Nov 17, 2020 08:16:20 PST
646242254193490	Important: SCE De-Energize Notice for PSPS Event in Mono County at 0850	Nov 17, 2020 08:59:02 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 8:17 AM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in Mono County at 0746

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: TUFA**
- **County: MONO**
- **Segment: 2**
- **Unincorporated County Area: Chinatown; Mono City; and Mono Lake**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 07:46**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 8:59 AM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in Mono County at 0850.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: CAIN RANCH**
- **County: MONO**
- **Segment: All Segments**
- **Unincorporated County Area: Tioga Gas Mart ; Pumice Valley**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 08:50**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254193546	Important: SCE Update Notice for PSPS Event in Inyo County.	Nov 17, 2020 09:48:32 PST
646242254193552	Important: SCE Update Notice for PSPS Event in Kern County.	Nov 17, 2020 09:53:08 PST
646242254193563	Important: SCE Update Notice for PSPS Event in Mono County.	Nov 17, 2020 10:00:00 PST
646242254193569	Important: SCE Update Notice for PSPS Event in Los Angeles County.	Nov 17, 2020 10:03:50 PST
646242254193573	Important: SCE Update Notice for PSPS Event in Tuolumne County.	Nov 17, 2020 10:08:24 PST
646242254193587	Important: SCE Update Notice for PSPS Event in Ventura County.	Nov 17, 2020 10:11:39 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 9:49 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Inyo County.
Attachments: SCE+LNO+POC+INYO+2020-11-17+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Update					11/17/2020	0600-0000	11/18/2020	0000-0600;0900-0000	11/19/2020		11/20/2020		535	4	10	9	2	560

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 9:53 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Kern County.
Attachments: SCE+LNO+POC+KERN+2020-11-17+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
CONDOR	KERN		Bear Valley Springs	Imminent De-Energized	All Segments				11/17/2020	0000-1200	11/18/2020		11/19/2020		11/20/2020		1383	0	48	45	5	1481
FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	De-Energized	All Segments	11/16/2020	17:29		11/17/2020	0000-0600	11/18/2020		11/19/2020		11/20/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	De-Energized	All Segments	11/16/2020	16:39		11/17/2020	0000-0600	11/18/2020		11/19/2020		11/20/2020		UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL
RIDGE	KERN		Frazier Park ; Lebec	Update					11/17/2020	0000-1200	11/18/2020		11/19/2020		11/20/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	Imminent De-Energized	Segments 5, 6, 7, 8, 9				11/17/2020	0000-1200	11/18/2020		11/19/2020		11/20/2020		4616	1	81	79	17	4794

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 10:00 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Mono County.
Attachments: SCE+LNO+POC+MONO+2020-11-17+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
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How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BANTA	MONO		Lee Vining ; Lee Vining Canyon	De-Energized - Not PSPS related	Portion of Segment 1	11/17/2020	7:37		11/17/2020	0600-0000	11/18/2020		11/19/2020		11/20/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Update					11/17/2020	0600-0000	11/18/2020	0000-0600;0900-0000	11/19/2020		11/20/2020		535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	De-Energized	All Segments	11/17/2020	8:50		11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	Imminent De-Energized	All Segments				11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	Imminent De-Energized	All Segments				11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		1	0	0	0	0	1
GULL LAKE	MONO		June Lake Down Canyon	Initial					11/17/2020	0900-2100	11/18/2020		11/19/2020		11/20/2020		361	1	8	3	0	373
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	Imminent De-Energized	All Segments				11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		66	1	14	1	0	82
REVERSE PEAK	MONO		June Lake Village and Loop ; Crestview	Update					11/17/2020	0900-2100	11/18/2020		11/19/2020		11/20/2020		484	0	46	5	0	535
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	Update					11/17/2020	0600-0000	11/18/2020	0000-0300	11/19/2020		11/20/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	Imminent De-Energized	Segment 1				11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		236	0	4	1	1	242
SAGEHEN	MONO		Benton ; Hammil Valley	Update					11/17/2020	0900-0000	11/18/2020		11/19/2020		11/20/2020		229	3	52	4	2	290
STROSNIDER	MONO		Bridgeport City	Imminent De-Energized	All Segments				11/17/2020	0600-0000	11/18/2020		11/19/2020		11/20/2020		373	3	34	3	0	413
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	De-Energized	Segment 2	11/17/2020	7:46		11/17/2020	0600-0000	11/18/2020	0000-0300	11/19/2020		11/20/2020		103	0	3	0	0	106

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 10:04 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Los Angeles County.
Attachments: SCE+LNO+POC+LOS+ANGELES+2020-11-17+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BOOTLEGGER	LOS ANGELES		Acton ; Surrounding area around Acton ; Vincent ; Paris ; Singing Springs ; Hidden Springs ; Angles Forest Hwy to Singing Springs ; Aliso Canyon Rd	Initial					11/17/2020	0900-1200	11/18/2020		11/19/2020		11/20/2020		1448	1	71	51	9	1580
RIDGE	LOS ANGELES		Gorman ; Peace Valley	Update					11/17/2020	0000-1200	11/18/2020		11/19/2020		11/20/2020		335	0	34	10	0	379
SHOVEL	LOS ANGELES		Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point ;	Imminent De-Energized	Segment 3				11/17/2020	0900-1500	11/18/2020		11/19/2020		11/20/2020		662	1	25	23	4	715
SHOVEL	LOS ANGELES	PALMDALE		Imminent De-Energized	Segment 3				11/17/2020	0900-1500	11/18/2020		11/19/2020		11/20/2020		662	1	25	23	4	715

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 10:09 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Tuolumne County.
Attachments: SCE+LNO+POC+TUOLUMNE+2020-11-17+Rpt+1.xlsx

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Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

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Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat ; Tuolumne Meadows ; Dana Meadows	Update					11/17/2020	0600-0000	11/18/2020	0000-0300	11/19/2020		11/20/2020		3	0	26	0	0	29

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 10:12 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Ventura County.
Attachments: SCE+LNO+POC+VENTURA+2020-11-17+Rpt+1.xlsx

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #1

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TENNECO	VENTURA		Staufer ; Lockwood Valley	Imminent De-Energized	Segments 5, 6, 7, 8, 9				11/17/2020	0000-1200	11/18/2020		11/19/2020		11/20/2020		4616	1	81	79	17	4794

Notification ID	Message Title	Sent On
646242254193671	Important: SCE Imminent De-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit).	Nov 17, 2020 11:11:30 PST
646242254193854	Important: SCE Imminent De-Energize Notice for PSPS Event in Inyo & Mono Counties (BIRCHIM circuit).	Nov 17, 2020 13:23:51 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 11:12 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: SHOVEL**
- **County: LOS ANGELES**
- **Segment: 3**
- **Incorporated City: Palmdale**
- **Unincorporated County Area: Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

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    - Update customer contact information at sce.com/pspsalerts.

Charles		Navarro	charles.navarro@mail.house.gov	2	Nov 17, 2020 11:11:43 PST	Mobile (Text-SMS)	16612891910	Yes	Nov 17, 2020 11:37:13 PST	Confirmed	646242254193671
Duty		Officer	dutyofficer@ceooem.lacounty.gov	0		SMS Blkbry TXT Ph#	13239802260	No		Not Delivered - Duplicate Path	646242254193671
Duty		Officer	dutyofficer@ceooem.lacounty.gov	1	Nov 17, 2020 11:11:45 PST	Email Address 1	dutyofficer@ceooem.lacounty.gov	Yes	Nov 17, 2020 11:35:27 PST	Confirmed	646242254193671
Duty		Officer	dutyofficer@ceooem.lacounty.gov	2	Nov 17, 2020 11:11:42 PST	Mobile (Text-SMS)	13239802260	No		Not Delivered - Invalid Number	646242254193671

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 1:24 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent De-Energize Notice for PSPS Event in Inyo & Mono Counties (BIRCHIM circuit).

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to current weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) in the next 1 to 4 hours to reduce the risk of wildfire ignition though the PSPS may occur earlier or later depending on actual weather conditions. Areas that may be impacted include:

- **Circuit: BIRCHIM**
- **County: Inyo & Mono**
- **Segments: 3, 4, 5**
- **Unincorporated County Areas (INYO): Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain**
- **Unincorporated County Areas (MONO): Paradise ; Portion of Swall Meadows**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

This Imminent De-Energization warning expires after four hours. If one or more circuits listed here are de-energized by SCE due to PSPS, a De-Energized notification confirming date and time of the PSPS event will be sent. However, **if this imminent notice expires without de-energization, the listed circuit(s) remain on SCE's monitor list and subject to PSPS**.

SCE's Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe. SCE will provide an update to your agency as conditions change. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE may shut off the power on specific circuits within the next 1-4 hours. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254193744	Important: SCE De-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit) at 12:06	Nov 17, 2020 12:18:43 PST
646242254193831	Important: SCE De-Energize Notice for PSPS Event in Los Angeles County at 12:56.	Nov 17, 2020 13:12:09 PST
646242254193949	Important: SCE De-Energize Notice for PSPS Event in Inyo & Mono Counties (BIRCHIM circuit) at 1320.	Nov 17, 2020 14:28:09 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 12:19 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit) at 12:06

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: SHOVEL**
- **County: LOS ANGELES**
- **Segment: 3**
- **Incorporated City: Palmdale**
- **Unincorporated County Area: Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 12:06**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 1:12 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in Los Angeles County at 12:56.

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: SAND CANYON**
- **County: Los Angeles**
- **Segment: 3**
- **Incorporated City of: Santa Clarita**
- **Unincorporated County Area: Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyon ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 12:56**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

CA-05-0215

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 2:28 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in Inyo & Mono Counties (BIRCHIM circuit) at 1320.

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: BIRCHIM**
- **County: Inyo & Mono**
- **Segments: 3, 4, 5**
- **Unincorporated County Areas (INYO): Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain**
- **Unincorporated County Areas (MONO): Paradise ; Portion of Swall Meadows**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 13:20**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254193989	Important: SCE Imminent Re-Energize Notice for PSPS Event in Kern County.	Nov 17, 2020 14:54:15 PST
646242254194004	Important: SCE Imminent Re-Energize Notice for PSPS Event in Kern County.	Nov 17, 2020 15:01:58 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 2:55 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Kern County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: GRAPEVINE PEAK**
- **Segment(s): All segments**
- **County: Kern**
- **Unincorporated County Areas: Along Grapevine Creek South of Grapevine City**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 3:02 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Kern County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: FROZEN**
- **Segment(s): 1**
- **County: Kern County**
- **Unincorporated County Areas: Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254194015	Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County on SHOVEL Circuit (partial).	Nov 17, 2020 15:12:21 PST
646242254194154	Important: SCE Re-Energize Notice for PSPS Event in Kern County.	Nov 17, 2020 16:42:12 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 3:13 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County on SHOVEL Circuit (partial).

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **PARTIALLY RE-ENERGIZE** the following circuit(s):

- **Circuit: SHOVEL**
- **Segment: 3 (partial, 110 customers)**
- **County: Los Angeles**
- **Incorporated City of: Palmdale**
- **Unincorporated County Area: Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point**
- **Re-Energized Date: 11/17/2020**
- **Re-Energized Time: 14:46**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.

CA-05-0225

- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 4:42 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Kern County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: GRAPEVINE PEAK**
- **County: Kern**
- **Segment(s): All Segments**
- **Unincorporated County Area: Along Grapevine Creek South of Grapevine City**
- **Re-Energized Date: 11/17/2020**
- **Re-Energized Time: 16:20**

- **Circuit: FROZEN**
- **County: Kern**
- **Segment(s): All Segments**
- **Unincorporated County Area: Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec**
- **Re-Energized Date: 11/17/2020**
- **Re-Energized Time: 16:21**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
644867864660068	Important: SCE Update Notice for PSPS Event in TUOLUMNE County.	Nov 17, 2020 19:17:25 PST
644867864660083	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 17, 2020 19:25:17 PST
644867864660085	Important: SCE Update Notice for PSPS Event in VENTURA County.	Nov 17, 2020 19:28:25 PST
644867864660091	Important: SCE Update Notice for PSPS Event in KERN County.	Nov 17, 2020 19:32:14 PST
644867864660095	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 17, 2020 19:34:26 PST
	*The Mono County Rpt 2 update was not sent on 11/17/20. There were numerous communications that did occurr.	

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 7:18 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in TUOLUMNE County.
Attachments: SCE+LNO+POC+TUOLUMNE+County+2020-11-17+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat ; Tuolumne Meadows ; Dana Meadows	Update					11/17/2020	0900-0000	11/18/2020	0000-0600	11/19/2020		11/20/2020		3	0	26	0	0	29

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 7:25 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+POC+Los+Angeles+County+2020-11-17+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

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- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #2

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Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BOOTLEGGER	LOS ANGELES		Acton ; Surrounding area around Acton ; Vincent ; Paris ; Singing Springs ; Hidden Springs ; Angles Forest Hwy to Singing Springs ; Aliso Canyon Rd	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		1448	1	71	51	9	1580
RIDGE	LOS ANGELES		Gorman ; Peace Valley	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		335	0	34	10	0	379
SAND CANYON	LOS ANGELES		Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyo ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump	De-Energized	Segment 3	11/17/2020	12:56		11/17/2020	1200-2100	11/18/2020		11/19/2020		11/20/2020		2050	2	74	64	7	2197
SAND CANYON	LOS ANGELES	SANTA CLARITA		Initial					11/17/2020	1200-2100	11/18/2020		11/19/2020		11/20/2020		2050	2	74	64	7	2197
SHOVEL	LOS ANGELES		Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point ;	Re-Energized-Partial	Segment 3 (110 custs restored; 57 remain off)	11/17/2020	14:46		11/17/2020	1200-2100	11/18/2020		11/19/2020		11/20/2020		662	1	25	23	4	715
SHOVEL	LOS ANGELES	PALMDALE		Re-Energized-Partial	Segment 3 (110 custs restored; 57 remain off)	11/17/2020	14:46		11/17/2020	1200-2100	11/18/2020		11/19/2020		11/20/2020		662	1	25	23	4	715

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 7:29 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in VENTURA County.
Attachments: SCE+LNO+POC+Ventura+County+2020-11-17+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

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Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in VENTURA County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
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- Access SCE's non-PSPS outage information page at sce.com/outages.
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CA-05-0236

How to Contact Us

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    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #2

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TENNECO	VENTURA		Staufer ; Lockwood Valley	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		4616	1	81	79	17	4794

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 7:32 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in KERN County.
Attachments: SCE+LNO+POC+Kern+County+2020-11-17+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

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Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in KERN County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

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Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #2

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CONDOR	KERN		Bear Valley Springs	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		1383	0	48	45	5	1481
FROZEN	KERN		Wheeler Ridge ; Grapevine ; Tejon Ranch ; Lebec	Re-Energized	All Segments	11/17/2020	16:21		11/17/2020		11/18/2020		11/19/2020		11/20/2020		0	0	1	0	0	1
GRAPEVINE PEAK	KERN		Along Grapevine Creek South of Grapvine City	Re-Energized	All Segments	11/17/2020	16:20		11/17/2020		11/18/2020		11/19/2020		11/20/2020		UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL	UNAVBL
RIDGE	KERN		Frazier Park ; Lebec	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		335	0	34	10	0	379
TENNECO	KERN		Pine Mountain Club ; Pinon Pines Estate ; Lake of the Woods ; Frazier Park	All Clear					11/17/2020		11/18/2020		11/19/2020		11/20/2020		4616	1	81	79	17	4794

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 7:35 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+POC+INYO+County+2020-11-17+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

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SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/17/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	De-Energized		11/17/2020	13:20		11/17/2020	0900-0000	11/18/2020	0000-2100	11/19/2020		11/20/2020		535	4	10	9	2	560

Notification ID	Message Title	Sent On
644867864660156	Important: SCE De-Energize Notice for PSPS Event in MONO County.	Nov 17, 2020 20:58:08 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Tuesday, November 17, 2020 8:58 PM
To: SCE Liaison Officer
Subject: Important: SCE De-Energize Notice for PSPS Event in MONO County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Due to weather conditions, SCE conducted a Public Safety Power Shutoff (PSPS) to circuits in your county. Impacted circuits and locations are:

- **Circuit: REVERSE PEAK**
- **County: MONO**
- **Segment: 3**
- **Unincorporated County Area: June Lake Village and Loop ; Crestview**
- **De-Energized Date: 11/17/2020**
- **De-Energized Time: 2046**

- **Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.**

SCE is also notifying customers on the affected circuits to inform them about the shutoff. SCE understands the inconvenience of shutting off electric service. Safety is SCE's first priority. This Public Safety Power Shutoff (PSPS) action was taken with the safety of our customers and the public in mind, and to maintain the integrity of the electric system for all of our customers.

SCE has an Incident Management Team (IMT) is in place to monitor conditions, coordinate with government agencies, and oversee re-energization once conditions are safe.

Power will be restored as weather conditions improve, crews conduct inspections, any necessary repairs have been made, and we determine it is safe to re-energize lines. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: Due to current weather conditions, SCE has shut off power in your area. Check your email for details and visit www.sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254194866	Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County.	Nov 18, 2020 07:07:18 PST
646242254194910	Important: SCE Imminent Re-Energize Notice for PSPS Event in Inyo County.	Nov 18, 2020 07:26:11 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 7:08 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: BIRCHIM**
- **Segment(s): Segment 3**
- **County: Mono**
- **Unincorporated County Area: Paradise ; Portion of Swall Meadows**

- **Circuit: CAIN RANCH**
- **Segment(s): All Segments**
- **County: Mono**
- **Unincorporated County Area: Tioga Gas Mart ; Pumice Valley**

- **Circuit: REVERSE PEAK**
- **Segment(s): 3**
- **County: Mono**
- **Unincorporated County Area: June Lake Village and Loop ; Crestview**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 7:26 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Inyo County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: BIRCHIM**
- **Segment(s): 3**
- **County: Inyo**
- **Unincorporated County Area: Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

CA-05-0251

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254195043	Important: SCE Re-Energize Notice for PSPS Event in Inyo & Mono County (BIRCHIM, Segment 3).	Nov 18, 2020 08:46:56 PST
646242254195131	Important: SCE Re-Energize Notice for PSPS Event in Mono County.	Nov 18, 2020 09:39:24 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 8:47 AM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Inyo & Mono County (BIRCHIM, Segment 3).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: BIRCHIM**
- **Segment(s): 3**
- **County: Inyo & Mono**
- **Unincorporated County Area (INYO): Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain**
- **Unincorporated County Area (MONO): Paradise ; Portion of Swall Meadows**
- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 08:13**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
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- **Members of the Public: Please DO share this information with your residents on your website or social media**.
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  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 9:40 AM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Mono County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: CAIN RANCH**
- **County: Mono**
- **Unincorporated County Area: Tioga Gas Mart ; Pumice Valley**
- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 08:44**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
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        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254195178	Important: SCE Update Notice for PSPS Event in Mono County.	Nov 18, 2020 10:06:08 PST
646242254195187	Important: SCE Update Notice for PSPS Event in Inyo County.	Nov 18, 2020 10:11:01 PST
646242254195195	Important: SCE Update Notice for PSPS Event in Los Angeles County.	Nov 18, 2020 10:14:45 PST
646242254195199	Important: SCE Update Notice for PSPS Event in Tuolumne County.	Nov 18, 2020 10:18:04 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:06 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Mono County.
Attachments: SCE+LNO+POC+MONO+2020-11-18+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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    - SCE Liaison Officer (LNO)
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    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BANTA	MONO		Lee Vining ; Lee Vining Canyon	De-Energized - Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		131	2	13	1	1	148
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Re-Energized-Partial		11/18/2020	8:13		11/18/2020	0000-0000	11/19/2020		11/20/2020		11/21/2020		535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	Re-Energized		11/18/2020	8:44		11/18/2020		11/19/2020		11/20/2020		11/21/2020		18	0	4	0	0	22
CONWAY	MONO		North Conway ; Willow Springs ; Bridgeport Feeder	De-Energized - Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		22	2	4	0	0	28
DYNAMO	MONO		Dunderberg Mill ; Bridgeport Feeder	De-Energized - Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		1	0	0	0	0	1
PICKLE MEADOWS	MONO		Bridgeport Valley to Pickle Meadows	De-Energized - Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		66	1	14	1	0	82
REVERSE PEAK	MONO		June Lake Village and Loop ; Crestview	Imminent Re-Energized	Segment 3				11/18/2020		11/19/2020		11/20/2020		11/21/2020		485	0	46	5	0	536
RHINEDOLLAR	MONO		Upper Lee Vining Canyon ; Tuolumne	All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		3	0	26	0	0	29
ROBINSON CREEK	MONO		Bridgeport Valley to Twin Lakes	De-Energized-Partial Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		236	0	4	1	1	242
STROSNIDER	MONO		Bridgeport City	De-Energized - Not PSPS related	Impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		371	3	34	3	0	411
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	De-Energized	Segment 2 (PSPS Related at 07:46 on 11/17/2020); Other segments impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		103	0	3	0	0	106

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:11 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Inyo County.
Attachments: SCE+LNO+POC+INYO+2020-11-18+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Re-Energized-Partial		11/18/2020	8:13		11/18/2020	0000-0000	11/19/2020		11/20/2020		11/21/2020		535	4	10	9	2	560

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:15 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Los Angeles County.
Attachments: SCE+LNO+POC+LOS+ANGELES+2020-11-18+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
SAND CANYON	LOS ANGELES		Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyon ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump	De-Energized	Segment 3	11/17/2020	12:56		11/18/2020		11/19/2020		11/20/2020		11/21/2020		2049	2	74	64	7	2196
SAND CANYON	LOS ANGELES	SANTA CLARITA		De-Energized	Segment 3	11/17/2020	12:56		11/18/2020		11/19/2020		11/20/2020		11/21/2020		2049	2	74	64	7	2196
SHOVEL	LOS ANGELES		Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point ;	Re-Energized-Partial	Segment 3	11/17/2020	14:46		11/18/2020	0300-1500	11/19/2020		11/20/2020		11/21/2020		663	1	25	23	4	716
SHOVEL	LOS ANGELES	PALMDALE		Re-Energized-Partial	Segment 3	11/17/2020	14:46		11/18/2020	0300-1500	11/19/2020		11/20/2020		11/21/2020		663	1	25	23	4	716

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:18 AM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in Tuolumne County.
Attachments: SCE+LNO+POC+TUOLUMNE+2020-11-18+Rpt+1.xlsx

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in TUOLUMNE COUNTY. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

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There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #1

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
RHINEDOLLAR	TUOLUMNE		Moraine Flat; Tuolumne Meadows ; Dana Meadows	All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		3	0	26	0	0	29

Notification ID	Message Title	Sent On
646242254195205	Important: SCE Re-Energize Notice for PSPS Event in Mono County (REVERSE PEAK circuit).	Nov 18, 2020 10:24:34 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:25 AM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Mono County (REVERSE PEAK circuit).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: REVERSE PEAK**
- **Segment(s): 3**
- **County: MONO**
- **Unincorporated County Area: June Lake Village and Loop ; Crestview**
- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 09:43**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254195264	Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County (TUFA circuit).	Nov 18, 2020 10:52:25 PST
646242254195498	Important: SCE Imminent Re-Energize Notice for PSPS Event in Los Angeles County.	Nov 18, 2020 12:58:56 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:53 AM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County (TUFA circuit).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: TUFA**
- **Segment(s): 2**
- **County: Mono**
- **Unincorporated County Area: Chinatown ; Mono City ; and Mono Lake**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

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    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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    - SCE Liaison Officer (LNO)
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        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 12:59 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Los Angeles County.

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: SAND CANYON**
- **Segment(s): 3**
- **County: Los Angeles**
- **Incorporated City of: Santa Clarita**
- **Unincorporated County Areas: Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyon ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump**

- **Circuit: SHOVEL**
- **Segment(s): 3 (remaining portion of segment)**
- **County: Los Angeles**
- **Incorporated City of: Palmdale**
- **Unincorporated County Areas: Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point**

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
646242254195623	Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit).	Nov 18, 2020 14:22:43 PST
646242254195642	Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County (SAND CANYON circuit).	Nov 18, 2020 14:40:34 PST

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 2:23 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County (SHOVEL circuit).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: SHOVEL**
- **Segment(s): 3 (remaining portion of segment)**
- **County: Los Angeles**
- **Incorporated City of: Palmdale**
- **Unincorporated County Area: Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point**
- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 13:44**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Carolina Ceballos

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 2:41 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Los Angeles County (SAND CANYON circuit).

Importance: High

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: SAND CANYON**
- **County: Los Angeles**
- **Segment(s): 3**
- **Incorporated City of: Santa Clarita**
- **Unincorporated County Area: Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyon ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump**
- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 14:26**

SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
644867864661879	Important: SCE Update Notice for PSPS Event in INYO County.	Nov 18, 2020 18:47:31 PST
644867864661885	Important: SCE Update Notice for PSPS Event in LOS ANGELES County.	Nov 18, 2020 18:51:46 PST
644867864661886	Important: SCE Update Notice for PSPS Event in MONO County.	Nov 18, 2020 18:56:39 PST

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 6:48 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in INYO County.
Attachments: SCE+LNO+Inyo+County+2020-11-18+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in INYO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	INYO		Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain	Re-Energized-Partial					11/18/2020	1200-2100	11/19/2020		11/20/2020		11/21/2020		535	4	10	9	2	560

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 6:52 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in LOS ANGELES County.
Attachments: SCE+LNO+Los+Angeles+County+2020-11-18+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in LOS ANGELES County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
SHOVEL	LOS ANGELES		Escondido Canyon Rd between Aqua Dulce Canyon and Acton ; Kashmere Canyon ; Boiling Point;	All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		663	1	25	23	4	716
SHOVEL	LOS ANGELES	PALMDALE		All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		663	1	25	23	4	716
SAND CANYON	LOS ANGELES		Agua Dulce Canyon ; Mint Canyon south of Mint Canyon Elementary school going south on Sand Canyon Rd ; Sand Canyon ; Soledad Canyon ; Long Canyon ; Russ ; Lang ; Magic Mountain ; North Fork Ranger Station Water Pump	All Clear	Segment 3				11/18/2020		11/19/2020		11/20/2020		11/21/2020		2049	2	74	64	7	2196

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 6:57 PM
To: SCE Liaison Officer
Subject: Important: SCE Update Notice for PSPS Event in MONO County.
Attachments: SCE+LNO+Mono+County+2020-11-18+Rpt+2.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

Please refer to the attached file for UPDATED status and periods of concern for specific circuits in your county.

Due to weather conditions, SCE may need to shut off power (a Public Safety Power Shutoff or PSPS) to electrical circuits in High Fire Risk Areas (HFRA) serving portions of some cities and/or unincorporated areas in MONO County. SCE is also notifying customers on the affected circuits about the potential for shutoff, giving them time to prepare.

SCE's Incident Management Team continues to monitor the weather in real time. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential Public Safety Power Shutoffs. Additional targeted notifications will also be sent, as needed, to provide time-sensitive de-energize or re-energize information. Erratic or sudden onset of hazardous conditions that jeopardize public safety may impact SCE's ability to provide advanced notice to customers. A shutoff could occur sooner than anticipated, additional circuits could be impacted, or conditions could change, resulting in shutoffs no longer being considered for one or more circuits. We will notify you as conditions change.

There also might be weather-related or other unplanned repair outages in the areas designated for potential Public Safety Power Shutoffs. Information on these unplanned outages can be found at sce.com/outage.

Recommended Language to Share with the Public: Weather conditions have changed and we are providing an updated status for all circuits with potential for power shutoff in your area. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

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  - SCE Liaison Officer (LNO)
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    - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

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  - 800-611-1911 is for outage-specific Customer Service issues.
  - 800-684-8123 is for all other billing and service inquiries.
  - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
  - Update customer contact information at sce.com/pspsalerts.

Southern California Edison LNO Circuit List with Periods of Concern

As of 11/18/2020 Circuit List All Counties Report #2

Note 1: Restoration activities begin as soon as conditions improve and it is safe for crews to begin inspections.
Note 2: Estimated Restoration Times may be delayed if damage is found or if weather conditions change.
Note 3: 72-hour notification information is for local government and agency planning use only. Customer notifications begin at 48 hours.
Note 4: Approximate customer counts are calculated by circuit, regardless of jurisdiction. If a circuit crosses jurisdictional boundaries, the total customer counts for that circuit are included for each jurisdiction. See sce.com/safety/wildfire/psps for total customer counts by county.
Note 5: Please refer to Definitions tab for additional information.
Note 6: Any circuits on the list that do not display period of concern times means those circuits have periods of concern that start beyond the time periods shown. Watch for more on subsequent reports.

Circuit Name	County	Incorporated City/Cities	Unincorporated Communities	Circuit Notification Status	Comments	De-Energ / Re-Energ Date	De-Energ / Re-Energ Time	Est. Restor. Time De-Energ Circuits	Day 1 PoC Date	Day 1 PoC Time	Day 2 PoC Date	Day 2 PoC Time	Day 3 PoC Date	Day 3 PoC Time	Day 4 PoC Date	Day 4 PoC Time	Residential/Unassigned (Entire Circuit)	Essential Use (Entire Circuit)	Major (Entire Circuit)	MBL (Entire Circuit)	Critical Care (Entire Circuit)	Customer Totals (Entire Circuit)
BIRCHIM	MONO		Paradise ; Portion of Swall Meadows	Re-Energized-Partial					11/18/2020	1200-2100	11/19/2020		11/20/2020		11/21/2020		535	4	10	9	2	560
CAIN RANCH	MONO		Tioga Gas Mart ; Pumice Valley	All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		18	0	4	0	0	22
REVERSE PEAK	MONO		June Lake Village and Loop ; Crestview	All Clear					11/18/2020		11/19/2020		11/20/2020		11/21/2020		485	0	46	5	0	536
TUFA	MONO		Chinatown ; Mono City ; and Mono Lake	Imminent Re-Energized	Segment 2 (PSPS Related at 07:46 on 11/17/2020); Other segments impacted by hardware failure at SCE substation serving Lee Vining/Bridgeport area	11/17/2020	9:21		11/18/2020		11/19/2020		11/20/2020		11/21/2020		103	0	3	0	0	106

Notification ID	Message Title	Sent On
650227983843345	Important: SCE Imminent Re-Energize Notice for PSPS Event in Inyo.	Nov 18, 2020 19:43:04 PST
650227983843347	Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County.	Nov 18, 2020 19:45:35 PST

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 7:43 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Inyo.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: Birchim**
- **Segment(s):**
- **County: Inyo**
- **Incorporated City of:**
- **Unincorporated County Area:**

  Round Valley ; Scheelite ; Mesa ; West Bishop ; east of Grouse Mountain

-

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 7:46 PM
To: SCE Liaison Officer
Subject: Important: SCE Imminent Re-Energize Notice for PSPS Event in Mono County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have completed inspections, made any necessary repairs, and determined it is safe to begin **RE-ENERGIZING** the following circuit(s) or segments of circuit(s):

- **Circuit: Birchim**
- **Segment(s):**
- **County: Mono**
- **Incorporated City of:**
- **Unincorporated County Area:**

  Paradise ; Portion of Swall Meadows

-

Circuit segments may be viewed at sce.com/psps and maps downloaded at sce.com/maps.

SCE will also begin notifying customers that power will be turned back on. In most cases, power will be restored within 24 hours from the end of the period of concern for the electrical circuit. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working safely and as quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: SCE will begin turning power back on in your area. SCE has inspected its electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

CA-05-0297

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
650227983843454	Important: SCE Re-Energize Notice for PSPS Event in Mono County.	Nov 18, 2020 21:28:18 PST
650227983843457	Important: SCE Re-Energize Notice for PSPS Event in Inyo County.	Nov 18, 2020 21:30:53 PST
650227983843477	Important: SCE Re-Energize Notice for PSPS Event in Mono County.	Nov 18, 2020 22:06:43 PST

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 9:28 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Mono County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: BIRCHIM**
- **Segment: 4**
- **County: Mono**
- **Unincorporated County Area:**

  Paradise ; Portion of Swall Meadows

- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 21:15**
-
- SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 9:31 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Inyo County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: BIRCHIM**
- **Segment: 4**
- **County: INYO**
- **Unincorporated County Area:**

  Paradise ;
  Round Valley ; Scheelite ; Mesa ;
  West Bishop ; east of Grouse
  Mountain

- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 21:15**

-
- SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

CA-05-0302

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Wednesday, November 18, 2020 10:07 PM
To: SCE Liaison Officer
Subject: Important: SCE Re-Energize Notice for PSPS Event in Mono County.

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE crews have inspected the lines, made any necessary repairs, and determined it was safe to **RE-ENERGIZE** the following circuit(s):

- **Circuit: Tufa**
- **Segment:**
- **County: Mono**
- **Unincorporated County Area:**

Chinatown ; Mono City ; and Mono Lake

- **Re-Energized Date: 11/18/2020**
- **Re-Energized Time: 21:56**
- SCE is also notifying customers that power has been turned back on. SCE's Incident Management Team will continue to monitor conditions and coordinate with government agencies.

For customers in these areas who are experiencing a weather-related or other unplanned repair outage not related to a PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

The SCE Liaison Officer typically sends update notifications twice a day, providing a rolling 72-hour advance warning of potential PSPS events for this county. Additional targeted notifications provide alerts with all time-sensitive de-energize or re-energize information.

Recommended Language to Share with the Public: SCE is turning the power back on in your area. We have inspected our electrical lines and equipment, made any necessary repairs, and determined it is safe to turn on the power. Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.
        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Notification ID	Message Title	Sent On
655175786169023	Important: SCE Event Concluded Notice for PSPS Event in KERN County.	Nov 19, 2020 09:46:34 PST
655175786169027	Important: SCE Event Concluded Notice for PSPS Event in INYO County.	Nov 19, 2020 09:49:23 PST
655175786169033	Important: SCE Event Concluded Notice for PSPS Event in MONO County.	Nov 19, 2020 09:51:03 PST
655175786169040	Important: SCE Event Concluded Notice for PSPS Event in SAN BERNARDINO County.	Nov 19, 2020 09:53:35 PST
655175786169042	Important: SCE Event Concluded Notice for PSPS Event in VENTURA County.	Nov 19, 2020 09:55:06 PST
655175786169044	Important: SCE Event Concluded Notice for PSPS Event in LOS ANGELES County.	Nov 19, 2020 09:56:25 PST
655175786169048	Important: SCE Event Concluded Notice for PSPS Event in TUOLUMNE County.	Nov 19, 2020 09:58:11 PST

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:47 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in KERN County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

CA-05-0307

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:50 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in INYO County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

CA-05-0309

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:51 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in MONO County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

CA-05-0311

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:54 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in SAN BERNARDINO County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

CA-05-0313

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:55 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in VENTURA County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

CA-05-0315

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:57 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in LOS ANGELES County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
  - SCE Business Resiliency Team
    - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
    - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
  - SCE Liaison Officer (LNO)
    - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Rocio M Contreras-Regalado

From: SCELiaisonOfficer@sce.com <noreply@everbridge.net>
Sent: Thursday, November 19, 2020 9:58 AM
To: SCE Liaison Officer
Subject: Important: SCE Event Concluded Notice for PSPS Event in TUOLUMNE County.

Follow Up Flag: Follow up
Flag Status: Flagged

Please click here to acknowledge receipt of this message
This message is from the Southern California Edison Liaison Officer for official use by local / tribal governments and public safety partners.

SCE's Incident Management Team is standing down and both SCE systems and staff have returned to normal status.

For customers in areas experiencing a weather-related or other unplanned repair outage not related to PSPS, know that SCE crews are working as safely and quickly as possible to restore service. SCE relies on forecast data provided by in-house meteorologists, fire scientists, and other technical staff. Note that weather forecasts on radio and television may provide different information.

Recommended Language to Share with the Public: The power shutoff in your area has concluded. Customers in this area, however, may experience other weather-related or unplanned repair outages not related to the Public Safety Power Shutoff (PSPS). Check your email for details and visit sce.com/PSPS.

Web and Maps

- PDFs of High Fire Risk Area (HFRA) circuit maps and GIS layers may be found, by county, at sce.com/maps.
- Information about SCE's Public Safety Power Shutoff (PSPS) program is at sce.com/PSPS.
- Access SCE's non-PSPS outage information page at sce.com/outages.
- Access information on weather conditions at sce.com/fireweather.
- SCE's post-PSPS reports are available at sce.com/psps.

How to Contact Us

- **First Responders and Emergency Managers: Please DO NOT share this information with the public**.
    - SCE Business Resiliency Team
        - Business Resiliency Duty Manager hotline is **(800) 674-4478**. This is a 24/7 phone line that can be used outside of PSPS events as well as during activations.
        - BusinessResiliencyDutyManager@sce.com. The Business Resiliency Duty Manager mailbox is only monitored during activations.

- **Public Officials: Please DO NOT share this information with the public**.
    - SCE Liaison Officer (LNO)
        - LNO hotline is 800-737-9811. This 24/7 phone line is for use by local government and tribal officials only and it's monitored only during emergency activations.

        - SCELiaisonOfficer@sce.com. The LNO mailbox is for use by local government officials and only monitored during emergencies or PSPS activations.

- **Members of the Public: Please DO share this information with your residents on your website or social media**.
    - 800-611-1911 is for outage-specific Customer Service issues.
    - 800-684-8123 is for all other billing and service inquiries.
    - sce.com/PSPS is the site where customers may learn more about PSPS events in their area.
    - Update customer contact information at sce.com/pspsalerts.

Attachment B
Critical Infrastructure and Customer Notifications

From Period of Concern Report 11/19/2020 08:24

*72 Hour Notification only generated for Critical Infrastructure Customers. Circuits without date/timestamps in the Communications sects

11.19.2020 PSPS Activation
Customer Communication Notification Tracking Sheet

CIRCUIT STATUS								COMMUNICATIONS						PSPS PROTOCOL											
Circuits	D_ST_T	Downstreams	Parent Circuit	Counties	Added to Target List	Removed from Target List	HFA Circuit	Initial (72 Hour)	2 Day (48 Hour)	1 Day (24 Hour)	Day Of	Update(s) (required daily unless circuit is de-energized)	All Clear	Imminent Shutdown Notification	Imminent Shutdown Notification (Partial) Circuit Breaker(CB) or RAR or PS	Notification Shutdown Notification Customer Count	De-Energized Notification Date/Time	De-Energized Notification (Partial) Circuit Breaker(CB) or RAR or PS	De-Energized Notification Customer Count	Prepare to Re-Energize Notification (Partial) Circuit Breaker(CB) or RAR or PS	Prepare to Re-Energize Notification Customer Count	Re-Energized Notification Date/Time	Re-Energized Notification (Partial) Circuit Breaker(CB) or RAR or PS	Re-Energize Notification Customer Count	Notes
BRDHM	0			MONO, INYO	11/14/2020 10:30	11/19/2020 08:24		11/14/2020 17:09	11/18/2020 15:05	11/16/2020 12:10	11/17/2020 9:24	11/18/2020 9:42	11/19/2020 9:22	11/17/2020 13:10	11/17/2020 13:20	AW0323 and RCS0181	5, 173	11/17/2020 14:17, 11/17/2020 14:17	AW0323 RCS0181	0 178	11/18/2020 7:01	11/18/2020 8:37	RCS0181	173	
CANYAWCH	0			MONO	11/14/2020 10:30	11/18/2020 06:00		11/14/2020 17:09	11/15/2020 15:05	11/16/2020 12:10			11/18/2020 9:27	11/17/2020 5:47	0:28		22	11/17/2020 8:55	AW0633	22	11/18/2020 6:35	11/18/2020 9:14	CB	22	
CUDDIBACK	0			Kern	11/16/2020 09:00	11/16/2020 17:00							11/16/2020 19:58	11/16/2020 9:09	0:28		103	11/16/2020 10:28	PS0875	103	11/16/2020 16:37	11/18/2020 18:10	PS0875	103	
FROZEN	0			Kern	11/14/2020 17:15	11/17/2020 17:00			11/16/2020 20:55	11/15/2020 13:05	11/16/2020 12:10		11/17/2020 19:39	11/16/2020 17:53	PS0269		1	11/16/2020 22:05	PS0269	1	11/17/2020 14:42	11/17/2020 16:35	PS0269	1	
METTLER	0			Kern	11/16/2020 09:00	11/16/2020 17:00					11/16/2020 12:57		11/16/2020 19:59	11/16/2020 9:07	RCS1132		8	11/16/2020 9:43	RCS1132	8	11/16/2020 16:36	11/18/2020 18:10	RCS1132	8	
REVERSE PEAK	0			MONO	11/16/2020 09:00	11/18/2020 06:00				11/16/2020 12:10	11/17/2020 9:24		11/18/2020 13:04	11/17/2020 18:17	AW0122		24	11/17/2020 21:07	AW0112	24	11/18/2020 6:05	11/18/2020 9:58	AW0112	24	
SAND CANYON	0			LOS ANGELES	11/17/2020 17:00	11/18/2020 06:00					11/17/2020 19:40		11/18/2020 16:16				9	11/17/2020 13:10	AW0191	9	11/18/2020 13:00	11/18/2020 15:16	AW0191	9	
SKOVEL	0			LOS ANGELES	11/18/2020 06:00, 11/17/2020 05:30	11/18/2020 13:43					11/17/2020 9:23	11/18/2020 9:38	11/18/2020 18:31	11/17/2020 5:23, 11/17/2020 11:03	AW0102 AW0102	166 166	166	11/17/2020 12:15	AW0332	166	11/18/2020 13:13, 11/17/2020 14:33	11/17/2020 15:00, 11/18/2020 14:08	AW0101 to open PS0424	110	
TUFA	0			MONO	11/14/2020 10:30	11/18/2020 06:00		11/14/2020 17:09	11/18/2020 15:05	11/16/2020 12:10	11/17/2020 9:23		11/19/2020 9:22	11/17/2020 5:23	AW0289	1	1	11/17/2020 8:01	AW0289	1	11/18/2020 10:48	11/18/2020 22:07	AW0289	1	11/17/2020 Source text @ 0921 - 1 customer on TUFA de-energized

Attachment B
Critical Infrastructure and Customer Notifications-Amended

From Period of Concern Report 11/19/2020 08:24

*72 Hour Notification only generated for Critical Infrastructure Customers. Circuits without date/timestamps in the Communications section d

11.14.2020 PSPS Activation
Pre-Event Notification Timing and Customer Classification Report

CIRCUIT STATUS			COMMUNICATIONS					*CUSTOMER COUNTS					
Circuits	D_ST_T	Counties	Initial (72 Hour) Critical Infrastructure	2 Day (48 Hour)	1 Day (24 Hour)	Day Of Event	Daily Update	Residential/Unassigned	Essential Use	Major	MBL	Critical Care	Customer Totals
BANTA	D	MONO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24	N/A	131	2	13	1	1	148
BIRCHIM	D	MONO; INYO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24	11/18/2020 9:42	535	4	10	9	2	560
BOOTLEGGER	D	Los Angeles	N/A			11/17/2020 9:23		1448	1	71	51	9	1580
CAIN RANCH	D	MONO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	N/A	N/A	18	0	4	0	0	22
CASA DIABLO-CONTROL-SHERWIN	ST	MONO; INYO											
CASA DIABLO-RUSH CREEK	ST	MONO											
CONDOR	D	Kern	N/A	N/A	11/15/2020 20:23	11/16/2020 12:10	11/17/2020 9:24	1384	0	48	44	5	1481
CONTROL-PLANT 2	ST	MONO; INYO											
CONWAY	D	MONO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	N/A	N/A	22	2	4	0	0	28
CUDDEBACK	D	Kern	N/A	N/A	N/A	N/A	N/A	332	0	7	3	0	342
DOBLE	D	SAN BERNARDINO	No CI	11/15/2020 13:05	N/A	N/A	N/A	1	0	1	0	0	2
DYNAMO	D	MONO	No CI	N/A	N/A	N/A	N/A	1	0	0	0	0	1
FROZEN	D	Kern	No CI	11/14/2020 20:55	11/15/2020 13:05	11/16/2020 12:10	N/A	0	0	1	0	0	1
GRAPEVINE PEAK	D	KERN	No Load	N/A	N/A	N/A	N/A	0	0	0	0	0	0
GULL LAKE			N/A	N/A	11/16/2020 12:10	11/17/2020 9:23	N/A	361	1	8	3	0	373
LEE VINING-LUNDY NO. 1	ST	MONO											
LEE VINING-LUNDY NO. 2	ST	MONO											
LEE VINING-POOLE-RUSH CREEK	ST	MONO											
METTLER	D	Kern	N/A	N/A	N/A	11/16/2020 12:57	N/A	494	0	10	17	4	525
PICKLE MEADOWS			11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	N/A	N/A	67	1	13	1	0	82
REVERSE PEAK	D	MONO	N/A	N/A	11/16/2020 12:10	11/17/2020 9:24	N/A	485	0	46	5	0	536
RHINEDOLLAR			N/A	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24	N/A	3	0	26	0	0	29
RIDGE	D	Kern; Los Angeles	No CI	11/14/2020 20:55	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24	335	0	34	10	0	379
ROBINSON CREEK	D	MONO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	N/A	N/A	236	0	4	1	1	242
SABRINA	D	INYO	N/A	11/15/2020 13:05	N/A	N/A	N/A	183	0	4	0	0	187
SAGEHEN	D	Mono	11/14/2020 20:22	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24		230	3	52	4	2	291
SAND CANYON	D	LOS ANGELES	N/A	N/A	N/A	11/17/2020 19:40	N/A	2049	2	74	64	7	2196
SCOUT			No CI	11/15/2020 13:05	N/A	N/A	N/A	4	0	0	0	0	4
SHOVEL	D	LOS ANGELES	N/A	N/A	N/A	11/17/2020 9:23	11/18/2020 9:38	662	1	25	23	4	715
STROSNIDER			11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	N/A	N/A	371	3	34	3	0	411
TENNECO	D	KERN; VENTURA	11/14/2020 17:09	11/14/2020 20:55	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:24	4611	1	79	78	17	4786
TUFA	D	MONO	11/14/2020 17:09	11/15/2020 13:05	11/16/2020 12:10	11/17/2020 9:23	N/A	103	0	3	0	0	106
UTE	D	MONO	No Load	N/A	N/A	N/A	N/A	0	0	0	0	0	0
													15027

From Period of Concern Report 11/19/2020 08:24 *72 Hour Notification only generated for Critical Infrastructure Customers. Circuits without date/timestamps in the Communications section d

11.14.2020 PSPS Activation
Pre-Event Notification Timing and Customer Classification Report

CIRCUIT STATUS			COMMUNICATIONS					*CUSTOMER COUNTS					
Circuits	D_ST_T	Counties	Initial (72 Hour) Critical Infrastructure	2 Day (48 Hour)	1 Day (24 Hour)	Day Of Event	Daily Update	Residential/Unassigned	Essential Use	Major	MBL	Critical Care	Customer Totals

N/A - Notification not sent as circuit was not in POC at this time
No Load - No Customers on this Circuit
No CI - No Critical Infrastructure customers on this circuit
*customers counts may differ due to abnormal feeds/sectionalization during event
Circuits De-energized

Notes:

Attachment C
PSPS Activation Customer Notification Messaging

Customer Automated Notifications - Messaging

72 hour Initial – Messaging

Voice/ Voice Mail/TTY:
This is an important safety message from Southern California Edison. Due to forecast fire weather conditions, SCE is exploring a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^^Month Day^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having your resiliency plan ready to execute. SCE will send daily updates until conditions improve. For additional information available, please contact your assigned SCE account representative, go to SCE.com/psps, or call SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Due to forecast fire weather conditions, Southern California Edison is exploring a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^^Month Day^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having your resiliency plan ready to execute. SCE will send daily updates until conditions improve. For please contact your assigned SCE account representative, go to SCE.com/psps, or call SCE at 1-800-611-1911.

E-Mail:

Subject: Public Safety Power Shutoff (PSPS) Advanced Initial Notification – Critical Infrastructure

From: do_not_reply@scewebservices.com Southern California Edison

Due to forecast fire weather conditions, SCE is exploring a potential Public Safety Power Shutoff of electrical lines in your area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^^Month Day^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having your resiliency plan ready to execute. SCE will send daily updates until weather conditions improve.

The following address(es) are within areas being monitored:

Customer Name
13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For additional information including please visit sce.com/psps , contact your assigned SCE account representative, or call SCE at 1-800-611-1911.

Thank You,
Southern California Edison

48 Hour (Initial)

Voice/ Voice Mail/TTY:

This is an important safety message from Southern California Edison. Due to forecast fire weather conditions, Southern California Edison is exploring a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Due to forecast fire weather conditions, Southern California Edison is exploring a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Initial Notification

From: do_not_reply@scewebservices.com Southern California Edison

Due to forecast fire weather conditions, Southern California Edison is exploring a potential Public Safety Power Shutoff of electrical lines in your area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve.

The following address(es) are within areas being monitored:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For more info such as expected duration: please visit www.sce.com/psps. Downed power line? Stay away, Call 911, and SCE at 1-800-611-1911.

Thank You,

Southern California Edison

24 Hour (Update)

Voice/ Voice Mail/TTY:

This is an important safety message from Southern California Edison. Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Update Notification

From: do_not_reply@scewebservices.com Southern California Edison

Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in your area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve.

The following address(es) are within areas being monitored:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67

Meter: 123456-654321
Rate: GS-2

For more info such as expected duration: please visit www.sce.com/psps. Downed power line? Stay away, Call 911, and SCE at 1-800-611-1911.

Thank You,

Southern California Edison

Imminent De-energization

Voice/ Voice Mail/TTY:

This an important safety message from Southern California Edison. Due to forecast fire weather conditions, SCE may proactively turn off power within the next 1 to 4 hours for a Public Safety Power Shutoff to the ^city_variable^ area though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Due to forecast fire weather conditions, SCE may proactively turn off power within the next 1 to 4 hours for a Public Safety Power Shutoff to the ^city_variable^ area though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Imminent Shutoff Notice

From: do_not_reply@scewebservices.com Southern California Edison

Due to forecast fire weather conditions, SCE may proactively turn off power within the next 1 to 4 hours for a Public Safety Power Shutoff to the ^city_variable^ area ^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send updates until conditions improve.

The following address(es) may be affected:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For more info such as expected duration: please visit www.sce.com/psps. Downed power line? Stay away, Call 911, and SCE at 1-800-611-1911.

Thank You,

Southern California Edison

Preparing to Re-Energize (Imminent Restoration)

Voice/ Voice Mail/TTY:

This is an important safety message from Southern California Edison. SCE will soon begin the process of inspecting electrical lines in the ^city variable^ area. Provided we find no safety concerns, we will begin the power restoration process. To ensure you are ready for service, turn off or unplug any appliances or equipment that may automatically start when your power is restored. For more information on SCE's restoration process, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: SCE will soon begin the process of inspecting electrical lines in the ^city variable^ area. Provided we find no safety concerns, we will begin the power restoration process. To ensure you are ready for service, turn off or unplug any appliances or equipment that may automatically start when your power is restored. For more information on SCE's restoration process, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Preparing to Re Energize Notification

From: do_not_reply@scewebservices.com Southern California Edison

This is an important safety message from Southern California Edison.

SCE will soon begin the process of inspecting electrical lines in the ^city variable^ area. Provided we find no safety concerns, we will begin the power restoration process. To ensure you are ready for service, turn off or unplug any appliances or equipment that may automatically start when your power is restored.

The following address(es) are within areas SCE is preparing to re-energize:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For more information on SCE's restoration process, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Thank You,

Southern California Edison

Shutoff

Voice/ Voice Mail/TTY:

This is an important safety message from Southern California Edison. Southern California Edison has proactively turned off power to the ^city_variable^ area due to fire weather conditions. Your power may be restored at any time. To ensure you are ready for service turn off or unplug any appliances or equipment that may automatically start when your power is restored. We will update you as conditions change. For more information, please visit sce.com/psps. If you see a downed power line, stay away, call 9 1 1, and report this to S C E at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Southern California Edison has proactively turned off power to the ^city_variable^ area due to fire weather conditions. Your power may be restored at any time. To ensure you are ready for service turn off or unplug any appliances or equipment that may automatically start when your power is restored. We will update you as conditions change. For more information, please visit sce.com/psps. If you see a downed power line, stay away, call 9 1 1, and report this to S C E at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Notification

From: do_not_reply@scewebservices.com Southern California Edison

This is an important safety message from Southern California Edison. Southern California Edison has proactively turned off power to your area due to fire weather conditions. Your power may be restored at any time. To ensure you are ready for service turn off or unplug any appliances or equipment that may automatically start when your power is restored. We will update you as conditions change.

The following address(es) may be affected:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For more information, please visit sce.com/psps. If you see a downed power line, stay away, call 9 1 1, and report this to S C E at 1-800-611-1911.

Thank You,

Southern California Edison

Restored

Voice /Voice Mail/TTY:

This is an important safety message from Southern California Edison. Southern California Edison proactively turned off power to the ^city_variable^ area on ^date variable^ date, due to fire weather conditions. Power has now been restored. If your power is still off, please call 1-800-611-1911 or visit sce.com/outage.

Text/SMS:

SCE Safety Alert: Southern California Edison proactively turned off power to the ^city_variable^ area on ^date variable^ date, due to fire weather conditions. Power has now been restored. If your power is still off, please call 1-800-611-1911 or visit sce.com/outage.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Restoration Notification

From: do_not_reply@scewebservices.com Southern California Edison

Southern California Edison proactively turned off power to the ^city_variable^ area on ^date variable^ date, due to fire weather conditions. Power has now been restored.

The following address(es) have been restored:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

If your power is still off, please call 1-800-611-1911 or visit sce.com/outage.

Thank You,

Southern California Edison

Avoided/All Clear Notification - Messaging

Voice/ Voice Mail/TTY:

This is an important safety message from Southern California Edison. Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more

information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

Text/SMS:

SCE Safety Alert: Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in the ^city_variable^ area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve. For more information, please visit sce.com/psps. Downed power line? Stay away, call 911, and SCE at 1-800-611-1911.

E-Mail:

Subject: SCE Safety Alert: Public Safety Power Shutoff (PSPS) Update Notification

From: do_not_reply@scewebservices.com Southern California Edison

Due to forecast fire weather conditions, Southern California Edison continues to explore a potential Public Safety Power Shutoff of electrical lines in your area. These conditions may result in SCE turning off your power. SCE anticipates that this may occur on ^Day of week^ ^morning/afternoon/evening^ though it may occur earlier or later depending on actual weather conditions. We encourage you to prepare by having an outage plan and emergency kit. SCE will send daily updates until conditions improve.

The following address(es) are within areas being monitored:

13240 Riverview Dr.
Victorville, CA 92395-1234
Service Account: 3-XXX-XX45-67
Meter: 123456-654321
Rate: GS-2

For more info such as expected duration: please visit www.sce.com/psps. Downed power line? Stay away, Call 911, and SCE at 1-800-611-1911.

Thank You,

Southern California Edison

ATTACHMENT 4

SCE's response to data request CalAdvocates-SCE-A2506017-001 September 22, 2025

Southern California Edison
Wildfire NDDR – Wildfire NDDR

DATA REQUEST SET C a l A d v o c a t e s - S C E - A 2 5 0 6 0 1 7 - 0 0 1

To: Cal Advocates
Prepared by: Nicholas Sette
Job Title: Senior Advisor, Weather Services
Received Date: 9/8/2025

Response Date: 9/22/2025

Question 01.a-c:
SCE's November 14-18, 2020 PSPS Post Event Report, page 3, states November 14th, SCE meteorologists notified SCE's Business Resiliency Duty Manager BRDM of a weather system that was forecast to bring elevated fire weather for portions of the SCE territory beginning November 17 at 12 pm and continuing through November 18 at 12 pm. SCE held a State Executive call at 3 pm, and an Office of Emergency Management OEM) County Coordination call at 3:30 pm to communicate the weather forecast, potential customers in scope and answer any questions regarding the event.

a. Provide a copy of all of the weather forecasts (e.g., Weather Alerts) that SCE meteorologists produced each day from November 14, 2020 through November 18, 2020. For each, state when the weather forecast was provided and what time range it covered.
b. Provide a copy of the Monitored Circuits List spreadsheet that SCE meteorologists produced each day from November 14, 2020 through November 18, 2020. For each, state when the Monitored Circuits List was produced and what time range it covered.
c. Provide a copy of all of the Fire Potential Index FPI related forecasts for each individual circuit in scope of the PSPS event that SCE meteorologists produced each day from November 14, 2020 through November 18, 2020. For each, state when the FPI related forecast was produced and what time range it covered.

Response to Question 01.a-c:

1a. See attached files in zipped folder labeled "Weather Alerts+Threat Level Matrices.zip".

- All files labeled "Weather Alert" were in effect through November 18, 2020.
- All files labeled "Threat Level Matrix" were in effect for the seven days following their issuance as indicated by the date in the file name.

1b. See attached files in zipped folder labeled "MonitoredCircuitLists.zip".

Files do not have time range beginning and end timing, because each circuit's period of concern is unique.

Issuance of the monitored circuit list can be found in the upper left-hand corner of each sheet. Individual circuits included in the Monitored Circuit Lists have individual valid period ranges that can be found in columns J & K (Date_Time_Starting, Date_Time_Ending).

1c. See attached files in the zipped folder labeled “MonitoredCircuitLists.zip”.

The FPI forecast can be found in the Peak FPI column for each circuit. The time range the FPI forecast covers can be found in columns J & K (Date_Time_Starting, Date_Time_Ending). Issuance of the FPI forecast and monitored circuit list can be found in the upper left-hand corner of each sheet.

Threat Level Matrix

Metro Los Angeles, Orange County, Inland Empire

Valley, Metro and Coastal Portions of Districts : Santa Monica, South Bay, Dominguez Hills, Covina, Monrovia, Montebello, Whittier, Long Beach, Fullerton, Santa Ana, Saddleback, Ontario, Foothill, Redlands, Menifee, Wildomar, Catalina, Huntington Beach

Hazard	11/15/2020	11/16/2020	11/17/2020	11/18/2020	11/19/2020	11/20/2020	11/21/2020
Day of Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Fire Weather	2	2	1	1	0	0	0
Wind	1	1	0	0	0	0	0
Precip	0	0	0	0	0	0	0

High Desert, Low Desert, Southern California Mountains

Districts: Antelope Valley, Victorville, Arrowhead, Palm Springs, Yucca Valley, Blythe, Ridgecrest, Barstow, Tehachapi
Mountainous Portions of Districts: Monrovia, Covina, Ontario, Redlands, Menifee, Saddleback, Santa Ana, Foothill

Fire Weather	2	2	2	2	1	0	0
Wind	1	1	2	2	1	1	1
Precip	0	0	0	0	0	0	0

Southern Sierras, San Joaquin Valley

Districts: Mammoth/Bishop, San Joaquin Valley, Kernville, Shaver Lake

Fire Weather	1	1	3	2	1	1	0
Wind	1	1	3	2	1	1	1
Precip	0	0	1	1	0	1	0

North Coast

Districts: Santa Barbara, Ventura, Valencia, Thousand Oaks

Fire Weather	2	2	2	1	0	0	0
Wind	1	1	2	1	0	0	0
Precip	0	0	0	0	0	0	0

Threat Level Matrix General Definitions

0 = None
No System Threat. If a weather alerts are issued, it is as a "heads up" to clarify that the weather is not expected to cause any system problems or as a safety message.

1 = Low (Minor)
Low system threats are frequent events that may cause minor or isolated issues to the system, but are not expected to cause any major or widespread outages or damage.

2 = Low to Moderate (Elevated)
Low to moderate system threats are occasional events that may cause clusters of minor issues, or several areas of isolated damage, but are unlikely to cause major or widespread outages or damage.

3 = Moderate (Critical)
Moderate system threats are events that only occur relatively seldomly or several times a year. They may cause pockets of significant damage or widespread minor system issues.

4 = High (Extreme)
High system threats are events that are expected to occur no more than once or twice a year and may not occur for a certain weather parameter at all in a given year. Expect widespread damage and system issues.

5 = Major (Extreme)
Major or extreme events are considered events of note and are not expected to occur every year. Widespread, catastrophic and/or complex impacts are expected to the system, causing a slow recovery.

Fire Weather Threat Definitions

0 = None
Rapid fire spread is not expected. No significant fire weather expected. Fuel conditions will limit any potential fire activity to small areas with slow rates of spread. FPIs will generally be 9 or lower. *PSPS activation is not expected.*

1 = Low (Minor)
Rapid fire spread is not expected. Fire activity, while possible, will generally be slow to spread and easy to control due to mitigating factors in either weather or fuel conditions or both. Peak FPIs will generally be around 9-11. *PSPS activation is not expected.*

2 = Low to Moderate (Elevated)
Upon ignition, moderate fire spread is possible in localized areas. Either weather or fuels may be supportive of fire spread or fuels and weather may be both marginally conducive. Peak FPIs will generally be around 11-13. *See PSPS forecast in TLM discussion for PSPS activation risk.*

3 = Moderate (Critical)
Upon ignition, rapid fire spread may occur across portions of the region. Weather and fuels will be conducive to fire spread with the possibility of fuels being highly receptive. Peak FPIs will generally be around 13-15. *See PSPS forecast in TLM discussion for PSPS activation risk.*

4 = High (Extreme)
Upon ignition, rapid fire spread is likely across a significant portion of the region. Weather and fuels support rapid fire growth with fires difficult to control. Peak FPIs will generally be 15 or higher. *PSPS activation is imminent with numerous circuits potentially impacted.*

5 = Major (Extreme)
Upon ignition, fires will be uncontrollable. Weather and fuels will support extreme rates of fire spread and winds will exceed the 99th percentile in many areas. Peak FPIs will be 15 or higher. *PSPS activation is imminent with hundreds of circuits impacted.*

CA-05-0338

SCE Weather Threat Level Matrix (11/15/20)

Discussion:
A weak Santa Ana event will unfold today and tomorrow across Southern California and North Coast areas. Peak winds are expected to occur tomorrow morning in the most exposed Santa Ana wind areas. Winds are expected to remain below PSPS criteria, but elevated fire threats are expected across Southern California this afternoon through tomorrow. Temperatures are expected to turn well above normal across the region with highs generally in the 80s.

On Tuesday and Wednesday, a trough will approach the Northern California coast. Broad southwesterly flow will develop across the state, with the strongest winds setting up across Central California. Strong to damaging winds will develop on Tuesday along the Eastern Sierra slopes, with gusty winds developing along some Southern California and North Coast north-facing slopes. At the onset of strong winds, low humidity levels will bring a period of elevated to moderate fire weather danger. Blustery onshore winds will continue into Wednesday in some areas, but humidity levels will start to increase and mitigate the fire threat in most areas. Light rain and snow showers are likely in parts of the Central Sierras on Wednesday as well.

Weather models disagree somewhat for Thursday through Saturday. Breezy onshore flow is still expected, and periods of light rain and snow showers are possible in the Sierras. Increased humidity levels and lighter winds will significantly decrease fire threats for this time period.

PSPS conditions are likely for Eastern Sierra, North Coast and Southern California Mountain desert slope areas on Tuesday and Wednesday.

Moderate Fire Threat
- **Eastern Sierras of Mono and Inyo County below 7000 feet (Tuesday)**

Strong to locally damaging wind gusts will combine with decreasing humidity levels to bring a period of moderate fire weather threats to lower elevations along the Eastern Sierra slopes of Mono and Inyo County. Expect strong winds to combine with humidity levels in the 10-20% range to bring peak fire weather threats on Tuesday Afternoon.

Moderate Wind Threat
- **Eastern Sierras of Mono and Inyo County (Tuesday)**

Strong southwesterly flow aloft will bring an extended period of strong to damaging winds along the Eastern Sierra slopes of Mono and Inyo county. Peak winds gusts are forecasted to generally be in the 50-65 MPH range with gusts to 70-80 MPH likely in the most exposed areas.

Elevated Fire Threat

- **LA Basin, Orange County, Inland Empire (Today-Monday)**
- **North Coast (Today-Tuesday)**
- **Southern California Mountains (Today-Wednesday)**
- **Eastern Sierras of Mono and Inyo County above 7000 feet (Tuesday)**
- **Eastern Sierras of Mono and Inyo County below 7000 feet (Wednesday)**

Generally breezy Santa Ana winds will combine with decreasing humidity levels to bring elevated fire threats across Southern California and North Coast regions today and tomorrow. Expect humidity levels to dip into the 15-25% range this afternoon across valley areas and remain in that range overnight tonight. Humidity levels will dip into the 10-20% range by tomorrow afternoon.

Strong to potentially damaging onshore winds will combine with decreasing humidity levels to bring elevated fire threats to north facing slopes in the North Coast and Southern California Mountains, as well as the higher elevations along the Eastern Slopes of Mono and Inyo County. Recent snowfall in the higher elevations will partially mitigate fire threats in the highest elevations on Tuesday. On Wednesday, blustery winds will continue along the Eastern Sierra slopes, but increasing humidity levels will start to mitigate the fire threats at all elevations on Wednesday.

Elevated Wind Threat

- **North Coast North Slopes (Tuesday)**
- **Southern California Mountain Desert Slopes (Tuesday-Wednesday)**
- **Eastern Sierras of Mono and Inyo County (Wednesday)**

Onshore wind gusts in Southern California and North Coast north slope areas will generally peak in the 45-55 MPH range on Tuesday. The strongest gusts in North Coast areas will be earlier in the day on Tuesday, while periodically gusty to strong wind gusts may continue into Wednesday Morning across the Southern California Mountain desert slopes.

Winds in the Eastern Sierras will peak on Tuesday, but gusty to locally strong winds will continue into Wednesday. Peak gusts will generally be in the 40-55 MPH range on Wednesday. Lighter winds are expected in all areas on Thursday.

Threat Level Matrix

Metro Los Angeles, Orange County, Inland Empire

Valley, Metro and Coastal Portions of Districts: Santa Monica, South Bay, Dominguez Hills, Covina, Monrovia, Montebello, Whittier, Long Beach, Fullerton, Santa Ana, Saddleback, Ontario, Foothill, Redlands, Menifee, Wildomar, Catalina, Huntington Beach

Hazard	11/16/2020	11/17/2020	11/18/2020	11/19/2020	11/20/2020	11/21/2020	11/22/2020
Day of Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Fire Weather	2	1	1	0	0	0	1
Wind	1	1	1	0	0	0	1
Precip	0	0	0	0	0	0	0

High Desert, Low Desert, Southern California Mountains

Districts: Antelope Valley, Victorville, Arrowhead, Palm Springs, Yucca Valley, Blythe, Ridgecrest, Barstow, Tehachapi
Mountainous Portions of Districts: Monrovia, Covina, Ontario, Redlands, Menifee, Saddleback, Santa Ana, Foothill

Fire Weather	2	2	1	1	0	0	0
Wind	2	2	2	1	1	0	0
Precip	0	0	0	0	0	0	0

Southern Sierras, San Joaquin Valley

Districts: Mammoth/Bishop, San Joaquin Valley, Kernville, Shaver Lake

Fire Weather	2	3	2	1	1	0	0
Wind	2	3	2	1	1	0	0
Precip	0	0	2	0	0	0	0

North Coast

Districts: Santa Barbara, Ventura, Valencia, Thousand Oaks

Fire Weather	2	2	1	0	0	0	1
Wind	1	2	1	0	0	0	1
Precip	0	0	0	0	0	0	0

Threat Level Matrix General Definitions

0 = None
No System Threat. If a weather alerts are issued, it is as a "heads up" to clarify that the weather is not expected to cause any system problems or as a safety message.

1 = Low (Minor)
Low system threats are frequent events that may cause minor or isolated issues to the system, but are not expected to cause any major or widespread outages or damage.

2 = Low to Moderate (Elevated)
Low to moderate system threats are occasional events that may cause clusters of minor issues, or several areas of isolated damage, but are unlikely to cause major or widespread outages or damage.

3 = Moderate (Critical)
Moderate system threats are events that only occur relatively seldomly or several times a year. They may cause pockets of significant damage or widespread minor system issues.

4 = High (Extreme)
High system threats are events that are expected to occur no more than once or twice a year and may not occur for a certain weather parameter at all in a given year. Expect widespread damage and system issues.

5 = Major (Extreme)
Major or extreme events are considered events of note and are not expected to occur every year. Widespread, catastrophic and/or complex impacts are expected to the system, causing a slow recovery.

Fire Weather Threat Definitions

0 = None
Rapid fire spread is not expected. No significant fire weather expected. Fuel conditions will limit any potential fire activity to small areas with slow rates of spread. FPIs will generally be 9 or lower. *PSPS activation is not expected.*

1 = Low (Minor)
Rapid fire spread is not expected. Fire activity, while possible, will generally be slow to spread and easy to control due to mitigating factors in either weather or fuel conditions or both. Peak FPIs will generally be around 9-11. *PSPS activation is not expected.*

2 = Low to Moderate (Elevated)
Upon ignition, moderate fire spread is possible in localized areas. Either weather or fuels may be supportive of fire spread or fuels and weather may be both marginally conducive. Peak FPIs will generally be around 11-13. *See PSPS forecast in TLM discussion for PSPS activation risk.*

3 = Moderate (Critical)
Upon ignition, rapid fire spread may occur across portions of the region. Weather and fuels will be conducive to fire spread with the possibility of fuels being highly receptive. Peak FPIs will generally be around 13-15. *See PSPS forecast in TLM discussion for PSPS activation risk.*

4 = High (Extreme)
Upon ignition, rapid fire spread is likely across a significant portion of the region. Weather and fuels support rapid fire growth with fires difficult to control. Peak FPIs will generally be 15 or higher. *PSPS activation is imminent with numerous circuits potentially impacted.*

5 = Major (Extreme)
Upon ignition, fires will be uncontrollable. Weather and fuels will support extreme rates of fire spread and winds will exceed the 99th percentile in many areas. Peak FPIs will be 15 or higher. *PSPS activation is imminent with hundreds of circuits impacted.*

CA-05-0341

SCE Weather Threat Level Matrix (11/16/20)

High Wind Warning for Mono County from Tuesday at 10 AM through Wednesday at 4 AM

High Wind Watch for Owens Valley and Eastern Sierra Slopes from late Tuesday Morning through Wednesday Morning

Wind Advisory for Kern County Mountains, Southern San Joaquin Valley Areas from 10 PM Tonight through 12 PM Tuesday

Winter Weather Advisory for Elevations Above 7,000 Feet in Shaver Lake District for 4 PM Tuesday through 4 PM Wednesday

Discussion:

A Pacific trough will move through the area during the first half of the week, bringing strong winds to much of Central CA before precipitation arrives Wednesday. Prior to the arrival of the trough, offshore flow will generate very warm, sunny and dry conditions across much of the district today. Locally gusty east winds will be possible through the afternoon in some favored passes today before weakening occurs around sunset.

Winds will switch to the west overnight tonight in the Sierras, becoming quite strong Tuesday morning as the trough draws closer. While there may be a period of low RH over many areas Tuesday, the greater threat from this event may be from the sheer strength of the winds which may be strong enough to cause damage to infrastructure at higher elevations in/near the Sierras. Precipitation will overspread much of the Sierras north of Fresno County Wednesday which will lessen the fire weather threat.

A cooling trend will develop through much of the week, but long range models are indicating offshore wind may develop over Southern CA next Sunday.

PSPS conditions are likely for the sections of the Tehachapi Mountains today and the Eastern Sierras and North Coast Mountains Tuesday and Wednesday.

Moderate Fire Threat

- **Eastern Sierras of Mono and Inyo County below 7000 feet (Tuesday)**

Strong west winds will develop first across the Sierra Front before gusty, downsloping winds develop east of the Crest by Tuesday afternoon. Erratic, infrequent bursts of wind will be possible on the western side of the Owens Valley and other areas west of highway 395. While humidity may slowly increase toward Tuesday evening, there will likely be several hours of RH staying below 15% under partly to mostly sunny skies. Fuels in these areas remain very dry – especially in the dead fuels. The gusty winds and low RH would allow for very rapid rates of spread during the daylight hours. Expect conditions to moderate as higher RH develops Tuesday night, but it will remain quite windy in these areas into Wednesday.

Moderate Wind Threat

- **Sierra Front County, Eastern Sierras of Mono and Inyo County (Tuesday)**

Strong west and southwest winds will develop ahead of the approaching trough Tuesday. By afternoon, open, exposed higher elevation areas may see wind gusts in the 60-80 mph range. On the east side of the Crest into the Owens Valley, erratic wind gusts to 55 mph will be possible. Expect the strongest winds to occur above 7,000 feet north of Fresno County Tuesday afternoon. Winds should moderate late Tuesday night.

Elevated Fire Threat

- **LA Basin, Orange County, Inland Empire, Southern Sierras (Today)**
- **North Coast (Today - Tuesday)**
- **Southern California Mountains (Today - Tuesday)**
- **Eastern Sierras of Mono and Inyo County below 7000 feet (Wednesday)**

Local offshore winds will occur over much of Southern CA today. This will result in elevated fire weather threats due to sunny skies and very low RH. As of early Monday morning, the strongest winds were occurring in Kern County, the Banning Pass area as well as adjacent areas of the Inland Empire. RH recovery was very poor in these areas overnight and a large section of central and Southern CA will see minimums in the single digits once again this afternoon. The focus of the fire weather threat across Southern CA will shift into the north coast areas tonight into Tuesday, especially near the I-5 Corridor and the Cajon Pass. Expect RH to remain low in these area through much of Tuesday before higher RH and cloud cover develops Tuesday evening.

On Wednesday, downsloping, gusty winds will result in elevated fire threats over the Owens Valley and other areas west of highway 395. Minimum RH may remain in the 20 percent range Wednesday, but the threats in this area should slowly recede Wednesday due to increasing cloud cover and more abundant surface moisture.

Elevated Wind Threat

- **North Coast, I-5 Corridor (Tuesday)**
- **Deserts, Southern CA Mountains, Tehachapi Mountains (Today – Tuesday)**
- **Southern California Mountain Desert Slopes (Tuesday - Wednesday)**
- **Eastern Sierras of Mono and Inyo County (Wednesday)**

East winds gusts approaching 45 mph will be possible across the Tehachapi Mountains, Banning Pass and other nearby areas of the Inland Empire today. Tonight, similar north winds may develop across the I-5 Corridor as well as other areas of the Angeles National Forest into the Santa Clarita Valley. Other windy areas tonight into Tuesday morning include the Cajon Pass and Santa Barbara County. Winds will also become quite gusty across desert adjacent areas of the San Bernardino and San Jacinto Mountains Tuesday afternoon into Wednesday morning.

By Wednesday afternoon, the strongest winds in the Service Territory may be in Owens Valley and high desert areas of Inyo and Mono Counties where some west wind gusts to 45 mph may linker through Wednesday evening. All winds should be light by Wednesday night or Thursday morning.

Elevated Precipitation Threat

- **Central Sierras north of Fresno County (Wednesday)**

Models project widespread rain and higher elevation snows are possible across the Sierras north of Fresno County. The recent trend in models is for higher amounts of precipitation than earlier expected and rainfall of up to an inch may occur on west and southwest aspects. The rainfall should not be overly intense with around 0.25 – 0.33" expected in the Shaver Lake area. Above 7,000 feet, 6-12 inches of snow will be possible north of Fresno County. Strong winds will result in blowing and drifting snow. Over 18" of snow will be possible in Tuolumne County.

CA-05-0343

ATTACHMENT 5

SCE's response to data request CalAdvocates-SCE-A2506017-001 September 22, 2025

Southern California Edison
Wildfire NDDR – Wildfire NDDR

DATA REQUEST SET C a l A d v o c a t e s - S C E - A 2 5 0 6 0 1 7 - 0 0 1

To: Cal Advocates
Prepared by: Marco Aceituno-Murillo
Job Title: PSPS Operations Senior Manager
Received Date: 9/8/2025

Response Date: 9/22/2025

Question 03:
SCE's November 14-18, 2020 PSPS Post-Event Report, pages 9-10, states:
SCE considered the following specific factors to inform de-energization decisions:

a. Clarify if the "Wind Sustained" values listed on pages 9-10 are real-time or forecasted values.
b. Clarify if the "Gust Sustained" values listed on pages 9-10 are real-time or forecasted values.
c. Clarify the meaning of "Threshold Sustained."
d. Clarify if the "FPI Value" values listed on pages 9-10 are real-time or forecasted values.
e. Explain why some circuits (e.g., Mettler, Cuddeback, Shovel) had lower values for "Threshold Sustained" than the other circuits shown on pages 9-10.

Circuit Name	Isolation Device	Weather Station	Wind Sustained	Gust Sustained	Threshold Sustained	FPI Value	Reasons for De-Energization
METTLER	RCS1132	SCE CUMMINGS VALLEY	27	40	23/37	12	• Exceeded Threshold • Exceeded FPI
CUDDEBACK	PS0875	SCE CUMMINGS VALLEY	27	40	23/37	12	• Exceeded Threshold • Exceeded FPI
GRAPEVINE PEAK	CB	GRAPEVINE PEAK (RAWS)	32	40	31/46	12.07	• Exceeded Threshold • Exceeded FPI
FROZEN	PS0269	GRAPEVINE PEAK (RAWS)	32	40	31/46	13.08	• Exceeded Threshold • Exceeded FPI
TUFA	RAR0289	SCE BODIE STATE PARK	26	38	31/46	13.06	• High Wind Trend • Exceeded FPI
CAIN RANCH	CB	SCE RUSH CREEK	28.8	56.2	31/46	13.18	• Exceeded Threshold • Exceeded FPI
SHOVEL	RAR0102	SCE SIERRA PALOMA	22.8	31.9	25/40	12.18	• High Wind Trend • Exceeded FPI

Circuit Name	Isolation Device	Weather Station	Wind Sustained	Gust Sustained	Threshold Sustained	FPI Value	Reasons for De-Energization
SAND CANYON	RAR0191	SCE MAGIC MOUNTAIN TRUCK TRAIL	36	49	31/46	13.34	• Exceeded Threshold • Exceeded FPI
BIRCHIM	RAR0323	SCE ROUND VALLEY	32.5	49.8	31/46	14.08	• Exceeded Threshold • Exceeded FPI
BIRCHIM	RCS0181	SCE PINE CREEK	27.6	50.1	31/46	14.08	• Exceeded Threshold • Exceeded FPI
REVERSE PEAK	RAR0112	SCE CRESTVIEW RADIO	16.1	48.2	31/46	12.47	• Exceeded Threshold • Exceeded FPI

Response to Question 03:

a. The “Wind Sustained” values listed on pages 9-10 are real-time wind values.

b. The “Gust Sustained” values listed on pages 9-10 are real-time wind values.

c. The term “Threshold Sustained” represents the threshold wind limit for a circuit which would prompt de-energization action if the wind value was reached or exceeded.

d. The “FPI Value” values listed on pages 9-10 are forecasted values.

e. Mettler, Cuddeback, and Shovel circuits were considered outage informed circuits. There are circuits that have legacy thresholds below the National Weather Service (NWS) advisory level (31/46 mph) because they have a history of local circuit outages at lower wind speeds. As a result, these circuits required lower thresholds for de-energization to minimize fire risk.

ATTACHMENT 6

University of Utah, MesoWest at: https://mesowest.utah.edu/.

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Address

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Help

Synoptic Data PBC Services

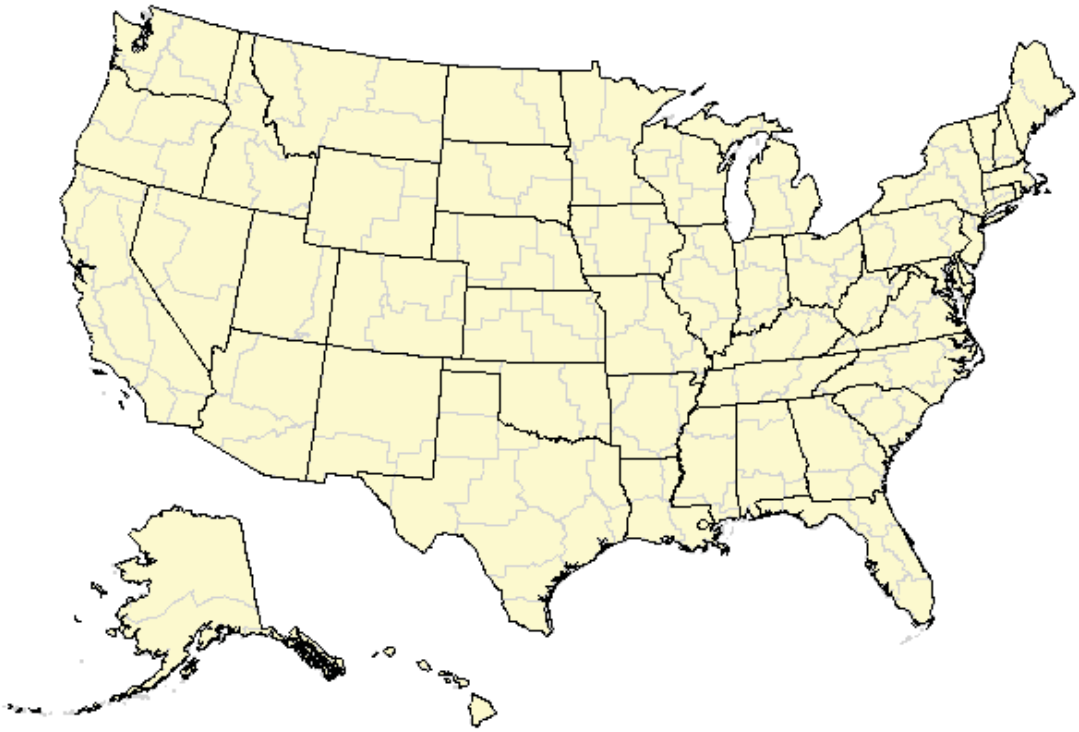
Department of Atmospheric Sciences

MesoWest — The University of Utah

For Users: Recently Implemented Product Changes at MesoWest (full summary available here)

States

Click on a State to access weather observations



States CWAs Text Only

Observations and Summaries

Region UTAH

Product Surface Weather Maps Go

University of Utah Department of Atmospheric Sciences

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For Questions or Comments about this page or MesoWest contact atmos-mesowest@lists.utah.edu

CA-05-0348

ATTACHMENT 7

American National Standards Institute, AMPP TR1505-2022: Wildfires Damage to Combustion Products, January 21, 2025. Available at: https://blog.ansi.org/ansi/ampp-tr1505-2022-wildfires-impact-on-power-lines/.

ANSI | FIRE SAFETY

AMPP TR1505-2022: Wildfires Damage to Combustion Products

By Alexandra Schirn January 21, 2025



Wildfire frequency and severity continue to pose risks to transmission and distribution line structures—thereby raising concerns for power utilities. In part due to climate change, extinguishing wildfires is becoming even more challenging in dry, warm, and windy weather conditions that can spread a fire at terrifyingly fast rate. Assuring future asset integrity management actions for the power industry is paramount in implementing proper mitigation strategies in the event of a wildfire. AMPP TR1505-2022: Adverse Impacts of Wildfires on Power Industry Steel Structures covers the impact of wildfires on combustion products, such as transmission and distribution line structures.

What Is AMPP TR1505?

AMPP TR1505-2022 communicates the effects of wildfires heat and combustion products on corrosion resistance, material properties, and mechanical integrity of power transmission infrastructure. The report also identifies next steps to research, develop, and implement future asset integrity management actions for the power industry.

AMPP TR1505-2022 addresses the following general topics:

- Wildfire vulnerabilities and impacts
- Materials effects for steel, coatings, and concrete
- Power infrastructure risks and impacts
- Asset integrity risk assessment guidance
- Recommended industry actions
- Association for Materials Protection and Performance (AMPP) activities proposed

Effects of Wildfires on Structural Steel

The mechanical properties of steel—such as tensile strength, yield strength, ductility, hardness, and toughness—are temperature-dependent and as such could be negatively affected when exposed to the heat of a wildfire. A reduction in these properties could reduce the strength capacity of the structure to a level below a minimum factor of safety, particularly if the structure was previously weakened by corrosion, mechanical damage, or severe loading events.

The extreme heat of wildfires can also cause a reduction in structural strength and stiffness. The heat can even melt zinc-based galvanized protective coatings on steel, leaving the steel vulnerable to accelerated corrosion after the fire event. This can even lead to the collapse of lattice towers at some later time.

How Can Power Lines Spark Wildfires?

CA-05-0350

There are various mechanisms through which electrical operations can spark wildfires, both on transmission and distribution grids. Power lines can ignite wildfires in several ways:

- **Downed Lines:** Power lines can fall for many reasons (e.g., by a falling tree or strong winds) and they remain energized as they fall to the grass below until the utility company shuts it off. In hot and dry climates, the surrounding vegetation that the line comes in contact with can spark a fire.
- **Vegetation Contact:** When a tree becomes overgrown and its branches expand and reach the power lines, a fire can ignite. Also, a tree branch lying between two conductors can also produce high-temperature electrical arcs.
- **Conductor Slap:** Power lines are strategically spaced apart to prevent them from coming into contact with one another. A conductor slap refers to the case where wind or other outside factors occur and the lines do come into contact. When a conductor slap occurs, it creates high-energy sparks and spits out hot metal particles that can start a fire on the ground.
- **Repetitive Faults:** Repetitive faults refers to a situation where the same type of malfunction or error occurs repeatedly within a system or component. An example of repetitive faults for a transmission line can be low-hanging branches touching a powerline for an extended period or wind causing the powerlines the repeatedly hit against one another causing a conductor slap.

Utilities are becoming more cognizant of the fire risk and doing extremely detailed modeling of where the risks are and how ensure that none of their assets, like transmission lines or distribution lines, are igniting these wildfires.



How Can Wildfires Damage Transmission and Distribution Lines?

Distribution lines are buried underground more often than transmission lines, which protects them from wildfire damage. Aboveground lines are therefore vulnerable to wildfires and smoke, which can automatically trip a transmission line out of service. Wildfires can in particular damage transmission and distribution lines by directly contacting them with burning vegetation, causing the lines to overheat and potentially sag. By dropping burning debris onto the lines or by creating extreme heat that weakens the structural integrity of the towers and conductors, wildfires can lead to potential failures and outages. Additionally, the smoke and soot from a wildfire can accumulate on insulators, reducing their effectiveness and increasing the risk of arcing.

AMPP TR1505-2022: Adverse Impacts of Wildfires on Power Industry Steel Structures is available on the ANSI Webstore.

#AMPP TR1505-2022 #Combustion systems #distribution lines #Fire Safety #power distribution #transmission lines #wildfire

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CA-05-0354

ATTACHMENT 8

Liberty supplemental response to data request CalAdvocates-LIB-A2506017-032

November 18, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

November 18, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-032
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Cal Advocates Wildfire Discovery CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	October 16, 2025
Due Date:	October 30, 2025
Extension Granted:	October 31, 2025
Response Date:	October 31, 2025
Supplemental Response Date:	November 18, 2025

Attachments to these responses contain information marked confidential in accordance with applicable law and regulation. The basis for confidentiality is set forth in the accompanying confidentiality declaration. Public disclosure is restricted.

Public Safety Power Shutoffs (PSPS)

REQUEST NO. 1:

Provide redacted (non-confidential) versions of the following documents:

a) Response CalAdvocates-LIB-A250607-011, attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds"; and

b) Response CalAdvocates-LIB-A250607-011, attachment "CONFIDENTIAL-Emergency Response PSPS Playbook."

RESPONSE:

Liberty will provide redacted versions of the "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds" and "CONFIDENTIAL-Emergency Response PSPS Playbook."

SUPPLEMENTAL RESPONSE:

Liberty is providing redacted (non-confidential) versions of both documents. See attachments *2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf* and *Emergency Response PSPS Playbook_Redacted.pdf*.

Outages

REQUEST NO. 2:

Liberty's response to Data Request CalAdvocates-LIB-A2506017-001, Question 11 excel "CalAdvocates-LIB-A2506017-001-Q11" provides **wire down events** in 2016 through 2020 on Topaz 1261 circuit. Provide documentation of the work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided) performed for the following Incident IDs:

- 13401
- 7710
- 12711

RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague, ambiguous and overbroad as framed, including with respect to its reference to "work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided)." Subject to and without waiving its objections, Liberty responds as follows: See *CONFIDENTIAL-Attachment to CalAdvocates-LIB-A2506017-032, Q2.zip* for records from Liberty's Outage Management System (OMS) that describe Liberty's response to the outage and reference corrective actions.

REQUEST NO. 3:

Liberty's response to Data Request CalAdvocates-LIB-A2506017-001, Question 12 in Excel file "CalAdvocates-LIB-A2506017-001-Q12" provides **outage events** in 2016 through 2020 on the Topaz 1261 circuit. Provide documentation of the work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided) performed for the following Incident IDs:

- 6264
- 7313
- 7314

- 7386
- 7392
- 7589
- 7641
- 7648
- 7755
- 7764
- 9054
- 12687
- 12703
- 12711
- 13123
- 13211
- 13401
- 13934
- 13939
- 14405
- 15270
- 15336
- 15337
- 15339
- 15414
- 15763
- 16693
- 17187
- 17188
- 17340
- 17554
- 17555
- 17574
- 17767
- 17921
- 18165
- 18203
- 19501
- 20230
- 20233
- 21042
- 21347
- 21408
- 22003
- 22668
- 22740
- 22993

- 23101
- 23105
- 24277
- 24279
- 24360
- 25414
- 25635
- 25895
- 26618
- 26776
- 27841
- 27967
- 28018
- 28024
- 28225

RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague, ambiguous and overbroad as framed, including with respect to its reference to "work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided)." Subject to and without waiving its objections, Liberty responds as follows: See *CONFIDENTIAL-Attachment to CalAdvocates-LIB-A2506017-032, Q3.zip* for records from Liberty's Outage Management System (OMS) that describe Liberty's response to the outage and reference corrective actions.

REQUEST NO. 4:

In Liberty's 2016 Electric System Reliability Report, page 22, Liberty states:[1]

> With a combined total of over $700,000 invested by the end of 2017 to improve the Topaz 1261 circuit, CalPeco Electric expects the quantity of sustained outages due to wire slapping in windy conditions to be significantly reduced. In 2016, this circuit experienced twelve outages that were suspected wire slapping events and accounted for 780 customer outage minutes.

a) List the Incident IDs of the twelve outages that were suspected wire slapping events.
b) List the Incident IDs of any other outages from 2015 through 2020 that were suspected wire slapping events.
c) If the Incident IDs in subparts (a) or (b) were not listed in Question 2 or Question 3 above, provide documentation of the work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided) performed.

[2] Liberty's 2016 Electric Service Reliability Report, July 15, 2017. Accessed at: https://files.cpuc.ca.gov/egy_Reliability_GO165Reports/ReliabilityRpts/2016/Liberty_2016_Reliability_Annual_Report.pdf

RESPONSE:

a) Based on review of historical outage data and OMS records, Liberty identified seven outages in 2016 that were identified as suspected wire slapping events. Liberty identified these events by reviewing historical outage data for outages where the cause codes or remarks explicitly indicated wire-slapping-related causes. Liberty identified and confirmed Incident IDs in its OMS for each outage event and provides them below. After a reasonable search and diligent inquiry, Liberty has not identified additional outages in 2016 that were identified as suspected wire slapping events as referenced in the 2016 Electric System Reliability Report. As explained in *Liberty-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center during the time frame specified in this Question.

- 101
- 6264
- 7067
- 7144
- 7159
- 7392
- 7648

b) Based on review of historical outage data and OMS records, Liberty identified thirty-one outages on the Topaz 1261 Circuit from 2015 through 2020 that were identified as suspected wire slapping events. Liberty identified wire slapping events by reviewing historical outage data for outages where the cause codes or remarks explicitly indicated wire-slapping-related causes. Liberty does not have Incident IDs for nine outages in 2015 identified as suspected wire-slapping events in its historical outage data because Liberty's OMS records date back to approximately 2016. For outages from 2016 to 2020, Liberty identified and confirmed Incident IDs in its OMS for each outage. Liberty identified one incident in its 2017 historical outage data that does not have a corresponding OMS record. As explained in *Liberty-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time frame specified in this Question. The following are Incident IDs from OMS for outages identified as suspected wire slapping events from 2017 through 2020 that were not already included in subpart (a):

- 7755
- 8658
- 12703
- 13123
- 15270
- 17187
- 17190
- 17340
- 17574
- 17921

- 22711
- 24277
- 24279
- 27841

c) This response contains confidential attachments. Liberty objects to this subpart as vague, ambiguous and overbroad as framed, including with respect to its reference to "work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided)." Subject to and without waiving its objections, Liberty responds as follows: See *CONFIDENTIAL-Attachment to CalAdvocates-LIB-A2506017-032, Q4.zip* for records in Liberty's OMS for the Incident IDs identified in subparts (a) and (b) that are not being provided in response to Questions 2 or 3 of this set of data requests and that describe Liberty's response to the outage and reference corrective actions. With respect to the nine outages in 2015 identified in Liberty's historical outage data, Liberty is unable to provide OMS records because its OMS records date back to approximately 2016. For an incident described as number "814" in its 2017 historical outage data, Liberty has not located a corresponding OMS record after a reasonable search and diligent inquiry. As explained in *Liberty-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time frame specified in this Question.

REQUEST NO. 5:

Liberty's 2019 Reliability report shows that Topaz 1261 circuit had a total of 25 outages, see breakdown of outages in Table 1. Liberty's response to Data Request CalAdvocates-LIB-A2506017-001, Question 12 shows that Topaz 1261 circuit had a total of 21 outages, see breakdown of outages in Table 1.

Table 1. Comparison of Liberty's 2019 Reliability Report compared to Liberty's Response to Data Request CalAdvocates-LIB-A2506017-001, Question 12.

2019 Reliability Report[2]	**Liberty's response to Data Request CalAdvocates-LIB-A2506017-001, Question 12[3]**
3 – Loss of source from a third party owned substation	6 – 3rd Party Outage
6 – equipment/hardware failure	2 – deterioration 2 – device failed
3 – weather related	1 – flying debris
1 – trees	2 – tree- broken limb
1 – operations error	

[3] Liberty's 2019 Electric Service Reliability Report, February 1, 2020. Accessed at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/infrastructure/electric-reliability-reports/2019_peco.pdf

[4] Liberty's response to Data Request CalAdvocates-LIB-A2506017-001, September 10, 2025, Question 12, Excel file "CalAdvocates-LIB-A2506017-001-Q12.xlsx"

	1 – animal
	1 – non-company activities
	2 – planned outage
11 – unknown[4]	4 – unknown
Total – 25	Total – 21

Explain the discrepancy between the number and types of outages between Liberty's 2019 Reliability Report and Liberty's response to data request CalAdvocates-LIB-A2506017-001, Question 12.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows: Based on review of Liberty's OMS and historical outage data, Liberty has identified 20 outages affecting the Topaz 1261 Circuit in 2019. Incident ID 23177 should not have been listed as an outage in the attachment to CalAdvocates-LIB-A2506017-001, Question 12 given Liberty's OMS data indicates the event affected zero customers and the outage is not included in historical outage data. Liberty will amend its response to CalAdvocates-LIB-A2506017-001 to provide an updated attachment. Liberty has not identified additional outages affecting the Topaz 1261 Circuit referenced in the 2019 Electric System Reliability Report.

REQUEST NO. 6:

Regarding Liberty's 2015 Electric System Reliability Report, page 21, Liberty states:[5]

5) Top two worst performing circuits (WPC) excluding TMED

I. For each of these circuits each utility shall include the following information in its annual report: 1) Circuit Name; 2) District/Division; 3) Customer Count; 4) Substation name; 5) Circuit-miles; 6) Percentage underground, or "% UG"; 7) Percentage overhead or "% OH"; 8) Number of mainline/feeder/backbone outages resulting in the operation of either a circuit breaker ("CB") or automatic re-closer ("AR"); and, 9) its preferred reliability metric.

Circuit	District	Customer Count	Substation Name	Circuit Miles	Facilities		Number of Mainline/ Feeder/Backbone Outages	*Circuit SAIDI	Circuit SAIFI
					OH	UG			
1261	Tahoe	744	Muller	75.5	90.7%	9.3%	3	3003	0.016
1296	Tahoe	622	Topaz	70.9	76.2%	23.8%	8	1065	0.016

Note: Preferred Metric is Circuit SAIDI

In the excerpt above, Circuit 1261 appears to be linked with Substation Muller while Circuit 1296 appears to be linked with Substation Topaz. In the Application, Exhibit Liberty-03, page 7, Liberty states "The Topaz 1261 Circuit originates from Topaz Substation, an NV Energy

[5] Liberty's 2019 Reliability Report at 22. "There were 25 unplanned outages in 2019 for the 1261 circuit, 3 were due to a loss of source from a third party owned substation, 6 were due to equipment/hardware failure, 3 were weather related, 1 was due to trees,1 was due to an operations error and the rest were unknown." The number of unknown outages was calculated from 25 – 3 – 6 – 3 – 1 – 1 = 11.

[6] Liberty's 2015 Electric Service Reliability Report, July 15, 2016. Accessed at: https://files.cpuc.ca.gov/egy_Reliability_GO165Reports/ReliabilityRpts/2015/Liberty_2015_Reliability_Annual_Report.pdf

substation in Nevada." In Liberty's response to Data Request CalAdvocates-LIB-A2506017-011, question 7, Liberty states "As described therein, de-energization thresholds were the same in all PSPS zones other than the Topaz 1261 and Muller 1296 circuit zones."

Explain the discrepancy and provide any amended information.

RESPONSE:

The table from the 2015 Electric System Reliability Report contains an error. The substation name "Muller" should be in the second row of the fourth column associated with Circuit 1296, and the substation name "Topaz" should be in the first row of the fourth column associated with Circuit 1261.

REQUEST NO. 7:

In Liberty's 2015 Electric System Reliability Report, pages 25-31, Liberty shows that Lake Tahoe (Topaz) was affected by an outage due to "Trees – High Winds" from February 6, 2015 through February 9, 2015.

a) Confirm that Liberty correctly identified the Topaz 1261 circuit for the referenced outage.
b) At exactly what date and time did this outage due to "Trees – High Winds" begin?
c) At exactly what date and time did this outage due to "Trees – High Winds" end?
d) Provide the Incident ID and provide documentation of the work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided) performed.

RESPONSE:

Liberty objects to this Question as vague, ambiguous and overbroad as framed, including with respect to its reference to "work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided)." Subject to and without waiving its objections, Liberty responds as follows: Liberty notes that its OMS records date back to approximately 2016. As explained in *Liberty-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center during the time frame specified in this Question. Based on review of historical outage data:

a) Liberty correctly identified the Topaz 1261 Circuit for the referenced outage.
b) This outage began at 6:30 a.m. on February 6, 2015.
c) This outage ended at 2:28 a.m. on February 9, 2015.
d) Liberty is unable to provide OMS records related to this outage because its OMS records date back to approximately 2016.

REQUEST NO. 8:

In Liberty's 2015 Electric System Reliability Report, pages 25-26, Liberty shows that Lake Tahoe (Muller) was affected by an outage due to "NV Energy Outage – High Winds" from February 6, 2015 through February 6, 2015.

a) Confirm that Liberty correctly identified the Muller 1296 circuit for the referenced outage.

b) At exactly what date and time did this outage due to "NV Energy Outage – High Winds" begin?
c) At exactly what date and time did this outage due to "NV Energy Outage – High Winds" end?
e) Provide the Incident ID and provide documentation of the work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided) performed.

RESPONSE:

Liberty objects to this Question as vague, ambiguous and overbroad as framed, including with respect to its reference to "work order or corrective actions (i.e., the entire record in Liberty's Outage Management System (OMS) for the Incident ID provided)." Subject to and without waiving its objections, Liberty responds as follows: Liberty notes that its OMS records date back to approximately 2016. As explained in *Liberty-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center during the time frame specified in this Question. Based on review of historical outage data:

a) Liberty correctly identified the Muller 1296 circuit for the referenced outage.
b) This outage began at 12:06 p.m. on February 6, 2015.
c) This outage ended at approximately 7:15 p.m. on February 6, 2015.
e) Liberty is unable to provide OMS records related to this outage because its OMS records date back to approximately 2016.



Reax Engineering Inc.
Job # 19-0677

De-energization Thresholds for Prevention of Catastrophic Wildfires

Prepared for Liberty Utilities

Revision 0
August 20, 2019

Prepared by:

[redacted]

Document Revision History

Job #	Job Name	Client
19-0677	De-energization Thresholds for Prevention of Catastrophic Wildfires	Liberty Utilities

Revision #	Date	Description	
Rev 0	August 20, 2019	Initial draft.	
		Prepared by: [redacted]	**Reviewed by:** [redacted]
			Reviewed by:
		Prepared by:	**Reviewed by:**
		Prepared by:	**Reviewed by:**
		Prepared by:	**Reviewed by:**

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1.0 INTRODUCTION

Reax Engineering Inc. (Reax) has been retained by Liberty Utilities to recommend thresholds for proactive de-energization of overhead electrical utilities in Liberty Utilities' Public Safety Power Shutoff (PSPS) zones as established by others. This work inherently assumes that all PSPS Zones present equivalent risk of structure loss under analogous fire weather conditions. It is our understanding that Liberty Utilities has identified 46 PSPS zones that can be separately isolated and de-energized.

This report is organized as follows:

- Section 2.0 provides background information that is subsequently applied in Section 3.0 for establishing baseline de-energization thresholds.
- In Section 4.0, historical weather observations and archived forecast data are analyzed to quantify the frequency at which the recommended de-energization thresholds have been exceeded in the past.
- Section 5.0 analyzes fire weather conditions associated with fires of historical significance in and near Liberty's service territory.
- Section 6.0 provides de-energization thresholds and decision trees for each of Liberty Utilities' PSPS zones.
- A summary of this work and concluding remarks are presented in Section 7.0.
- Section 8.0 contains references cited in this report.
- Appendix A contains the fuel moisture sampling plan that is used to support this work.

2.0 BACKGROUND

2.1 Correlation between wind speed and occurrence of electrical outages

Correlation of outage occurrence with wind gust speed shows that wind-caused outages are infrequent for wind gust speeds below 30 mph, but for distribution lines an inflection point exists at a gust speed of approximately 30 mph (13 m/s) [1]. Above 30 mph, outage probability increases by approximately a factor of 10 for every 15 mph increase in wind gust speed [1]. This means that at a wind speed of 45 mph (20 m/s) there is approximately a 10× increase in outage frequency compared to 30 mph winds. This is shown graphically in Figure 1 [2]. Since the same mechanisms that cause outages (flying debris, vegetation contact with conductors, line slap, etc.) may also cause fires, it is reasonable to assume that fire ignition probability also scales similarly with wind gust speed.

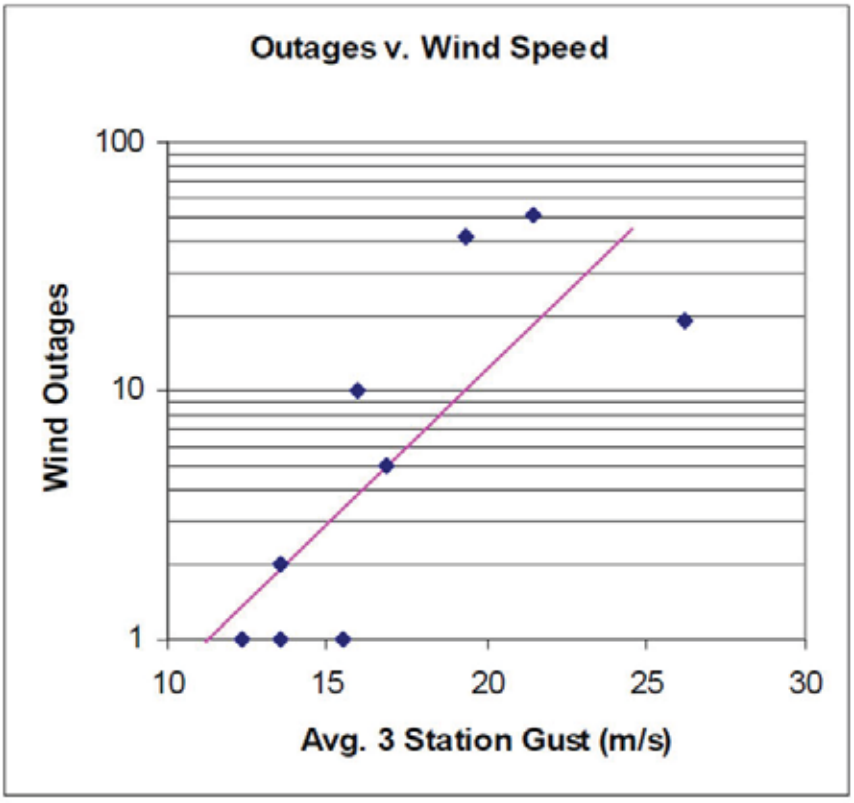


Figure 1. Increase of Outages with gust wind speed [2].

2.2 Wind gust speeds associated with suspected large-loss powerline fires

Surface weather station observations around the time of ignition were analyzed for several catastrophic suspected powerline fires. The results of this analysis are shown in Table 1. Measured gust speed for stations near the suspected ignition locations ranged from 32 mph to 79 mph,

although gust speeds may have been higher at the ignition location, particularly for the lower readings.

Table 1. Observed wind gust speed around time of ignition for weather stations near ignition of suspected powerline fires.

Year	Fire	Wind gust (mph)
2011	Bastrop Complex (TX)	34 - 43
2017	Starbuck (OK, KS)	46 - 53
2017	Tubbs	41 - 79
2017	Atlas, Nuns	32 - 43
2017	Thomas	32 - 40
2018	Woolsey	32 - 52
2018	Camp	52

2.3 Thresholds from California Senate Bill 901 Utility Wildfire Mitigation Plans

Wildfire Mitigation Plans (WMPs) submitted to the California Public Utilities Commission (CPUC) by several utilities on February 6, 2019 were reviewed. The following utilities submitted WMPs:

- Pacific Gas and Electric Company
- Southern California Edison
- San Diego Gas & Electric
- Liberty Utilities/CalPeco Electric
- Bear Valley Electric Service
- PacifiCorp
- NextEra Energy Transmission West
- Trans Bay Cable

Only three of the WMPs provided specific criteria for de-energization. These de-energization thresholds are provided in Table 2:

Table 2. Quantitative de-energization thresholds from CPUC WMPs.

Utility	Wind speed threshold	Additional thresholds
Bear Valley Electric Service	3-second gust > 50 mph	-
Liberty Utilities	3-second gust > 50 mph	-
PacifiCorp	Sustained wind speed of 11 – 17 mph or gust wind speed of 17 – 26 mph	Keetch Byram Drought Index (KBDI) > 282 to 386 and 6-hour averaged Fosberg Fire Weather Index (FFWI) > 15 - 30

3.0 BASELINE PROACTIVE DE-ENERGIZATION THRESHOLD RANGES

The recommended approach for triggering de-energization protocols involves a three part test:

1. Seasonal considerations: Are seasonal conditions associated with intermediate to long term drying (*e.g.*, live fuel moisture content) such that rapidly spreading fires are possible?
2. Wind gusts: Are wind gust speeds high enough to increase the probability of powerline-associated fire ignition?
3. Fire weather: Are fire weather conditions (including temperature and relative humidity) conducive to rapidly spreading fires?

Each of these components is broken down separately in the following sections.

3.1 Seasonal considerations and intermediate to long-term drying

Energy Release Component (ERC) is a key index calculated from Remote Automated Weather Station (RAWS) observations as part of the US National Fire Danger Rating System (NFDRS). The physical meaning of an ERC value is 4% of the energy per unit area that would be released during a fire in units of Btu/f^2. In other words, multiplying an ERC value by 25 gives the number of Btus per square foot that would be released in a fire, *e.g.*, an ERC of 10 corresponds to 250 Btu/sq ft.

ERC depends on live and dead fuel loading by size class (as characterized by an NFDRS fuel model) as well as fuel moisture content of live and dead fuels. In forested areas, ERC values are usually calculated for NFDRS fuel model G which includes a heavy loading of 1000-hour fuels (dead fuels between 3 and 8 inches in diameter). Consequently, ERC for fuel model G (or ERC(G) for short) is therefore quite sensitive to 1000-hour fuel moisture values.

In addition to depending on fuel loading / fuel model, ERC varies daily due to changes in moisture content of both live and dead fuels, which are in turn dependent on antecedent precipitation, relative humidity, and temperature. ERC is a “build up” index that, in the Western US, typically peaks during summer months and drops off after rains return and temperatures drop. Figure 2 shows an example seasonal variation of ERC. Since ERC depends on fuel loading/fuel model at each RAWS station, absolute ERC values are commonly converted to percentiles to facilitate comparison of seasonal ERC trends between RAWS stations with different fuel models. Conversion of an absolute ERC value to a percentile ERC value is accomplished by analyzing historical weather station observations using software developed by the USDA Forest Service known as Fire Family Plus [3].

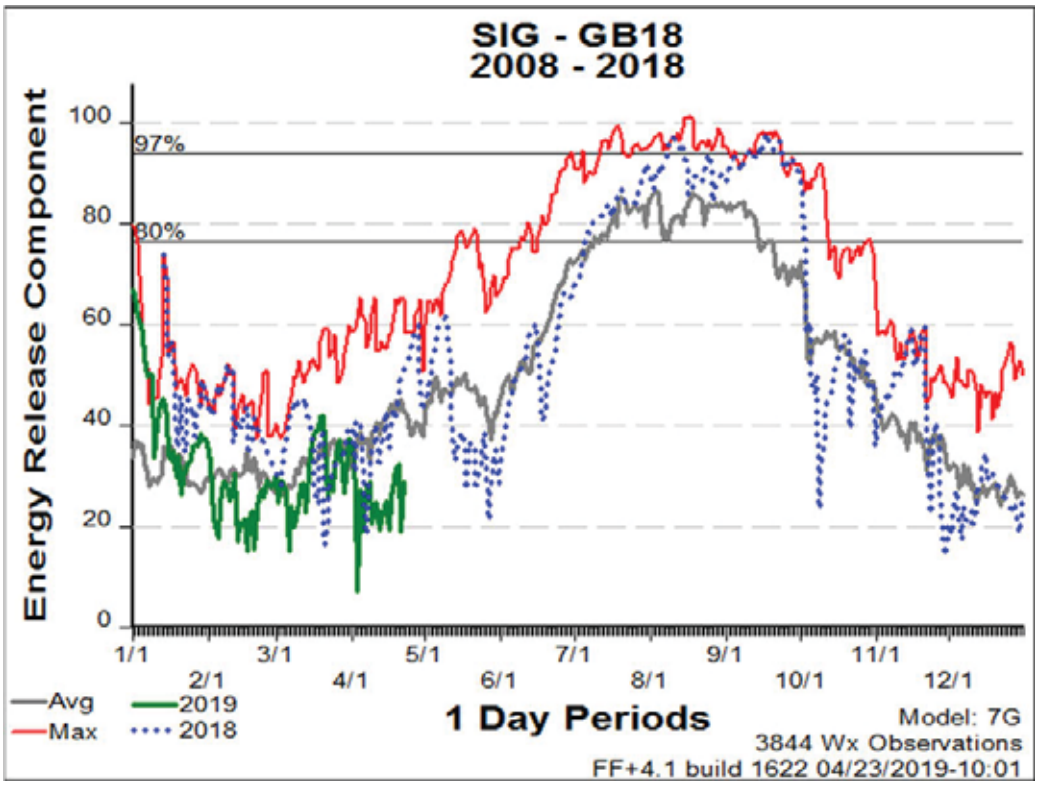


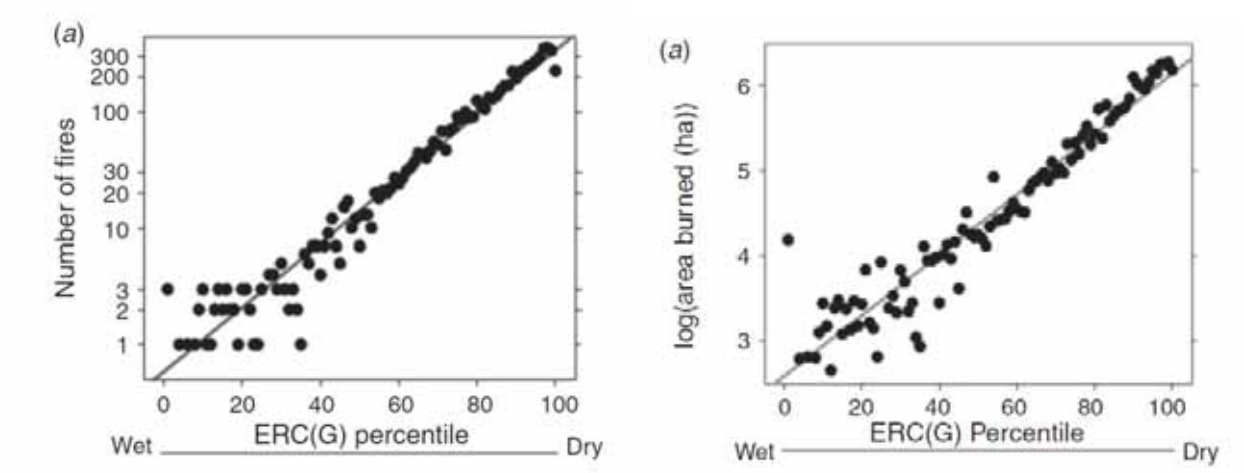
Figure 2. Sample seasonal variation of ERC.

ERC can be thought of as a measure of intermediate to long term drying. It is correlated with the Keetch Byram Drought Index (KBDI), a widely-used measure of drought that is used in the NFDRS to increase fuel loading under drought conditions. KBDI is explained by the United States Forest Service (USFS) Wildland Fire Assessment System (WFAS) as follows [4]:

> Keetch and Byram (1968) designed a drought index specifically for fire potential assessment. It is a number representing the net effect of evapotranspiration and precipitation in producing cumulative moisture deficiency in deep duff and upper soil layers. It is a continuous index, relating to the flammability of organic material in the ground.
>
> The KBDI attempts to measure the amount of precipitation necessary to return the soil to full field capacity. It is a closed system ranging from 0 to 800 units and represents a moisture regime from 0 to 8 inches of water through the soil layer. At 8 inches of water, the KBDI assumes saturation. Zero is the point of no moisture deficiency and 800 is the maximum drought that is possible. At any point along the scale, the index number indicates the amount of net rainfall that is required to reduce the index to zero, or saturation.

Fire occurrence (number of fires) and fire size (area burned) are both strongly correlated with ERC. Figure 3 demonstrates the strong correlation between ERC and fire occurrence/size [5]. Noting that the *y* axes are logarithmic, the relation between ERC and fire occurrence and area burned is

exponential. Comparing ERC percentiles of 50% to 100% shows a 30× increase in number of fires and a 100× increase in fire area.



(a) **(b)**

Figure 3. Correlation of ERC with fire occurrence (a) and fire size (b). From Ref. [5].

Based on these considerations, it is recommended that seasonal factors associated with intermediate to long term drying be quantified here via ERC. The USFS WFAS provides two real-time sources of ERC values. The first provides NFDRS indices – including ERC – based on current observations [6] as well as a one-day weather forecast [7]. Data are provided in tabular form for each reporting RAWS station. As an example, Figure 4 shows forecast NFDRS indices from 7/29/19 for a subset of RAWS stations in Nevada. ERC values are absolute – not percentiles – and 10-hour, 100-hour, and 1000-hour fuel moistures (TEN, HUN, THOU in Figure 4) are given in percentages.

***** California *****	Elev	Lat	Long	Mdl	Tmp	RH	Wind	PPT	ERC	BI	SC	KBDI	HUN	THOU	TEN	STL	ADJ	IC	(Staffing Specs)
40101 CAMP SIX LOOKOUT	3698	41.8	123.8	7G	81	48	5	.00	49	47	8	665	12	12	9	3	M	18	BI / 58/ 66/90/97
40102 GASQUET 2	452	41.8	123.9	7G	85	46	2	.00	41	34	5	789	14	14	9	3	M	15	BI / 42/ 46/90/97
40105 SHIP MTN L.O.	5151	41.7	123.7	7G	76	49	3	.00	59	47	7	595	9	10	8	3	M	15	BI / 71/ 86/90/97
40106 CRAZY PEAK	3970	41.9	123.6	7G	86	39	3	.00	55	46	7	594	10	11	7	4	H	21	ERC/ 44/ 55/90/97
40203 BLUE RIDGE (KNF)	5859	41.2	123.1	7G	81	25	6	.00	71	78	17	230	7	9	5	3	H	50	BI / 93/106/90/97
40217 MT SHASTA	3573	41.3	122.3	7G	88	26	5	.00	64	60	10	537	10	10	6	3	M	36	BI / 68/ 75/90/97
40221 ROUND MOUNTAIN	5255	41.4	121.4	7G	85	24	7	.00	79	68	11	266	6	8	4	4	H	43	ERC/ 79/ 96/90/97
40222 SAWYERS BAR	2455	41.3	123.1	7G	98	20	10	.00	77	96	24	733	7	8	4	4	V	68	BI / 93/104/90/97
40225 SLATER BUTTE	4621	41.8	123.3	7G	85	34	2	.00	70	66	12	701	8	8	6	3	M	31	BI / 80/ 91/90/97
40228 WEED AIRPORT	2929	41.4	122.4	7A	92	23	16	.00	3	42	114	595	7	8	5	4	H	42	BI / 41/ 49/90/97
40231 SOMES BAR	915	41.3	123.4	7G	101	25	4	.00	55	62	13	778	12	11	6	3	H	46	BI / 79/ 86/90/97
40233 INDIAN WELL	4777	41.7	121.5	7F	83	35	4	.00	24	30	6	283	6	7	6	2	M	28	BI / 81/ 97/90/97
40237 COLLINS BALDY LO	5476	41.7	122.9	7G	82	35	4	.00	71	57	8	430	7	8	6	3	M	25	BI / 71/ 83/90/97
40239 QUARTZ HILL	4225	41.5	122.9	7G	89	28	2	.00	81	41	4	575	6	7	5	3	M	21	BI / 55/ 66/90/97
40240 JUANITA	5173	41.8	122.1	7G	83	32	1	.00	69	40	4	250	7	9	6	3	M	17	BI / 60/ 71/90/97
40242 BRAZIE RANCH	3090	41.6	122.6	7B	93	24	6	.00	58	89	27	416	6	7	5	4	H	46	BI / 54/ 98/90/97
40243 VAN BREMMER	5303	41.6	121.7	7G	86	18	5	.00	74	67	12	401	7	9	4	3	H	46	BI / 84/ 96/90/97
40244 ASH CREEK	3677	41.2	121.9	7G	86	29	3	.00	53	40	5	622	11	12	6	3	M	24	BI / 52/ 56/90/97
40245 CALLAHAN #2	3910	41.3	122.8	7G	92	22	9	.00	78	82	17	422	7	7	5	5	V	52	BI / 62/ 68/90/97
40246 DUTCH INDY	2296	41.6	123.4	7G	93	26	6	.00	66	75	17	765	9	9	6	3	H	48	BI / 80/ 91/90/97

Figure 4. Sample USFS NFDRS indices forecast data in tabular form [7].

The second set of real-time ERC values available through the USFS WFAS is a gridded map that is derived from discrete RAWS observations [6]. A web map [8], updated daily at 10:00 UTC, displays ERC values by Spatial Preparedness Level (SPL). As an example, ERC SPL for 7/29/19 is shown in Figure 5. The SPL categories are as follows:

- SPL-I: Less than 58th percentile ERC
- SPL-II: 58th – 78th percentile
- SPL-III: 78th – 92nd percentile
- SPL-IV: 92nd to 97th percentile
- SPL-V: 97th – 99th percentile
- SPL-VI: > 99th percentile

SPL of 4 or higher corresponds to an increased probability of fires escaping initial attack and becoming extended attack fires. For that reason, an ERC percentile of 92 is recommended for use as a de-energization threshold. In other words, if ERC in a PSPS zone is less than 92nd percentile, proactive de-energization would not be initiated because seasonal conditions are such that rapidly spreading fires that become large, extended attack fires are unlikely to occur. In Figure 5, areas that are yellow, orange, or red are at a SPL of 4 or higher, meaning relative ERC values are 92nd percentile or greater.

Operationally, discrete ERC values (Figure 4) and gridded ERC rasters (Figure 5) are ingested into the weather analytics and monitoring system used by Liberty Utilities to monitor current and forecasted weather conditions. The gridded ERC rasters are made available by WFAS via the Web Map Service (WMS) protocol. As an example, the following URL is the http query that provides today's (day 0) ERC values:

https://www.wfas.net/cgi-bin/mapserv?&SERVICE=WCS&20&VERSION=1.0.0&REQUEST=GetCoverage&COVERAGE=erc0percnew&CRS=EPSG:4326&BBOX=-130,20,-60,52&WIDTH=2144&HEIGHT=1376&FORMAT=GEOTIFF_FLOAT

Tomorrow's (day 1) values are obtained by replacing "erc0percnew" in the above query with "erc1percnew", and so on. Currently WFAS provides a 3-day ERC forecast which is used operationally in Liberty Utilities' weather analytics and monitoring system for ERC forecasting. Current and forecast ERC values are assigned to each proactive de-energization zone by running zonal statistics for each of Liberty Utilities' PSPS zones.

As described in Appendix A, fuel moisture sampling will be conducted at six different locations in the Truckee/Tahoe region. This sampling will be conducted during "fire season" at 10 – 14 day intervals or after wetting rains. The purpose of this sampling is to continuously monitor live and dead (primarily 1000-hour) fuel moisture contents. These data provide inputs necessary to calculate ERC percentiles based on field observations when can then be compared to automated values from nearby NFDRS stations.

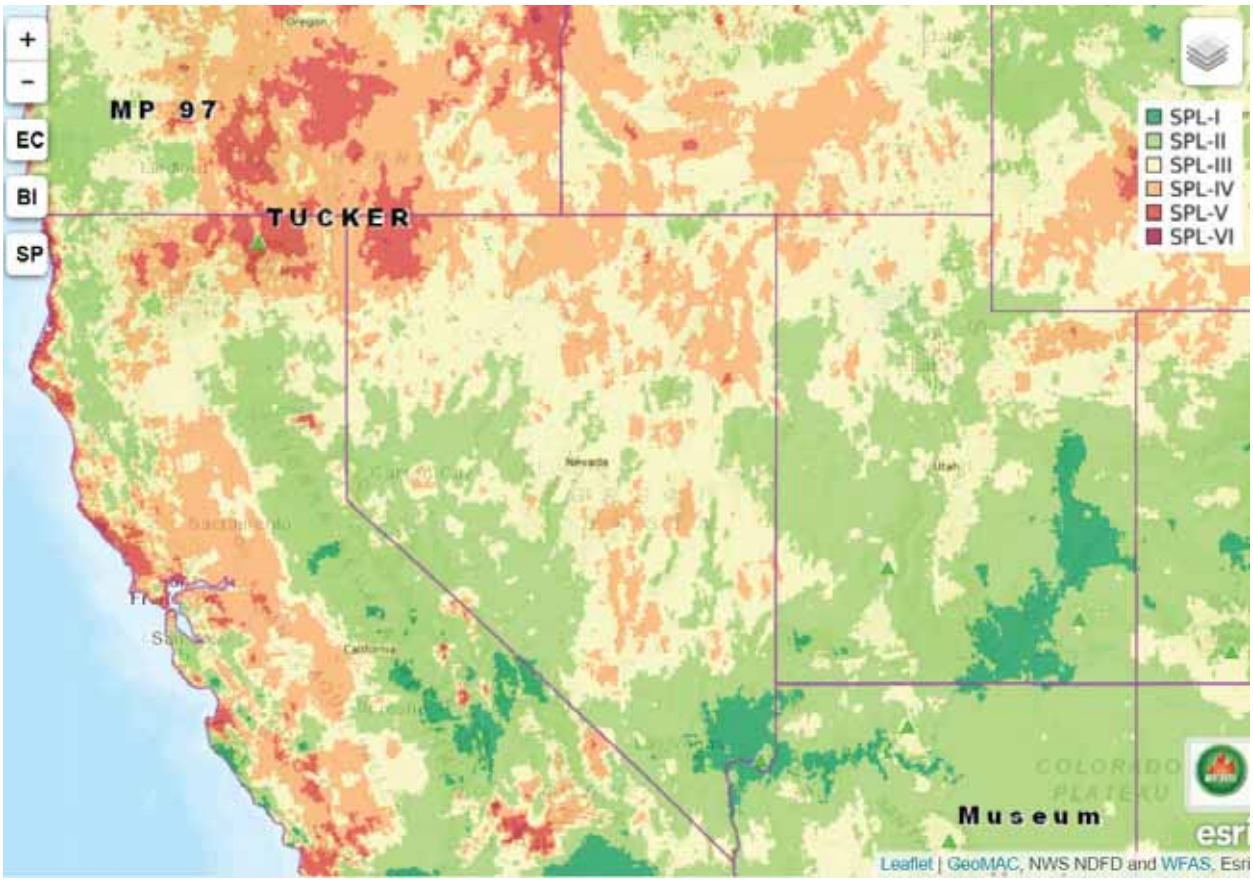


Figure 5. ERC Spatial Preparedness level on 7/29/19.

3.2 Wind gusts

Based on the analyses presented in the background section of this report, a wind gust speed threshold of 40 – 45 mph is recommended as a threshold for de-energization of distribution lines. This value has been shown to correspond to a statistically significant increase in outage occurrence (which is viewed as a proxy for ignition occurrence). Although this value is lower than that identified as a de-energization threshold by Liberty Utilities and BVES (50 mph) in their wildfire mitigation plans, gust speeds measured around the time of ignition of large loss suspected powerline were as low as 32 mph, although wind gusts near the suspected ignition locations may have been higher.

Gust factors are empirically derived equations or graphs that relate wind speed at one averaging interval to wind speed at another averaging interval. A 10-minute average wind speed will be lower than the peak 3-second gust that occurred within that same 10-minute interval. The "Durst curve" [9] (shown in Figure 6) is the most commonly-used source of gust factors. As can be seen from the Durst curve below, the ratio of 3-second gust wind speed to 10-minuted average wind speed (which is what RAWS measures) is approximately 1.43. This means that the 40 mph gust wind speed threshold is equivalent to a 10-minute average wind speed of approximately 40 mph / 1.43 ≈ 28 mph. Therefore, the 40 mph gust threshold can also be viewed as a 28 mph sustained wind speed and a 45 mph gust threshold can be viewed as a 31 mph sustained winds speed.

Since transmission lines typically have less encroaching vegetation than distribution lines, it may be appropriate to use a gust wind speed higher than 40 – 45 mph as a trigger for de-energization of transmission lines. However, unless transmission-specific outage data show a different inflection point when plotted as outage frequency vs. wind gust, the 40 – 45 mph wind gust distribution line threshold is also recommended for application to transmission lines.

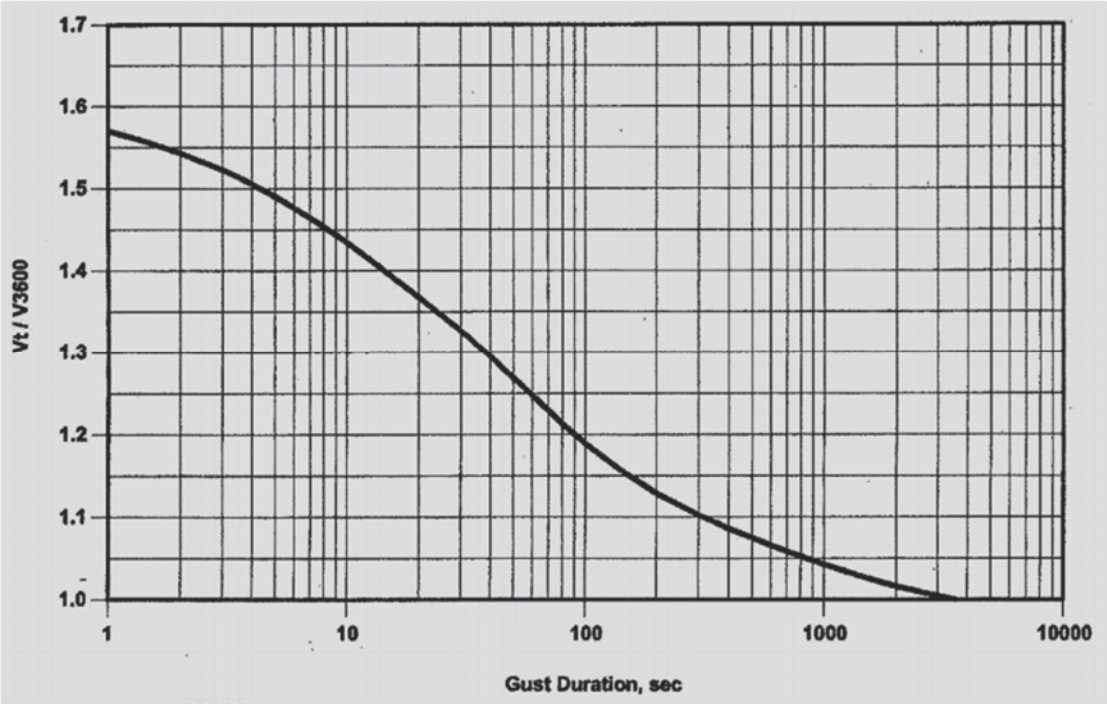


Figure 6. Conventional wind gust factors - Durst curve [9].

3.3 Fire weather

The final criterion that must be met to initiate de-energization protocol is related to fire weather. Essentially, this last test is meant to preclude de-energization during high winds that occur contemporaneously with high humidity and low temperature as such conditions are not conductive to rapidly spreading fires.

The Fosberg Fire Weather Index [10] (FFWI or FWI) is a widely-used index that quantifies the effect of short-term variations in meteorological conditions (temperature, relative humidity, and wind speed) on the potential for wind-driven fire spread. FFWI is based on instantaneous fire weather considerations so it does not consider other factors that may affect fire spread potential such as fuel type, topography, live fuel moisture, or recent precipitation.

Fosberg index is scaled from 0 to 100 such that 100 corresponds to a 30 mph sustained wind and a dead fuel moisture content of zero. Generally, Fosberg indices above 50 – 60 are considered conducive to rapid wind-driven fire spread. For example, NOAA Storm Prediction Center (SPC) personnel wrote [11]: "Generally, for national guidance purposes, temperatures above 60 F, RH

values less than 20%, and sustained surface winds above 20 mph will result in Fosberg values above 50, which is a minimum threshold for critical fire weather conditions. As a general rule, SPC forecasters tend to pay special attention to areas expected to have 3 or more hours of a FWI above 50."

4.0 Historical Exceedance of De-energization Criteria in Liberty Utilities' PSPS Zones

Liberty Utilities has designated 46 PSPS zones:

1) 111 Line
2) 132 Line
3) Portola
4) Sierra Brooks
5) Stampede
6) Russel Valley
7) Hobart
8) Sagehen tap
9) Fir Crags
10) Sunnyside
11) Ward Canyon east
12) Tahoe Park Heights
13) Alpine backside
14) Alpine Meadows and 629
15) Squaw Valley
16) Ward Canyon west
17) Tah 73-17
18) Tah 73-36
19) Tah 73-45
20) Tah 7300 r1
21) Tah 73-60
22) Tah 73-74
23) Angora Ridge and Lily Lake
24) Cathedral Spring Creek Emerald Bay
25) Mey 3400 Angora Creek
26) Mey3300 r3
27) Mey3300 r1
28) Mul 1296 r4
29) Sorensons tap
30) Mul1296 r3
31) Topaz
32) Heavenly lateral
33) Tier 3
34) 640 tier 2
35) 650 Line
36) 669 Line
37) 609 and underbuild
38) 625 Line
39) Bky 5200
40) Old Country Road
41) Tah 52-68
42) The grid

43) Canterbury and Commonwealth
44) Bky 5100 to NVE
45) Beacon tap
46) Glenshire and 608

For the purposes of quantifying historical exceedance frequencies and developing PSPS-specific de-energization thresholds, we have identified five separate groupings:

1) West and north shore
2) South shore
3) Truckee, Glenshire, and Hobart Mills
4) Portola and Sierra Brooks
5) Topaz & Markleeville

The baseline proactive de-energization threshold ranges described in Section 3.0 provide a starting point for developing PSPS zone-specific reasonable risk de-energization thresholds. Historical weather station observations and archived weather forecast data can be analyzed to quantify how frequently various de-energization thresholds have been exceeded in the past so that PSPS zone-specific thresholds can be developed.

Given that proactive de-energization is a last resort for fire prevention, de-energization thresholds must be sufficiently high to prevent unnecessary and/or frequent service interruptions. Through an iterative process, the thresholds shown in Table 3 have been established and are tested against historical weather station observations (Section 4.1) and archived weather forecast data (Section 4.2) to assess historical threshold exceedance frequencies.

Table 3. Thresholds to be assessed in historical threshold exceedance analysis.

Region	ERC(G)	Wind gust (mph)	FFWI (-)
West and north shore	> 92nd percentile	> 40 mph	> 50
South shore	> 92nd percentile	> 40 mph	> 50
Truckee, Glenshire, and Hobart Mills	> 92nd percentile	> 40 mph	> 50
Portola and Sierra Brooks	> 92nd percentile	> 40 mph	> 50
Topaz & Markleeville	> 92nd percentile	> 40 mph	> 50

4.1 Historical weather station observations

4.1.1 West and North shore

Liberty Utilities' PSPS zones on the West and North Shores of Lake Tahoe are shown in Figure 7 relative to the locations of Homewood and Knox 2 RAWS. To provide an estimate of the historical frequency at which the proposed de-energization thresholds have been exceeded, energy release component and wind speed / Fosberg Fire Weather Index statistics are analyzed separately below.

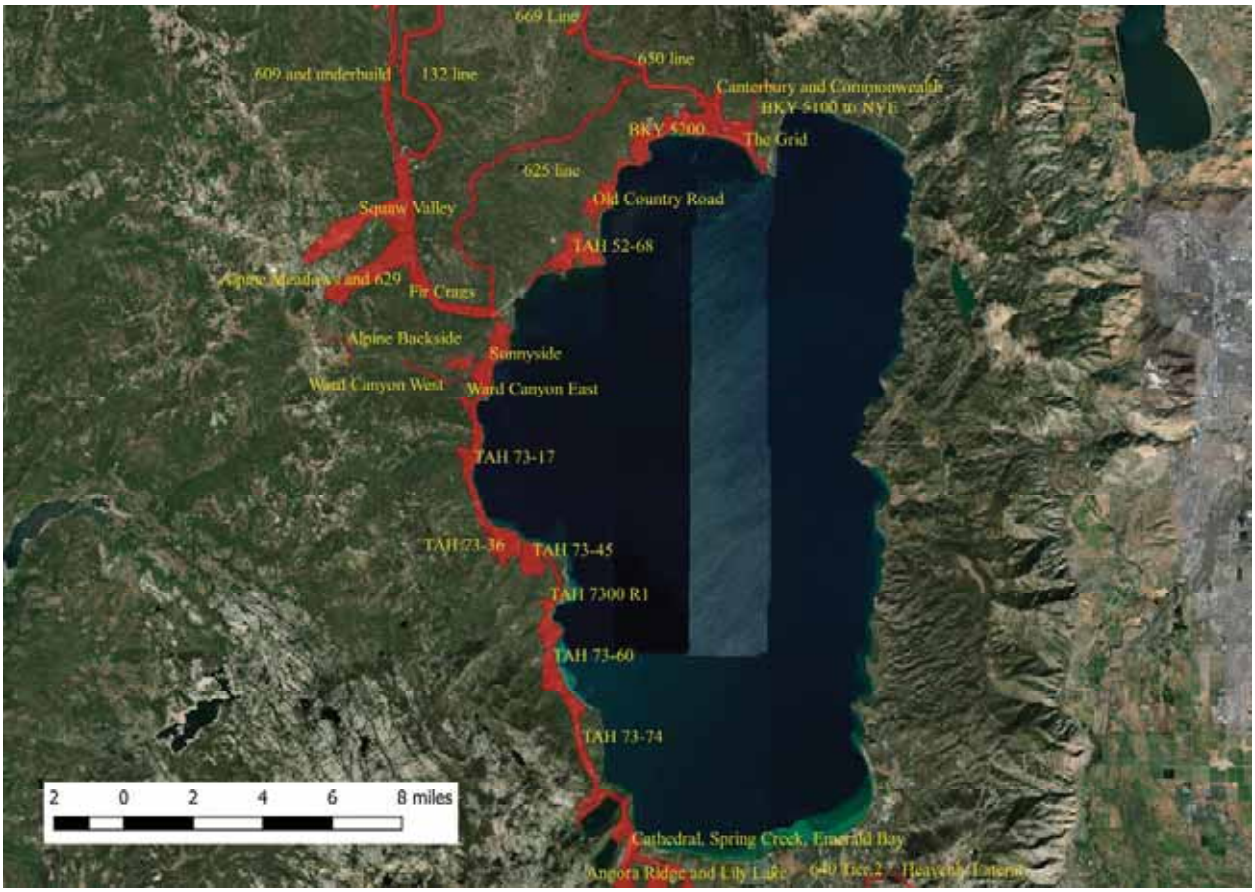


Figure 7. Locations of Liberty Utilities' West and North shore PSPS zones relative to Homewood and Knox 2 RAWS.

Data from Knox 2 and Homewood RAWS were used to create a "Special Interest Group" (SIG), which is a common practice when conducting climatological analyses. Nine years (2010 – 2018) of observations from this SIG were processed to analyze seasonal variations in ERC (using NFDRS Fuel Model G), and the result is plotted in Figure 8. In an average year, ERC does not exceed the 92nd percentile, but in years with below average precipitation and/or higher than average temperatures ERC will likely exceed the 92nd percentile maximum. Figure 8 shows that the maximum ERC has historically exceeded the 92nd percentile from approximately mid-June through late September.

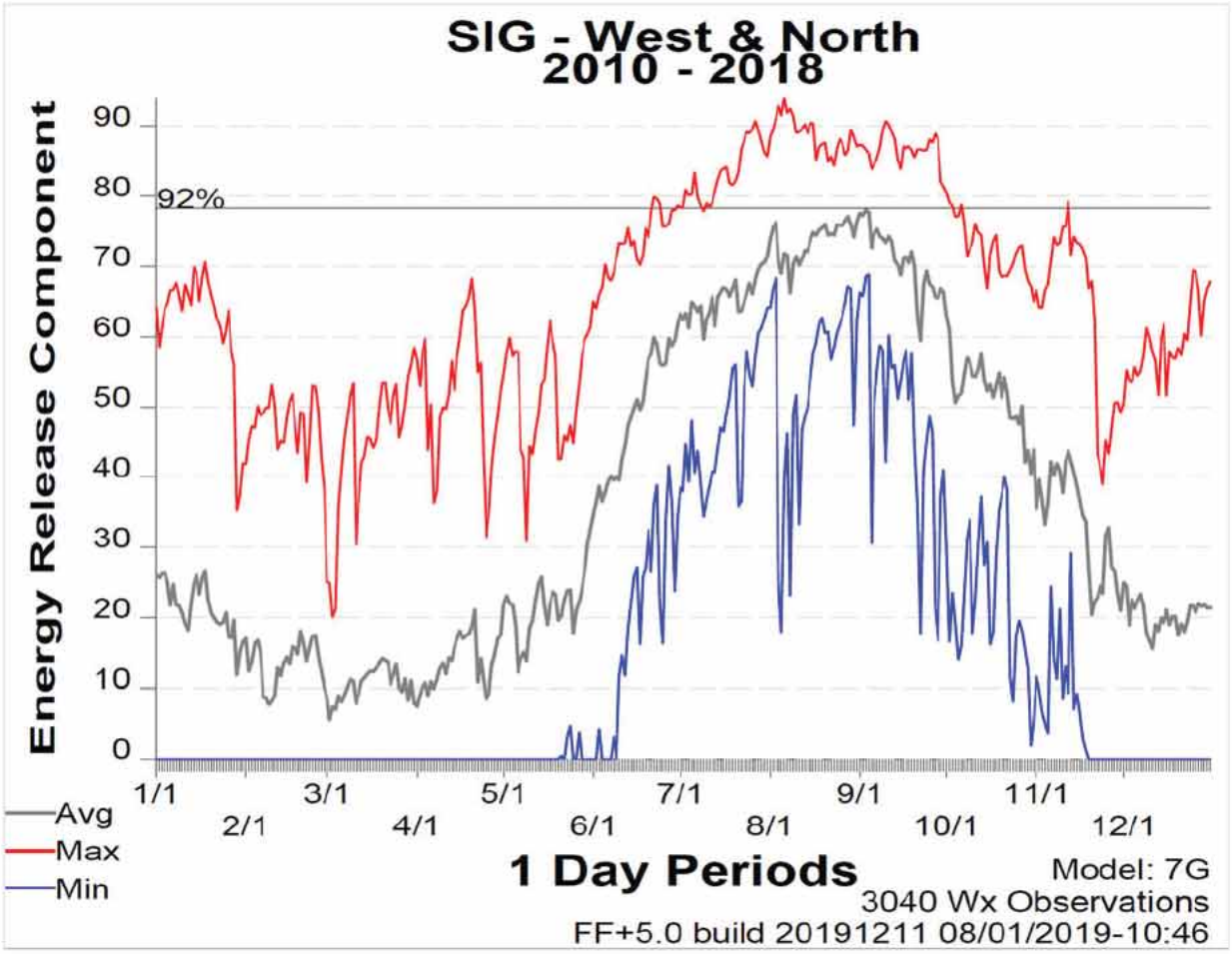


Figure 8. Seasonal variations in ERC (Fuel Model G) in Lake Tahoe SIG.

Scatter plots of measured wind gust vs. FFWI are shown in Figure 9 (Knox 2 / KNXN2) and Figure 10 (Homewood / HMDC1). The period of record plotted for each of these stations is as follows:

- Knox 2 / KNXN2: 2010 – 2018
- Homewood / HMDC1: 2010 – 2018

No exceedances were recorded at Knox 2 RAWS. Although there were several observations at Homewood RAWS where gust & FFWI thresholds were exceeded, they were all "off season" meaning they did not occur in June, July, August, or September when maximum ERC has exceeded 92nd percentile.

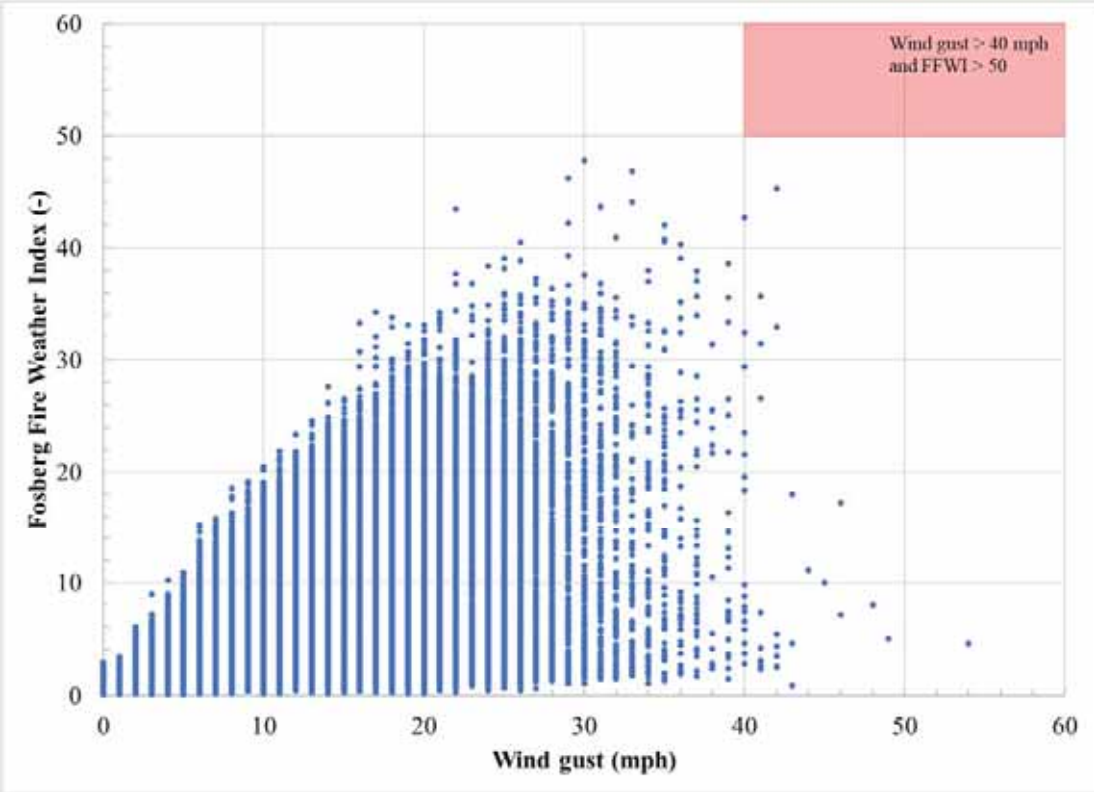


Figure 9. Knox 2 (KNXN2) wind gust vs. FFWI (2010 – 2018).

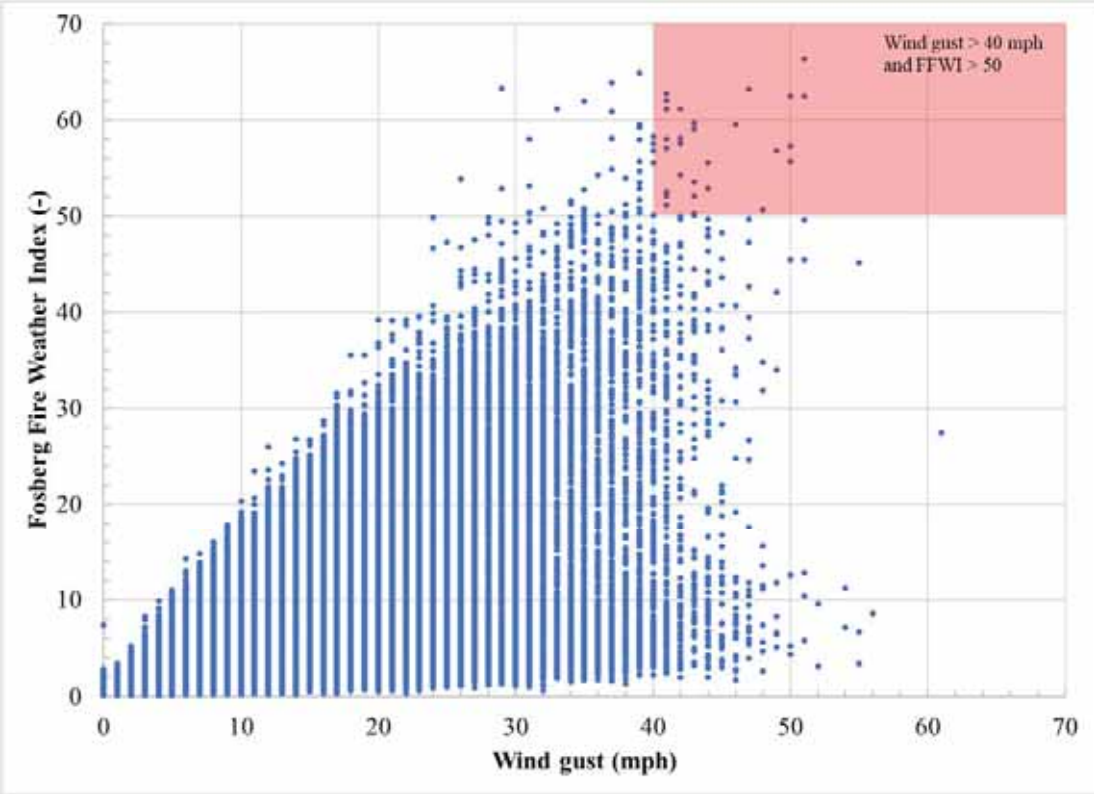


Figure 10. Homewood (HMDC1) wind gust vs. FFWI (2002 – 2018).

4.1.2 South shore

The locations of Baron RAWS and the NWS station at South Lake Tahoe airport relative to Liberty Utilities' South Shore PSPS zones are shown in Figure 11.

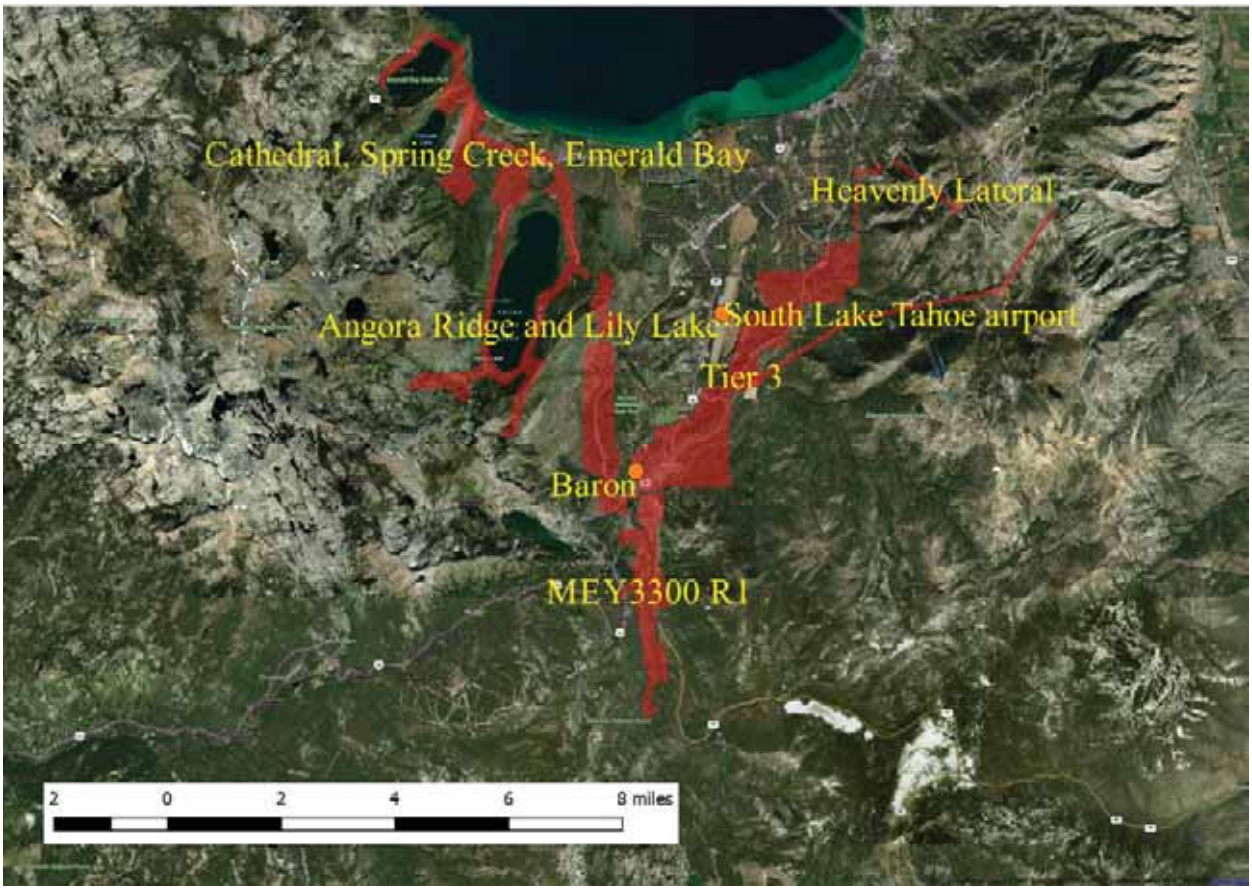


Figure 11. Locations of Liberty Utilities' South shore PSPS zones relative to Meyers/Baron RAWS and SLT airport weather station.

Scatter plots of wind gust against Fosberg Fire Weather Index are given in Figure 12 for Meyers/Baron RAWS and Figure 13 for South Lake Tahoe airport. In the 8 year period of record at Meyers/Baron RAWS, no exceedances occurred.

In the 21-year period of record at South Lake Tahoe airport, there were 410 observations where FFWI and wind gust exceeded baseline thresholds. However, this includes "off-season" winds where ERC would not be above 92nd percentile. After filtering these observations for "summer" months (June, July, August, and September), there were 15 separate days where one or more observation exceeded de-energization thresholds.

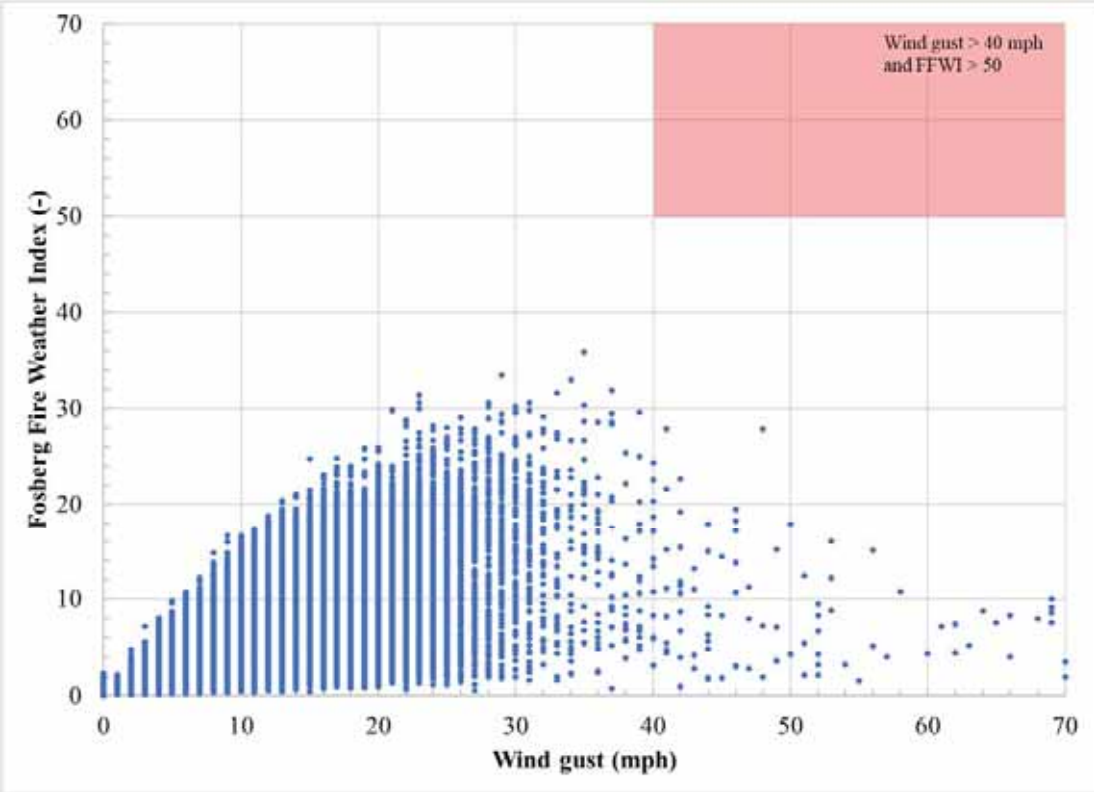


Figure 12. Baron RAWS wind gust vs. FFWI (2011 – 2018).

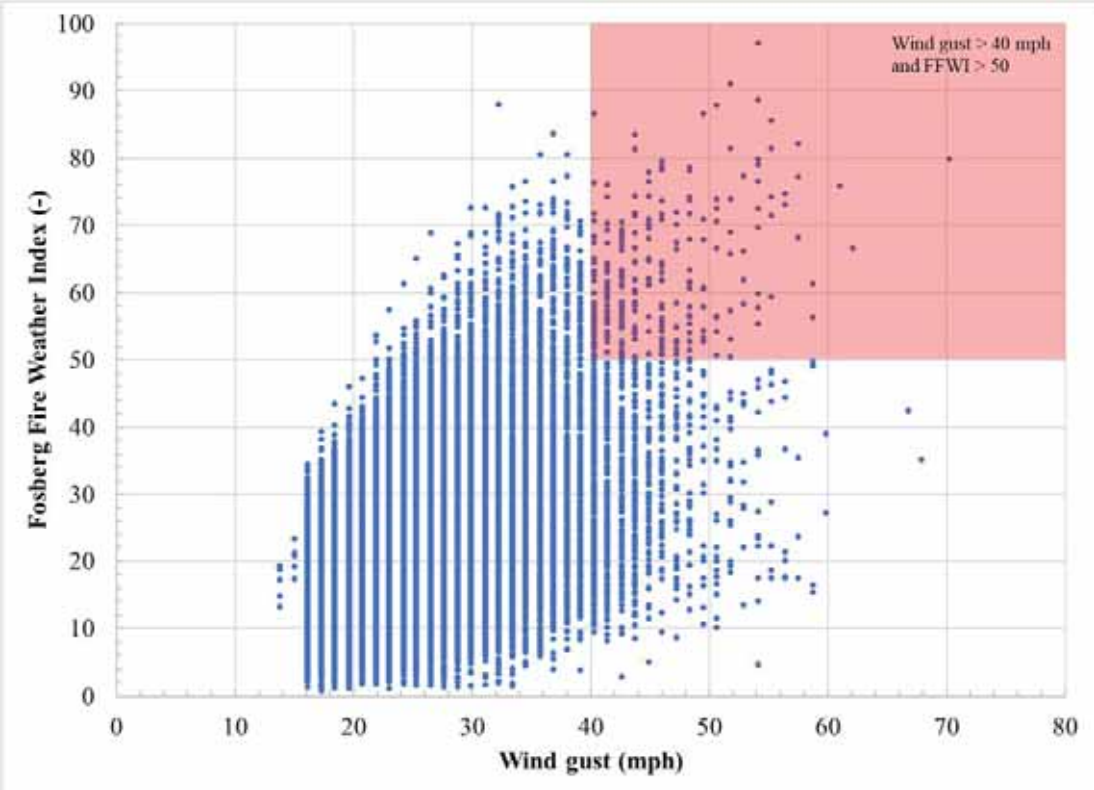


Figure 13. South Lake Tahoe airport wind gust vs. FFWI (1997 – 2018).

4.1.3 Truckee, Glenshire, and Hobart Mills

Liberty Utilities' Truckee/Glenshire/Hobart Mills PSPS Zones are shown in Figure 14. To provide an estimate of the historical frequency at which the proposed de-energization thresholds have been exceeded, energy release component and wind speed / Fosberg Fire Weather Index statistics are analyzed separately below.

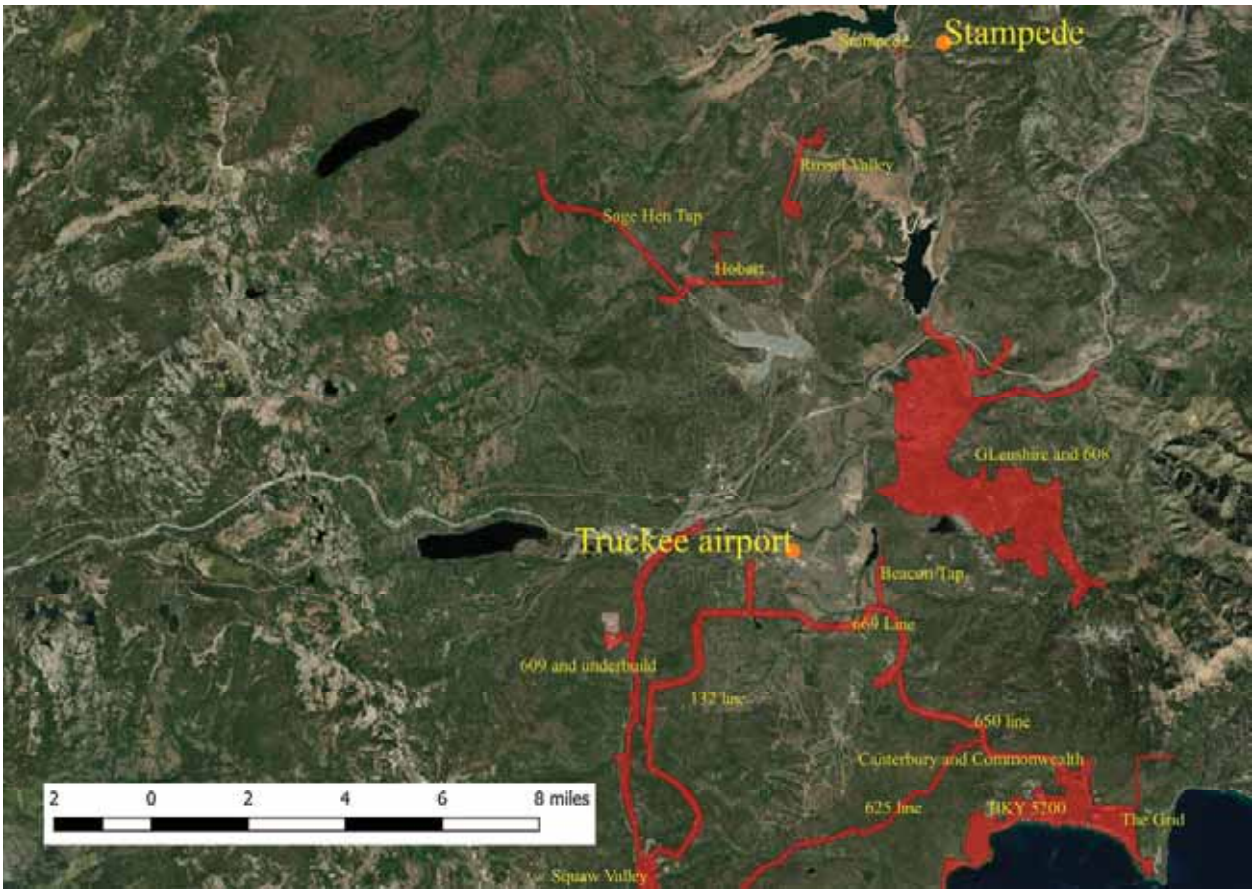


Figure 14. Truckee/Glenshire/Hobart Mills PSPS Zones and location of Stampede weather station.

Thirteen years (2006 – 2018) of observations from Stampede RAWS were processed to analyze seasonal variations in ERC (using NFDRS Fuel Model G), and the result is plotted in Figure 15. The maximum historical ERC exceeded the 92nd percentile threshold from early June through late September, but as with the Lake Tahoe SIG the 92nd percentile was not exceeded in the average year.

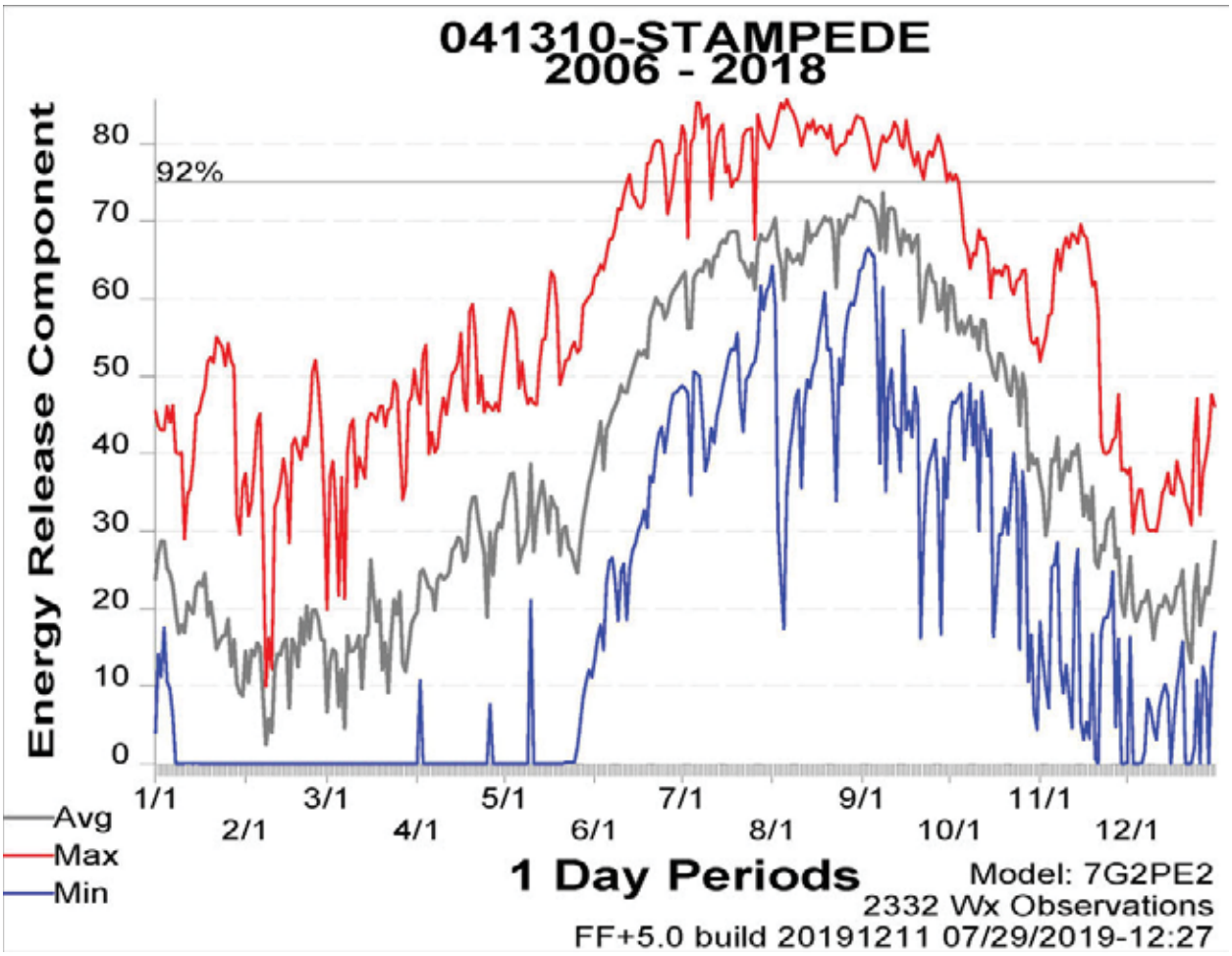


Figure 15. Seasonal variations in ERC (Fuel Model G) at Stampede RAWS.

Measured wind gust speed plotted against Fosberg Fire Weather index for Stampede RAWS from 1999 to 2018 is shown in Figure 16. The wind gust / FFWI threshold exceedances are presented in Table 4. ERC values are not available prior to 2006 so no ERC values are available for the 2004, 2005, or 2006 exceedances and ERC data are missing for 2010, so no ERC values are available for the exceedances shown in Table 4. However, since these exceedances occurred in June, it is possible that ERC values exceeded the 92nd percentile. In an average year the 92nd percentile ERC would not have been exceeded. The dates and duration of the three exceedance events is summarized below:

1. June 17, 2005: 8 hourly records
2. June 16, 2010: 2 hourly records

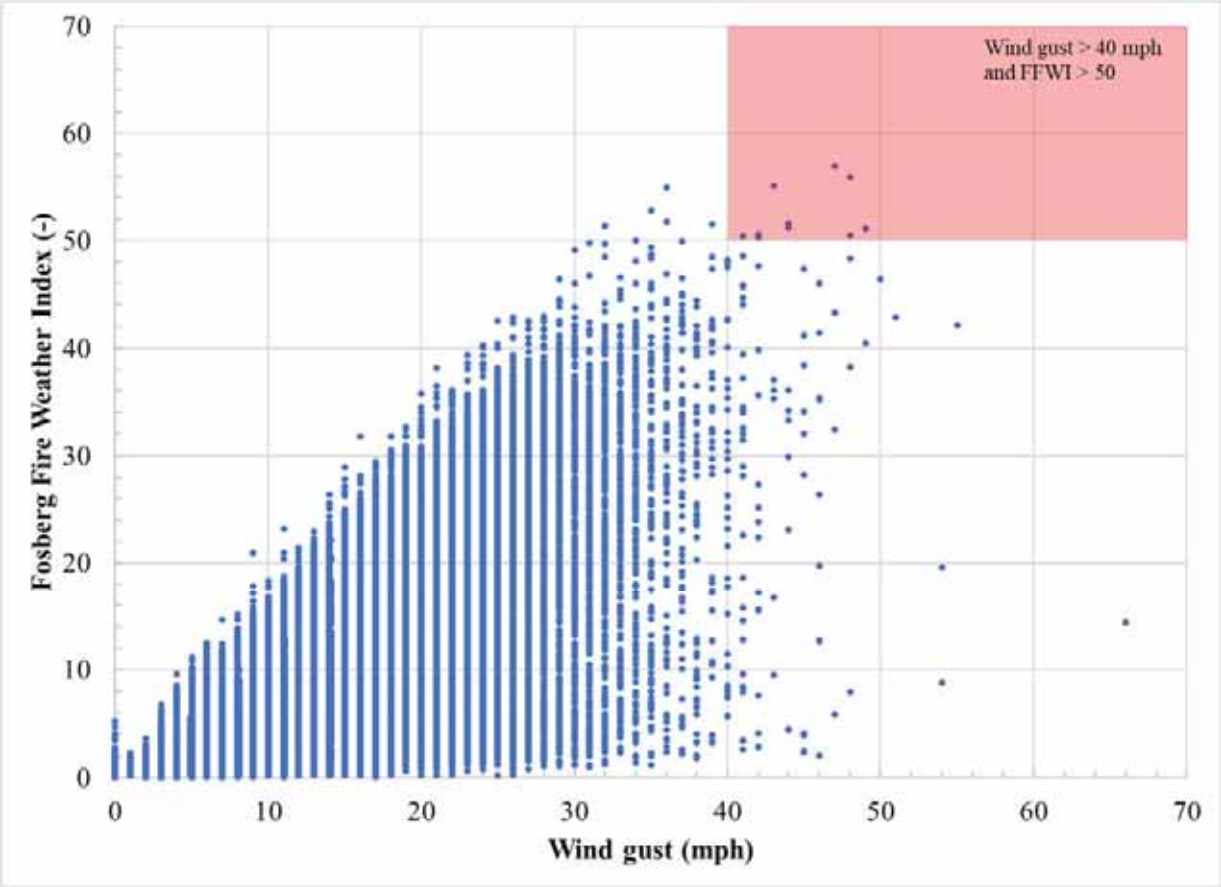


Figure 16. Stampede (SMDC1) wind gust vs. FFWI (1999 – 2018).

Table 4. Weather observations from Stampede RAWS where wind gust and FFWI de-energization thresholds were exceeded.

Station	Date PST / PDT	T F	RH %	WS mph	WG mph	FFWI -	ERC
SMDC1	2005-06-17_12:15	58	36	25	57	50	-
SMDC1	2005-06-17_14:15	58	31	25	48	53	-
SMDC1	2005-06-17_15:15	63	12	21	47	56	-
SMDC1	2005-06-17_16:15	61	13	22	50	58	-
SMDC1	2005-06-17_17:15	64	11	19	50	51	-
SMDC1	2005-06-17_19:15	66	11	19	43	52	-
SMDC1	2005-06-17_20:15	65	17	20	43	51	-
SMDC1	2005-06-17_23:15	63	16	20	41	51	-
SMDC1	2010-06-16_11:16	57	18	21	47	52	-
SMDC1	2010-06-16_18:16	65	11	20	42	54	-

Additional data from Truckee airport was also analyzed (Figure 17). The available period of record is 21 years. During this time, there were 225 observations that exceeded de-energization thresholds. However, most of these were off-season. After constraining these observations to

"summer" months (June, July, August, and September) when ERC may have exceeded 92%, 10 days were identified where one or more observation exceeded de-energization thresholds.

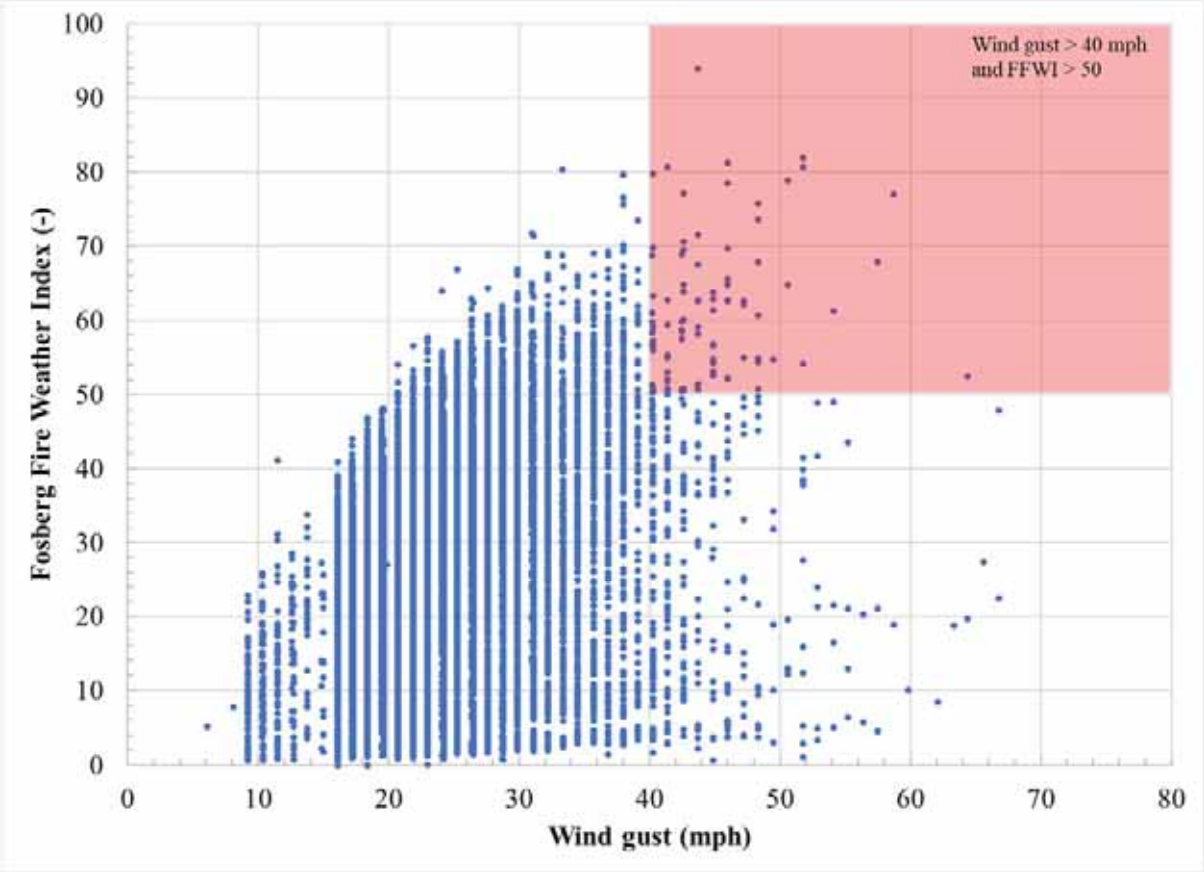


Figure 17. Truckee airport (KTRK) wind gust vs. FFWI (1997 – 2018).

4.1.4 Portola and Sierra Brooks

The Portola and Sierra Brooks PSPS zones are shown in Figure 18. There is one weather station in the surrounding area with a period of record that enables analysis of historical exceedance frequencies.

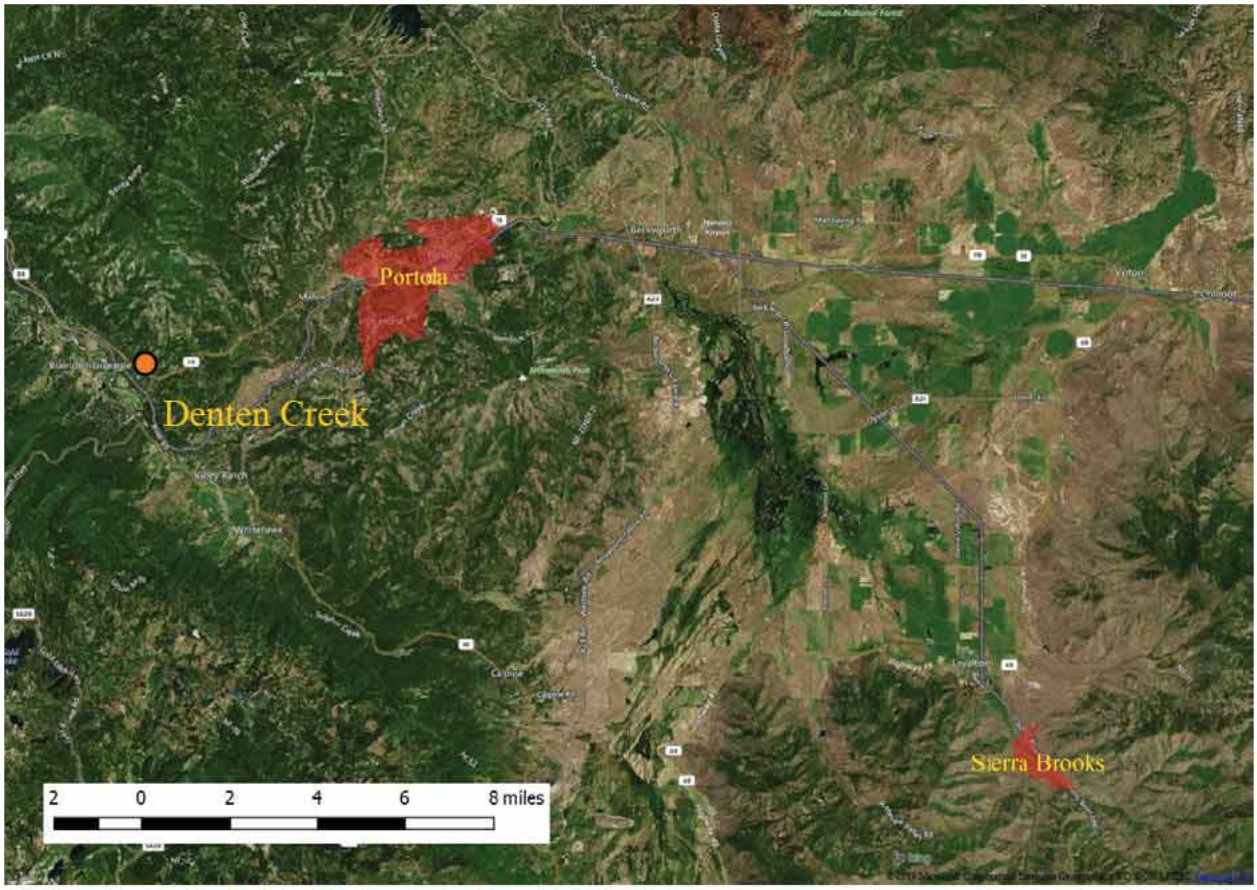


Figure 18. Portola and Sierra Brooks PSPS Zones and location of nearby weather stations.

Four years (2014-2018) of observations from Denten Creek RAWS were processed to analyze seasonal variations in ERC. This ERC analysis was completed using NFDRS Fuel Model G. The result is plotted in Figure 19. The maximum historical ERC exceeded the 92nd percentile threshold intermittently from approximately early July through late September. As with previous station analyses, the 92nd percentile was not exceeded in the average year.

Measured wind gust speed plotted against Fosberg Fire Weather Index for Denten Creek RAWS from 2014 to 2018 is shown in Figure 20. For the available period of record, FFWI and wind gust thresholds have not been exceeded.

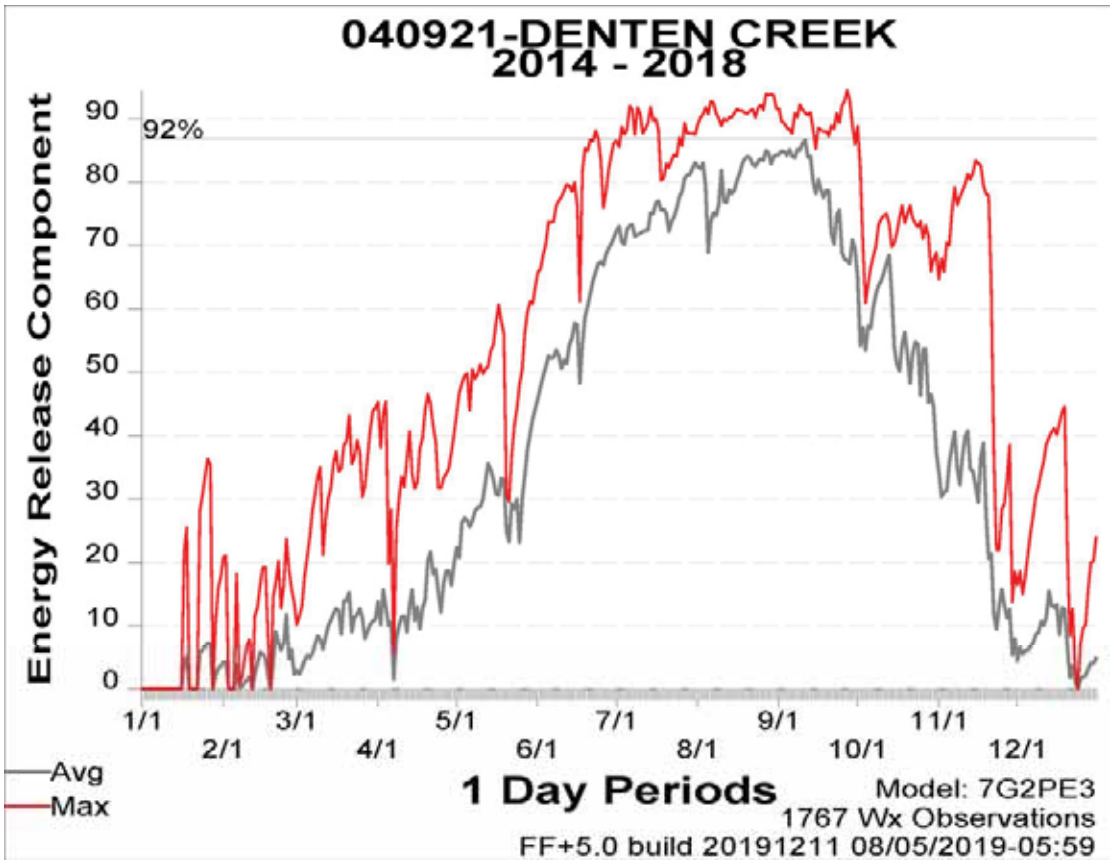


Figure 19. Seasonal variations in ERC (Fuel Model G) from Denten Creek RAWS.

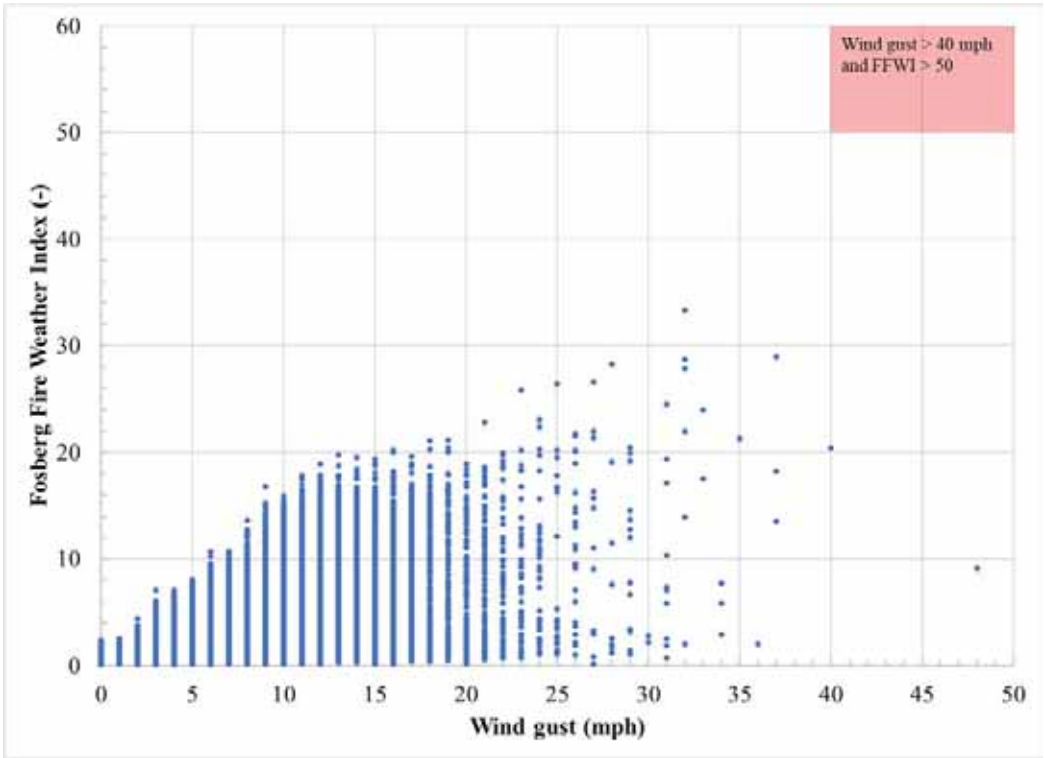


Figure 20. Denten Creek RAWS (MWKC1) wind gust vs. FFWI (2014 – 2018).

4.1.5 Topaz & Markleeville

The Topaz & Markleeville PSPS zones are shown in Figure 20. There are two weather stations, Markleeville and Walker RAWS, with a sufficiently long period of record in this area to analyze historical exceedance frequencies. Liberty Utilities has installed two weather stations in this area (LIB03 and LIB05), but these are relatively new stations with a short period of record.

Seasonal variations in ERC (for fuel model G) at Markleeville RAWS are shown in Figure 22. ERC has exceeded the 92nd percentile from approximately early June through late October. Measured wind gust speed plotted against Fosberg Fire Weather Index is shown in Figure 23. One threshold exceedance occurred in December 2002 when ERC would not have been above 92nd percentile.

Seasonal variations in ERC (for fuel model G) at Walker RAWS from 1975-2018 are shown in and Figure 24. The 92nd percentile ERC threshold has been exceeded from mid-June through mid-October. Figure 25 plots wind gust against Fosberg Fire Weather Index. Data quality from this station is questionable. Approximately 500 hourly records were identified wherein wind gust and FFWI thresholds were exceeded between June and October. Additional analysis is required to understand if these readings are affected by data quality and whether Walker RAWS is representative of conditions in the Topaz PSPS Zone.

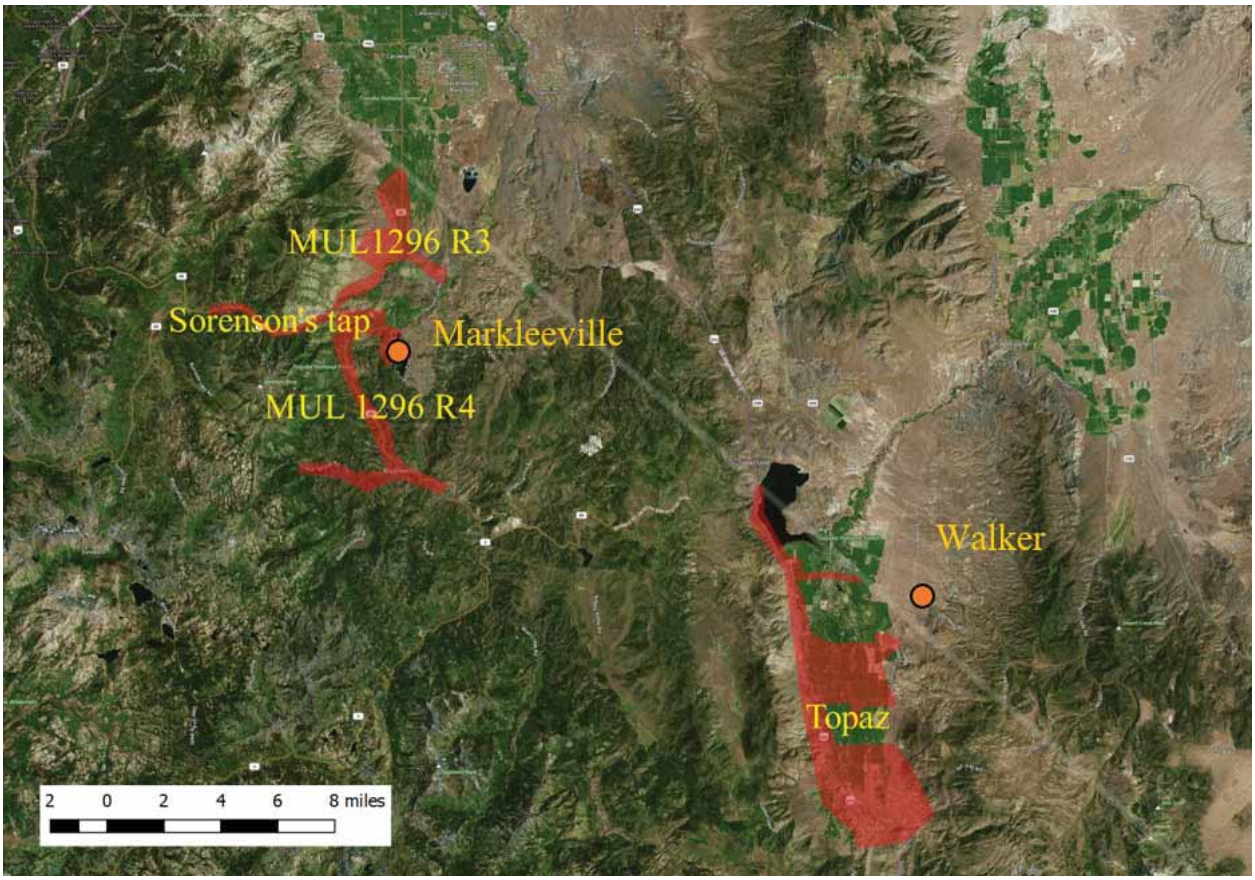


Figure 21. Liberty Utilities' PSPS Zones in Topaz / Markleeville.

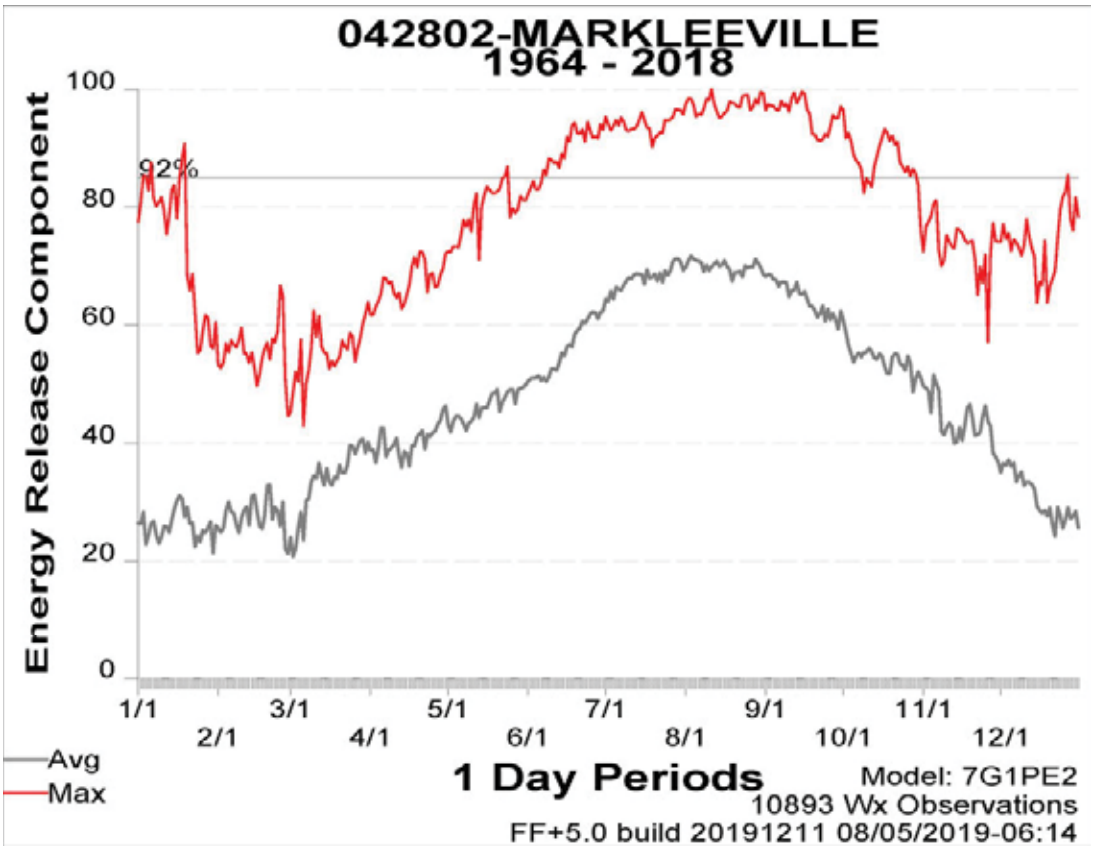


Figure 22. Seasonal Variations in ERC (Fuel Model G) from Markleeville RAWS

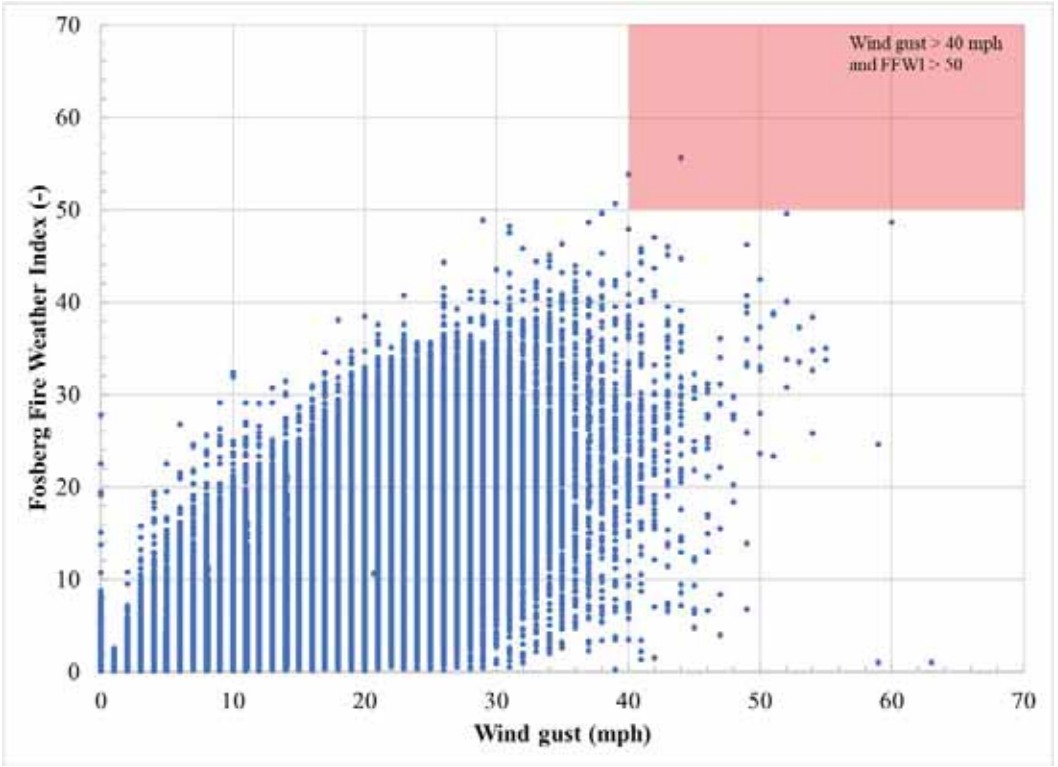


Figure 23. Markleeville RAWS (MKEC1) wind gust vs. FFWI (1999 – 2018).

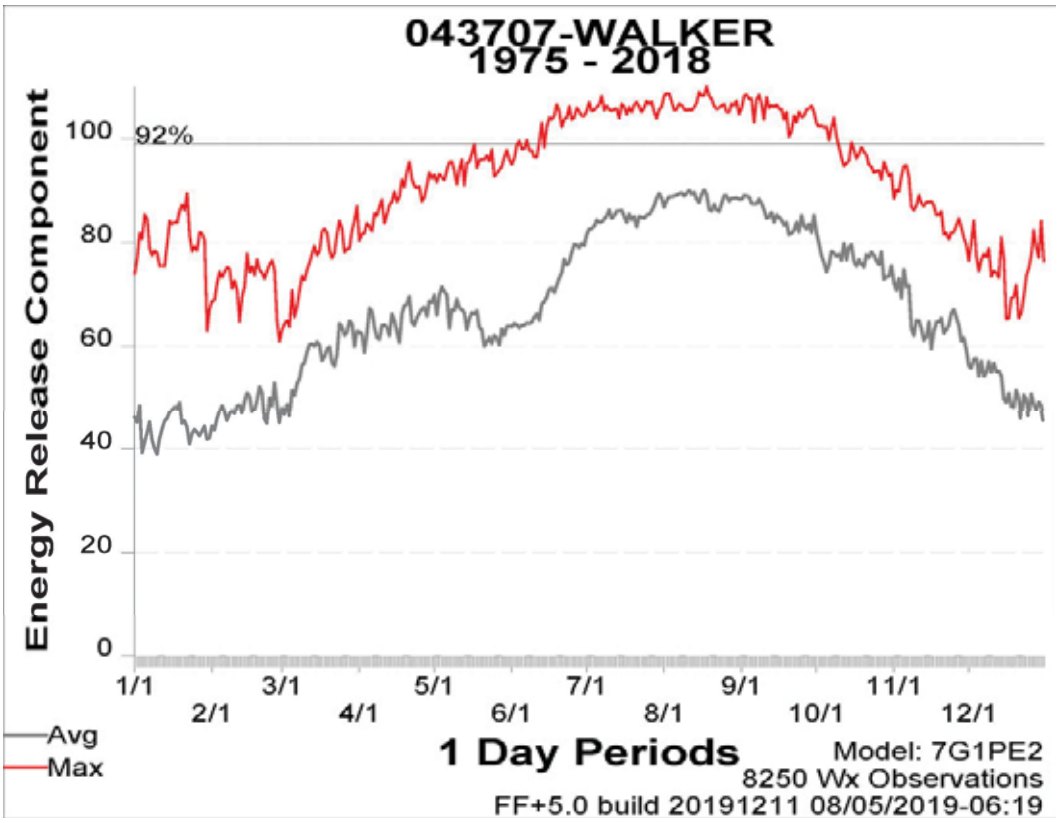


Figure 24. Seasonal variation in ERC (Fuel Model G) from Walker RAWS

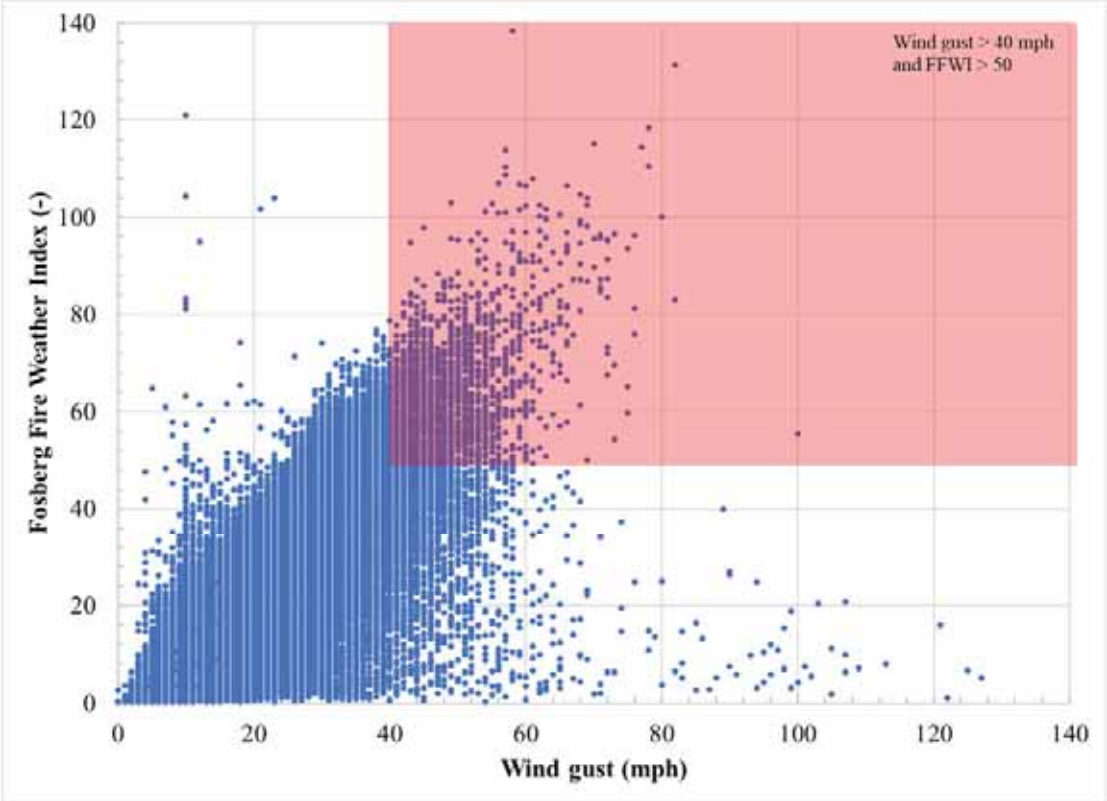


Figure 25. Walker RAWS (WALC1) wind gust vs. FFWI (1999 – 2018).

4.2 Archived weather forecast data

Operationally, times where weather conditions may exceed de-energization thresholds are identified by analyzing wind gust and FFWI forecasts from four different weather forecast models having different spatial/temporal resolutions and forecast durations:

a. 0-36 hours: High Resolution Rapid Refresh (HRRR) weather model. Spatial resolution is 3 km, temporal resolution is 1 hour, and forecast duration is 36 hours.
b. 37-60 hours: North American Mesoscale Model (NAM) high resolution CONUS nest. Spatial resolution is 3 km and temporal resolution is 1 hour.
c. 61-84 hours: After 60 hours, the NAM's spatial resolution decreases to 12 km. Temporal resolution is 3 hours.
d. 87-192 hours: After 84 hours, data from the Global Forecast System (GFS) is used. Spatial resolution is 0.25° (approximately 27 km), temporal resolution is 3 hours.

De-energization decisions would be made based on the "closest in" forecast (HRRR, which provides almost 34 hours of lead time). However, experience has shown that HRRR tends to over-estimate wind speed and FFWI in some of Liberty Utilities' PSPS zones when compared to weather station observations. A typical example is shown in Figure 26 where the 6/26/19 12z HRRR wind gust forecast is compared to measurements at Knox 2 RAWS in Incline Village. The wind speed forecast for 03:00 UTC on 6/27 was approximately 33 mph whereas the observed wind speed was approximately 50% of the forecast wind speed.

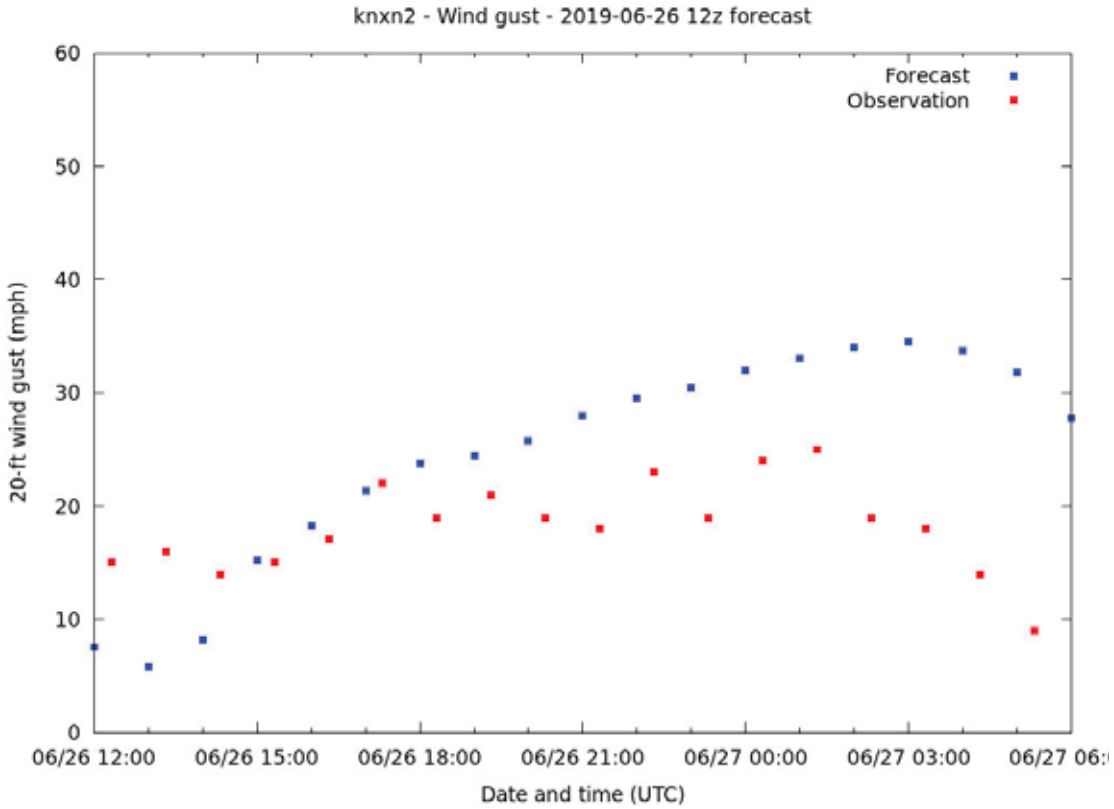


Figure 26. HRRR wind gust forecast compared with observations.

Three years of archived HRRR forecast data were analyzed to determine how frequently de-energization thresholds were forecast to be exceeded. The available period of record is July 15, 2016 through current.

Table 5 shows wind gust and FFWI thresholds by PSPS zone as well as the average number of hours per year that these screening criteria were forecast to be exceeded in the 3 years of available HRRR forecast data. These exceedance frequencies were tabulated for 80%, 90%, and 100% of the de-energization thresholds. De-energization thresholds are the same in all PSPS zones, except "Topaz" and "Mul 1296 r4", which have been assigned de-energization thresholds higher than the baseline values established earlier due to consistently higher wind speeds in these areas.

Table 5. Average number of de-energization threshold exceedances per year (independent of ERC) based on analysis of ~3 years of archived HRRR data.

PSPS zone	FFWI threshold (-)	Wind gust threshold (mph)	80%	90%	100%
111_line	50	40	2.4	0.0	0.0
132_line	50	40	0.0	0.0	0.0
609_and_underbuild	50	40	0.0	0.0	0.0
625_line	50	40	0.0	0.0	0.0
629_line	50	40	0.0	0.0	0.0
640_tier_2	50	40	0.0	0.0	0.0
650_line	50	40	0.0	0.0	0.0
alpine_backside	50	40	0.0	0.0	0.0
alpine_meadows_and_629	50	40	0.0	0.0	0.0
angora_ridge_and_lily_lake	50	40	0.0	0.0	0.0
beacon_tap	50	40	0.0	0.0	0.0
bky_5100_to_nve	50	40	0.0	0.0	0.0
bky_5200	50	40	0.0	0.0	0.0
canterbury_and_commonwealth	50	40	0.0	0.0	0.0
cathedral_spring_creek_emerald_bay	50	40	0.0	0.0	0.0
fir_crags	50	40	0.0	0.0	0.0
glenshire_and_608	50	40	0.0	0.0	0.0
heavenly_lateral	50	40	0.0	0.0	0.0
hobart	50	40	0.0	0.0	0.0
mey_3400_angora_creek	50	40	0.0	0.0	0.0
mey3300_r1	50	40	0.0	0.0	0.0
mey3300_r3	50	40	0.0	0.0	0.0
mul_1296_r4	50	40	1.5	0.0	0.0
mul1296_r3	60	45	1.2	0.0	0.0
old_country_road	50	40	0.0	0.0	0.0
portola	50	40	0.0	0.0	0.0
russel_valley	50	40	0.0	0.0	0.0
sagehen_tap	50	40	0.0	0.0	0.0
sierra_brooks	50	40	0.0	0.0	0.0
sorensons_tap	50	40	0.0	0.0	0.0
squaw_valley	50	40	0.0	0.0	0.0
stampede	50	40	0.0	0.0	0.0
sunnyside	50	40	0.0	0.0	0.0
tah_52-68	50	40	0.0	0.0	0.0
tah_73-17	50	40	0.0	0.0	0.0
tah_73-36	50	40	0.0	0.0	0.0
tah_73-45	50	40	0.0	0.0	0.0
tah_73-60	50	40	0.0	0.0	0.0
tah_73-74	50	40	0.0	0.0	0.0
tah_7300_r1	50	40	0.0	0.0	0.0
tahoe_park_heights	50	40	0.0	0.0	0.0
the_grid	50	40	0.0	0.0	0.0
tier_3	50	40	0.0	0.0	0.0
topaz	60	45	2.1	0.9	0.0
ward_canyon_east	50	40	0.0	0.0	0.0
ward_canyon_west	50	40	0.0	0.0	0.0

5.0 Fire Weather Conditions associated with Fires of Historical Significance

As a check on the proposed de-energization thresholds, we have analyzed ERC and fire weather conditions associated with fires having historical significance (due to structure losses, near misses, or large fire acreage) in and around Liberty Utilities' PSPS zones.

5.1 Fires of historical significance

Five fires in the Greater Lake Tahoe region were identified as being of interest, with their locations relative to Liberty Utilities PSPS Zones shown in Figure 27:

1.) 1960 Donner Ridge Fire (43,000 acres, burned through parts of what is now Truckee's Tahoe Donner neighborhood)
2.) 2001 Martis Fire (consumed over 10,000 acres in one day)
3.) 2002 Gondola Fire (started at Heavenly Ski Area and was a "near hit" for structures along Kingsbury Grade)
4.) 2007 Angora Fire (Destroyed over 250 structures near South Lake Tahoe)
5.) 2016 Little Valley Fire (Escaped prescribed burn that destroyed 23 homes East of Lake Tahoe)

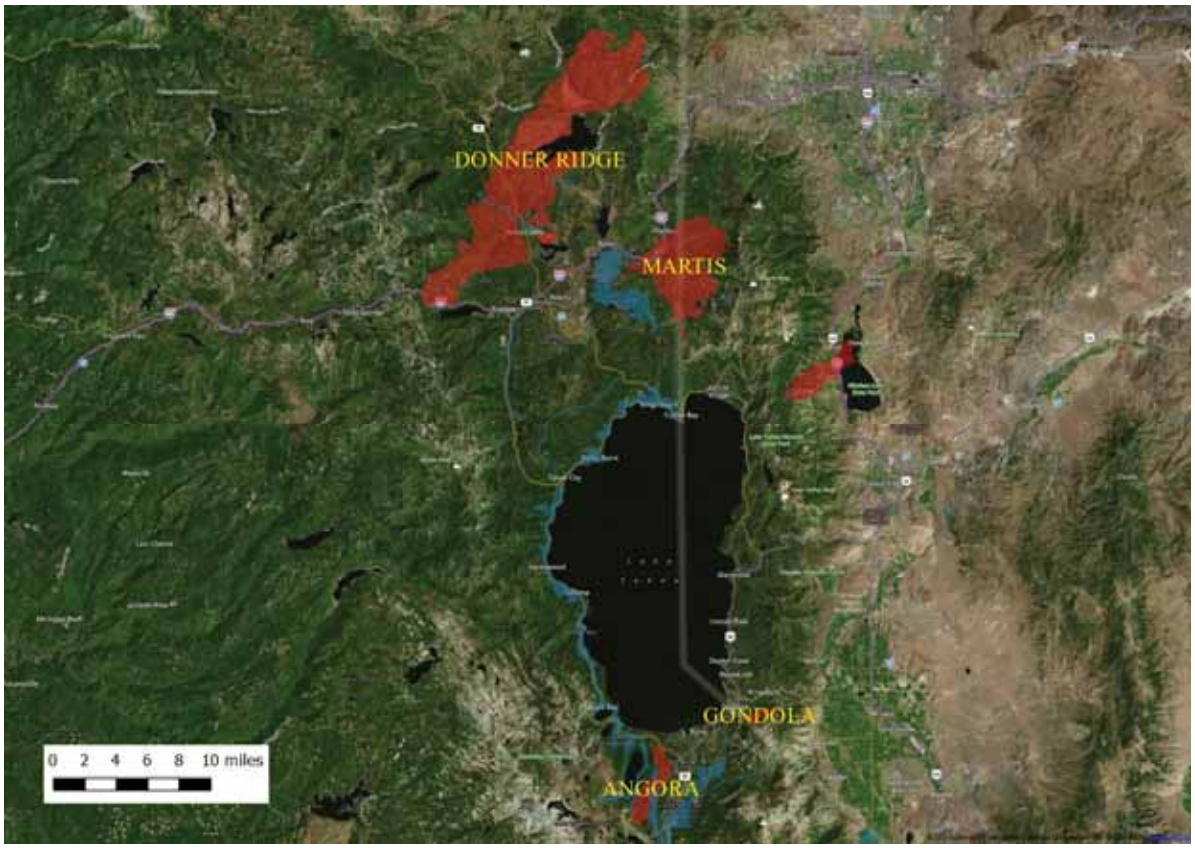


Figure 27. Greater Lake Tahoe region fires of historical significance.

5.2 Fire weather conditions

5.2.1 1960 Donner Ridge Fire

The Donner Ridge Fire began on August 25th, 1960. Although no weather station observations are available from conventional sources, it has been reported that winds were in the 60-70 mph range [13], which would have simultaneously exceeded wind gust and FFWI de-energization thresholds.

5.2.2 2001 Martis Fire

The Martis Fire was ignited on June 16, 2001. It consumed over 10,000 acres in its first seven hours and ultimately destroyed a cabin, a mobile home, and 3 vehicles [14]. Conditions at lower elevations were such that the initial rate of spread was rapid, but fuel moistures at higher elevations reduced spread rates. No representative weather station observations are available due to missing or bad data from surrounding stations. Without representative meteorological observations it is inconclusive as to whether de-energization thresholds were exceeded but they most likely were not.

5.2.3 2002 Gondola Fire

The Gondola Fire was ignited around 12:30 PM on July 3, 2002 near the gondola at Heavenly Ski Resort. It ultimately consumed approximately 700 acres and threatened over 500 structures although no structures were destroyed. The fire initially grew relatively slowly, reaching 25 acres several hours after ignition. Observations from the nearby Cave Rock station (Table 6) show relatively mild fire weather conditions. Peak wind gust was 13 mph with FFWI of 8. This is not close to exceeding de-energization thresholds.

Table 6. Weather observations at Cave Rock on the afternoon of the Gondola Fire.

Date PDT	T F	RH %	WS mph	WG mph	FFWI -
2002-07-03_12:00	69.2	47	1.6	4.5	3.4
2002-07-03_12:15	70.4	24	1.8	3.8	4.8
2002-07-03_12:30	68.6	46	2.2	4.7	4.3
2002-07-03_12:45	68.6	47	1.6	3.8	3.4
2002-07-03_13:00	70.2	46	1.8	3.8	3.7
2002-07-03_13:15	68.8	48	2	4	3.9
2002-07-03_13:30	70.2	39	2.5	4.7	5.3
2002-07-03_13:45	71	32	2	3.6	4.8
2002-07-03_14:00	72.4	30	3.1	7.6	7.1
2002-07-03_14:15	73.3	28	3.6	9.6	8.4
2002-07-03_14:30	73.8	32	3.4	12.5	7.6
2002-07-03_14:45	74	36	2.7	7.2	5.9
2002-07-03_15:00	73.8	33	3.1	7.8	6.9
2002-07-03_15:15	73.8	35	2.7	7.6	6.0
2002-07-03_16:00	73.8	35	2.2	5.6	5.0
2002-07-03_16:15	74.7	32	2.7	5.1	6.2
2002-07-03_16:30	74.4	34	3.6	13	7.8
2002-07-03_17:00	75.1	35	3.4	10.1	7.3
2002-07-03_17:30	75.3	34	2.9	5.8	6.4
2002-07-03_17:45	74.5	38	3.1	11.4	6.5
2002-07-03_18:00	74	33	4.5	12.3	9.8
2002-07-03_18:15	74	31	3.6	8.3	8.1
2002-07-03_18:30	74	32	3.6	10.7	8.0

5.2.4 2007 Angora Fire

The 2007 Angora Fire destroyed over 250 structures near South Lake Tahoe. It was ignited at approximately 2 PM on June 24, 2007. Steady winds of 20-30 mph gusting to 50 mph were reported, but observations at local weather stations showed lower wind speeds.

Table 7 shows observations from the US-50 Kahle Drive station on the afternoon of the first day of the Angora Fire (when most structures were destroyed). The highest wind gust was approximately 29 mph which occurred when FFWI was approximately 26. Although measured wind gusts approached de-energization thresholds, FFWI did not. Given reports of steady winds up to 30 mph with gusts to 50 mph, if a denser network of weather stations was available at the time of the fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds.

Table 7. Observations at US-50 Kahle Dr. on the first day of the Angora Fire.

Date PDT	T F	RH %	WS mph	WG mph	FFWI -
2007-06-24_13:00	66.9	14	8.3	21	21.9
2007-06-24_13:15	67.5	13	9	19.7	24
2007-06-24_13:30	68.7	13	7.4	22.8	19.8
2007-06-24_14:00	67.6	14	9.8	28.9	25.9
2007-06-24_14:30	69.1	13	9	23.7	24.1
2007-06-24_14:45	68.5	14	9.4	20.6	24.8
2007-06-24_15:45	65.7	14	9.8	25.3	25.8
2007-06-24_16:15	64.6	18	9	24.4	22.6
2007-06-24_17:15	63.7	21	7.8	18.3	19
2007-06-24_17:30	63	25	6.9	19.5	16.1
2007-06-24_18:00	63	23	9.4	23.7	22.3
2007-06-24_19:00	62.1	28	4.7	11.9	10.7
2007-06-24_19:30	61	30	4.5	11	10
2007-06-24_20:00	59.5	31	5.1	11.9	11.1
2007-06-24_21:15	54.5	40	2.7	6	5.5
2007-06-24_21:30	53.2	42	2.2	7.8	4.5
2007-06-24_21:45	53.2	43	2	8.7	4.1
2007-06-24_22:00	51.6	45	1.6	4.7	3.4
2007-06-24_22:15	51.3	45	1.3	3.6	2.9
2007-06-24_22:30	48.7	49	1.8	3.8	3.5
2007-06-24_23:00	47.7	51	1.3	3.8	2.6

5.2.5 2016 Little Valley Fire

The October 2016 Little Valley Fire was a holdover fire from an earlier prescribed burn. It rekindled and escaped on October 14, 2016 at approximately 12:30 am, ultimately destroying 23 homes East of Lake Tahoe. Little Valley RAWS (see Table 8) reported a wind gust of 87 mph at 12:38 AM on October 14, 2016, although the veracity of this observation is questionable. Several wind gust readings that morning exceeded 50 mph. However, FFWI remained below 45 because temperatures were low (52 °F), relative humidities were moderate (30% - 50%), and sustained wind speeds did not exceed 20 mph.

In summary, observations at Little Valley RAWS showed wind gusts well in excess of de-energization thresholds. However, peak FFWI reached approximately 87% of the de-energization threshold due to low temperatures, relatively high humidities, and moderate sustained wind speeds. If a denser network of weather stations was available at the time of the fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds.

Table 8. Observations at Little Valley RAWS data on first day of the Little Valley Fire.

Date PDT	T F	RH %	WS mph	WG mph	FFWI -
2016-10-13_14:38	62	25	12	31	27.7
2016-10-13_15:38	57	26	16	45	36.2
2016-10-13_16:38	57	31	16	39	34.1
2016-10-13_17:38	55	37	16	36	31.7
2016-10-13_18:38	53	39	16	35	30.8
2016-10-13_19:38	52	42	15	30	27.8
2016-10-13_20:38	51	38	14	33	27.3
2016-10-13_21:38	52	32	15	45	31.4
2016-10-13_22:38	52	32	13	44	27.3
2016-10-13_23:38	52	29	20	54	43.4
2016-10-14_00:38	52	32	16	87	33.5
2016-10-14_01:38	52	35	19	56	38.4
2016-10-14_02:38	51	38	15	55	29.2
2016-10-14_03:38	51	42	13	48	24.1
2016-10-14_04:38	51	44	9	39	16.3
2016-10-14_05:38	50	49	12	37	20.4
2016-10-14_06:38	49	53	9	35	14.3
2016-10-14_07:38	47	60	18	47	26.4
2016-10-14_08:38	49	55	16	52	24.9
2016-10-14_09:38	50	57	9	41	13.8
2016-10-14_10:38	46	71	8	33	9.5
2016-10-14_11:38	46	77	7	32	6.9
2016-10-14_12:38	44	84	9	33	6.7
2016-10-14_13:38	43	80	14	38	12.3

6.0 PSPS Zone-Specific De-energization Thresholds and Decision Trees

6.1 Topaz and Mul 1296 r3 PSPS Zones

Based on the preceding discussion and analyses, the recommended protocol for de-energization in the Topaz and Mul 1296 r3 PSPS zones involves simultaneously testing whether the following criteria are exceeded:

1. Observed Energy Release Component (ERC) > 92nd percentile
2. Observed wind gust > 45 mph
3. Observed Fosberg Fire Weather Index (FFWI) > 60

This is presented as a decision tree in Figure 28:

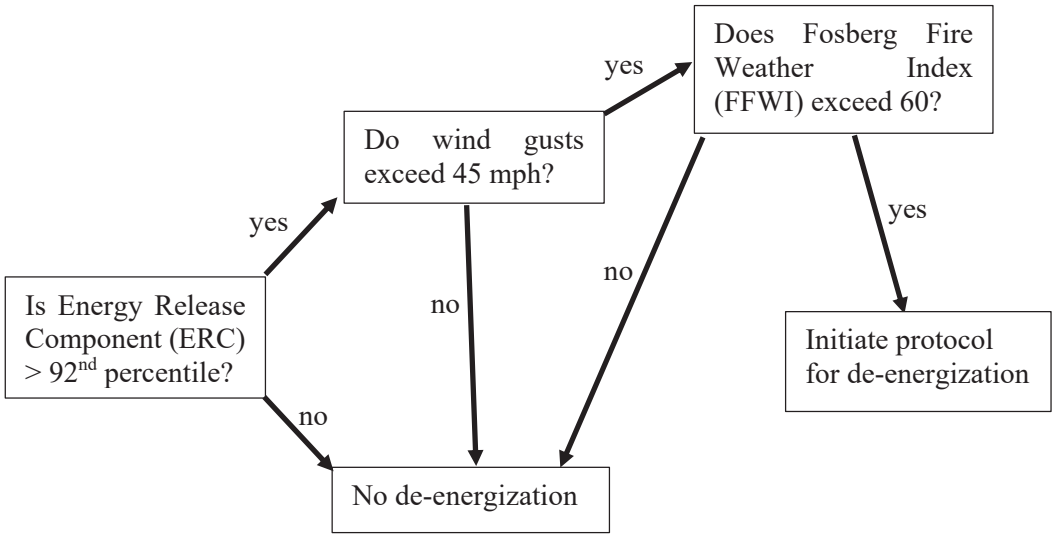


Figure 28. De-energization decision tree for Topaz and Mul 1296 r3 PSPS zones.

6.2 All PSPS zones except Topaz and Mul 1296 r3

Based on the preceding discussion and analyses, the recommended protocol for de-energization in the PSPS zones except Topaz and Mul 1296 r3 PSPS involves simultaneously testing whether the following criteria are exceeded:

1. Observed Energy Release Component (ERC) > 92nd percentile
2. Observed wind gust > 40 mph
3. Observed Fosberg Fire Weather Index (FFWI) > 50

This is presented as a decision tree in Figure 29:

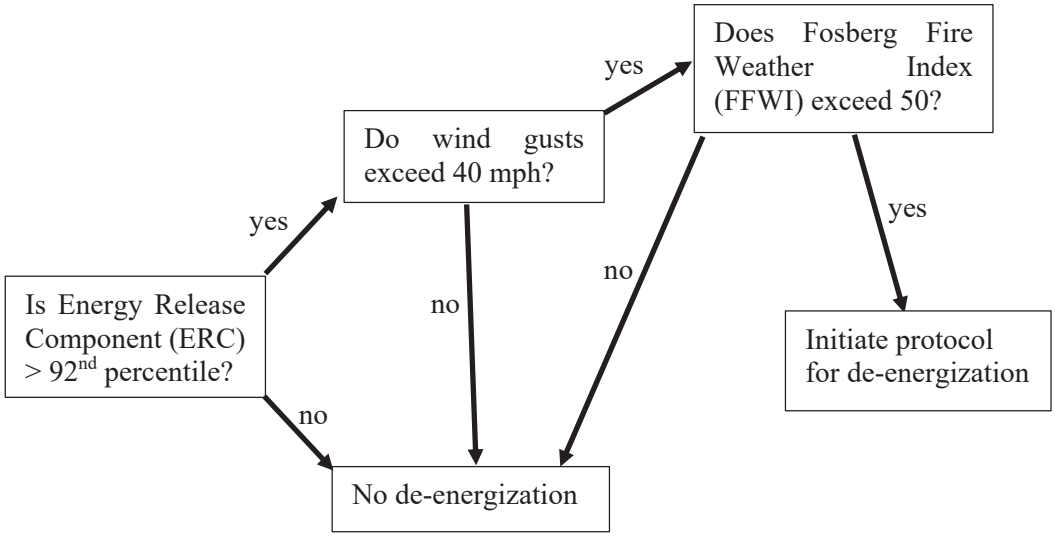


Figure 29. De-energization decision tree for PSPS zones except Topaz and Mul 1296 r3.

7.0 SUMMARY AND CONCLUDING REMARKS

This report recommends de-energization thresholds based primarily on fire weather considerations within PSPS zones that have been designated by others. This inherently assumes that each PSPS Zone presents equal risk from utility-associated fires to structures, people, and improved property. Factors such as Firewise practices (defensible space, construction techniques, etc.), ingress/egress, first responder response time and capabilities, wind direction relative to assets at risk, *etc*. were not considered here when establishing these de-energization thresholds. Empirically, vegetation failures are more likely to occur under countervailing winds (meaning winds from a direction dissimilar to the predominant wind decision).

Operationally, the forecast-based screening criteria described in Section 4.1.1 are used to screen for times in the future at which weather conditions may exceed de-energization thresholds. The weather analytics system used by Liberty Utilities provides notification when conditions are forecast to exceed 80%, 90%, and 100% of the screening criteria in each PSPS zone. If ERC exceeds 92nd percentile and these forecast-based screening criteria are forecast to be exceeded, then weather station observations are monitored in real time to assess whether forecasted conditions materialize and observed fire weather conditions are trending toward de-energization thresholds. The decision to de-energize is ultimately made manually upon consideration of weather station observations and data from field observers.

8.0 REFERENCES

[1] Mitchell, J.W., "Power line failures and catastrophic wildfires under extreme weather conditions," *Engineering Failure Analysis* **35**: 726–735 (2013).

[2] Mitchell, J.W., "Power Lines and Catastrophic Wildland Fire in Southern California," Fire and Materials 2009.

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[5] Riley, K.L., Abatzoglou, J.T., Grenfell, I.C., Klene, A.E., and Heinsch, F.A., "The relationship of large fire occurrence with drought and fire danger indices in the western USA, 1984–2008: the role of temporal scale," *International Journal of Wildland Fire* **22**: 894–909 (2013).

[6] https://www.wfas.net/images/firedanger/fdr_obs.txt

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[8] https://wfas.net

[9] Durst, C.S., "Wind Speed Over Short Periods of Time," *Meteorological Magazine* **89**: 181-187 (1960).

[10] Fosberg, M.A, "Weather in Wildland Fire Management: The Fire Weather Index," *Conference on Sierra Nevada Meteorology*, American Meteorological Society, pp 1-4 (1978).

[11] Taylor, S.J., Bright, R., Carbin, G., Bothwell, P., and Naden, R., "Using short range ensemble model data in national fire weather outlooks," *Fifth Symposium on Fire and Forest Meteorology* (2003).

[12] https://gacc.nifc.gov/gbcc/predictive/docs/WGBEOY/EOY13.pdf

[13] https://www.tahoedailytribune.com/news/50-years-later-truckees-biggest-fire/

[14] https://www.sierrasun.com/news/martis-fire-remembered/

APPENDIX A – FUEL MOISTURE SAMPLING PLAN

Field sampling of wildland fuels will be conducted in specific areas to quantify current fuel moisture conditions. These data provide insight into potential fire behavior and facilitate calculation of National Fire Danger Rating System (NFDRS) indices – specifically Energy Release Component (ERC) – based on actual field observations. This sampling also elucidates whether automated ERC values calculated from weather station observations and disseminated via the Wildland Fire Assessment System (WFAS) comport with field conditions.

Personnel

During the 2019 "fire season," field sampling will be conducted by Reax Engineering [redacted]) and Spatial Informatics Group [redacted]).

Timeline and sampling frequency

Fuel moistures are commonly sampled bi-weekly. Therefore, a sampling interval of approximately 10 – 14 days will be implemented. This interval will be reassessed after initial measurements are obtained. Sampling will also be conducted after significant rain events.

Fuels to be sampled

ERC for fuel model G is extremely sensitive to 1000-hour fuel moisture so 1000-hour fuels will be sampled. Although ERC(G) is insensitive to live fuel moistures (due to lower live fuel loadings) live fuels will be sampled at each site because this provides additional insight into potential fire behavior. In Greater Lake Tahoe, Greenleaf Manzanita and Snowbrush Ceanothus will be targeted with Sagebrush at sites that do not have Manzanita or Snowbrush.

Sampling locations

Fuel moisture samples will be collected from the following locations in Greater Lake Tahoe (See Figure A-1):

1. Alder Creek (NV Energy Truckee PDZ)
2. Knox 2 RAWS (NV Energy Incline PDZ)
3. Spooner Summit (NV Energy Glenbrook PDZ)
4. Kingsbury / Tahoe Rim Trail North (NV Energy Roundhill PDZ)
5. Meyers / Baron RAWS (Liberty Utilities south shore PSPS zones)
6. Ward Creek (Liberty Utilities west & north shore PSPS zones)
7. Burton Creek State Park (Liberty Utilities west & north shore PSPS zones)

Sampling protocol

To the extent possible, sampling will follow recommendations in the US Forest Service fuel moisture collection and equipment guide[1].

Drying, reporting, and calculations

Samples will be weighed in the field, dried in a lab oven at 100 °C for 24-hours, and then weighed again to facilitate calculate of moisture content. The resulting moisture content values will then be used to calculate ERC using Fuel Model G. Since this gives values with units of Btu/ft^2, a Fire Family Plus climatology analysis of the nearest NFDRS weather station will be used to convert ERC values in Btu/ft^2 to percentiles.

[1] Zahn, S. and Henson, C., "A Synthesis of Fuel Moisture Collection Methods and Equipment – A Desk Guide," US Department of Agriculture Forest Service, National Technology & Development Program, May 2011.

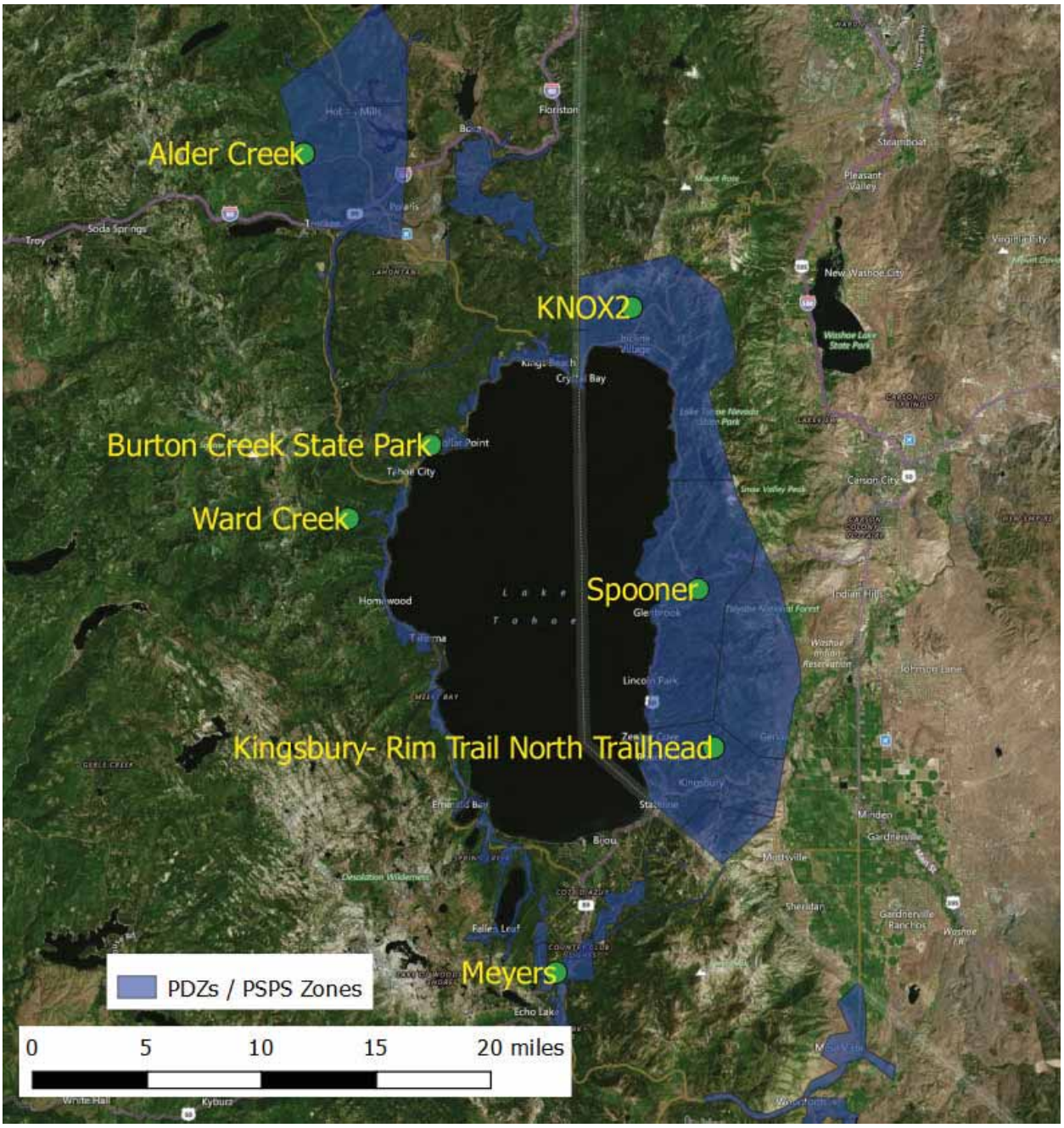


Figure A-1. Fuel moisture sampling locations in Greater Lake Tahoe area.

ATTACHMENT 9

Liberty Utilities 2019 General Rate Case (A.18-12-001), Ex. Liberty-02,

Chapter 2: Capital
November 30, 2018

Application No.:	A.18-11-XXX
Exhibit No.:	Liberty-02
Witnesses:	Jeff Matthews Stuart Timson

FILED
12/03/18
08:00 AM

A1812001

(U 933-E)

2019 General Rate Case

Before the California Public Utilities Commission

Chapter 2: Capital

Tahoe Vista, California
November 30, 2018

Liberty CalPeco-02: Capital

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I.

CAPITAL

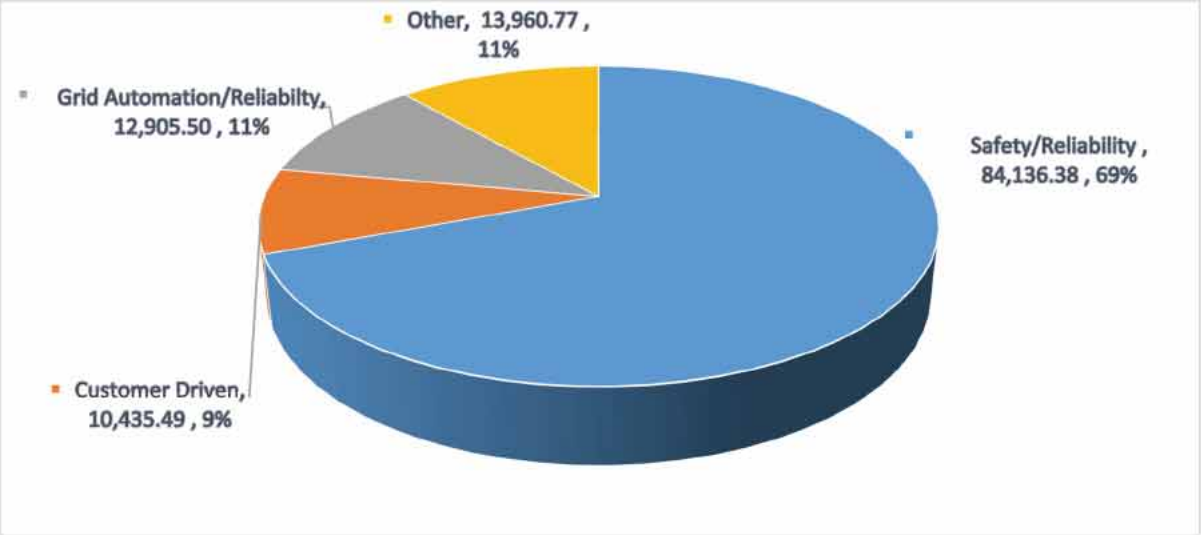
A. Capital Expenditure Overview

Liberty Utilities (CalPeco Electric) LLC ("Liberty CalPeco") plans capital expenditures for much needed improvements of our aging capital infrastructure supporting safe and reliable service to our customers. As discussed in Mr. Travis Johnson's testimony (Chapter 1- Policy), major capital projects focus on safety and reliability of service, including the replacement of aging and failing distribution lines on the 7300 line and Topaz circuits and the construction of back-up battery energy storage required to meet electricity needs in Alpine County in the event of an outage. Grid modernization projects include the Advanced Metering Infrastructure ("AMI") project and the Supervisory Control and Data Acquisition and Transfer of Authority project ("SCADA"). These projects will improve operational efficiency and customer service by enabling remote monitoring of system assets and faster responses to system outages. Planning and prioritizing work efforts is primarily driven by replacements of equipment failures in-service (an example of which is the 625/650 Transmission Rebuild Project described below) which are identified from routine patrolling/maintenance or outage response and major replacement efforts to proactively install new assets to our system (an example of which is the major reconductoring efforts along the Topaz and 7300 lines described in Figure I-1 below).

Liberty CalPeco presents its capital forecast in five major categories: (1) Safety & Reliability, (2) Customer Driven, (3) Grid Automation, (4) Compliance & Safety, and (5) Other.[1]

[1] *See* workpapers for listing of specific projects by category and annual spend.

Figure I-1
Total Capital Expenditures (September 2018-2022)
($000)



B. Safety and Reliability Projects and Programs

Liberty CalPeco's capital forecast reflects our commitment to the safety and reliability of service for our customers, our employees, and the public. Table I-1 below shows the capital forecast for projects driven by this commitment.

Table I-1
Safety and Reliability Projects
$(000)

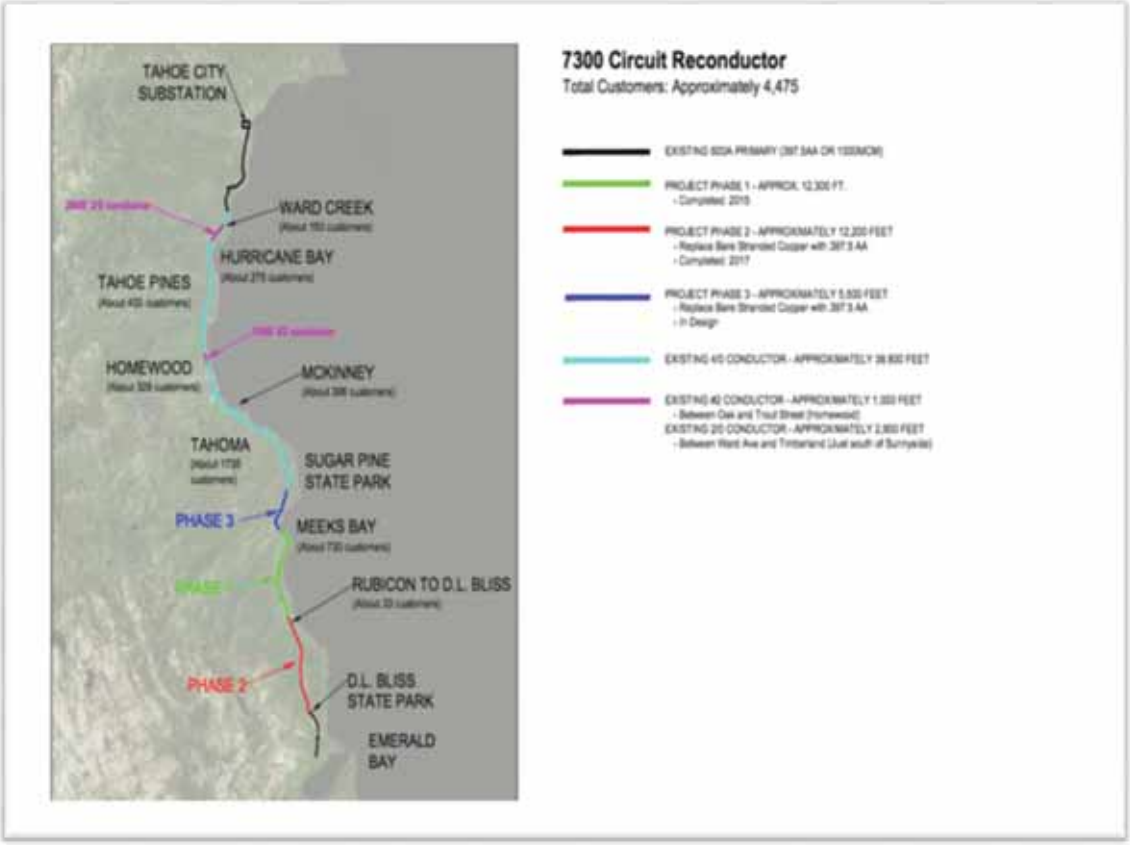
Project #	Project Name	2018	2019	2020	2021
1	7300 Line Reconductor	-	1,700	1,700	1,700
2	Topaz 1261 Reconductor	-	810	810	810
3	625/650	-	-	13,000	-
4	Battery- Alpine	-	8,400	-	-
5	Olympic Microgrid	-	-	18,000	-
6	MHP Conversions	-	854	3,496	1,298
7	Training Center/Back-up Ops	-	-	-	3,300
8	NLT Parking Lot BMP Retrofit	-	1,000	-	-
9	Meyers Sub	1,800	-	-	-
10	Distribution Replacements	50	8,469	8,469	8,469
	Total Safety and Reliability Projects	1,850	21,233	45,475	15,577

1. 7300 Line Rebuild Project

a) Project Overview

The 7300 Line Rebuild project involves reconductoring segments of the 7300 circuit out of Tahoe City Substation from 200A conductor to 600A service. As shown in Figure I-2, the current system route out of Tahoe City Sub runs approximately 15 miles along the west shore of Lake Tahoe and serves approximately 4,500 customers. High winds from extreme storm events caused downed wires and resulted in numerous outages threatening public safety and our customers. The 7300 Line Rebuild project is a long-term replacement effort initiated by NV Energy that replaced the submarine cable across Emerald Bay and reconductored lines to 600A service out of the Meyer's substation to improve system reliability in that region. Liberty CalPeco plans to continue the reconductoring effort northward with construction efforts segmented along the circuit route.

Figure I-2
7300 Circuit Map



b) Project Scope

The 7300 Line Rebuild project includes reconductoring approximately 15,000 feet of overhead lines from Meeks Bay to 600A conductor.[2] This reconductoring will allow for switching customers on the west shore to the 3400 circuit out of Meyers Sub in the event of an outage. Future rate cases will continue reconductoring efforts northward to the North side of Tahoe City. Table I-2 below details the 7300 Line Rebuild project by construction phase.

2 Phase I and Phase 2 of this project were completed in 2015 and 2017, respectively.

Table I-2
7300 Line Rebuild - Deployment Schedule

Construction Phase	Segment Locations	Work	Time-line
Phase 4	Meeks Bay to Tahoma	Construction	Jun-2019 to Oct-2019
Phase 5	Tahoma to Homewood	Permitting	2019
Phase 5	Tahoma to Homewood	Construction	Jun-2020 to Oct-2020
Phase 6	Homewood to Timberland	Permitting	2020
Phase 6	Homewood to Timberland	Construction	Jun-2021 to Oct-2021

c) Project Benefits

The 7300 Line Rebuild project is projected to reduce the outage times (measured by the System Average Interruption Duration Index ("SAIDI")) on the 7300 circuit by gaining the ability to transfer customer load to the 3400 circuit when problems arise. By adding more relay enabled reclosers and modernizing the line with new poles, cross-arms, and hardware, the project allows for improved fault isolation and greater flexibility for power restoration.[3] For our 4,500 customers served by the 7300 circuit, reconductoring lines allows Liberty CalPeco to provide continual service to our customers along this route, even when outages may occur.

d) Capital Cost Forecast

The forecast for the 7300 Line Rebuild project is $1,500,000 per year and includes labor, contract crews, reconductor materials (poles, conductor, insulators), removal, overhead costs, and permitting fees (estimated to be approximately $200,000). Due to the varying terrain, age of poles, permitting

[3] Reconductoring to 397.5 AA wire size, from 4/0 to 2/0, will allow more relay enabled reclosers to be installed on the line. The 7300 circuits currently has a single relay enabled recloser installed due to difficulties of relay coordination between lateral fuses, the single recloser, the substation circuit breaker protection, and substation transformer protection.

constraints, and other challenges unique to each phase, each phase is projected to replace approximately 15,000 feet of conductor.

2. Topaz Line Rebuild Project

a) Project Overview

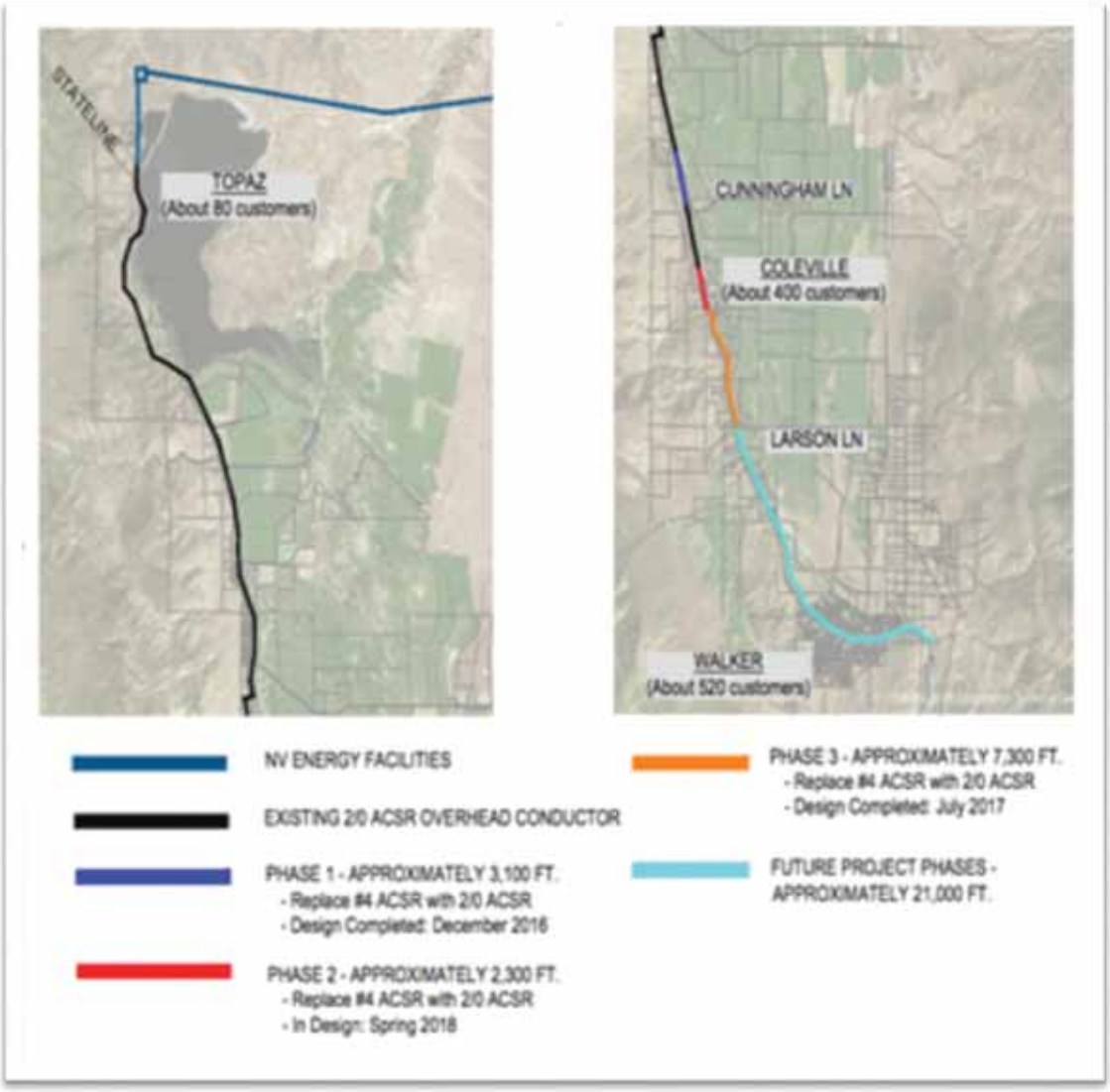
The Topaz Line Rebuild project involves reconductoring segments of the 1261 circuit out of Topaz substation.[4] The 1261 circuit serves load to approximately 480 remote customers in the Antelope Valley communities of Coleville, Walker, and Topaz, including several large cattle ranches.[5] According to the annual reliability reports for 2016 and 2017, the 1261 circuit was the worst performing circuit in Liberty CalPeco's service territory. A thorough modernization effort is needed to improve reliability and capacity as the increase in load has put stress on the circuit with the current configuration of the overhead lines existing #4 Aluminum conductor steel-reinforced ("ACSR") and #6 ACSR conductors. The 1261 circuit is located in an area that frequently experiences high winds and freezing temperatures. Combined with the age of overhead lines, these conditions have caused significant damage to the conductors. Portions of the circuit consisting of #4 ACSR conductor tend to break under the strain of ice and wind and exacerbate the deficiency of proper wire sag between poles causing the lines to be repeatedly spliced back together.

This project is segmented into phases to address the long stretches of the remote terrain. Figure I-3 below shows an aerial map of construction work slated for 2019-2021 (Phases 1-3) and future phases to reconductor the remaining portions of the circuit.

[4] The Topaz circuit was acquired by Liberty CalPeco in 2011 from NV Energy utility company.

[5] Due to the ongoing drought in California, load serving this area has increased with the addition of larger pumps for wells than previously installed on cattle ranches.

Figure I-3
Topaz Circuit Map



b) Project Scope

The Topaz Line Rebuild project involves reconductoring overhead lines from the existing #4 ACSR conductor to our company's standard #2 ACSR conductor. The #2 ACSR conductor is stronger and more reliable and allows for an increase in load serving the area. In addition to reconductoring the lines, the project also installs distribution poles along the circuit route in accordance with General Order

("GO") 95 pole loading standards for "Heavy" and "Grade A" loading areas.[6] The capital expenditures from 2019 to 2021 cover replacement of approximately 7,500 feet of overhead conductors and installation of distribution poles on the Topaz circuit. The deployment schedule for the Topaz Line Rebuild is shown below in Table I-3.

Table I-3
Topaz Line Rebuild - Deployment Schedule

Construction Phase	Segment Locations	Work	Time-line
Phase 3	Coleville to Walker	Construction	2019
Phase 4	Town of Walker	Permitting	2019
Phase 4	Town of Walker	Construction	2020
Phase 5	Larson Ln. and Eastside Ln.	Permitting	2020
Phase 5	Larson Ln. and Eastside Ln.	Construction	2021

c) Project Benefits

This project will increase the reliability of the system serving remote communities in the Antelope Valley (namely, Coleville, Walker, and Topaz), including several large cattle ranches, that have experienced multiple area outages over the years. Reconductoring the 1261 circuit will have a significant impact by modernizing the line with new poles, crossarms, and hardware where necessary and, in turn, reducing SAIDI and System Average Interruption Frequency Index ("SAIFI") metrics. Since the 1261 circuit consists of large sections of smaller size conductor and old poles, rebuilding the line with larger size conductor will strengthen the circuit by improving span lengths and hardening the circuit against the severe winds and extreme cold experienced in the area.

6 *See* workpapers for company standards and excerpt of GO 95 pole loading standards.

This project will also mitigate the risk of fires sparked from downed wires on the circuit.[7] Current configuration and increased stress on the system has resulted in overhead conductors breaking in mid-span and falling to the ground. Such events have resulted in multiple outages (and at least one fire event) and present a potential hazard to public safety.

d) Capital Cost Forecast

The forecast for the Topaz Line Rebuild project is $750,000 per year for this rate case cycle and includes labor, contractors, reconductor materials (poles, conductor, insulators), removal, overhead costs, and estimated permitting costs (approximately $60,000). As with the 7300 Line Rebuild project, the Topaz Line Rebuild project will proceed in phases over multiple years. Due to the varying terrain, age of poles, permitting constraints, and other challenges that differ between phases, each phase is expected to cover approximately 7,500 feet of line reconductor.

3. 625/650 Line Upgrade Project

a) Project Overview

In A. 10-08-024, Liberty CalPeco requested the California Public Utilities Commission ("CPUC") grant a permit to construct upgrades and improvement to its transmission system in the North Lake Tahoe area (the "625/ 650 Line Upgrade Project"). In D.15-03-020, the CPUC issued a permit to construct Phase 1 of the Project.[8] Liberty CalPeco was also granted permission to construct Phase II subject to verification that the peak load growth on the North Lake Tahoe Transmission System approached 89 megawatts. Liberty CalPeco verified the peak load criteria in Advice Letter 64-E filed in October 17, 2016, including submission of a detailed study conducted by Ascension Power Engineering.[9] At that time, Phase II of the Project was expected to include the upgrade of the three 650 Line substations (North Truckee, Northstar, and Kings Beach) and the decommissioning of the Brockway substation and the re-routing 14.4 kV distribution feeders to the Kings Beach substation.

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[7] The Slinkard Fire was 8,925 acres and originated in Slinkard Valley, just west of Coleville. The cause was a lightning strike on Aug. 29, 2017.

[8] Phase 1 of the Project was completed in 20xx and placed in service.

[9] On October 14, 2016, Liberty CalPeco submitted Advice Letter 64-E providing "verification of [the] load triggers and the attainment of the 89 MW trigger" and requesting the authority to complete the construction of Phase 2 of the Transmission Upgrade Project before the 2017/2018 winter peak load period.

In January 2017, the #2 regulator unit at Brockway Substation suffered a catastrophic failure causing a number of its major components to be inoperable during severe storm activity concurrently with peak loading conditions for the Liberty CalPeco electric system. Liberty CalPeco has remediated the equipment failures sufficient to maintain service out of the Brockway Substation on a temporary basis. However, the Brockway Substation continues to experience reliability issues heightening the risk of longer and more frequent and expansive, outages. As a result, Liberty CalPeco has revised the project scope of Phase II of the 625/650 Line Upgrade Project as described below.

b) Project Scope

The revised project scope of Phase II of the Project includes the expansion of the King's Beach Substation to add (i) two line terminals for the Northstar and Tahoe City transmission lines, (ii) two new substation transformers with regulating provisions, (iii) associated circuit breakers, switches, support structures, foundations, grounding and conduit systems. and (iv) one enclosed switchgear unit serving four distribution feeders and integrating the plant output from the neighboring Kings Beach generation facility.

c) Project Benefits

Phase II of the 625/650 Line Upgrade Project serves a number of key objectives, namely, establishing reliable transformer capacity in the Kings Beach area and allowing for the timely decommissioning of the Brockway Substation. Phrase II will also provide improved switching capability, additional transformer and feeder capacity, and enhanced operational flexibility for the facilities serving Liberty CalPeco's customers in the Kings Beach area. Completion of Phase II will also establish reliable transformer capacity in the Kings Beach area and allow for the timely decommissioning of the Brockway Substation.

a) Capital Cost Forecast

The capital costs for Phase II of the 625/650 Transmission Upgrade project are estimated at $13 million. [10]

[10] *See* workpapers.

4. Alpine Battery Storage

a) Project Overview

Liberty CalPeco plans to install a 2.6 megawatt ("MW")/15 megawatt-hour ("MWh") battery energy storage system ("BESS") in the Alpine County town of Markleeville. Installing a BESS in Alpine County will significantly improve system reliability and safety for our customers served in this region. Liberty CalPeco's Alpine County customers experience longer and more frequent power outages than the average Liberty CalPeco customer because of the rough topography of the Sierra Nevada mountain range and the only source for electric supply for Alpine County is one radial distribution line. With many Alpine County customers at elevations of 5,500 feet or higher sustained outages pose a substantial life safety issue, particularly during cold winter months when electricity for heating is critical. Liberty CalPeco supplies electricity to Alpine County via the 1296 Circuit, a radial distribution line that originates at the Muller substation in NV Energy's service territory. As this is the only line providing power into Alpine County, there is no alternate feed into Alpine County when an outage occurs on this line. Consequently, rather than the typical scenario a Liberty CalPeco customer confronts when the outage persists for only as long as needed to isolate the problem and switch the system around it, the outage time for Alpine County customers will last until repairs are completed. The rough geography of the region and winter snow also significantly impedes Liberty CalPeco's repair efforts, further contributing to extended outage times. The proposed BESS Project addresses this by allowing for restoration of power to Alpine County residents in a more reasonable time frame.

b) Project Scope

Installation of the BESS in Alpine County will provide back-up power to customers for several hours in the event of an outage on the 1296 Circuit. In addition to reducing outage times, the BESS will provide additional benefits, including tariff optimization, system peak shaving, energy shifting, voltage regulation, and demand response.

c) Project Benefits

From 2013 to 2016, Alpine County experienced 32 outages resulting in 4.1 million customer minutes of interruption ("CMI"). Had the BESS been in place during this period, the number of outages would have been significantly reduced from 32 to 6 outages and the corresponding CMI reduction would

have been 1.6 million CMI rather than 4.1 million CMI. During the December 2014 storm event alone, a reduction of 1.2 million CMI would have been achieved had the BEES been in place to avoid the 29-hour outage that occurred during the storm.

Liberty CalPeco's customers on the 1296 Circuit have experienced the fragility of the existing electrical grid over recent winters, with multiple power outages occurring over the course of each winter season. As compared to a fossil fuel based system (*e.g.* diesel generators) to provide back-up for the 1296 Circuit, the proposed BESS Project is less capital intensive, provides a more timely solution, uses more advanced and cleaner technology, and is a more efficient way to fortifying the existing grid When overall demand on the 1296 Circuit is low, surplus grid energy can be fed to the BESS via existing Liberty CalPeco infrastructure. Conversely, when demand is high or the upstream energy source (Muller substation) is interrupted, the BESS can provide essential power to the grid via the 1296 Circuit, thereby reducing grid outages and the negative impacts on Liberty CalPeco customers.

d) Alternatives

Alternatives include building a second transmission line estimated at $8 million to $16 million. However, the prospects of obtaining the necessary permits and authorizations in a timely manner, if at all, is unlikely. Another alternative would be to install diesel generators with costs projected at north of $3 million. While this cost is less than the BESS installation, such generators employ traditional fossil fuel technology and the permitting challenges in the region due to greenhouse gas emissions present a time-consuming, costly and potentially insurmountable obstacle.

e) Capital Cost Forecast

The forecast for the Alpine County BESS is $8.4 million. This includes the battery vendor costs, the cost of work to be performed by Liberty CalPeco personnel to connect the battery to its system, and land lease costs for the BESS site.[11]

[11] *See* workpapers.

5. Olympic Valley Microgrid

a) Project Overview

Liberty CalPeco is planning the installation of a microgrid in Olympic Valley, including an 8MW/32 MWh BESS within a village in nearby Placer County. In the event of a system outage on the 8200 and 8300 lines, this BESS will automatically activate and provide vital back-up power to all Liberty CalPeco customers reliant on those circuits for power. The BESS will provide up to 8 MW of electricity for four hours. In addition to back-up power, this BESS will increase system reliability in the region, provide for the integration of additional renewable energy resources, and allow for system peak shaving, energy shifting, voltage regulation, and demand response.

b) Project Scope

The Project entails the installation of an 8MW/32 MWh BESS comprised of 72 Tesla Powerpack systems (each of which has 210 kWh of energy storage capacity), and 4 Tesla bi-directional inverters. The systems and inverters will be housed in a metal prefab structure and installed on a concrete pad. The structure will mitigate against unauthorized access to, interference with and damage to the battery storage facility. The devices will be electrically connected as a single system before being stepped up to 12.47 kV distribution voltage for interconnection to the Liberty CalPeco grid. The single system will be dispatched and controlled by Liberty CalPeco via a remote controller that will send control commands to the onsite controller.

The electrical system in the village will also be upgraded to interface with the BESS and configured for automatic transfers from the two utility circuits sourcing the village (8200 and 8300 lines) and the batteries located at the top of the mountain. The implementation of smart grid technology via installation of automatic transfer switches (ATS) in the village will improve system reliability for the entire Olympic Valley. The use of ATSs allows the transfers from circuit to circuit or circuit to battery to occur without causing an extended outage or requiring the dispatch of Liberty personnel to perform the transfer.

c) Project Benefits

The Olympic Valley Microgrid project will provide the following benefits to Liberty CalPeco customers:

1. The BESS location site and integration of the microgrid solution will improve service reliability to the residential and business customers in Olympic Valley;
2. The microgrid will provide backup power to Olympic Valley and reliability support assistance, such as voltage support and resiliency during periods, in the event of a service disruptions;
3. The microgrid connection to the transmission domain will allow for storage of excess renewable generation during the day that can be discharged at night during the peak period when solar generation sources are unavailable and grid energy prices escalate;
4. The BESS will reduce CO2 emissions by supporting peak load in place of the diesel generation facility at Kings Beach Station;
5. It will allow for deferral of Phase 3 of the 625/650 Line Upgrade Project;
6. A local business customer, Squaw Valley Alpine Meadows , has agreed to contribute $100,000 annually, to cover future operating expenses and mitigate against the rate impact of the project cost.

d) Alternatives

Liberty Utilities evaluated bringing a third feeder into the Olympic Valley area as an alternative. During an N-1 contingency when either the 8200 or 8300 is lost, the ampacity of the intact circuit will be maxed out during peak loading conditions and cause customers in Olympic Valley to experience an outage. A third feeder into the Olympic Valley would alleviate this contingency and provide increased reliability and capacity to the area. Cost estimate of $3.4 million assumes a spare 6" conduit exists along the path between the substation and the Squaw Valley village on the 8300 circuit.

Another alternative considered was to install a new conduit along the 8300 circuit and new trenching and vaults near the village in order to tie into the existing conduit system going up the mountain. The estimated costs for alternative #2 is $3.4 million.

e) Capital Cost Forecast

The forecast to install the Olympic Valley Microgrid is $16.4 million. This estimate includes the battery vendor costs, Liberty CalPeco work to connect the battery to its system, and the cost to lease the battery site. Table I-4 below breaks down the cost by category.

Table I-4
Olympic Valley Microgrid
($000)

Category	**Cost**
Battery Vendor Costs	$14,400
Liberty CalPeco Scope of Work	$3,530
Land Lease with Squaw Valley Resort (20 yrs)	$20
Total Olympic Valley Microgrid Cost	**$17,950**

f) Battery Vendor Costs

The battery vendor costs of $14.4 million includes the battery itself, full turn-key installation, and a 15-year operation and maintenance agreement for the entire battery system.

g) Liberty CalPeco Scope of Work

The Liberty CalPeco scope of work includes system upgrades, system automation via automatic transfer switches, and line construction. Liberty CalPeco will require system upgrades on the 8200 and 8300 circuits to automate the operation of the battery bank for service restoration during power outage scenarios, voltage regulation, and peak shaving operations. System automation will utilize overhead distribution reclosers/breakers connected through a communications line to a system processor located at the battery bank location. An additional communication link will be established with the system operator control center. The line construction to connect the battery bank to the 12.47 kV distribution system will be made via underground and overhead lines. Expenditures for equipment, engineering, design, permitting, project management and construction are also included.

h) Land

The land lease agreement between Squaw Valley Alpine Meadows and Liberty CalPeco will run twenty years. In February 2018, Squaw Valley Alpine Meadows announced its intention to be powered by 100% renewable energy and has been a proponent of this Olympic Valley Microgrid project from its inception. Squaw Valley Alpine Meadows is (1) offering preferential land lease terms at $1,000 per year for the full 20-year lease term and is (2) providing $242,000 worth of contribution in aid of construction

(i.e. excavation, grading, and installing conduit and water lines to the battery facility, and paying $100,000 per year as a contribution-in-aid of construction for the battery facility).

6. Mobilehome Park Conversions

a) Project Overview

Liberty CalPeco plans to continue its voluntary conversion of electric and gas master-metered service at mobile home parks and manufactured housing communities (collectively, "MHPs") to direct service pursuant to D.14-03-021. These conversions promote service, reliability, and overall safety at the MHPs. Table I-5 shows the MHP conversions planned from 2019 to 2021.

Table I-5
Mobilehome Park - Deployment Schedule

Location	No. of Spaces	Work	Time-line
Heavenly Estates	61	To the Meter & Beyond the Meter	2019
Tahoe Verde	270	To the Meter Work	2019
Tahoe Verde	270	Beyond the Meter Work	2020
Cedar Pines	16	To the Meter & Beyond the Meter	2020
Trails West	52	To the Meter & Beyond the Meter	2021
Truckee Cottages	30	To the Meter & Beyond the Meter	2021

Construction work is classified by "to the meter" and "beyond the meter" work required for each MHP configuration. As with any mobile home park or community conversion, the MHP projects will be coordinated with Southwest Gas and the project schedule can be impacted by factors such as coordination of construction schedules, MHP applications, and availability of contractors.

"To the meter" work includes utility and contracted labor efforts (contractor to install underground conduit, Liberty CalPeco to install cables), purchased services, materials, trenching and paving. Utility labor work includes engineering/design, distribution facility installation, meter setting, service connection, master meter removal and procurement and warehousing of materials.

"Beyond the meter" work includes construction work related to the connection of new service from the meter to the mobile home. This work will be performed by contractors selected by the MHP owner and approved by Liberty CalPeco.

b) Capital Cost Forecast

Liberty CalPeco's forecast is based on the number of spaces at each MHP to convert at the average "to the meter" cost and "beyond the meter" conversion cost. The forecast also includes program management costs (including program outreach and coordination with customers before, during and after construction activities) and related overhead. Table I-6 below shows the estimated MHP conversion costs.

Table I-6
MHP Conversions
$(000)

Project #	MHP Conversions	2019	2020	2021
1	Tahoe Verde	-	3,240	-
2	Cedar Pines	-	256	-
3	Heavenly Estates	854	-	-
4	Trails West	-	-	728
5	Truckee Cottages	-	-	570
		854	**3,496**	**1,298**

Liberty Utilities applied the costs of the two previous MHPs that were converted through the MHP pilot program to come up with an average cost per space. The costs are estimated to range from $12,000 to $19,000 per space.[12] The average costs were determined from a small sample of 56 converted spaces during the pilot project.[13]

[12] *See* workpapers for cost estimate for each MHP conversion.

[13] Coordination with Southwest Gas could also impact construction schedules leading to increases in project costs.

7. Lineman Training Facility/Backup Ops Center

a) Project Overview

Liberty CalPeco plans to locate, develop and build a Lineman Training Center within our service territory. Currently, employees meet with outside vendors or send linemen teams to external training facilities to receive required training related to their fields. This building will provide a full-time training facility for linemen, the substation technical team, and other Liberty CalPeco employees with on-site training that will eliminate the need to additional travel expenses.

This facility will also serve as a back-up emergency operations center, enabling better use of existing facilities that are temporarily seconded during emergency operations activation causing disruption to the employees and work that is handled at those locations.

a) Capital Cost Forecast

Liberty CalPeco forecasts $3.3 million for the Linemen Training Facility and Back-up Operations Center. This estimate includes acquisition of land, building, and purchase and installation of appropriate training support materials and related construction.

8. Distribution Capital Maintenance and Replacements

a) Project Overview

Liberty CalPeco forecasts capital expenditures related to routine replacements based on field inspections and equipment failures and to proactive replacement of distribution assets based on age. The forecast of annual capital expenditures is based on historic average spend. The table below presents our request for distribution asset replacements.

b) Capital Cost Forecast

The capital forecast for distribution capital maintenance and replacements are shown below in Table I-7 for 2019-2021. The forecast is based on an average of recorded costs for these budget line items for expected maintenance and replacements.

Table I-7
Distribution Capital Maintenance & Replacements
($000)

Project #	Project	Annual Forecast (TY's 2019-2021)
1	Pole Replacement per Testing	1,040
2	U/G Failures	553
3	O/H Failures	808
4	Substation Equipment Replacement	924
5	O/H Services	1,525
6	U/G Services	1,358
7	Distribution Rebuilds	2,000
8	Submersible Transformer Replacements	3
9	A-1 Meter Replacements	37
10	Street & Hwy Improvement	221
		8,469

C. Customer Driven

1. Rule 20A Projects

a) Tahoe Vista (Placer County)

(1) Project Overview

The Placer County Board of Supervisors previously issued a resolution that created a Utility Undergrounding District along North Lake Blvd. to underground overhead lines within the District boundaries.[14] In accordance therewith, Liberty CalPeco plans to underground overhead lines along North Lake Blvd (Hwy 28) and National Avenue in North Lake Tahoe using Rule 20A funds allocated to Placer County.

(2) Project Scope

Phase 1 of the project in 2019 includes obtaining necessary permits for the installation of conduit and vault substructures within Caltrans right-of-ways to allow for undergrounding conductors. In 2020, Phase 2 will consist of installation of transformers and underground cables and the modification of private panels from overhead to underground source and associated substructure work. In 2021, the final phase

[14] On January 28, 1992, Placer County established the creation of the Tahoe Vista/Kings Beach Underground Utility Conversion District, Area No. 10 and Area No. 11, Placer County Board of Supervisors Resolution No. 92-32 and 92-33.

of work includes completing installation of private substructure and panel work and removal of overhead facilities. The project forecast for 2021 includes the costs related to the design and permitting for the Tahoe City Rule 20 project in Placer County.

(3) Project Benefits

Rule 20A allocated funds will offset Liberty CalPeco's capital expenditures upon project completion and will serve to benefit the community served by eliminating a high concentration of overhead lines in the area. In addition, this project will be a joint utility project with the phone and cable utilities. Liberty CalPeco is the lead utility for the substructure installation and will be reimbursed by the other utilities for design and permitting costs.

(4) Capital Cost Forecast

As shown in Table I-8 the capital costs for Placer County Rule 20A project is forecast at $6.1 million, of which $3.6 million is for 2019, $2.0 million is for 2020, and $0.5 million is for 2021. The 2019 forecast includes contract labor, purchased services, materials, and trenching and paving costs. The 2020-2021 forecast is based on the price per foot for cable installation and procurement and transformer sets, including utility and contracted labor costs (with the contractor to install conduit and Liberty CalPeco to install cable and transformers), purchased services, materials, trenching and paving. Utility labor costs include engineering/design, distribution facility installation, inspection of substructure, service connections, removal of existing overhead facilities, and the procurement and warehousing of materials.[15]

[15] As this Tahoe Vista Rule 20 project is being coordinated with Southwest Gas there are numerous factors that can impact the program schedule such as coordination of construction schedules, permitting applications, availability of contractors, etc., which can cause costs to rise.

Table I-8
Rule 20A Projects – Placer County
($000)

2019	**Rule 20 - Tahoe Vista**	**$3,600**
	Area 10 & 11 Caltrans Substructure Contractor - *Budget based on Contractor Bid)*	3,300
	Area 10 & 11 Caltrans and LU Inspection Labor – *Estimated labor hours for LU Employee plus night work expenses*	200
	Area 10 & 11 Project Management, Design, Right-of Way - *Estimate of required labor hours*	100
2020	**Rule 20 - Tahoe Vista**	**2,000**
	Area 10 & 11 Caltrans Cabling and Transformers *Price per foot to procure and install cabling and transformers*	1,000
	Area 10 Private Substructure & Panel upgrades *Estimate of required excavation and panel work*	700
	Area 10 Private Cabling - *Estimate of required cable procurement and installation*	170
	Removal - *Estimate of required labor and vehicle hours*	135
2021	**Rule 20 - Tahoe Vista**	**$500**
	Area 11 Private Substructure & Panel upgrades - *Estimate of required excavation and panel work*	350
	Area 11 Private Cabling - *Estimate of required cable procurement and installation*	80
	Removal - *Estimate of required labor and vehicle hours*	70
2021	**Rule 20 - Tahoe City**	**150**
	Design and Permitting - *High level estimate of required labor hour*	150

b) Apache Avenue (El Dorado County)

(1) Project Overview and Scope

On April 3, 2018, El Dorado County established the creation of the Apache Avenue Underground Utility District.[16] The Rule 20A Apache Avenue project will take approximately three years to complete,

[16] El Dorado County Board of Supervisors Resolution No. 042-2018.

with construction work scheduled to begin in 2019 with the installation of substructures within County right-of-ways. In 2020, work continues with the installation of transformers, underground cable, private substructures and panel work, and removal of overhead facilities. In addition to completing work on Apache Avenue, the work in 2021 also includes the preliminary design and permitting of the next Rule 20 project.

(2) Capital Cost Forecast

The forecast for the Rule 20A Apache Avenue project is $1.7 million. The forecast is based on preliminary estimates for substructure installation of a recent Rule 20 project completed in El Dorado county (Pioneer Trail and Sierra Blvd). In 2019, the majority of the work consists of contract labor, purchased services, materials, trenching and paving totaling $750,000. The forecast for 2020 and 2021 of $925,000 covers the installation of transformers and cables including utility and contract labor costs (with contractor to install conduit and Liberty CalPeco install cable and transformers), purchased services, materials, trenching and paving. Utility labor costs include engineering and design, distribution facility installation, inspection of substructure, service connections, removal of existing overhead facilities as well as the procurement and warehousing of materials. Various factors that can impact the program schedule, such as coordination of construction schedules, permitting applications, availability of contractors, may result in actual costs that vary from our forecast.

2. New Service & Claims

a) Project Overview

Liberty CalPeco forecasts new service installations for residential and commercial customers. Claims are for customer-related damages to Liberty CalPeco's assets that need replacement. Our estimated annual capital expenditures are based on historic average spend for new customer services and Claims are presented in Table I-9 below.

Table I-9
New Service & Claims

Project #	Budget Item	Annual Forecast (TY's 2019-2021)
1	Meters New Business	210,110
2	Customer New Business	526,936
3	Claims	141,450
		878,496

D. Grid Automation

1. Supervisory Control and Data Acquisition (SCADA) and Transfer of Authority (TOA) project

a) Project Overview

Liberty CalPeco plans to acquire SCADA and TOA systems for monitoring, dispatch, and control services that are currently provided by NV Energy under a service agreement expiring at the end of 2018.. SCADA gathers and analyzes real time data from remote plant assets where terrain and distance are challenging with human oversight. SCADA allows for system operators to analyze and act on system incidents as reported in real-time. TOA supports our operations logging, outage/work scheduling, field request, coordination, switching, event analysis and reporting.

b) Project Scope

The project scope is to migrate from NV Energy's SCADA solution to a system owned and operating by Liberty CalPeco. Phase I includes assessing our equipment, and developing migration time-lines and the roadmap for delivery. Phase II includes delivery of a working SCADA system with full integration, user training and support for system controls and dispatching independent of NV Energy.

c) Project Benefits

SCADA software provides services necessary to properly having flexibility and exercising control over our distribution lines. The TOA software provides unique numbering system, traceability, approval protocols, and integration with GIS. As it stands, when one of our lines goes out, Liberty CalPeco must deal with delays arising from working through NV Energy's control room operators as those operators are

overseeing other lines and services other than our own. This project will expedite the ability of our field crews to dispatch to customer locales and to identify power outage conditions and communicate results quickly and accurately, especially in storm conditions. In addition, switching power lines, which is dangerous for our field workers, will be standardized and communicated remotely using the industry best practices to enhance worker safety. As described in greater detail below, Liberty CalPeco's acquisition of SCADA and TOA systems will result in lower operations and maintenance ("O&M") costs.

d) Capital Cost Forecast

Based on historic SCADA and TOA implementation costs for affiliated utilities in New Hampshire, Georgia, and other states, and the results of the assessments in Phase One, Phase Two expenditures are forecast at $4,347,000. This will cover labor costs for internal and outside resources to perform all field upgrades and programming and SCADA system integration.

2. Advanced Metering Infrastructure ("AMI") Implementation Phase-in Plan

a) Project Overview

Liberty CalPeco plans to implement AMI in our service territory to better serve our 47,000 customers (41,740 residential and 5,260 commercial). Our request for AMI is consistent with Commission precedent supporting Advanced Metering initiatives for California's major Investor Owned Utilities (IOU's) to increase accuracy of meter reads, provide real-time outage data, and allow for greater control of resource usage.

b) Project Scope

Phase I of the implementation includes the initial design and plans for the installation of the 47,000 meters in our service territory. The remainder of the implementation work will be covered in future GRC Applications and will also address our plan to recover stranded costs of our current undepreciated meter assets.

c) Project Benefits

Benefits of AMI project includes the following:

- Mitigating safety risks to our meter-reading workforce who will no longer have deal with harsh weather conditions and travel to remote areas to access meters.
- AMI allow for faster outage detection and restoration of service.

- We will no longer need to rely on estimated meter reads when weather conditions become severe (including those experienced in January 2017).
- AMI will allow for remote disconnection and reconnection of seasonal customers which will reduce labor costs presently incurred to manually connect or disconnect meters.

d) Capital Cost Forecast

Liberty CalPeco forecasts $9 million for the AMI project. Costs include meters and the installation of communication equipment (routers and antennas) and the installation of back office equipment.

E. Compliance and Safety-Related Capital

1. Tahoe Vista Office Parking Lot Redesign and BMP Retrofit

a) Project Overview

Liberty CalPeco plans to redesign the current parking lot configuration at the Tahoe Vista Office to add parking spaces and storage yard space. The project also includes installing storm water retention devices and landscaping that is required in the Tahoe basin.

b) Project Scope

Phase I of the project includes design and permitting for the parking lot and Best Management Practices retrofit. This will include property surveys, hydrological studies, and impervious coverage calculations. Phase II includes grading and asphalt of the parking and related elements needed to meet regulatory requirements (including those mandated by the Americans with Disabilities Act ("ADA")) and the installation of stormwater retention devices and landscaping.

c) Project Benefits

The existing layout of the parking lot does not facilitate parking for every employee on-site in properly designated areas raising safety concerns. As currently configured, the parking lost is not in compliance with mandates by the Tahoe Regional Planning Agency.

d) Capital Cost Forecast

The capital cost forecast for the Tahoe Vista Office Parking Lot and BMP Retrofit project is provided in Table I-10 below.

Table I-10
Tahoe Vista Parking Lot and BMP Retrofit ($000)
$(000)

Category	Cost
Design and Permitting	$200
Grading and Asphalt	$400
ADA Compliance	$100
Installation of Stormwater Devices	$400
Landscaping	$100
Total	$1,000

F. Other Capital Projects

1. Lake Tahoe Office Building Remodels

a) Project Overview

Liberty CalPeco's regional operating division serving the North Lake Tahoe area has dedicated staff sharing the main office building located at 701 National Avenue, Tahoe Vista. The building, originally constructed in 1965, is a single story reinforced brick building with an attached warehouse housing the local operating division's construction equipment and materials. The South Lake Tahoe Office Building, located at 933 Eloise Ave, South Lake Tahoe, was also constructed in 1965 and consists of a reinforced brick single story building used as warehouse space with attached offices and single story brick buildings constructed for use as a vehicle maintenance building and storage facility. Since the original construction of the North and South Lake Tahoe Office buildings, the offices have undergone modifications to comply with statutory changes and to adapt to the growth in the staff at both locations.

(1) Remodeling at North Lake Tahoe:

The last major remodel occurred in 1993 to build out the warehouse space to accommodate materials necessary to support operations. Between 1993 and 2018, there were minor refurbishments to create office space and cubicle workstations. In 2018, a minor upgrade was performed in certain parts of the building to comply with ADA standards, including the modification of a restroom for accessibility, and to install ballistic glass and walls in the Customer Service area to meet company safety and security guidelines.

(2) Remodeling at South Lake Tahoe:

The last major remodel occurred in 1992 converting old warehouse space into office space for the administrative staff who housed there. Between 1992 and 2018, small changes have been made to create more office space. During 2018, a minor upgrade was performed in certain parts of the building to comply with ADA standards, including the upgrading of the male and female restrooms for accessibility and to install ballistic glass and walls in the Customer Service area to meet company safety and security guidelines. Some minor changes are being made in 2018 to create more working space due to an increase in staffing at the South Lake Tahoe office.

Liberty CalPeco has encountered various challenges related to the original building infrastructure, including heating-ventilation-air conditioning ("HVAC"), cabling, structural, and electrical. As past work was performed in isolated areas of the buildings, Liberty CalPeco could only replace items within its confines, leaving old infrastructure connected to new infrastructure connecting back to old. While this helped mitigate disruption to the rest of the staff and daily operations, this non-traditional method required extra modifications so that the completed area functioned properly, but created issues (specifically, HVAC and plumbing) in other parts of the building.

In 2017, Liberty CalPeco engaged the services of an architectural firm, Ward & Young, to review the building functionality and to provide designs for the 2018 remodel and longer-term plans for a full-scale remodel to accommodate the changing needs of the organization and the staff deployed at the North Lake Tahoe office in addition to the South Lake Tahoe office. Ward & Young provided the following plans for the building remodel.

b) Project Scope at North Lake Tahoe Office Building

- Remodel of the internal layout of the building to better accommodate the personnel based at the office
- Flexible office space to accommodate personnel supporting operations and activities on both sides of Lake Tahoe.
- Redesign of the HVAC system to meet the building's needs
- Installation of shower facilities at the building, and replacement of aging restroom facilities

- Improvements to the aged building exterior to address issues created by pests and weather.

c) Project Scope at South Lake Tahoe Office Building

- Remodel of the internal layout of the building to better accommodate the staff based at the office
- Flexible office space to accommodate personnel supporting operations and activities on both sides of Lake Tahoe.
- Redesign of the HVAC system to meet the building's needs
- Replacement of the aging restroom facilities in the warehouse portion of the building.
- Improvements to the office space in the warehouse portion of the building (enhanced lighting and heating). and
- Improvements to the building exterior to address issues created by pests and weather.

d) Project Benefits

The project will allow the building to meet standards for efficient heating, water and lighting systems and reduce environmental impact. The remodel will also allow Liberty CalPeco to accommodate changes in personnel demands that continue to develop as operations continue to evolve.

e) Capital Cost Forecast

Liberty CalPeco's forecast includes $3.3 million for the North Lake Tahoe Office Building remodel project and $3.3 million for the South Lake Tahoe Office Building remodel project. The forecast is based on Ward & Young architect's original estimate for each building.

2. Fleet

a) Project Overview

Liberty CalPeco maintains a fleet of 128 vehicles and equipment out of its Tahoe Vista, South Lake Tahoe and Portola locations. The fleet is comprised of a mix of vehicles including small SUVs, light to heavy duty trucks, specialized Line trucks, and a wide range of specialized equipment (such as wire/cable reel trailers, snow mobiles, ATVs, Snow Cats, and Back Hoes). The fleet support the construction and maintenance of our electrical system. Based on current fleet replacement criteria, there

are a number of vehicles within the fleet that need to be replaced.[17] The workpapers include information identifying the vehicles needing replacements and the equivalent make and model of the replacement vehicle.[18]

b) Project Benefits

Vehicle replacements in accordance with our criteria, delivers a number of benefits, including:

1) Reduced maintenance cost and reliability;
2) Investments in vehicles with renewable fuel technology (hybrids and renewable diesel) to replace fossil fuel powered vehicles helps meet both the company's and California's drive to shift towards more sustainable fuels;
3) Investments in newer vehicles with greater fuel efficiency due to technological advances in engine design and performance;
4) As part of Liberty Utilities, we are able to take advantage of the national pricing agreements to reduce acquisition costs, obtain improved warranty terms and reduce the overall costs of fleet maintenance and replacement;

c) Capital Cost Forecast

See Table I-11 below for our annual fleet replacement forecast. All costs include sales tax, registration and wrap fee based on the estimated purchase costs.

Table I-11
Fleet Replacements
($000)

Cost Category:	2018	2019	2020	2021
Estimated Replacement Cost	954	1,873	1,276	1,068
Sales Tax	74	145	99	83
Registration Fees	13	18	10	16
Wrap	31	23	20	30
Total	**1,073**	**2,059**	**1,405**	**1,197**

[17] *See* workpapers for fleet retirement conditions.

[18] *See* workpapers for current list of fleet vehicles and equipment and the annual proposed fleet purchase plan for 2018-2021 by vehicle.

3. EV Charge – Transportation Electrification

a) Project Overview

The CPUC approved $2.418 million in transportation electrification capital projects for Liberty CalPeco on September 27, 2018 in D.18-09-034. The projects include installation of DC fast chargers in Liberty CalPeco's service territory and installation of EV bus infrastructure. Liberty CalPeco is including these authorized capital expenditures in its revenue requirement forecast in 2019.

4. Meyers Sub

a) Project Overview

Liberty CalPeco plans to replace the Meyers Sub Control Building due to safety hazards created by the existing substation battery bank and to replace the aging oil circuit breakers inside Meyers Substation. The improvements will create a safe working environment for substation personnel and will improve system reliability by replacing ageing infrastructure. Current working conditions are unsafe. Workers need to reach over the top of an energized substation battery bank in order to perform routine maintenance on the substation relays. All the DC load centers are located on the wall directly behind battery bank, which has a battery rack that protrudes out into the work space approximately 6 feet. In order to operate the breakers in the control panel safely, substation personnel need to currently use an extended stick to manually flip the breakers on and off during routine relay maintenance. The control building does not have adequate ventilation for the lead acid batteries that make up the substations battery bank. Without proper ventilation, hydrogen gas could escape from the batteries and collect on the ceiling where it poses a potential threat of an explosion. There is no barrier between the battery bank and the control panels within the building, if an explosion were to occur, to could cause severe injury to substation personnel as well as equipment. In addition, the oil circuit breakers that feed the following circuits are over 50 years old and need to be replaced:

1. -3100 OCB 2,042 customers
2. -3200 OCB 3,548 customers
3. -3300 OCB 3,587 customers

4. -3400 OCB 3,042 customers

5. -3500 OCB 2,042 customers

Combined these OCB protect approximately 15,853 customers, replacing these OCB's would provide greater reliability for these customers.

b) Capital Cost Forecast

Liberty CalPeco estimates $1.9 million for the Meyers Substation project. See Table I-12 below.

Table I-12
Meyers Sub
$(000)

Category	**Cost**
Labor	$82
Hardware	$1,885
Building Storage	$56
Total	$1,911

Appendix A

Witness Qualifications

LIBERTY UTILITIES (CALPECO ELECTRIC) LLC

QUALIFICATIONS AND PREPARED TESTIMONY

OF JEFF MATTHEWS

Q. Please state your name and business address for the record.

A. My name is Jeff Matthews and my business address is 933 Eloise Avenue, South Lake Tahoe, California 96150.

Q. Briefly describe your present responsibilities at Liberty Utilities (CalPeco Electric) LLC.

A. I am currently the Manager of Engineering and Planning Departments for Liberty Utilities (CalPeco Electric) LLC, ("Liberty CalPeco") and am responsible for overseeing the electric meter operations and substation departments.

Q. Briefly describe your educational and professional background.

A. I have been in the utility industry for over thirty years and held various positions in warehousing, engineering, and planning departments. I have been employed at Liberty CalPeco for eight years.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to sponsor Chapter 2 – Capital.

Q. Was this material prepared by you or under your supervision?

A. Yes, it was.

Q. Insofar as this material is factual in nature, do you believe it to be correct?

A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgement, does it represent your best judgement?

A. Yes, it does.

Q. Does this conclude your qualifications and prepared testimony?

A. Yes, it does.

LIBERTY UTILITIES (CALPECO ELECTRIC) LLC

QUALIFICATIONS AND PREPARED TESTIMONY

OF STUART TIMSON

Q. Please state your name and business address for the record.

A. My name is Stuart Timson and my business address is 701 National Avenue, Tahoe Vista, California 96148.

Q. Briefly describe your present responsibilities at Liberty Utilities (CalPeco Electric) LLC.

A. I am currently the Director, Procurement – West Region which includes Liberty Utilities (CalPeco Electric) LLC, ("Liberty CalPeco") and I am responsible for supporting Liberty CalPeco's procurement, warehouse, fleet and facilities operations.

Q. Briefly describe your educational and professional background.

A. I graduated from the University of Central England, Birmingham (United Kingdom) in 1994 with a Bachelor of Science Degree in Industrial Information Technology. I have held a variety of positions in the Utility Industry at Southern California Edison, Southern California Gas and Liberty, including Category Manager, Supply Chain Manager, Portfolio Manager and Manager of Category Management which encompassed all of Sempra's regulated California Utility procurement requirements, in addition I've worked within Procurement and Supply Chain roles in different industries for over 20 years.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to sponsor Chapter 2 – Capital.

Q. Was this material prepared by you or under your supervision?

A. Yes, it was.

Q. Insofar as this material is factual in nature, do you believe it to be correct?

A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgement, does it represent your best judgement?

A. Yes, it does.

Q. Does this conclude your qualifications and prepared testimony?

A. Yes, it does.

ATTACHMENT 10

A.18-12-001, Ex. Cal Advocates-07: Capital
July 23, 2019

Docket	:	A.18-12-001
Exhibit Number	:	Cal Advocates-07
Commissioner	:	M. Guzman Aceves
ALJ	:	C. Fogel
Witness	:	G. Ezekwo

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Liberty Utilities (formerly CalPeco Electric) General Rate Case

Test Years 2019

Capital

San Francisco, California
July 23, 2019

CA-05-0456

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LIBERTY CALPECO CAPITAL

I. INTRODUCTION

This exhibit presents the Public Advocates Office's ("Cal Advocates") analyses and recommendations regarding Liberty CalPeco's ("Liberty") Capital for Test Year ("TY") 2019.

The Public Advocates Office reviewed Liberty's application, testimony, and supporting work papers. The Public Advocates Office issued data requests to Liberty, conducted conference calls, and made a field visit to Liberty facilities in South Lake Tahoe. The field visits and conference calls helped to clarify the utility's current and proposed projects.

According to its testimony, Liberty plans capital expenditures for needed improvements of its aging infrastructure supporting safe and reliable service to its customers. As discussed in Liberty's testimony, major capital projects focus on safety and reliability of service, including the replacement of aging and failing distribution lines on the 7300 line and Topaz circuits and the construction of back-up energy required to meet electricity need in Alpine County in the event of an outage. Liberty also proposes grid modernization projects that will include an Advanced Metering Infrastructure ("AMI") project and the Supervisory Control and Data Acquisition and Transfer of Authority project ("SCADA"). According to Liberty, these projects will improve operational efficiency and customer service by enabling remote monitoring of system assets and faster responses to system outages.[1]

Liberty presents its capital forecast in five major categories: (1) Safety and Reliability, (2) Customer Driven, (3) Grid Automation, (4) Compliance and

[1] Liberty 2019 General Rate Case Testimony, page 1.

Safety, and (5) Other. Table 2-1 below shows Liberty's 2018 recorded and 2019 proposed forecast for the five major categories.

Table 2-1: Liberty Actual 2018 – Forecast 2019[2]

$(000)

Category	2018 (1)	2019
Safety & Reliability	5,766	21,433
Customer Driven	4,378	878
Grid Automation	3,753	0
Other	2,053	4,821
Grand Total	**15,950**	**27,132**

II. SUMMARY OF RECOMMENDATIONS

The following summarizes the Public Advocates Office's recommendations regarding Liberty's Capital for TY 2019:

- $10.67 million in capital Reliability and Safety Related projects, compared to Liberty's proposed forecast of $21.43 million.
- $0.76 million in capital for Customer Driven projects, compared to Liberty's proposed forecast of $0.88 million.
- $4.20 million in capital for other projects, compared Liberty's proposed forecast of $4.82 million

Table 2-2 compares the Public Advocates Office's and Liberty's 2019 capital forecasts.

Note 1: Cal Advocates used Liberty's 2018 recorded data in determining 2019 forecast.

[2] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-2

Capital Forecast for 2019

$(000)

Description (a)	Cal Advocates Recommended (b)	Liberty Proposed[3] (c)	Amount Liberty > Cal Advocates (d=c-b)	Percent Difference
Safety & Reliability	10,667	21,433	10,766	50.23%
Customer Driven	764	878	114	13.00%
Grid Automation	0	0	0	0.00%
Other	4,197	4,821	624	12.94%
Grand Total	**15,628**	**27,132**	**11,504**	**42.40%**

III. DISCUSSION/ANALYSIS OF SAFETY AND RELATED PROJECTS

Safety and Related Projects: Liberty forecasts $21.43 million of capital in this category in 2019, representing a 15% increase from 2017. Figure 2-1 below shows generally increasing expenditures from $11.4 million in 2014 to $18.2 million in 2017. However, Liberty spent $5.8 million in 2018. Figure 2-1 also shows 2014 through 2018 historical data.

According to Liberty's testimony, the increase in capital expenditures is primarily due to expenditures for needed improvements of aging capital infrastructure supporting safe and reliable service to customers.

[3] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-3 below shows the capital forecast for ten safety and reliability projects



Table 2-3: Safety and Reliability Projects[4]

$(000)

Project Name	Liberty 2019	Cal Advocates 2019
7300 Line Reconductor	1,700(2)	1,700
Topaz 1261 Reconductor	810	810
625/650	0	0
Battery-Alpine	8,400	8,400
Olympic Microgrid	0	0
MHP Conversions	854	854
Training Center/Back-up Ops	0	0
NLT parking Lot BMP Retrofit	1,200(3)	1,200
Meyers Sub	0	0
Distribution Replacements	8,469	6,304
Total Safety and Reliability Projects	**21,433**	**19,268**

Note 2: Page 2 of Liberty's Workpapers shows $1,717,000; while page 2 of Liberty's Testimony shows $1,700,000.

Note 3: Liberty made a mistake in addition. The correct amount is 1.2 million not $1.0 million.

(1) 7300 Line Rebuild Project: The 7300 Line Rebuild project is projected to reduce the outage times measured by the System Average Interruption Duration Index ("SAIDI") on the 7300 circuit.[5] The outage times are reduced by reconducting segments of 7300 circuit out of Tahoe City Substation from 200 amps conductor to 600 amps service. As shown in Liberty's workpapers, the total forecast

[4] Liberty 2019 General rate Case Testimony, page 2.

for this project is $1.72 million in 2019 and this includes labor, contract crews, reconductor materials, vouchers, permits, and overheads. In the testimony, Liberty proposed forecast for this category is $1.72 million[6] and this is not consistent with the forecast shown in the workpapers. The table shown in the workpapers is shown below.

- Labor: $ 70,000
- Materials $ 120,000
- Vouchers: $ 1,127,000
- Permits: $ 200,000
- Overheads $ 200,000
- Total: $ 1,717,000[7]

Based on Liberty's historical costs for similar projects, Public Advocates Office does not oppose Liberty's $1.72 million proposed forecast for this project.

(2) Topaz 1261 Reconductor Project: The Topaz Line Rebuild project involves reconductoring segments of the 1261 circuit out of Topaz substation. The 1261 circuit serves load to approximately 480 remote customers in the Antelope Valley communities of Coleville, Walker, and Topaz, including several large cattle ranches.[8] Liberty states that this rebuild project is needed to improve reliability and capacity as the increase in load has put stress on the circuit in its current configuration.

(continued from previous page)

[5] Liberty 2019 General rate Case Testimony, page 5.

[6] Liberty 2019 General rate Case Testimony, page 2.

[7] Liberty 2019 General rate Case Workpapers, Chapter 2, page 2.

[8] Liberty 2019 General rate Case Testimony, page 6.

According to Liberty, the total forecast for this project is $0.81 million in 2019 and this includes labor, contractors, reconductor materials, removal, overhead costs, and estimated permitting costs. Due to the varying terrain, age of poles, and permitting constraints, the project will proceed in four phases and each phase is expected to cover approximately 7,500 feet of line reconductor.[9] Based on Liberty's historical costs for similar projects, Cal Advocates does not oppose Liberty's $0.81 million proposed 2019 forecast for this project.

(3) Alpine Battery Storage Project: Liberty plans to install a 2.6-megawatt ("MW")/15 megawatt-hour ("MWh") battery energy system ("BESS") in the Alpine County town of Markleeville.[10] Liberty has stated that this BESS will significantly improve system reliability and safety for customers served in this region. According to Liberty, the total forecast for this project is $8.40 million in 2019 and this includes the battery vendor costs, the cost of work to be performed by Liberty personnel to connect the battery system, and land lease costs for the BESS site.[11] In A.17-11-014, Cal Advocates recommended that the Commission reject Liberty's request for this project because Liberty has not demonstrated that the project meet the statutory requirement for cost effectiveness.[12] For the same reason, Cal Advocates is rejecting Liberty's request in this application. Furthermore, Cal Advocates does not expect this project to be constructed in 2019. Liberty is still waiting for CPUC decision on this

[9] Liberty 2019 General rate Case Testimony, page 9.

[10] Liberty 2019 General rate Case Testimony, page 11.

[11] Liberty 2019 General rate Case Testimony, page 12.

[12] Cal Advocates Testimony, A.17-11-014, page 3.

project. If the Commission approves the project, then Liberty can file an Advice Letter for future recovery of the investment.

(4) Mobile Home Park (MHP) Conversions: Liberty plans to continue its voluntary conversion of electric and gas master-metered service at mobile home parks and manufactured housing communities ("MHP") to direct service pursuant to D.14-03-021. Liberty asserts that these conversions promote service, reliability, and overall safety at MHPs. Liberty forecasts $0.85 million for MHPs conversions in 2019.[13] This forecast is based on the number of spaces at each MHP to convert per space. Liberty applied the costs of the two previous MHPs that were converted through the MHP pilot program to come up with an average cost. The average costs range from $12,000 to $19,000 per space and Liberty estimated these costs using a small sample of 56 converted spaces during the pilot project.[14] Cal Advocates does not oppose Liberty's methodology of determining the 2019 forecast for these MHP conversions and does not oppose Liberty's 2019 forecast of $0.85 million for this project to convert service for 854 MHP spaces in 2019.

(5) North Lake Tahoe (NLT) Parking Lot Best Management Practices (BHP) Retrofit: Liberty forecasts $1.2 million for Parking Lot and BMP Retrofit in 2019. The itemized costs for this project are shown below.[15]

[13] Liberty 2019 General rate Case Testimony, page 16.

[14] Liberty 2019 General rate Case Testimony, page 17.

[15] Cal Advocates notes that Liberty has an apparent summation error in their table, the total is $1.2 million, not $1.0 million.

Category[16]	Cost ($)
Design and Permitting	200,000
Grading and Asphalt	400,000
ADA Compliance	100,000
Installation of Stormwater Devices	400,000
Landscaping	100,000
Total	**1,200,000**

Cal Advocates agrees with Liberty's methodology for determining the 2019 forecast for this category and does not oppose Liberty's 2019 forecast of $1.2 million for this project.

(6) Electric Distribution Replacements: Liberty forecasts $8.47 million of distribution capital expenditures in 2019. Liberty based its forecast for six of the fourteen projects on the five-year (2013 through 2017) average of recorded costs. The forecast for another six projects was based on 2017 recorded costs and the forecast for two projects was budget based. Table 2-4 below shows the 2019 Liberty forecast.

Cal Advocates recommends a 2019 forecast of $6.30 million. This recommendation is based on a five-year average of actual expenditures which includes the more recent 2018 recorded data. Table 2-5 below shows Cal Advocates' 2019 forecast of distribution replacements based on the five-year (2014 through 2018) average.

[16] Liberty 2019 General Rate Case Testimony, Chapter 2, page 26.

Table 2-4

Liberty's 2019 Forecast of Distribution Replacements[17]

$(000)

Project Description	2013	2014	2015	2016	2017	2019 Forecast	Forecast Methodology
O/H Services-Replacements	321	445	639	1,149	1,054	1,054	2017 Recorded
U/G Services-Replacements	81	86	50	1,184	215	215	2017 Recorded
O/H Failures	615	610	956	566	1,291	808	5 Year Avg
U/G Failures – Non-Service	625	191	534	417	1,000	553	5 Year Avg
Meter Replacements 2014-2018	36	92	35	-	22	37	5 Year Avg
Distribution Rebuilds	525	948	1,047	1,053	2,594	2,000	Budget Based
Pole Replacement Pursuant to Test	519	1,462	820	591	794	1,040	Budget Based
Submersible Transformer	-	-	-	10	3	3	5 Year Avg
O/H Services- Comm'l	8	14	5	4	17	17	2017 Recorded
O/H Services-Residential	219	174	225	34	454	454	2017 Recorded
U/G Services-Comm'l	86	100	108	55	198	198	2017 Recorded
U/G Services- Residential	387	400	664	41	946	946	2017 Recorded
Street & Hwy Improvements	449	133	143	187	193	221	5 Year Avg
Substation equipment replacement	283	648	185	210	924	924	5 Year Avg
Distr. Replacement Total	**4,154**	**5,303**	**5,411**	**5,501**	**9,705**	**8,470**	

[17] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-5

Cal Advocates' 2019 Forecast of Distribution Replacements

Based on Five-Year (2014 through 2018) Average

$(000)

Project Description	2014	2015	2016	2017	2018[18]	2019 Forecast
O/H Services-Replacements	445	639	1,149	1,054	1,254	908
U/G Services-Replacements	86	50	1,184	215	44	316
O/H Failures	610	956	566	1,291	678	820
U/G Failures – Non-Service	191	534	417	1,000	49	438
Meter Replacements 2014-2018	92	35	-	22	36	37
Distribution Rebuilds	948	1,047	1,053	2,594	1,631	1,454
Pole Replacement Pursuant to Test	1,462	820	591	794	851	903
Submersible Transformer	-	-	10	3	5	4
O/H Services- Comm'l	14	5	4	17	3	9
O/H Services-Residential	174	225	34	454	197	217
U/G Services-Comm'l	100	108	55	198	158	124
U/G Services- Residential	400	664	41	946	205	451
Street & Hwy Improvements	133	143	187	193	154	162
Substation equipment replacement	648	185	210	924	337	461
Distribution Replacement Total	**5,303**	**5,411**	**5,501**	**9,705**	**5,602**	**6,304**

[18] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

IV. DISCUSSION/ANALYSIS OF CUSTOMER DRIVEN PROJECTS

Customer Driven: Liberty forecasts $0.88 million in capital expenditures for customer driver projects in 2019.[19] Table 2-6 below shows the capital for customer driven projects. Figure 2-2 also shows 2014 through 2018 historical data. Liberty based its forecast on the five-year (2013 through 2017) average of recorded costs. Table 2-7 below shows the 2019 Liberty forecast. Cal Advocates recommends a 2019 forecast of $0.76 million. This recommendation is based on the more recent five-year average of actual expenditures covering 2014 through 2018. Table 2-8 below shows Cal Advocates' 2019 forecast of customer driven projects based on a five-year (2014 through 2018) average.

Table 2-6

Liberty 2019 Proposed Forecast[20]

$(000)

Project Name	**2019**
Rule 20A	0
Meters New Business	210
Customer New Business	527
Claims	141
Total Customer Driven	**878**

[19] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

[20] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

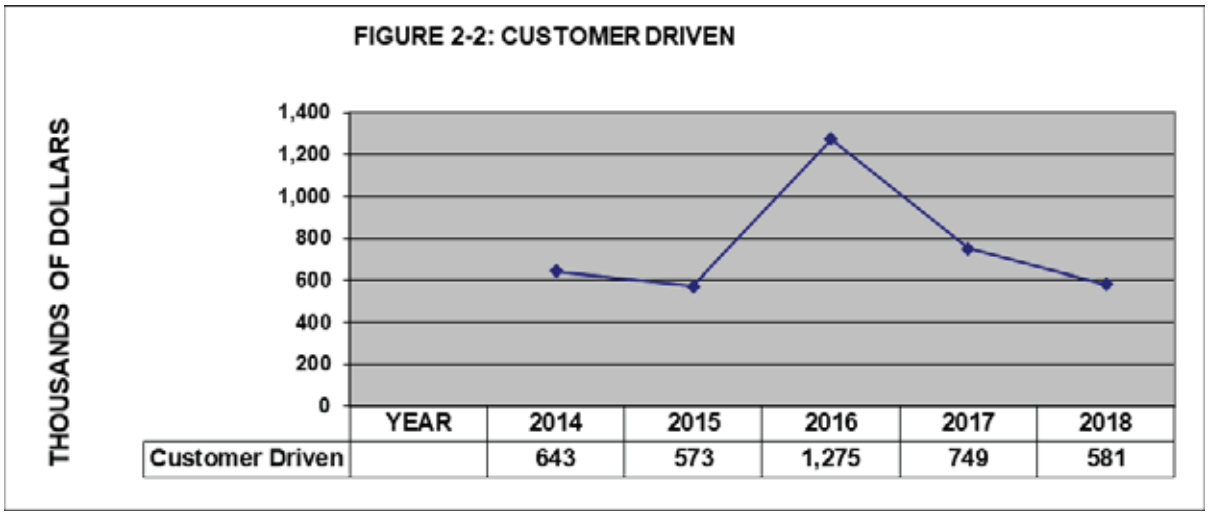


Table 2-7

Liberty's 2019 forecast of Customer Driven Projects

Based on 5-Year Average[21]

$(000)

Project Description	**2013**	**2014**	**2015**	**2016**	**2017**	**2019 Forecast**
Residential New Business<4 Units	132	24	44	90	102	78
New Subdivision> 4 Units (Incl Martis Camp)	586	101	41	72	40	168
Commercial New Business>50kW	183	181	163	309	209	209
Commercial New Business<50kW	15	51	129	50	113	72
Meters New Business	116	198	107	478	152	210
Claims	121	88	89	276	133	141
Customer Driven Total	**1,153**	**643**	**573**	**1,275**	**749**	**878**

[21] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-8

Cal Advocates' 2019 forecast of Customer Driven Projects

Based on 5-Year (2014 through 2018) Average

$(000)

Project Description	2014	2015	2016	2017	2018[22]	2019 Forecast
Residential New Business < 4 Units	24	44	90	102	37	59
New Subdivision > 4 Units (Incl Martis Camp)	101	41	72	40	20	55
Commercial New Business > 50kW	181	163	309	209	137	200
Commercial New Business < 50kW	51	129	50	113	130	94
Meters New Business	198	107	478	152	180	223
Claims	88	89	276	133	77	133
Customer Driven Total	**643**	**573**	**1,275**	**749**	**581**	**764**

V. DISCUSSION/ANALYSIS OF OTHER PROJECTS

Other Projects: Liberty forecasts $4.82 million of capital in this category in 2019. Table 2-9 below shows the capital for Other Projects. Figure 2-3 below shows increasing expenditures from $0.98 million in 2015 to $1.30 million in 2017. Figure 2-3 also shows 2014 through 2018 historical data.

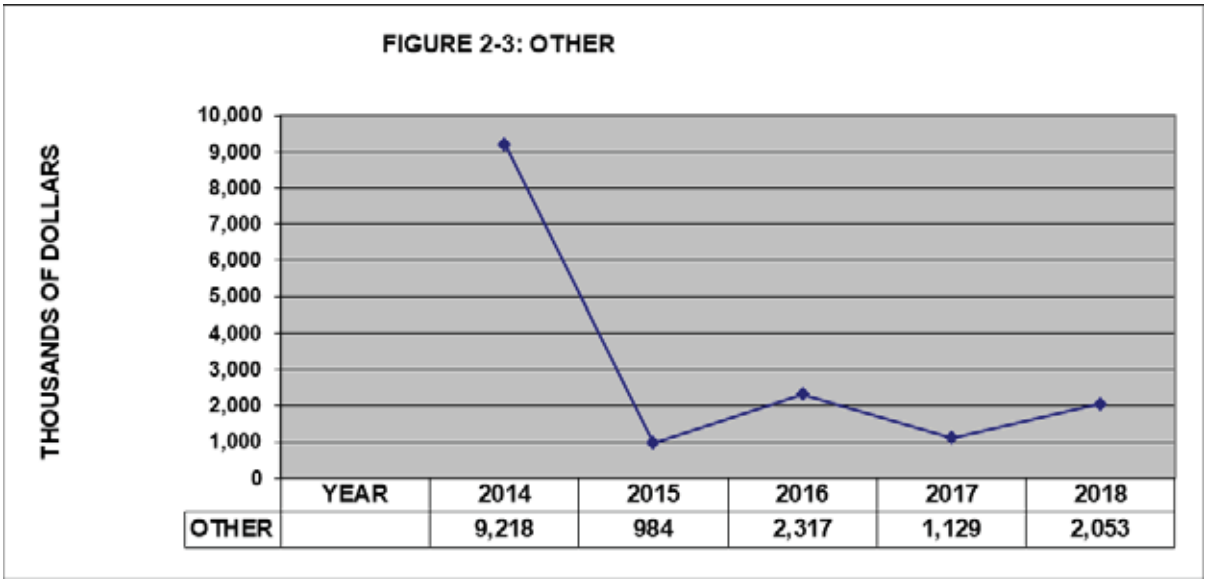
[22] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-9

Other Projects

$(000)

Project Name	2019
Lake Tahoe Office Building Remodels	0
Fleet	2,059
Transportation Electrification	2,195
Meyers Sub	0
Employee Workstations	76
IT Transition	491
Total	**4,821**



(1) Fleet: Liberty maintains a fleet of 128 vehicles and equipment out of its Tahoe Vista, South Lake Tahoe, and Portola locations.[23] Liberty asserts that there are a number of vehicles within the fleet that need to be replaced. Table 2-10 below shows Liberty fleet replacement forecast.

Table 2-10

Liberty's Fleet Replacement Forecast[24]

$(000)

Cost Category	**2019**
Estimated Replacement Cost	1,873
Sales Tax	145
Registration Fees	18
Wrap	23
Total	**2,059**

Liberty's 2019 Fleet Replacement forecast of $2.06 million was derived by listing the cost of each vehicle that needs to be replaced.[25] In response to Cal Advocates' Data Request, Liberty failed to provide supporting documents for the itemized cost of each vehicle that needs to be replaced. Based on this, Cal Advocates opposes Liberty's 2019 forecast for the fleet replacements and recommends a 2019 capital forecast of $0.97 million instead. This recommended amount is based on a five-year average (2014 through 2018) of historical expenditure for fleet replacements.[26] Table 2-11 below shows Cal Advocates' 2019 forecast for Fleet Replacement based on a five-year average.

[23] Liberty 2019 General Rate Case Testimony, page 26.

[24] Liberty 2019 General Rate Case Testimony, page 29.

[25] Liberty 2019 General Rate Case workpapers, pages 115 – 122.

[26] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-11
Cal Advocates' 2019 Forecast of Liberty's Fleet Replacements
Based on a Five-Year (2014 through 2018) Average
$(000)

Other	2014	2015	2016	2017	2018[27]	2019 Forecast
Fleet Replacements and Additions	2,683	296	1,092	322	479	974
Total	**2,683**	**296**	**1,092**	**322**	**479**	**974**

(2) Transportation Electrification: Liberty forecasts $2.20 million of Transportation Electrification capital expenditures in 2019. The CPUC approved $2.42 million in transportation electrification capital projects for Liberty on September 27, 2018 in D.18-09-034.[28] Liberty asserts that it is including these authorized capital expenditures in its revenue requirement forecast in 2019 consistent with D.18-09-034. Cal Advocates does not oppose Liberty's 2019 capital forecast of $2.20 million for this category.

(3) Employee Workstations: Liberty forecasts $76,000 of Employee Workstations capital expenditures in 2019. Liberty's 2019 forecast of this category is based on the five-year (2013 through 2017) average. Cal Advocates does not oppose Liberty's 2019 forecast for Employee Workstations.

(4) IT Transition: Liberty forecasts $0.49 million of IT Transition capital expenditures in 2019. However, Liberty did not present this category in its

[27] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

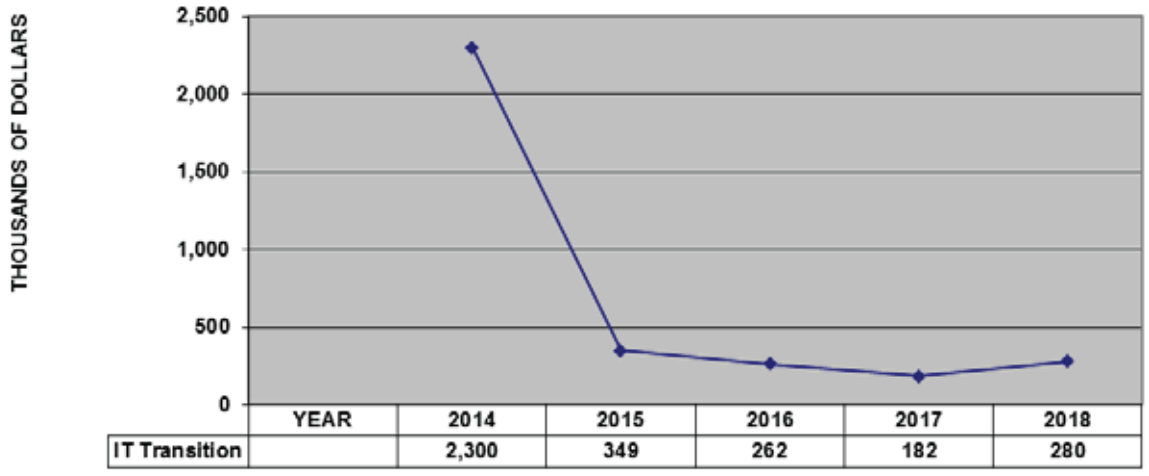
[28] Liberty 2019 General Rate Case Testimony, page 30.

testimony and workpapers. There was no description of this category and there was no detailed derivation of this 2019 forecast for this category.

In Liberty's response to Cal Advocates discovery,[29] Liberty did not provide detailed proposed forecasts for most of the categories presented in its testimony and workpapers for the IT Transition. Figure 2-4 below shows that IT Transition expenditures were highest at $2.30 million in 2014, then averaged approximately $0.27 million for 2015 through 2018 as shown in Figure 2-4.

Cal Advocates recommends $0.27 million of IT expenditures in 2019. This recommendation is based on the four-year (2015 through 2018) average of IT expenditures. Table 2-12 below shows Cal Advocates' 2019 forecast for this category based on the four-year average.

FIGURE 2 - 4: IT Transition



YEAR	2014	2015	2016	2017	2018
IT Transition	2,300	349	262	182	280

[29] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

Table 2-12

Cal Advocates 2019 Forecast for Liberty's IT Transition Expenditures

Based on a Four-Year (2015 through 2018) Average

$(000)

Other	**2015**	**2016**	**2017**	**2018**[30]	**2019 Forecast**
IT Transition	349	262	182	280	268
Total	**349**	**262**	**182**	**280**	**268**

[30] Liberty Response to DR_Cal-Advocates-Liberty-016-GIE.

VI. WITNESS QUALIFICATIONS

My name is Godson Ezekwo. My business address is 505 Van Ness Avenue, San Francisco, California. I am employed by Public Advocates Office at the California Public Utilities Commission as a Utilities Engineer in the Energy Safety and Infrastructure Branch.

I received a Bachelor of Science degree in Chemical Engineering from Cleveland State University, and a Master of Science degree in Chemical Engineering from Columbia University in the City of New York. I also received a Master of Business Administration degree in Project Management and a Master of Business Administration degree in General Management from Golden Gate University. I am a certified pipeline safety inspector (certified by the Department of Transportation), and a registered Professional Engineer in Chemical Engineering in the State of California.

Before joining the Commission in 1987, I was employed as a process engineer by Bechtel Corporation, San Francisco. I have twelve years of experience in process design, and startup assistance for petroleum refining, nuclear waste processing, and natural gas utilities maintenance and operations.

Since joining the Commission in 1987, I have performed economic and technical analysis on complex issues relating to natural gas and electric plants. I have been responsible for the administration of General Orders 112D, 128 and 95. I have sponsored testimony on behalf of ORA in San Diego Gas & Electric (SDG&E), Southern California Edison (Edison), Pacific Gas and Electric (PG&E), and Southwest Gas (SWG) rate proceedings. Additionally, I was a project manager for the 1995 and 1996 Edison ECAC proceedings. I also sponsored testimony on Edison's CTC, SDG&E Performance Indicators in PBR proceedings, SDG&E Capital Additions, SDG&E Generation Divestiture, and SWG and Sierra Pacific General Rate Cases (GRCs).

This completes my prepared testimony.

ATTACHMENT 11

Liberty response to data request
CalAdvocates-LIB-A2506017-001
September 10, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

September 10, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-001
Requesting Party:	Public Advocates Office
Originator:	Charles Madison, Charles.Madison@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
Date Received:	August 19, 2025
Due Date:	September 3, 2025
Extension Granted:	September 10, 2025

REQUEST NO. 1:

Provide an Excel file that contains all corrective work identified in 2010-2020 by the routine or annual patrol program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the following columns of data:

a) Structure number
b) Work Order Number
c) Notification Number (if applicable)
d) Equipment Number
e) Inspection Date
f) Equipment Type
g) HFTD/HFRA Tier
h) Priority
i) Ignition Risk (Y/N)
j) Date Created
k) Due Date

l) Revised Due Date (if applicable)
m) Priority Change (if applicable)
n) Reason for Change (if applicable)
o) Date Completed
p) Latitude in degrees
q) Longitude in degrees.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows: As explained in *Liberty-03: Prudence of Operations*, Liberty conducted routine patrols using hard-copy circuit maps. *See* Liberty-03 at 20. After a reasonable search and diligent inquiry, the Topaz 1261 maps used for Liberty's patrols from 2013, 2015, and 2017 do not indicate any corrective work identified by those patrols.

REQUEST NO. 2:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by the detailed inspection program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

Liberty is producing the data requested by this Question in the tab "Detailed Inspection Results" in the attachment *CalAdvocates-LIB-A2506017-001-Q2.xlsx*. As described in *Liberty-03: Prudence of Operations*, Liberty transitioned to Fulcrum for detailed inspection records in 2020 and has continued to refine its data collection process since that time. Liberty has included select data fields that Liberty understands to be responsive to this Question, to the extent available in Liberty's records. This spreadsheet contains detailed inspection records from 2020 for the entire Topaz 1261 Circuit, regardless of whether corrective work was identified from the inspection. As described in *Liberty-03: Prudence of Operations*, prior to 2020, inspectors recorded the results of detailed inspections on physical forms and thus, Liberty is unable to provide an Excel file with the requested information for detailed inspections prior to 2020.

REQUEST NO. 3:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by any infrared inspection programs affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows: Liberty did not have an infrared inspection program during the specified time frame.

REQUEST NO. 4:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by the intrusive pole inspection program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

Please see attachment *CalAdvocates-LIB-A2506017-001-Q4.xlsx*, which contains available data related to intrusive pole inspections conducted on the Topaz 1261 Circuit in 2013, the only year between 2011 and 2020 in which such inspections were performed on this circuit. This spreadsheet contains three tabs for corrective work identified by these inspections: "Restorable" – poles that were identified for reinforcement; "Non-Restorable" – poles that were identified for replacement; and "Hazard Poles" – poles that were identified for urgent replacement. Liberty addressed corrective work using hard-copy work packets during the specified time frame; following a reasonable search and diligent inquiry, Liberty has not located records showing when the corrective work was completed.

REQUEST NO. 5:

a) What constituted an asset work order being "overdue," according to Liberty's policies at the time of the Mountain View Fire?

b) What were considered valid reasons for delays in remediating asset work orders, according to Liberty policies at the time of the Mountain View Fire?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as to the term "asset work order" and "valid reasons for delays." Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands the term "asset work order" to refer to conditions requiring corrective actions in relation to a Liberty asset. At the time of the Mountain View Fire, Liberty assigned due dates for conditions based on the regulatory requirements set forth by GO 95, Rule 18. An "overdue" condition is one that is past the due date assigned by Liberty and applicable regulatory requirements.

b) Liberty understands the phrase "valid reasons for delays" to refer to reasons by which remediation times may be extended beyond the deadlines prescribed by regulatory requirements. Not all conditions were compliance-based issues. Those conditions not related to compliance were not subject to regulatory requirements. For compliance-based conditions, Liberty attempted to complete all remediation by the assigned due dates. For some conditions, factors beyond Liberty's control, such as permitting, customer refusal, access difficulties, and emergencies such as the Covid-19 pandemic, may cause Liberty to require additional time to complete the remediation. GO 95, Rule 18(A)(2)(b) allows such "reasonable circumstances" to justify an extension of correction times.

REQUEST NO. 6:

a) How did Liberty assess the wildfire risk associated with overdue asset work orders at the time of the Mountain View Fire?

b) What criteria did Liberty use to determine whether an overdue asset work order posed an immediate wildfire risk?

c) At the time of the Mountain View Fire, what role did fire risk play in determining the priority classification of conditions (with respect to asset work orders)?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as to the term "asset work order." Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands the term "asset work order" to refer to conditions requiring corrective actions in relation to a Liberty asset. Liberty assessed the wildfire risk associated with asset work orders by assessing whether an asset was located within the Commission's High Fire Threat District and assigning the corresponding due dates as set forth in GO 95, Rule 18. As explained in its response to Question 5 of this set of data requests, Liberty attempted to complete all compliance-based conditions by the assigned due dates.

b) - c) Please see Liberty's response to subpart (a).

REQUEST NO. 7:

Please provide all records of any asset maintenance notifications on the Topaz 1261 circuit that were open as of November 17, 2020. Provide a spreadsheet with a row for each notification.

Please provide the following columns of data:

a) Structure number
b) Work Order Number
c) Equipment Number
d) Inspection Date
e) Equipment Type
f) HFTD/HFRA Tier
g) Priority
h) Ignition Risk (Y/N)
i) Date Created
j) Due Date
k) Revised Due Date (if applicable)
l) Priority Change (if applicable).
m) Reason for Change (if applicable)
n) Date Completed
o) Latitude in degrees
p) Longitude in degrees

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not kept in the ordinary course of business. Subject to and without waiving these objections, Liberty responds as follows: Liberty understands this Question to be asking for conditions that were identified on or before November 17, 2020, and not yet remediated as of November 17, 2020. Because Liberty transitioned to Fulcrum for detailed inspection records in 2020 and that database does not include asset inspection records performed using hard-copy forms prior to 2020, Liberty can provide a list of poles inspected in 2020 which had repairs performed after November 17, 2020. Many of these repairs appear to be associated with conditions identified in detailed inspections conducted in 2020, but some may not be. Please see the tab "Repaired After Nov 17, 2020" in *CalAdvocates-LIB-A2506017-001-Q2.xlsx*, attached to Liberty's Response to Question 2 of this set of data requests. Please note that Liberty did not track some of the information requested by this Question.

REQUEST NO. 8:

In the ten years prior to the Mountain View Fire (2010 - 2020), were any splices installed on the conductor on the Topaz 1261 16kV circuit? If so, provide an Excel spreadsheet with the following information for each splice installed:

a) Date the splice was determined to be necessary.
b) Structure number at the upstream end of the span where the splice was installed.
c) Structure number at the downstream end of the span where the splice was installed.
d) Method(s) used to identify the need for a splice.
e) Work order number used to install splice.
f) Date work order was created.
g) Date work order was completed.

RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows: Liberty installed splices on the Topaz 1261 Circuit as needed in connection with operation of the distribution system. As referenced in *Liberty-02: Ignition*, splices were present on the lines in the Subject Span. *See* Liberty-02 at 7. After a reasonable search and diligent inquiry, Liberty has not located records showing when and where splices were installed on the Topaz 1261 Circuit or methods used to identify the need for splice installation.

REQUEST NO. 9:

In the ten year period leading up to the Mountain View Fire (2010 - 2020), was the Topaz 1261 circuit reviewed under Liberty's circuit reliability program?

a) Provide a list of any recommendations that resulted from any reviews in the 10 year period leading up to the Mountain View Fire.
b) Under the program's risk assessment process, what was the Topaz 1261 circuit ranked?
c) Was the Topaz 1261 circuit's rank determined by an overall average circuit score?
d) Were there any circuit segments of the Topaz 1261 circuit that scored high enough to warrant an urgent replacement?
e) If the answer to (d) is "yes", provide a list of the relevant circuit segments (i.e. structure numbers at each end).

RESPONSE:

a) - e) Liberty objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows: Consistent with D.16-01-008, Liberty reviewed the reliability of its electric system on an annual basis. Liberty's reliability reports are publicly available on the Commission's website at: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/electric-reliability/electric-system-reliability-annual-reports. These reliability reports identified the Topaz 1261 as a circuit that experienced more frequent outages. As a result of these findings and because the Topaz 1261 Circuit is exposed to harsh weather conditions, Liberty prioritized this circuit for system hardening. As explained in SCE-03: Prudence of Operations (pp. 17-18), the Topaz 1261 Rebuild

Project was a Commission-approved multiyear project designed to improve circuit reliability and mitigate wildfire risk on Liberty's portion of the Topaz 1261 Circuit. As of November 17, 2020, Liberty was in the process of implementing phase five of the project.

REQUEST NO. 10:

Provide an Excel spreadsheet listing all ignitions in 2010 through 2020 on the Topaz 1261 Circuit.

Each ignition should be a row. Provide the following data as columns:

a) Ignition date
b) Ignition time
c) Latitude of ignition
d) Longitude of ignition
e) Number of nearest pole
f) Acres burned
g) Cause, if identified
h) Whether the ignition was a CPUC-reportable incident (Y/N)
i) Whether Liberty had any asset corrective notifications at the ignition location, that were open at the time of the ignition (Y/N)
j) Whether the ignition was linked to an asset corrective notification that existed at the time (Y/N)
k) ID number of the nearest protective device upstream of the ignition
l) Longitude in degrees of the device identified in part (k)
m) Latitude in degrees of the device identified in part (k)
n) Whether the device identified in part (k) tripped

RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows: Liberty is not subject to ignition reporting under D.14-02-015. From the start of Liberty's operations in approximately 2011 to 2020, Liberty is not aware of any ignitions associated with the Topaz 1261 Circuit prior to November 17, 2020.

REQUEST NO. 11:

Provide an Excel spreadsheet listing all wire-down events in 2010 through 2020 on the Topaz 1261 circuit. Each wire-down event should be a row. Provide the following data as columns:

a) Date of wire-down event
b) Time of wire-down event
c) Latitude of wire-down event

d) Longitude of wire-down event
e) Number of nearest pole
f) Cause, if identified
g) Whether Liberty had any asset corrective notifications at the location, that were open at the time of the wire-down event (Y/N)
h) Whether the wire-down event was linked to an asset corrective notification that existed at the time (Y/N)
i) ID number of the nearest protective device upstream of the wire-down event
j) Longitude in degrees of the device identified in part (i)
k) Latitude in degrees of the device identified in part (i)
l) Whether the device identified in part (i) tripped

RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows: Please see *CalAdvocates-LIB-A2506017-001-Q11.xlsx*, which contains available information in Liberty's possession regarding reported wire down events between 2016-2020. Liberty identified these events by querying its outage management system (OMS) for wire down events and reviewing the comments and resolution to determine if a valid wire down condition existed.

As explained in *Libery-03: Prudence of Operations* (pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time period requested in this Question. Liberty's records for the requested data date back to approximately 2016. Please note that Liberty did not track the information requested in subparts (g)-(h) of this Question in relation to wire down events and that Liberty is producing the information requested in subparts (c)-(d) and (j)-(k) in the projected coordinate system format (NAD_1983_UTM_Zone_11N) as maintained in its GIS.

REQUEST NO. 12:

Please provide an Excel spreadsheet listing each outage that occurred from 2010 - 2020 on the Topaz 1261 circuit (or any portion of the Topaz 1261 circuit). The spreadsheet should list each outage in a row, with the following column headings:

a) Circuit segment ID #
b) Date of outage
c) Start time of outage
d) Cause of outage
e) For outages due to equipment failures, please state the specific type of equipment that failed. (for example: transformer failure, conductor failure, splice failure, etc.)
f) Outage duration in minutes
g) The type of protective device that tripped
h) The equipment number of the protective device that tripped
i) Latitude in degrees of the protective device that tripped

j) Longitude in degrees of the protective device that tripped

RESPONSE:

Liberty objects to this Question as overbroad to the extent that it seeks information prior to the start of its operation in approximately 2011, when it purchased the utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows: Please see *CalAdvocates-LIB-A2506017-001-Q12.xlsx*, which contains the available outage information in Liberty's possession between 2016-2020. As explained in *Libery-03: Prudence of Operations* (pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time period requested in this Question. Liberty's records for the requested data date back to approximately 2016. Please note that Liberty did not track the information requested in subpart (a) of this Question in relation to outages and that Liberty is producing the information requested in subparts (i)-(j) in the projected coordinate system format (NAD_1983_UTM_Zone_11N) as maintained in its GIS.

REQUEST NO. 13:

Provide a complete list of all wildfire risk mitigation measures Liberty developed or implemented between 2010 and November 2020.

a) Among the identified wildfire risk mitigation measures, which ones were proactive (that is, not implemented in response to specific, prior safety failures)?
b) How did Liberty determine the necessity and priority of the proactive wildfire risk mitigation measures identified in your response to part (a)?
c) What criteria or guidelines did Liberty follow in developing and implementing wildfire risk mitigation measures during the specified period?

RESPONSE:

Liberty objects to this Question as vague, ambiguous, and overbroad as framed. Liberty further objects to the extent that this Question seeks information prior to the start of its operation in approximately 2011, when it purchased the utility system from NV Energy. Liberty further objects to the term "proactive" in subparts (a) and (b). Wildfire mitigation measures are generally based on a utility's specific risk profile and past experience and are intended to proactively mitigate future wildfire risk. Distinguishing between measures that are "proactive" and those "in response to specific, prior safety failures" is not possible. Subject to and without waiving its objections, Liberty responds as follows:

Please refer to attachments *Fire Prevention Plan for Overhead Electric Facilities (2012).pdf*, *Wildfire Mitigation Plan (2019).pdf*, *Revised 2020 Wildfire Mitigation Plan.pdf*, and *2021 Wildfire Mitigation Plan Update (Public Version).pdf*. for detailed information regarding Liberty's wildfire mitigation efforts during the specified time frame. Although Liberty had not experienced a large wildfire attributed to its electrical infrastructure since taking over from Sierra Pacific in 2011, Liberty recognized the risk of wildfires within its service area and took steps to mitigate that risk. Liberty's opening testimony described wildfire risk mitigation measures that Liberty had adopted or was in the process of developing as of November 2020 (*see, e.g.*, Liberty-03 at 10-13), including:

- Patrols of circuits in high-fire areas during high wind conditions
- Implementing “fire settings” for reclosers
- Pausing discretionary maintenance and vegetation management activities during fire threat conditions
- Conducting a detailed system-wide asset survey
- Piloting a LiDAR inspection of its distribution system for vegetation clearance
- Installing covered conductor, including on the Topaz 1261 Circuit
- Undergrounding certain lines
- Installing larger size conductors
- Replacing and upgrading distribution poles
- Replacing expulsion fuses
- Deploying monitoring sensors and SCADA-enabled devices
- Installing weather stations to support situational awareness
- Developing a Fire Potential Index (FPI) to forecast wildfire risk
- Implementing a Public Safety Power Shutoff (PSPS) program
- Increasing the frequency of vegetation management inspections
- Removing dead and dying trees in high tree mortality areas
- Hiring additional personnel to manage emergency response activities

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
101	N/A	1/29/2016	1:54:49 PM	Non-Company Activities		3h 20m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
6264	N/A	4/14/2016	4:36:21 AM	<Unknown>		1h 43m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
6692	N/A	7/29/2016	4:35:39 PM	Non-Company Activities		4h 48m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
6695	N/A	7/30/2016	4:11:52 AM	Non-Company Activities		13m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7067	N/A	10/14/2016	7:31:23 AM	3rd Party Outage		1h 43m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7091	N/A	10/14/2016	10:59:38 AM	3rd Party Outage		4h 0m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7313	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7314	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	lecalpeco.LEGIS.ServiceLocation	7006, 128918	932872.9585760440,13992844.8953547000
7350	N/A	11/10/2016	10:48:31 AM	Planned Outage		1h 16m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7386	N/A	11/16/2016	2:01:33 AM	<Unknown>		1h 13m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7392	N/A	11/19/2016	8:22:28 AM	Improper Installation		1h 47m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7475	N/A	11/27/2016	6:51:55 AM	Moisture		2h 46m	lecalpeco.LEGIS.ServiceLocation, Fuse Bank	7167, 2134	920981.7054217280,14030900.3681720000
7589	N/A	12/6/2016	2:54:39 PM	<Unknown>		2h 13m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
7641	N/A	12/15/2016	2:29:43 AM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7648	N/A	12/15/2016	6:45:56 AM	Deterioration		1h 38m	Fuse Bank, lecalpeco.LEGIS.ServiceLocation	2132, 141913	937137.9091311430,13995212.1149143000
7755	N/A	1/1/2017	6:00:27 PM	<Unknown>		44m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
7764	N/A	1/1/2017	10:26:59 PM	<Unknown>		1h 18m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
8658	N/A	1/9/2017	1:22:18 AM	Moisture		7h 23m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	141915, 6906, 6767, 6814, 142814, 7109, 6593, 6661, 6803, 480	913257.5317722730,14058990.2944441000
9054	N/A	1/11/2017	6:27:27 AM	Deterioration		14h 32m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
12687	N/A	1/23/2017	6:01:05 AM	<Unknown>		5h 28m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
12703	N/A	1/23/2017	2:25:13 PM	<Unknown>		3h 4m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
12711	N/A	1/23/2017	4:59:00 PM	<Unknown>		5h 47m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank	6687, 1260, 128949	936818.7732240160,14018392.9544001000
13123	N/A	2/1/2017	11:39:30 PM	Deterioration		1h 57m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
13211	N/A	2/2/2017	3:00:14 AM	<Unknown>		4d 13h 44m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
13401	N/A	2/9/2017	8:15:12 AM	<Unknown>		23h 59m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
13934	N/A	2/15/2017	12:48:30 PM	<Unknown>		2h 6m	Transformer Bank	1502	933901.6997498150,13993837.8800561000
13939	N/A	2/15/2017	12:46:21 PM	<Unknown>		1h 53m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
14405	N/A	2/21/2017	10:42:29 PM	<Unknown>		9h 24m	Transformer Bank	1268	937250.0200000000,13995593.2200000000
15028	N/A	3/21/2017	6:51:15 PM	3rd Party Outage		12h 1m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
15270	N/A	4/12/2017	10:42:14 PM	Device Failed		2h 8m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
15305	N/A	4/20/2017	8:10:59 AM	Animal		1h 59m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
15336	N/A	4/28/2017	1:27:54 PM	Device Failed		1h 11m	Primary OH Conductor	15174	934801.4160209990,14028169.8812592000
15337	N/A	4/28/2017	1:27:54 PM	<Unknown>		1h 14m	Primary OH Conductor	15174	934796.4284122980,14028170.0514089000
15339	N/A	4/28/2017	4:44:06 PM	Device Failed	Anchor	3h 55m	lecalpeco.LEGIS.ServiceLocation, Primary OH Conductor	105845, 15174	934885.1558550040,14028530.8720833000
15414	N/A	5/9/2017	4:16:51 PM	<Unknown>		2h 19m	Transformer Bank	1649	926281.9641343710,14027783.7210385000
15423	N/A	5/12/2017	6:53:38 PM	3rd Party Outage		2h 50m	Transformer Bank	1649	926279.8104949060,14027788.6219214000
15763	N/A	6/6/2017	3:16:43 PM	<Unknown>		18h 43m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
16693	N/A	8/31/2017	8:37:22 AM	Fire on Company Equipment		1d 10h 26m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	7156, 128911, 6937, 7182, 6823, 6700, 480, 128894	931542.0824877750,13994689.7877581000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
17187	N/A	10/20/2017	12:18:09 AM	<Unknown>		1h 41m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17188	N/A	10/20/2017	2:10:45 AM	<Unknown>		1h 24m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
17340	N/A	11/9/2017	3:52:27 AM	<Unknown>		1h 37m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
17554	N/A	11/26/2017	1:59:29 PM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
17555	N/A	11/26/2017	2:25:00 PM	Deterioration		3h 50m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
17574	N/A	11/26/2017	4:52:31 PM	Deterioration		4h 17m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17767	N/A	12/19/2017	10:43:44 PM	<Unknown>		2h 36m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17868	N/A	1/11/2018	1:43:31 PM	3rd Party Outage		33m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank, Fuse Bank	6716, 6601, 1469, 6792, 6939, 7006, 7126, 6661, 2134, 6737, 7056, 7117, 141904, 6700, 6834	937367.5095547560,14008007.4017405000
17921	N/A	1/24/2018	4:01:05 PM	Device Failed		1h 58m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
18074	N/A	2/21/2018	5:52:10 AM	3rd Party Outage		1h 18m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
18165	N/A	3/1/2018	6:15:50 PM	<Unknown>		3h 29m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
18203	N/A	3/1/2018	11:30:00 PM	<Unknown>		7h 32m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank, Fuse Bank	6661, 7006, 6645, 6842, 6700, 7111, 7050, 128896, 881, 2094	932872.9585760440,13992844.8953547000
18527	N/A	3/28/2018	3:42:46 PM	Other Company Activities		22m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
19501	N/A	5/30/2018	4:10:22 PM	Deterioration		1h 31m	Fuse Bank	2129	920915.7235175410,14033409.6475384000
19611	N/A	6/14/2018	10:01:32 AM	Construction by Company Contractor		7h 55m	Primary OH Conductor	15666	922017.0558224620,14021280.0509991000
19612	N/A	6/14/2018	10:48:24 AM	Construction by Company Contractor		7m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
19625	N/A	6/17/2018	4:32:44 PM	3rd Party Outage		5h 46m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
19656	N/A	6/23/2018	10:00:48 AM	Non-Company Activities		2h 40m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
20230	N/A	10/2/2018	12:17:17 PM	<Unknown>		14m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
20233	N/A	10/2/2018	12:22:50 PM	<Unknown>		12m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
21042	N/A	12/14/2018	5:11:16 PM	Device Failed	Tap Wire	2h 18m	Transformer Bank	1620	934056.5598079120,13994839.4499911000
21347	N/A	1/16/2019	2:34:29 AM	<Unknown>		2h 25m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
21408	N/A	1/17/2019	9:29:33 AM	Deterioration		4h 10m	Transformer Bank	1538	920125.6199999990,14035289.7500000000
21957	N/A	2/14/2019	5:11:08 AM	3rd Party Outage		8m	lecalpeco.LEGIS.ServiceLocation	128911	933539.0590635020,13993241.1658517000
22003	N/A	2/14/2019	5:37:25 PM	Tree - Broken Limb		1d 1h 57m	Transformer Bank	1552	932785.8401863540,13993680.0802972000
22668	N/A	2/25/2019	1:16:18 PM	Device Failed		2h 43m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22711	N/A	2/25/2019	11:45:31 PM	Non-Company Activities		3h 19m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22740	N/A	2/26/2019	5:12:48 AM	Deterioration		4h 47m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
22950	N/A	3/14/2019	7:04:58 AM	Animal		2h 47m	Fuse Bank	2072	936621.2030854290,14006816.1521873000
22993	N/A	3/15/2019	7:24:52 AM	Device Failed		4h 35m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000
23022	N/A	3/22/2019	8:05:00 AM	Planned Outage		36m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23049	N/A	3/22/2019	9:05:37 AM	Planned Outage		3d 8h 20m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000
23101	N/A	3/26/2019	12:01:36 PM	<Unknown>		38m	Transformer Bank	1587	933423.9803551800,13993089.4803972000
23105	N/A	3/26/2019	11:53:06 AM	<Unknown>		47m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23164	N/A	4/11/2019	11:17:56 AM	3rd Party Outage		7m	Transformer Bank	1431	931609.6804722000,13996694.5526952000
23168	N/A	4/11/2019	11:18:01 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	6716, 7110	937367.5095547560,14008007.4017405000
23171	N/A	4/11/2019	11:17:29 AM	3rd Party Outage		7m	lecalpeco.LEGIS.ServiceLocation	7006, 128919	935373.2320017840,13994120.2254942000
23175	N/A	4/11/2019	11:18:40 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	141908, 6737	931551.0252783800,14008012.3169707000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
23177	N/A	4/11/2019	11:24:22 AM	3rd Party Outage		0m	lecalpeco.LEGIS.ServiceLocation	6956, 128911	931316.4840082990,13994475.0927395000
24277	N/A	9/16/2019	1:04:37 PM	Tree - Broken Limb		8h 15m	Fuse Bank	2118	919720.3092361710,14036233.1157568000
24279	N/A	9/16/2019	6:03:30 PM	Flying Debris		1h 52m	Transformer Bank	1478	934064.8693632600,14006359.0000768000
24360	N/A	9/28/2019	7:10:50 AM	<Unknown>		4h 34m	Transformer Bank	1614	920754.5099999990,14033172.1900000000
25414	N/A	4/9/2020	9:06:54 AM	Fire on Company Equipment		49m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25424	N/A	4/13/2020	9:37:16 AM	Planned Outage		4h 18m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25429	N/A	4/16/2020	4:45:00 PM	Planned Outage		3h 30m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
25492	N/A	5/19/2020	8:48:51 AM	Planned Outage		8h 18m	Secondary OH Conductor	9629	923458.8721172410,14015412.4700548000
25532	N/A	6/3/2020	8:30:14 AM	Planned Outage		7h 57m	Transformer Bank	1606	923685.1300000000,14014595.8200000000
25543	N/A	6/5/2020	11:29:34 AM	Planned Outage		5h 34m	Fuse Bank	2123	923804.9440835340,14014333.9966943000
25564	N/A	6/8/2020	8:34:29 AM	Planned Outage		8h 13m	Transformer Bank	1540	923862.0281625300,14013972.9845607000
25635	N/A	6/16/2020	2:32:00 PM	<Unknown>		49m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
25882	N/A	7/20/2020	10:49:37 AM	Planned Outage		4h 40m	Fuse Bank	2142	925654.6838216140,14006910.6963192000
25895	N/A	7/20/2020	2:57:00 PM	<Unknown>		5m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
26618	N/A	8/14/2020	2:36:04 PM	<Unknown>		51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	6937, 881	933592.2564358840,13992230.6572890000
26776	N/A	9/12/2020	3:29:42 PM	Flying Debris		1h 20m	Fuse Bank	2124	931377.5143581960,13995364.6024104000
27841	N/A	11/17/2020	9:48:00 AM	Weather - wind		55m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27871	N/A	11/17/2020	11:55:00 AM	Wildfire		2d 8h 16m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27873	N/A	11/17/2020	12:32:00 PM	Planned Outage		2d 23h 10m	Fuse Bank, Primary OH Conductor	2142, 15534	925654.6838216140,14006910.6963192000
27875	N/A	11/17/2020	12:51:00 PM	Planned Outage		20h 9m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27955	N/A	11/17/2020	12:32:00 PM	Planned Outage		1d 1h 11m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27963	N/A	11/18/2020	11:40:00 AM	Planned Outage		6h 38m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27967	N/A	11/18/2020	5:35:00 PM	<Unknown>		15h 35m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
27973	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 23h 55m	Fuse Bank	2065	929176.5235477980,13999641.5887330000
27975	N/A	11/17/2020	11:55:00 AM	Planned Outage		4d 7h 35m	Fuse Bank	2044	931501.5966649770,13995937.7862738000
27976	N/A	11/19/2020	5:00:00 PM	Planned Outage		1d 23m	Fuse Bank	2120	933047.9657727530,13995236.6405441000
27977	N/A	11/17/2020	11:55:00 AM	Planned Outage		5d 3h 8m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
27979	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	2115	935417.0951424200,13994794.1802897000
27981	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 5h 5m	Fuse Bank	2057	936046.7096045070,13994751.3013339000
27985	N/A	11/19/2020	8:00:00 PM	Planned Outage		21h 0m	Transformer Bank	1295	926755.9757641240,14004261.9074566000
27990	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 14m	Fuse Bank	2069	929613.7014589190,13998041.1946656000
27993	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1445	930611.6900000020,13996457.9000000000
27994	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 23h 5m	Transformer Bank	1443	930680.5399999990,13996379.8100000000
27995	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1254	930928.8099999990,13996177.8100000000
27997	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 4m	Fuse Bank	2053	931608.8403785120,13995851.9865628000
27999	N/A	11/19/2020	8:00:00 PM	Planned Outage		16h 37m	Fuse Bank	2056	932163.1206961070,13995583.8716623000
28002	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1608	932743.0593336460,13995397.1003823000
28004	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 1m	Primary OH Conductor	15907	933341.2961903360,13994970.8949846000
28005	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 9m	Fuse Bank	2137	933730.3401880150,13994820.4646377000
28006	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1620	934056.5598079120,13994839.4499911000
28007	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 16m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
28009	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	52145	935420.9397720050,13994776.2423594000
28014	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 25m	Primary OH Conductor	15475	936622.5896180680,14006879.2793699000
28015	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 26m	Primary OH Conductor	15471	936594.1529342590,14006610.2164531000
28018	N/A	11/20/2020	3:27:21 PM	<Unknown>		6h 39m	lecalpeco.LEGIS.ServiceLocation	6850	925763.9396387830,14004857.4920219000
28019	N/A	11/19/2020	5:00:00 PM	Planned Outage		2d 18h 0m	Fuse Bank	2133	937400.6710185150,13995250.6994880000
28020	N/A	11/19/2020	5:00:00 PM	Planned Outage		22h 0m	Transformer Bank	1147	936541.6798180930,13995168.3407599000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
28024	N/A	11/21/2020	10:18:13 AM	<Unknown>		41m	Transformer Bank	1358	931485.2002004600,13995574.6301103000
28026	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 5h 0m	Fuse Bank	2052	936221.1306212680,14004015.8065377000
28027	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 3h 28m	Primary OH Conductor	15327	935785.2512628820,14002880.5655680000
28028	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2076	938004.6950405980,14000659.7515725000
28029	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2074	937989.9016502550,14000654.5812423000
28225	N/A	12/10/2020	7:57:50 PM	<Unknown>		5h 32m	Transformer Bank	1431	931609.6804722000,13996694.5526952000

ATTACHMENT 12

Liberty amended response to data request
CalAdvocates-LIB-A2506017-011
October 22, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

October 22, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-011
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Joseph Lam, Joseph.Lam@cpuc.ca.gov
	Cal Advocates Wildfire Discovery, CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	September 5, 2025
Due Date:	September 19, 2025
Response Date:	September 19, 2025
Amended Response Date:	October 22, 2025

Attachments to these responses contain information marked confidential in accordance with applicable law and regulation. The basis for confidentiality is set forth in the accompanying confidentiality declaration. Public disclosure is restricted.

REQUEST NO. 1:

In the Application, Exhibit Liberty-04, page 6, Liberty states:

> Although the National Weather Service issued a High Wind Warning for the area for that day—forecasting winds of 10 to 15 mph with gusts up to 45 mph increasing to 20 to 30 mph with gusts up to 65 mph in the afternoon—it did not issue a Red Flag Warning or

otherwise forecast fire weather conditions. On the day of the fire, minimum estimated relative humidity was 18.9%.

a) At any point from November 11, 2020 through November 17, 2020, did Liberty consider proactively shutting off power due to the High Wind Warning or other hazardous weather?
b) If the answer to subpart (a) is yes, please describe Liberty's deliberations and decisions during the specified time period.
c) If the answer to subpart (a) is yes, please provide all internal communications and communications with CPUC staff related to Liberty's decision-making process during the specified time period.
d) If the answer to subpart (a) is no, explain why not.

AMENDED RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty understands this Question to be asking about Liberty's PSPS protocol. Liberty further objects to this Question as overbroad and unduly burdensome. Subject to and without waiving its objections, Liberty responds as follows:

a) During the specified time frame, Liberty monitored weather and fire risk forecasts in relation to its PSPS protocol. As described in *Liberty-03: Prudence of Operations,* those forecasts did not meet Liberty's approved PSPS criteria or approach thresholds sufficient to initiate a potential PSPS event. Accordingly, Liberty did not initiate a PSPS event. Please refer to *FPI Forecasts.pdf* attached to Liberty's Response to CalAdvocates-LIB-A2506017-008, Question 4. In response to the Mountain View Fire, Liberty initiated an emergency power shutoff for the Topaz 1261 Circuit on November 17, 2020, as described in *Liberty-03* (p. 46).
b) N/A
c) N/A
d) See Liberty's response to subpart (a).

REQUEST NO. 2:

In the Application, Exhibit Liberty-03, page 37, Liberty states: "Liberty's 2019 [Wildfire Mitigation Plan (WMP)] established a basic PSPS protocol that triggered proactive de-energizations based on local meteorological conditions and other risk factors such as fuel moisture and firefighting capabilities."

a) Provide a copy of Liberty's first PSPS procedure.
b) Provide a copy of Liberty's PSPS procedure in effect on November 17, 2020.

RESPONSE:

This Response contains confidential attachments. Liberty's initial PSPS protocol was described in its 2019 Wildfire Mitigation Plan. Please refer to *Wildfire Mitigation Plan (2019).pdf,* pp. 35-36, attached to Liberty's Response to CalAdvocates-LIB-A2506017-001, Question 13. Liberty subsequently refined its PSPS protocol in consultation with its third-party fire science and risk modeling expert. Please refer to confidential attachment *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf,* which reflects the PSPS thresholds in effect on

November 17, 2020. Please also refer to attachment *PSPS Communications Playbook.pdf* and confidential attachment *CONFIDENTIAL-Emergency Response PSPS Playbook.docx*.

REQUEST NO. 3:

Regarding Liberty's initial PSPS protocols, with respect to external studies, analyses, research:

a) Prior to November 17, 2020, did Liberty commission or request any external study, analysis, research, and examination of proactive de-energization as a tool to mitigate wildfire risk?
b) If the answer to subpart (a) is yes, please describe the findings of any such external studies, analyses, and research.
c) If the answer to subpart (a) is yes, please provide a copy of all such external studies, analyses, and reports.
d) If the answer to subpart (a) is no, explain why not.

AMENDED RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Yes, as described in *Liberty-03: Prudence of Operations*, Liberty engaged a third-party fire science and risk modeling expert to support developing a more sophisticated PSPS protocol comprising a set of criteria and guidelines for de-energization.
b) – c) Please refer to *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* attached to Liberty's Response to Question 2 of this set of data requests.
d) N/A

REQUEST NO. 4:

Regarding Liberty's initial research into proactive de-energizations of other utilities:

a) Prior to November 17, 2020, did Liberty conduct research and examine the practices of other utilities and industry best practices, with respect to proactive de-energization?
b) If the answer to subpart (a) is yes, please describe the findings of Liberty's research, examination, and analyses.
c) If the answer to subpart (a) is yes, please provide a copy of any resulting reports or studies.
d) If the answer to subpart (a) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows: Liberty learned about PSPS practices of other utilities through their wildfire mitigation plans and joint workshops and other discussions in CPUC proceedings. Liberty understands that its third-party fire science and risk modeling expert evaluated practices of other utilities related to PSPS, e.g., *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, page 3, attached to Liberty's Response to Question 2 of this set of data requests.

REQUEST NO. 5:

Regarding Liberty's initial PSPS protocols:

a) When did Liberty begin evaluating or considering proactive de-energization as a tool to reduce wildfire risk?
b) What factors or events prompted Liberty to begin evaluating proactive de-energization (e.g., PSPS) as a tool to reduce wildfire risk?
c) When did Liberty decide (or approve a recommendation) to incorporate proactive de-energization into its grid operations?
d) When did Liberty adopt its first protocols for proactive de-energization (PSPS) on distribution circuits?
e) When did Liberty adopt its first protocols for proactive de-energization (PSPS) on transmission circuits?
f) When did Liberty first initiate a proactive de-energization (i.e., PSPS event) on a distribution circuit?
g) When did Liberty first initiate a proactive de-energization (i.e., PSPS event) on a transmission circuit?

AMENDED RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty understands the term "transmission" to be referring to Liberty's 60kV and 120kV lines, which are used only to serve customers within Liberty's service area. Subject to and without waiving these objections, Liberty responds as follows:

a) – b) Liberty began to evaluate and consider PSPS as a wildfire mitigation tool of last resort around the time the Commission issued Resolution ESRB-8 in 2018, which extended the PSPS requirements previously imposed on San Diego Gas & Electric to all investor-owned utilities and prescribed additional PSPS requirements. That same year, the State enacted SB 901, which set forth requirements for utilities to submit wildfire mitigation plans, including PSPS protocols.
c) – d) Please refer to Liberty's response to Question 2 of this set of data requests and attachments thereto regarding Liberty's PSPS protocols in 2019 and 2020.
f) Liberty's first proactive de-energization of a distribution circuit pursuant to its formal PSPS protocol was on November 11, 2024. Prior to adoption of its formal PSPS protocol and in response to fire weather conditions, Liberty proactively de-energized three lines in South Lake Tahoe on November 21, 2018 for approximately three hours, impacting 30 residential and commercial customers. The proactively de-energized lines included laterals on a distribution line, as well as 60kV and 120kV lines.
g) To date, Liberty has not de-energized a transmission circuit pursuant to its formal PSPS protocol. Prior to adoption of its formal PSPS protocol and in response to fire weather conditions, Liberty proactively de-energized three lines in South Lake Tahoe on November 21, 2018 for approximately three hours, impacting 30 residential and commercial customers. The proactively de-energized lines included laterals on a distribution line, as well as 60kV and 120kV lines.

REQUEST NO. 6:

Did the Mountain View Fire incident influence Liberty's deliberations regarding whether and how to use proactive de-energization in its grid operations? If so, explain how.

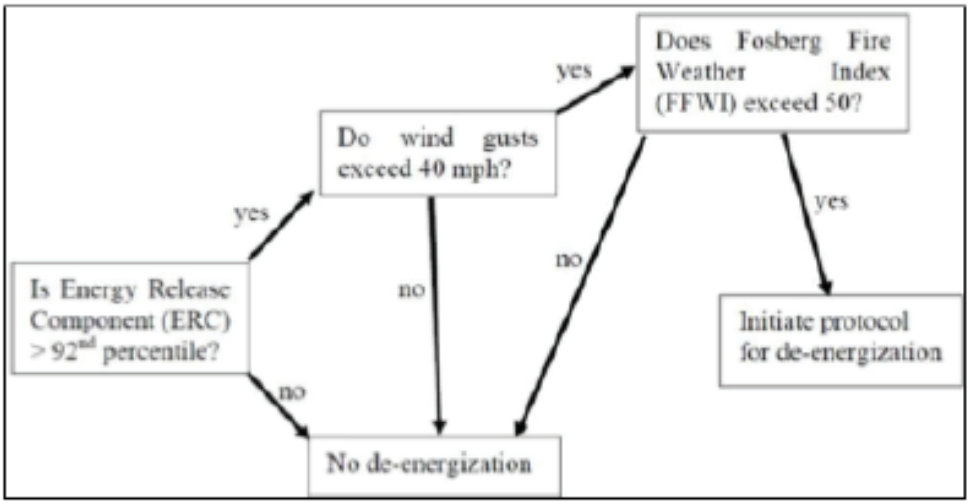
RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving these objections, Liberty responds as follows: Liberty has continued to refine and evolve its PSPS protocol over time based on the risks specific to Liberty's service area and lessons learned, including from the Mountain View Fire. After 2020, Liberty developed the Composite Risk Index (CRI) to guide its PSPS decision making. For more detail regarding CRI, please refer to attachment *CRI one-pager.docx*.

REQUEST NO. 7:

In the Application, Exhibit Liberty-03, page 38, Liberty states "for the vast majority of Liberty's PSPS zones, Liberty used the following de-energization thresholds for the three criteria in the protocol—[Energy Release Component (ERC)] percentile, wind gusts, and [Fosberg Fire Weather Index (FFWI)]."

Figure 16: De-Energization Decision Tree for Most of Liberty's PSPS Zones



a) Explain how Liberty developed the thresholds provided in Figure 16.
b) Other than the Topaz 1261 and Muller 1296 circuits, were any other zones or circuits assigned different thresholds than those provided in Figure 16? If so, please provide the zones or circuits and associated thresholds.
c) Were the thresholds in Figure 16 in effect on November 17, 2020?
d) Explain when and how the thresholds provide in Figure 16 had changed from initial implementation to November 17, 2020.

AMENDED RESPONSE:

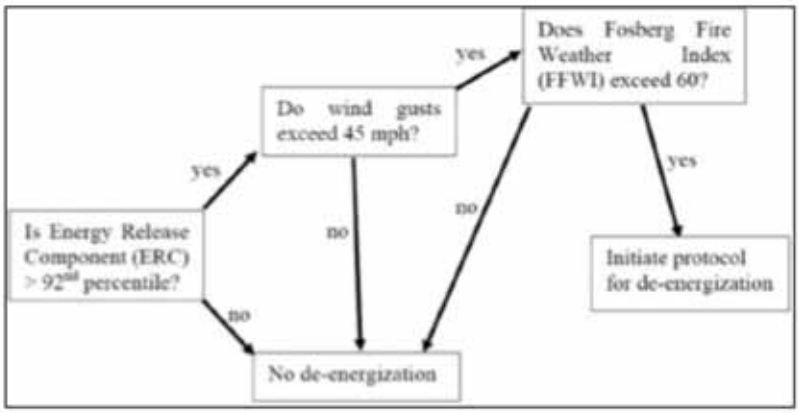
a) Please refer to *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, attached to Liberty's Response to Question 2 of this set of data requests.

b) As described in *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf,* de-energization thresholds were the same in all PSPS zones other than the Topaz 1261 and Muller 1296 circuit zones.
c) Yes.
d) Please refer to Liberty's response to Question 2 of this set of data requests and attachments thereto.

REQUEST NO. 8:

In the Application, Exhibit Liberty-03, page 38, Liberty states "Because the Topaz and Muller 1296 R3 PSPS zones were windier than other PSPS zones under normal weather conditions, Liberty's protocol established slightly higher thresholds for wind gusts and FFWI:"

Figure 17: De-Energization Decision Tree for Topaz and Muller 1296 R3 PSPS Zones



a) Explain how Liberty developed the thresholds provided in Figure 17.
b) Please explain whether Figure 17 was applicable to the entirety of the Topaz 1261 circuit.
c) Please explain whether Figure 17 was applicable to the entirety of the Muller 1296 circuit
d) Were the thresholds in Figure 17 in effect on November 17, 2020?
e) Explain when and how the thresholds provide in Figure 17 had changed from initial implementation to November 17, 2020.

RESPONSE:

a) Please refer to *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf,* attached to Liberty's Response to Question 2 of this set of data requests.
b) The decision tree in Figure 17 applied to the entirety of the Topaz 1261 Circuit in Liberty's service area. The Topaz Circuit originates at NV Energy's Topaz Substation in Nevada and Liberty's facilities begin at the California-Nevada border.
c) The decision tree in Figure 17 applied to the Muller 1296 R3 zone, which was the portion of the Muller 1296 circuit downstream of the R3 recloser and upstream of the R4 recloser. Like the Topaz Circuit, the Muller 1296 Circuit originates in Nevada and Liberty's facilities begin at the California-Nevada border. Because the R3 recloser was Liberty's upstream protective device on its portion of the circuit, de-energization of the

R3 circuit zone had the practical effect of de-energizing the entirety of the circuit in Liberty's service area.

d) Yes.

e) Please refer to Liberty's response to Question 2 of this set of data requests and attachments thereto.

ATTACHMENT 13

Archived PSPS Post-Event Reports 2017-2023 are available at: https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season/archived-psps-post-event-reports-2017-2023

The CPUC website will undergo scheduled maintenance on Wednesday, December 10, 2025 from 7:30pm – 10:00pm (PST). During this time, the CPUC website will be unavailable.

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ARCHIVED PSPS Post-Event Reports 2017-2023

2023 Utility Company PSPS Post-Event Reports

SCE

- Consolidated Amended 2023 SCE PSPS Post-Event Reports
- December 8, 2023: SCE PSPS Post-Event Report
- November 26, 2023: SCE PSPS Post-Event Report
- November 20, 2023: SCE PSPS Post-Event Report
- November 8, 2023: SCE PSPS Post-Event Report
- October 29, 2023: SCE PSPS Post-Event Report
  - Amended October 29, 2023: SCE PSPS Post-Event Report
- July 18, 2023: SCE PSPS Post-Event Report
- July 11, 2023: SCE PSPS Post-Event Report
- October 11, 2023: SCE PSPS Post-Event Report

PG&E

- December 15, 2023: PG&E PSPS Post-Event Report
- August 30, 2023: PG&E PSPS Post-Event Report
- September 20, 2023: PG&E PSPS Post-Event Report
- September 30, 2023: PG&E PSPS Post-Event Report
- December 15, 2023: PG&E PSPS Post-Event Report

SDG&E

- October 29, 2023: SDG&E PSPS Post-Event Report

2022 Utility Company PSPS Post-Event Reports

SCE

- November 24, 2022: SCE PSPS Post Event Report
- November 19, 2022: SCE PSPS Post Event Report
- October 22, 2022: SCE PSPS Post Event Report
- September 7-9, 2022: SCE Post Event Report
- July 22-23, 2022: SCE PSPS Post Event Report

- June 15, 2022: SCE PSPS Post Event Report

PG&E

- October 22-24, 2022: PG&E PSPS Post Event Report

Liberty Utilities

- October 21, 2022: Liberty Utilities (CalPeco Electric)'s Post-Event Report on the NV Energy Potential Public Safety Outage Management (PSOM) Event

2021 Utility Company PSPS Post-Event Reports

SCE

- Nov. 24, 2021: SCE PSPS Post Event Report
- Nov. 21, 2021: SCE PSPS Post Event Report
- Oct. 22, 2021: SCE PSPS Post Event Report
- Oct. 16-18, 2021: SCE PSPS Post Event Report
- Oct. 15, 2021: SCE PSPS Post Event Report
- Oct. 11, 2021: SCE PSPS Post Event Report
- Sept 30, 2021: SCE PSPS Post Event Report
- June 14, 2021: SCE PSPS Post Event Report
- April 12-13, 2021: SCE PSPS Post Event Report
- Jan 12-21, 2021: SCE PSPS Post Event Report
  - Jan 12-21, 2021: PSPS Post Event Report Amended

PG&E

- Oct. 14-16, 2021: PG&E PSPS Post Event Report
- Oct. 11, 2021: PG&E PSPS Post Event Report
- Sept 20-21, 2021: PG&E PSPS Post Event Report
- Aug 17-19, 2021: PG&E PSPS Post Event Report
- Jan 19, 2021: PG&E Post Event Report

SDG&E

- Nov 24-26, 2021: SDG&E PSPS Post Event Report
  - Nov 24-26, 2021: SDG&E PSPS Post Event Report AMENDED
- Jan 14-16, 2021: SDGE PSPS Post Event Report

PacificCorp

- Aug 17, 2021: PacifiCorp PSPS Post Event Report

Liberty Utilities

- Sept 19, 2021: Liberty PSPS Post Event Report

2020 Utility Company PSPS Post-Event Reports

SCE

- Dec. 16-24, 2020: PSPS Post Event Report

- Dec. 4-14, 2020: PSPS Post Event Report
- Nov. 29-Dec. 4, 2020: PSPS Post Event Report
- Nov. 24-28, 2020: PSPS Post Event Report
- Nov. 14-18, 2020: PSPS Post Event Report
- Nov. 3-7, 2020: PSPS Post Event Report
- Oct. 23-28, 2020: PSPS Post Event Report
- Oct, 16, 2020: PSPS Post Event Report
- Sept. 5-11, 2020: PSPS Post Event Report
  - Amended Sept. 5-11, 2020: PSPS Post Event Report
- July 31-Aug. 4, 2020: PSPS Post Event Report
- June 25-28, 2020: PSPS Post Event Report
- May 27-30, 2020: PSPS Post Event Report

PG&E

- Dec. 7, 2020: PSPS Post Event Report
- Dec. 2-3, 2020: PSPS Post Event Report
- Oct. 25-28, 2020: PSPS Post Event Report
- Oct. 21-23, 2020: PSPS Post Event Report
- Oct. 14-17, 2020: PSPS Post Event Report
- Sept. 27-29, 2020: PSPS Post Event Report
- Sept. 7-10, 2020: PSPS Post Event Report

SDG&E

- Dec. 23-24, 2020: PSPS Post Event Report
  - Dec. 23-24, 2020: PSPS Post Event Report Amended
- Nov. 26-Dec. 9, 2020: PSPS Post Event Report
- Oct. 26-27, 2020: PSPS Post Event Report
- Sept. 28-29, 2020: PSPS Post Event Report
- Sept. 8-9, 2020: PSPS Post Event Report

PacificCorp

- Oct. 25, 2020: PSPS Post Event Report
- Sept. 13-17, 2020: PSPS Post Event Report

2019 Utility Company PSPS Post-Event Reports

PG&E

- Nov. 20-21, 2019 Pro-Active De-Energization Post Event Report
  - Amendment
- Oct. 26 and 29, 2019 Pro-Active De-Energization Post Event Report
  - Amendment
- Oct. 23-25, 2019 Pro-Active De-Energization Post Event Report
  - Amendment
- Oct. 9-12, 2019 Pro-Active De-Energization Post Event Report
  - Amended Oct. 9-12, 2019 Pro-Active De-Energization Post Event Report
- Oct. 5-6, 2019 Pro-Active De-Energization Post Event Report
  - Amendment

- Sept. 25-27, 2019 Pro-Active De-Energization Post Event Report
  - Amendment
- Jun. 7-9, 2019 Pro-Active De-Energization Post Event Report
  - Amendment

SCE

- Nov. 23-26, 2019 Proactive De-energization Post-Event Report
- Nov. 15-17, 2019 Proactive De-Energization Post Event Report
- Oct. 27-Nov. 4, 2019 Proactive De-Energization Post Event Report
- Oct. 21-26, 2019 Pro-Active De-Energization Post Event Report
  - Amended Oct. 21-26, 2019 Pro-Active De-Energization Post Event Report
- Oct. 12-21, 2019 Pro-Active De-Energization Post Event Report
- Oct. 2-12, 2019 Pro-Active De-Energization Post Event Report
- Sept. 21-Oct. 1, 2019: Pro-Active De-Energization Post Event Report
- Sept. 9-19, 2019: Pro-Active De-Energization Post Event Report
- Sept. 4-8, 2019 Pro-Active De-Energization Post Event Report
  - Amended Sept. 4-8, 2019 Pro-Active De-Energization Event Report
- Aug. 12-17, 2019 Potential Pro-Active De-Energization Report
- Aug. 3-10, 2019: Pro-Active De-Energization Post Event Report
- Jul. 29-Aug. 2, 2019: Pro-Active De-Energization Post Event Report
- Jul. 22-28, 2019: Pro-Active De-Energization Post Event Report
- Jul. 9-21, 2019 Potential Pro-Active De-Energization Report
- Jun. 28-Jul. 8, 2019 Potential Pro-Active De-Energization Report
- Jun. 17-22, 2019 Potential Pro-Active De-Energization Report

SDG&E

- Nov. 17-18, 2019: Pro-Active De-Energization Post Event Report
- Oct. 20-Nov. 1, 2019 Pro-Active De-Energization Post Event Report
- Oct. 10-11, 2019 Pro-Active De-Energization Post Event Report

2018 Utility Company PSPS Post-Event Reports

PG&E

- Nov. 6-8, 2018 Pro-Active De-Energization Post Event Report
- Oct. 13-17, 2018 Pro-Active De-Energization Post Event Report

SCE

- Dec. 29, 2018 - Jan. 1, 2019 Pro-Active De-Energization Post Event Report
- Nov. 5-13, 2018 Potential Pro-Active De-Energization Report
- Oct. 12-16, 2018 Potential Pro-Active De-Energization Report

SDG&E

- Nov. 11-16, 2018 Pro-Active De-Energization Post Event Report
- Nov. 8-9, 2018: De-Energization Post Event Report
- Oct. 15-16, 2018 Pro-Active De-Energization Post Event Report
- Oct. 19-20, 2018 Pro-Active De-Energization Post Event Report
- Jan. 27-29, 2018 Pro-Active De-Energization Post Event Report

2017 Utility Company PSPS Post-Event Reports

SDG&E

- Dec. 14-15, 2017 Pro-Active De-Energization Post Event Report
- Dec. 4-12, 2017 Pro-Active De-Energization Post Event Report
  - SED Review of SDG&E's December 2017 PSPS Events (May 2018)
- Oct. 23-25, 2017 Pro-Active De-Energization Post Event Report
- Oct. 20-21, 2017 Pro-Active De-Energization Post Event Report
- Sept. 21-22, 2017 Pro-Active De-Energization Post Event Report

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ATTACHMENT 14

Resolution ESRB-8, July 12, 2018

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SAFETY AND ENFORCEMENT DIVISION **Resolution ESRB-8**
Electric Safety and Reliability Branch **July 12, 2018**

R E S O L U T I O N

RESOLUTION EXTENDING DE-ENERGIZATION REASONABLENESS, NOTIFICATION, MITIGATION AND REPORTING REQUIREMENTS IN DECISION 12-04-024 TO ALL ELECTRIC INVESTOR OWNED UTILITIES.

PROPOSED OUTCOME:

This Resolution extends the de-energization reasonableness, public notification, mitigation and reporting requirements in Decision (D.) 12-04-024 to all electric Investor Owned Utilities (IOUs) and adds new requirements. It also places a requirement on utilities to make all feasible and appropriate attempts to notify customers of a de-energization event prior to performing de-energization.

SAFETY CONSIDERATIONS:

De-energizing electric facilities during dangerous conditions can save lives and property and can prevent wildfires. This resolution provides guidelines that IOUs must follow and strengthens public safety requirements when an IOU decides to de-energize its facilities during dangerous conditions.

ESTIMATED COST: Costs of compliance with the new requirements are unknown.

SUMMARY

Commission Decision (D.) 12-04-024 established requirements for reasonableness, notification, mitigation and reporting by San Diego Gas & Electric Company (SDG&E) for its de-energization events.

This resolution extends the requirements established in D.12-04-024 to all electric IOUs, requires that the utilities meet with the local communities that may be impacted by a future de-energization event before putting the practice in effect in a particular area, requires feasible and appropriate customer notifications prior to a de-energization event, and requires notification to the Safety and Enforcement Division (SED) as soon as practicable after a decision to de-energize facilities and within 12 hours after the last service is restored.

BACKGROUND

California Public Utilities Code (PU Code) Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety. This authority includes shutting off power for the prevention of fires caused by strong winds.

Application (A.) 08-12-021 filed by SDG&E on December 22, 2008, requested specific authority to shut off power as a fire-prevention measure against severe Santa Ana winds and a review of SDG&E's proactive de-energization measures. SDG&E also requested that such power shut-offs would qualify for an exemption from liability under SDG&E's Tariff Rule 14.

Decision (D.) 12-04-024 issued on April 19, 2012 provided guidance on SDG&E's authority to shut off power under the PU Code and also established factors the Commission may consider in determining whether or not a decision by SDG&E to shut off power was reasonable. The decision ruled that SDG&E has the authority under Public Utilities Code, Sections 451 and 399.2(a) to shut off power in emergency situations when necessary to protect public safety. It also ruled that a decision to shut off power by SDG&E under its statutory authority, including the adequacy of any notice given and any mitigation measures implemented, may be reviewed by the Commission to determine if SDG&E's actions were reasonable. The decision requires SDG&E to take appropriate and feasible steps to provide notice and mitigation to its customers whenever it shuts off power. The decision also requires SDG&E to notify the Commission's Consumer Protection and Safety Division, now the Safety and Enforcement Division (SED), of the shut-off within 12 hours and submit a report to SED with a detailed explanation of its decision to shut off the power.

Southern California Edison Company (SCE) and Pacific Gas and Electric Company (PG&E) both currently exercise their authority to shut off power during dangerous fire conditions. However, there are currently no established standards on reasonableness, notification, mitigation and reporting by IOUs other than SDG&E.

DISCUSSION

The 2017 California wildfire season was the most destructive wildfire season on record, and saw multiple wildfires burning across California, including five of the 20 most destructive wildland-urban interface fires in the state's history. Devastating fires raged in Santa Rosa, Los Angeles, and Ventura, and the Thomas Fire proved to be the largest wildfire in California history. These fires further demonstrated the fire risk in California. As a result of the fires and critical fire weather conditions, both the President of the United States and the Governor of California issued State of Emergency declarations.

SDG&E exercised its statutory authority under Public Utilities Code Sections 451 and 399.2(a), to de-energize specific circuits in December of 2017. The first group of de-energization events occurred during the period of December 4 through 12, 2017. There were 55 individual circuit de-energization events involving 28 circuits (some circuits had multiple de-energization events) in various eastern San Diego County communities. A total of approximately 14,000 customers were affected.

A second group of de-energization events occurred on December 14 and 15, 2017. There were six individual circuit de-energization events involving three circuits in various eastern San Diego County communities. A total of approximately 650 customers were affected.

In 2017, SCE also used de-energization as a measure to protect its system against fire safety hazards. The de-energization event occurred on December 7, 2017 and affected customers in the community of Idyllwild. Approximately 8,061 total customers were affected in SCE's and nearby Anza Co-Op's service territories. The de-energization event occurred in response to a Red Flag Warning in effect, SCE meteorological forecasting, field-validated extreme high winds and associated fire risks in the area.

According to SCE, during such an event, the company typically attempts to notify customers who could be affected prior to de-energization if timing allows. For the December 7, 2017 event, SCE notified city, county and government officials prior to de-energizing but was not able to notify affected customers prior to the outage occurring. SCE also utilizes other wildfire mitigation practices, such as blocking of distribution reclosers in High Fire Areas, prior to de-energization. According to SCE, de-energization of circuits would be the last line of defense to protect public safety due to extreme fire weather conditions. SCE requires that such an event must be authorized by its activated Incident Management Team.

PG&E reports that prior to 2018, it did not have a policy to de-energize lines as a fire prevention measure. PG&E reported that it did not proactively de-energize lines due to extreme fire weather conditions in 2017. However, in March 2018 PG&E announced that it is developing a program to de-energize lines during periods of extreme fire conditions and has been meeting with local communities to gather feedback.

I. Current De-Energization Policies Applicable to SDG&E

D.12-04-024 established de-energization policies applicable to SDG&E addressing reporting, reasonableness review and customer notification.

A. Reporting

Under D.12-04-024, SDG&E is required to provide the following notifications:

- A notification to the Director of SED provided no later than 12 hours after the power shut-off.
- A report to the Director of SED provided no later than 10 business days after the shut-off event ends that includes (i) an explanation of the decision to shut off power; (ii) all factors considered in the decision to shut off power, including wind speed, temperature, humidity, and moisture in the vicinity of the de-energized circuits; (iii) the time, place, and duration of the shut-off event; (iv) the number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other; (v) any wind-related damage to SDG&E's overhead power-line facilities in the areas where power is shut off; (vi) a description of the notice to customers and any other mitigation provided by

SDG&E; and (vii) any other matters that SDG&E believes are relevant to the Commission's assessment of the reasonableness of SDG&E's decision to shut off power.

As other electric IOUs shut off power in a similar manner and in similar situations, such notifications are important to allow safety oversight by SED, and it would be appropriate to have these reporting requirements apply to all electric IOUs' de-energization events.

B. Reasonableness Review

D.12-04-024 identified several factors that the Commission may consider in assessing whether an SDG&E decision to de-energize "was reasonable and qualifies for an exemption from liability under SDG&E's Electric Tariff Rule 14."[1] These factors are summarized below:

- SDG&E has the burden of demonstrating that its decision to shut off power is necessary to protect public safety.
- SDG&E must rely on other measures, to the extent available, as alternatives to shutting off power.
- SDG&E must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation during periods of extreme fire hazard.
- SDG&E must consider efforts to mitigate the adverse impacts on the customers and communities in areas where it shuts off power. This includes steps to warn and protect its customers whenever it shuts off power.
- Other additional factors, as appropriate, to assess whether the decision to shut off power is reasonable.

As other electric IOUs are developing and/or instituting de-energization plans, it is important that these factors be used to assess the reasonableness of all electric IOU de-energization events in order to ensure that the power shut off is executed only as a last resort and for a good reason. However, we modify the third factor listed above by adding the phrase underlined below:

- [The IOU] must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation or will cause major vegetation-related impacts on its facilities during periods of extreme fire hazard.

C. Public Outreach, Notification, and Mitigation

D.12-04-024 requires that SDG&E provide notice and mitigation to its customers, to the extent feasible and appropriate, whenever SDG&E shuts off power pursuant to its statutory authority.

[1] D.12-04-024, page 30.

As other electric IOUs are developing and/or instituting de-energization plans, it is important that this requirement for public outreach, notification, and mitigation apply to all electric IOUs in order to ensure that customers are impacted to the least extent necessary. We recognize that it is not practicable to have an absolute requirement that electric IOUs provide advance notification to customers prior to a de-energization event.

II. Strengthened Requirements Applicable to all Electric IOUs

Recent California experience with wildfires demands that we enhance existing de-energization policy and procedures. In order to ensure that the public and local officials are prepared for power shut off and aware of an IOU de-energization policy, and in order to ensure proper safety oversight by SED, we adopt the following:

1. The guidelines in D.12-04-024, currently applicable to SDG&E only, shall apply to all electric IOUs.
2. The guidelines shall be strengthened as described in the following sections and the strengthened guidelines shall apply to all electric IOUs.

A. Reporting

IOUs shall submit a report to the Director of SED within 10 business days after each de-energization event, as well as after high-threat events where the IOU provided notifications to local government, agencies, and customers of possible de-energization though no de-energization occurred. Reports to the Director of SED must include at a minimum the following information:

- The local communities' representatives the IOU contacted prior to de-energization, the date on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in General Order 95, Rule 21.2-D.
- If an IOU is not able to provide customers with notice at least 2 hours prior to the de-energization event, the IOU shall provide an explanation in its report.
- The IOU shall summarize the number and nature of complaints received as the result of the de-energization event and include claims that are filed against the IOU because of de-energization.
- The IOU shall provide detailed description of the steps it took to restore power.
- The IOU shall identify the address of each community assistance location during a de-energization event, describe the location (in a building, a trailer, etc.), describe the assistance available at each location, and give the days and hours that it was open.

B. Reasonableness Review

The reasonableness review discussion in D.12-04-024 and detailed above shall apply to all electric IOUs. At this time, we are not adding additional requirements and, while we recognize that this issue along with financial liability are important ongoing discussions, this resolution is not the venue for that discussion.

C. Public Outreach, Notification, and Mitigation

Increased coordination, communication and public education can be effective measures to increase public safety and minimize adverse impact from de-energization.

- The IOU shall notify the Director of SED, as soon as practicable, once it decides to de-energize its facilities. If the notification was not prior to the de-energization event, the IOU shall explain why a pre-event notification was not possible. The notification shall include the area affected, an estimate of the number of customers affected, and an estimated restoration time. The IOU shall also notify the Director of SED of full restoration within 12 hours from the time the last service is restored.
- Within 90 days of the effective date of this resolution, each IOU shall convene De-Energization Informational Workshops with representatives of entities that may be affected by a de-energization event, including but not limited to: state agencies, tribal governments, local agencies and representatives from local communities. Workshops should be inclusive of, but not limited to, representatives of customers who are low-income, have limited English, have disabilities, or are elderly. The purpose of these workshops is to explain, and receive feedback on, the IOU's de-energization policies and procedures. The workshops should be supplemented by focused working sessions, upon request by specific groups such as communications providers or Community Choice Aggregators that might have notification needs different than those of the general public.
- Within 30 days of the effective date of this resolution, each IOU shall submit a report to the Director of SED outlining its public outreach, notification, and mitigation plan. The plan must include at a minimum, the following information:
  - Names of communities that will be invited to De-Energization Informational Workshops.
  - Names of state agencies and tribal governments that the IOU will coordinate with in developing its de-energization plan and will invite to De-Energization Informational Workshops.
  - Names of local agencies the IOU will coordinate with in developing its de-energization plan and will invite to De-Energization Informational Workshops.
  - Proposed communication methods for publicizing and convening the De-Energization Informational Workshops.
  - Details regarding its plans for notification in advance of, and during, a de-energization event, and its plans for mitigation when de-energization occurs.
- The IOU shall ensure that de-energization policies and procedures are well-communicated and made publicly available, including the following:
  - Make available and post a summary of de-energization policies and procedures on its website.
  - Meet with representatives from local communities that may be affected by

de-energization events, before putting the practice in effect in a particular area.

- Provide its de-energization and restoration policy in full, and in summary form, to the affected community officials before de-energizing its circuits.
- Discuss the details of any potential shut-off and mitigation measures that the communities should consider putting in place, including information about any assistance that the IOU may be able to provide during events.

- In anticipation of a specific de-energization event, the IOU shall:
  - Notify customers of planned de-energization as soon as practicable before the event.
  - As practicable and operationally feasible, notify and communicate with representatives from the fire departments, first responders, local communities, government, communications providers, and Community Choice Aggregators that may be affected by the de-energization event.
  - Discuss with local government and community representatives the details of any potential shut-off and mitigation measures the IOU can provide to lessen the negative impacts of the power outage (e.g., cooling centers).
  - Ensure that critical facilities such as hospitals, emergency centers, fire departments, and water plants are aware of the planned de-energization event.
- The IOU shall retain documentation of community meetings and information provided in electronic form, and make that information available to SED upon request. The information shall be retained for a minimum of one year after the de-energization event or five years after the community meetings, whichever comes first.
- After the de-energization event, IOUs shall assist critical facility customers to evaluate their needs for backup power and determine whether additional equipment is needed. To address public safety impacts of a de-energization event, the IOU may provide generators to critical facilities that are not well prepared for a power shut off.
- The IOU shall retain records of customer notifications and make that information available to SED upon request. The information shall be retained for a minimum of one year after the de-energization event.

COMMENTS ON DRAFT RESOLUTION

PU Code Section 311(g)(1) provides that a resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding or in other specified situations.

The draft resolution was mailed to parties for comment on May 30, 2018, and was noticed on the Commission's Daily Calendar on June 8, 2018. The 30-day comment period for the draft resolution was neither waived nor reduced. Parties submitted comments by June 28, 2018, and reply comments by July 6, 2018.

Based on parties' comments, several modifications were made to the draft resolution, including the following:

- One of the factors specified in D.12-04-024 for consideration during reasonableness reviews was expanded for use when applied to all IOUs.
- The requirements for reporting events that do not eventually trigger de-energization were clarified.
- The full restoration reporting period to the SED was increased from 30 minutes to 12 hours.
- The period for convening De-Energization Informational Workshops was increased from 60 days to 90 days.
- The guidance for meeting with local communities was made a general requirement, rather than tied to specific de-energization events.
- Low-income, limited English, and disability communities were added to the list of parties to include in the De-Energization Informational Workshops.
- Communications providers were added to the list of representatives to be notified in anticipation of a de-energization event.
- The requirement to provide generators and/or batteries to critical facilities was removed since most critical facilities are required to have their own back-up power resources.

Also in response to comments by the parties, we clarify that the requirements adopted in this resolution are not in conflict with IOU authority to de-energize power lines to ensure public safety provided under the PU Code. We expect an IOU to use its best judgment on a case-by-case basis to determine whether de-energization is needed for public safety. We hold this expectation even if an IOU has not complied fully with each of the requirements in this resolution, for example, if a need for de-energization arises before an IOU has meet with the impacted local communities. If an IOU did not fulfill one or more of the requirements in this resolution prior to a de-energization, the IOU shall identify the missed requirement(s) and provide an explanation in its report submitted to the Director of SED after the de-energization event.

FINDINGS

1. Under PU Code Sections 451 and 399.2(a), electric IOUs have the authority to shut off power in order to protect public safety.
2. The decision to de-energize electric facilities for public safety is complex and dependent on many factors including and not limited to fuel moisture; aerial and ground firefighting capabilities; active fires that indicate fire conditions; situational awareness provided by fire agencies, the National Weather Service and the United States Forest Service; and local meteorological conditions of humidity and winds.
3. The decision to shut off power may be reviewed by the Commission pursuant to its broad jurisdiction over public safety and utility operations.

4. The requirements for reporting, public outreach, notification, mitigation and reasonableness review in D.12-04-024 are effective, but are only applicable to SDG&E.
5. All electric IOUs may face similar safety situations requiring power shut-off in emergencies and de-energization events in their service territory.
6. De-energization of electric facilities could save lives, protect property, and prevent fires.
7. The measures in D.12-04-024 should be strengthened to further ensure that the public and local officials are prepared for de-energization events and to ensure the proper safety oversight by the Commission's Safety and Enforcement Division.

THEREFORE, IT IS ORDERED THAT:

1. All electric IOUs shall take appropriate and feasible steps to provide notice and mitigation to their customers in accordance with the guidelines in D.12-04-024 whenever they shut off power pursuant to their statutory authority.
2. All electric IOUs shall follow the notification requirements to SED established in D.12-04-024.
3. All electric IOUs shall comply with the additional guidelines stated in the section of this resolution titled "**Strengthened Requirements Applicable to all Electric IOUs."**

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on July 12, 2018; the following Commissioners voting favorably thereon:

/s/ *ALICE STEBBINS*
ALICE STEBBINS
Executive Director

MICHAEL PICKER
President
CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

ATTACHMENT 15

Liberty response to data request
CalAdvocates-LIB-A2506017-008
September 5, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-008
Requesting Party:	Public Advocates Office
Originator:	Herman Eng, Herman.Eng@cpuc.ca.gov
cc:	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Date Received:	August 21, 2025
Due Date:	September 5, 2025

Question 1

Please list all external or third-party sources of wind and weather information that Liberty used for situational awareness and to inform its operations (e.g., Public Safety Power Shutoff (PSPS)) as of November 17, 2020.

Response to Question 1:
As of November 17, 2020, Liberty had a range of open-source and publicly available weather forecasting tools and models to support situational awareness and inform operational decisions, through its third-party fire science and risk modeling consultant. These sources included:

- National Weather Service (NWS)
- PyreCast
- Wildland Fire Assessment System (WFAS)
- Weather forecast models:
    - ECMWF (European Centre for Medium-Range Weather Forecasts)
    - HRRR (High-Resolution Rapid Refresh)
    - NAM 3km and NAM 12km (North American Mesoscale Model)
    - GFS 0.125° and GFS 0.250° (Global Forecast System)
    - NBM (National Blend of Models)

Question 2
Please list all internal tools or methodologies that Liberty used to measure and estimate wind speeds and weather at the time of the Mountain View Fire ignition.

Response to Question 2:
As of November 17, 2020, the tools Liberty used included its PSPS predictive tool, which provided forecasts for weather conditions relative to Liberty's PSPS thresholds. Liberty's

weather stations and field fuel moisture sampling also provided information on wind speeds and weather conditions, which were used as inputs into Liberty's FPI tool and forecast models behind Liberty's PSPS predictive tool and to guide de-energization decisions in the event of a PSPS activation. Liberty utilized a fire weather dashboard (https://tahoefireweather.com/) to monitor forecasted weather conditions across its service territory.

Question 3

For the period from 2010 through 2020:

a) Please list the dates that Liberty estimates had sustained wind speeds of more than 20 miles per hour (mph) within a five-mile radius of the Mountain View Fire ignition site.
b) Please list the dates that Liberty estimates had sustained wind speeds of more than 60 mph within a five-mile radius of the Mountain View Fire ignition site.

Response to Question 3:

Liberty objects to this Question as burdensome to the extent it seeks information not maintained in the ordinary course of business. Liberty further objects to this Question as overbroad to the extent it seeks information prior to the start of Liberty's operation in approximately 2011, when it purchased the utility system from NV Energy. Liberty further objects to this Question as vague and ambiguous as to the phrase "the Mountain View Fire ignition site." Subject to and without waiving its objections, Liberty responds as follows:

Liberty understands the phrase "the Mountain View Fire ignition site" to refer to the area of the Subject Span (the span between Pole 266731 ("West Pole") and Pole 40288 ("East Pole")) as described in *Liberty-03: Prudence of Operations*. As of November 17, 2020, there were three weather stations within an approximate five-mile radius of the Mountain View Fire ignition site: LIB-3106/LIB06; LIB-3130/LIB26; and Walker RAWS. Data from all three weather stations are publicly available via MesoWest: https://mesowest.utah.edu/. Data from the two Liberty weather stations are also publicly available from Western Weather Group: https://liberty.westernweathergroup.com/search.

Question 4

When (i.e., approximately what date and time) did Liberty become aware of the likelihood of hazardous weather conditions (i.e., warm temperatures, high winds, and low humidity combined with dry fuels) occurring on November 17, 2020?

Response to Question 4:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows: Based on weather forecasts, Liberty was not aware of any heightened risk of wildfires on November 17, 2020. As explained in *Liberty-03: Prudence of Operations*, Part VI.B.2, the National Weather Service (NWS) issued a High Wind Warning for November 17, 2020 but did not issue a Red Flag Warning and its briefings in the days leading up to November 17, 2020 did not indicate any heightened wildfire threat. *See* Liberty-03 at 40. Likewise, the forecast Fire Potential Index for the Topaz zone ranged from "Low" to "Moderate," meaning there was no anticipated elevated fire threat conditions. *See* Liberty-03 at 34-35 and the attachment *FPI Forecasts.pdf*.

Question 5

Please provide the information in the table below regarding how many Liberty-owned weather stations Liberty has in its service territory, both on November 17, 2020 and at the current time, separated by High Fire-Threat District (HFTD) tier.
Number of weather stations in Liberty's service territory

Date	Non HFTD	HFTD Tier 2	HFTD Tier 3
November 17, 2020			
July 31, 2025			

Response to Question 5:
Number of weather stations in Liberty's service territory

Date	Non HFTD	HFTD Tier 2	HFTD Tier 3
November 17, 2020	3	25	1
July 31, 2025	5	33	1

Question 6
Regarding Liberty's weather station network:

a) As of November 17, 2020, how did Liberty determine how many weather stations it should install and where to place them?
b) Provide documentation from 2020 showing Liberty's weather station siting criteria.
c) Have Liberty's standards for determining how many weather stations to install and where to place them changed between November 17, 2020 and the present? If so, describe the changes, including when those changes took place.

Response to Question 6:

a) As of November 17, 2020, Liberty had engaged a third-party expert consultant (Western Weather Group) to support installation of Liberty-owned weather stations, including determining the number of weather stations to install and their locations. As Liberty has explained in its Wildfire Mitigation Plan, the priority locations were chosen based on several factors, including existing weather stations providing publicly available data, gaps within Liberty's service area where a weather station would be beneficial, and the potential wildfire impact and prevailing weather trends in an area.
b) Please refer to Liberty's response to subpart (a).
c) No.

Question 7
In the Application, Exhibit Liberty-03, page 35, Liberty states:
Liberty installed ten weather stations in 2019 and an additional 19 weather stations in 2020. Enhanced collection of weather data provided valuable inputs and improved accuracy for Liberty's PSPS and FPI tools and helped Liberty plan for operations during extreme weather events.

a) Describe how Liberty used its weather station data as inputs for its PSPS operations as of November 17, 2020?
b) Describe how Liberty used its weather station data as inputs for its FPI tool as of November 17, 2020?

Response to Question 7:

a) As explained in *Liberty-03: Prudence of Operations*, Part VI.B.1, data from Liberty's weather stations provided inputs to the forecast models behind the PSPS predictive tool, developed with the assistance of a third-party fire science and risk modeling consultant. This weather station data also helped to validate and improve the accuracy of forecast models behind the PSPS predictive tool. In the event of a PSPS activation, live weather station observations, along with data from field observers, would guide the ultimate decision to de-energize.
b) Liberty used weather station data including temperature, humidity, wind speed, and fuel moisture readings as inputs to its FPI tool, which classified fire threat levels and supported situational awareness.

Question 8

In the Application, Exhibit Liberty-03, page 34, Liberty states:
Liberty's FPI tool provided a seven-day forecast for 11 different geographic zones across Liberty's service area, ranking fire risk conditions on a five-category scale: Low, Moderate, High, Very High, and Extreme.

a) Explain how Liberty ensured the accuracy and validity of its Fire Potential Index (FPI) tool.
b) How often did Liberty perform validation of its FPI tool?
c) Provide a copy of Liberty's seven-day forecast from each of the following days: November 11, 2020; November 12, 2020; November 13, 2020; November 14, 2020; November 15, 2020; November 16, 2020; and November 17, 2020.
d) As of November 2020, did Liberty have a method or protocol to calculate FPI in real-time?
e) If the answer to part (d) is yes, explain what real-time inputs were used and how Liberty measured those inputs.
f) If the answer to part (d) is no, explain why not.

Response to Question 8:

a) As explained in *Liberty-03: Prudence of Operations*, Liberty developed and implemented an FPI tool, with the help of a third-party fire science and risk modeling consultant. The FPI tool used multiple inputs such as fuel moisture, ambient temperature, relative humidity, and other data points, which were then translated into a scale of fire threat levels. Liberty's fire science and risk modeling consultant validated its FPI tool by comparing forecasted conditions with real-time weather station observations and archived forecast data.
b) Validation was performed on an ongoing basis through monitoring and comparison of forecasted versus observed conditions.
c) Liberty understands this subpart to be referring to seven-day FPI forecasts described in *Liberty-03: Prudence of Operations*. Please refer to attachment *FPI Forecasts.pdf* for

forecasts beginning at 0000 hours on November 11, 2020 to 1800 hours on November 17, 2020, in six-hour intervals for each of the 11 geographic zones in Liberty's service area.

d) Liberty had a fire weather dashboard (https://tahoefireweather.com/) that displayed FPI values by zone that was updated daily.
e) Liberty used inputs measured by weather stations for temperature, relative humidity, wind speed, and fuel moisture as well as field fuel moisture sampling to calculate FPI.
f) N/A

Liberty Utilities Fire Potential Index Forecast for 11/11/20 - 11/17/20

Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

Liberty Utilities Energy Release Component Forecast for 11/11/20 - 11/17/20

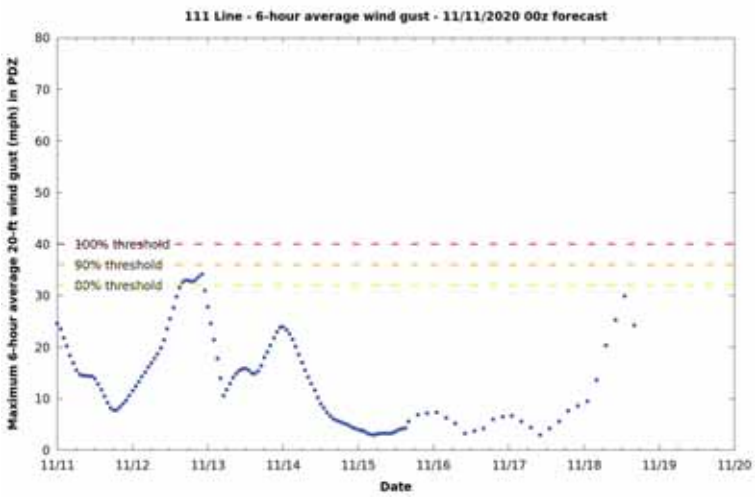
Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	59.0	46.0	38.0	34.0	32.0	30.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

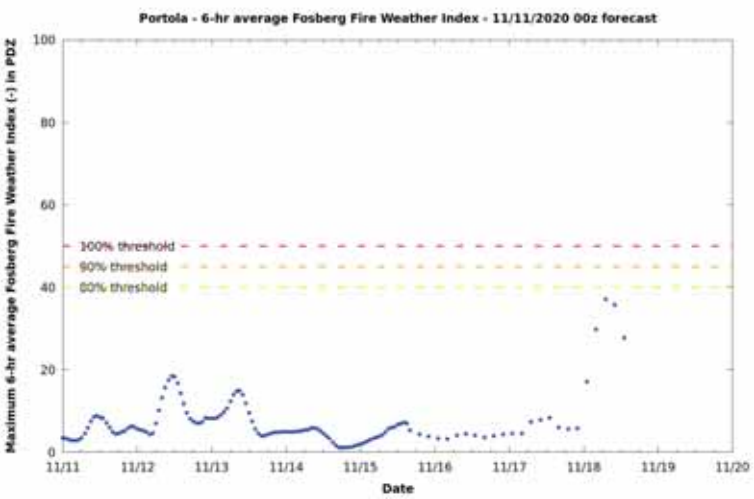
Liberty Utilities Fire Weather Summary Plots - 11/11/2020 00z forecast

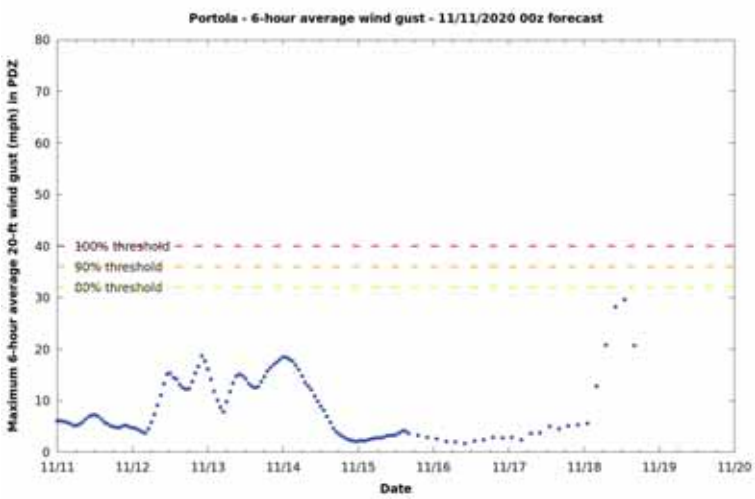
111 Line



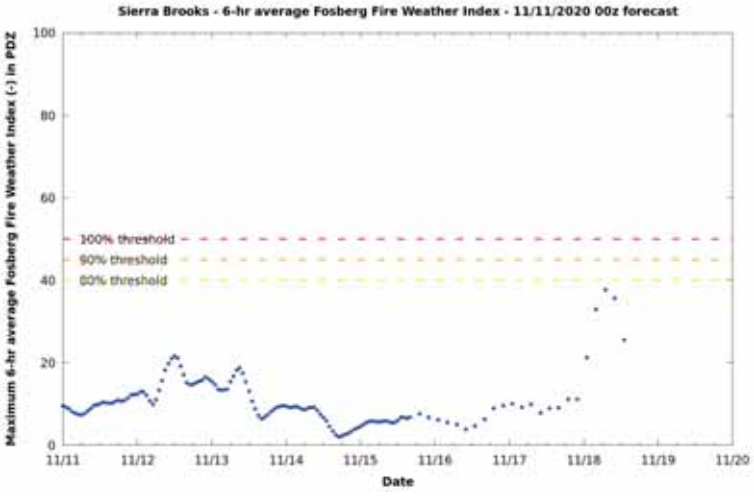


Portola



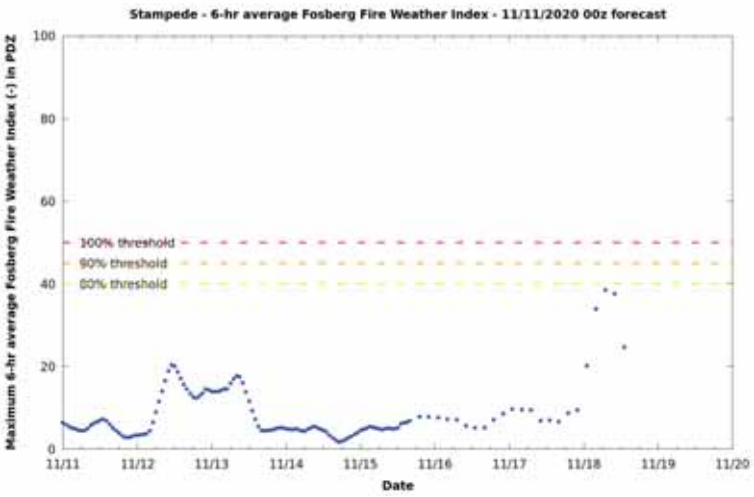


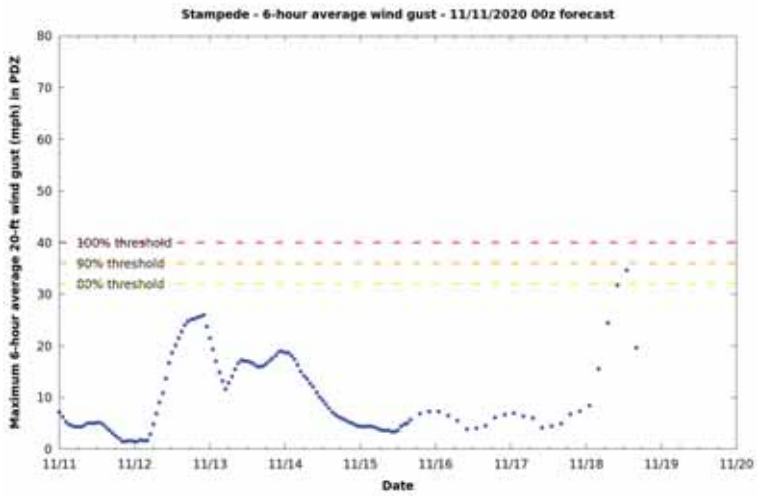
Sierra Brooks



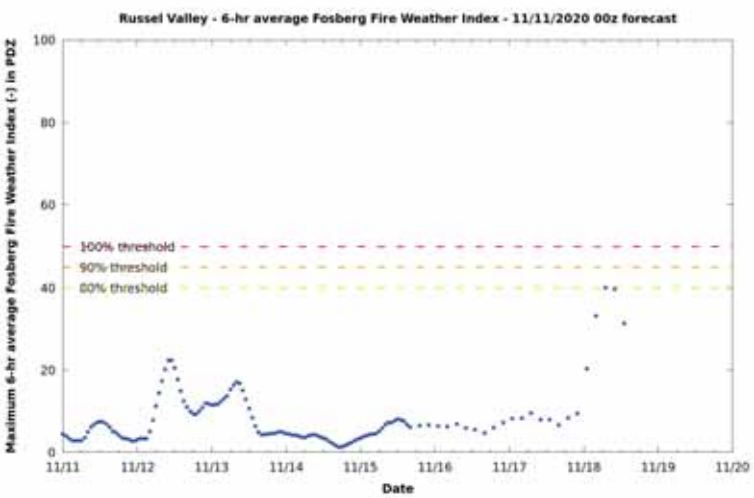


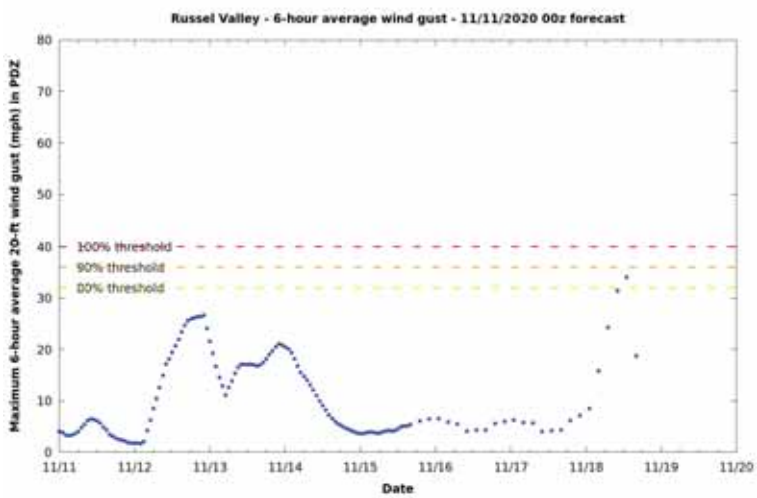
Stampede



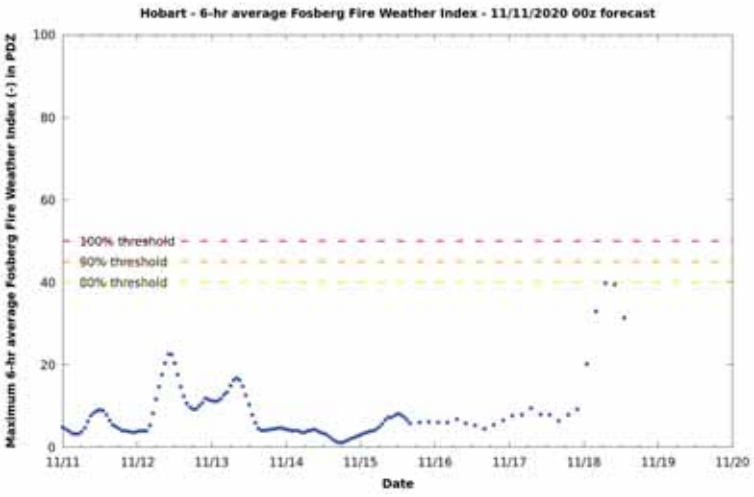


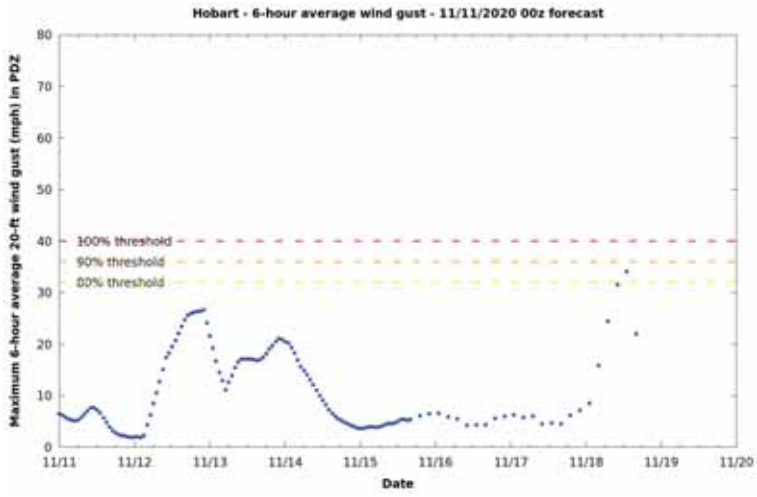
Russell Valley



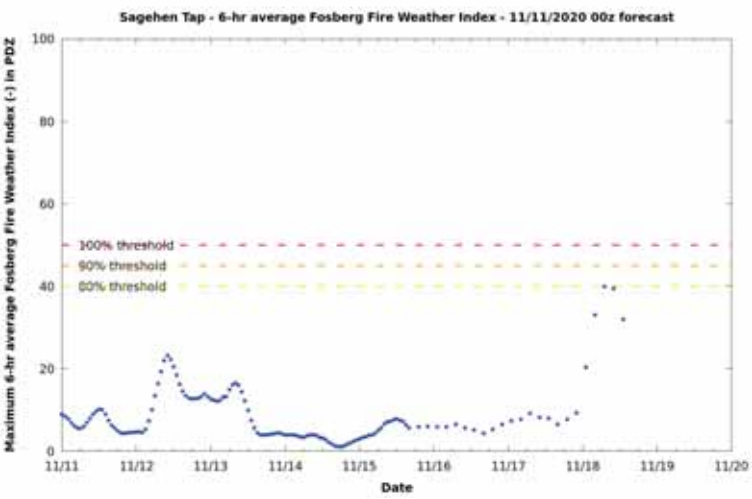


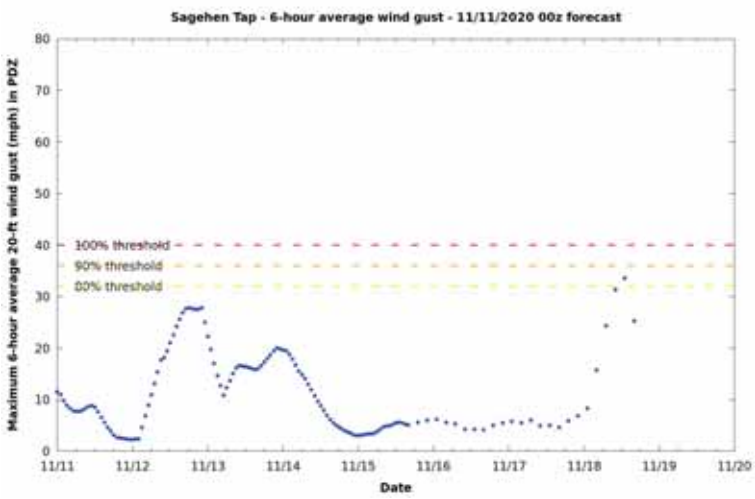
Hobart



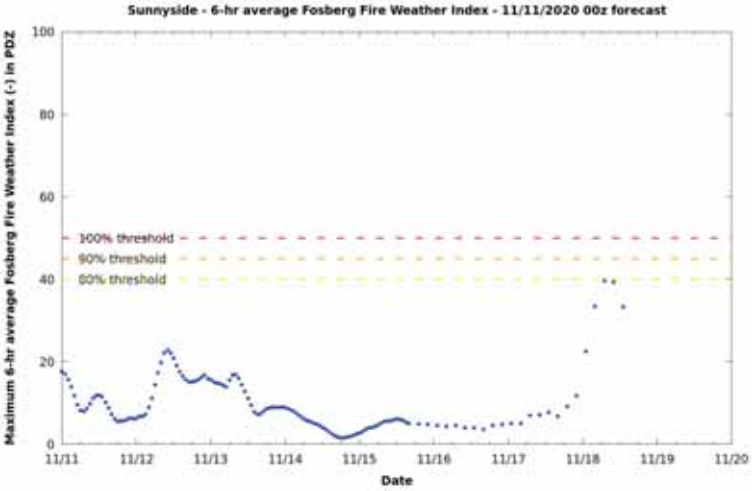


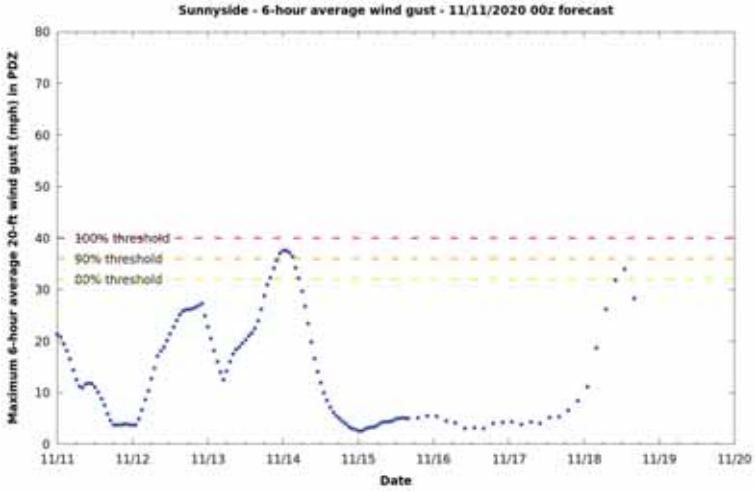
Sagehen tap



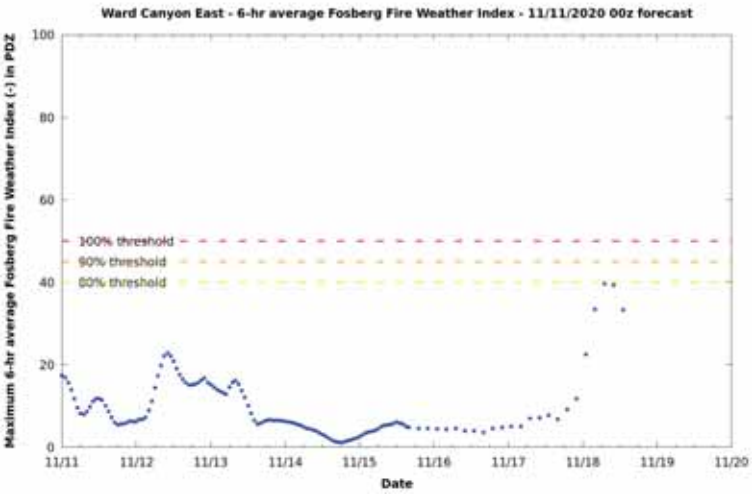


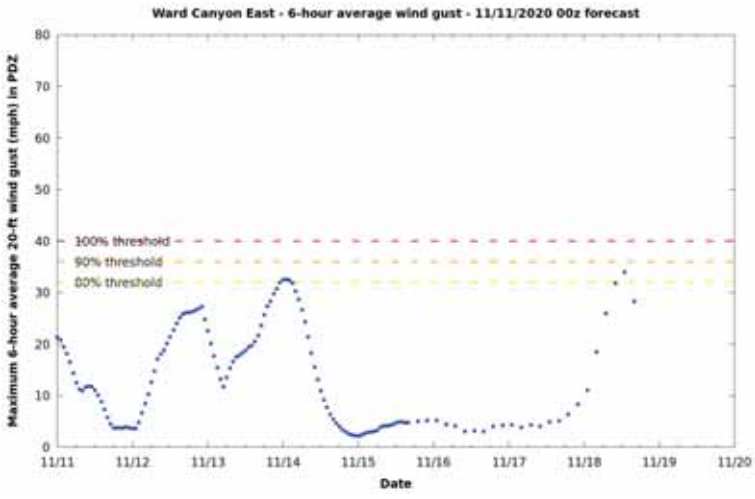
Sunnyside



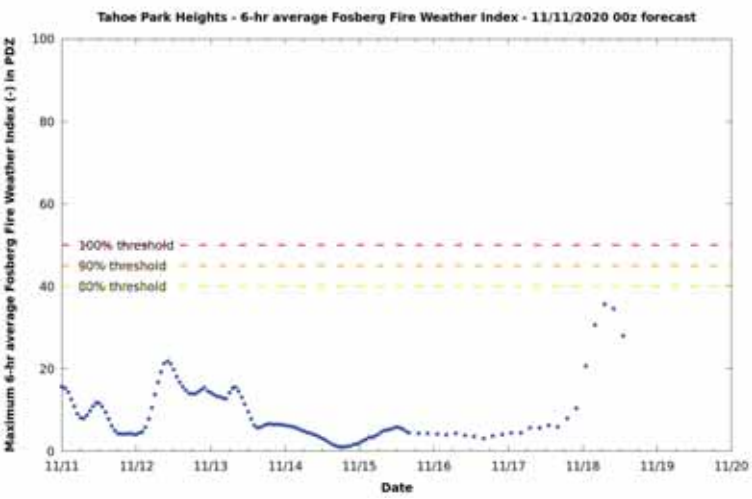


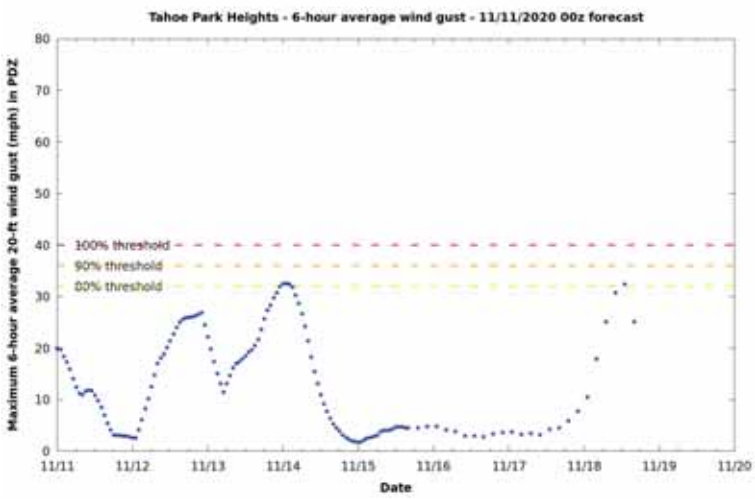
Ward Canyon East



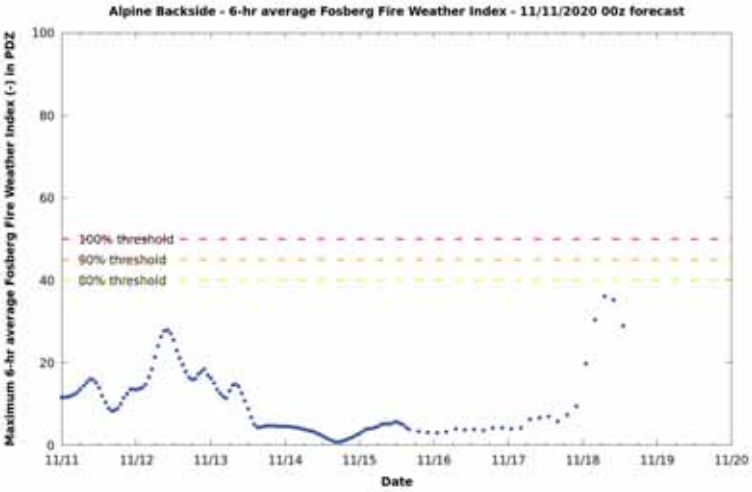


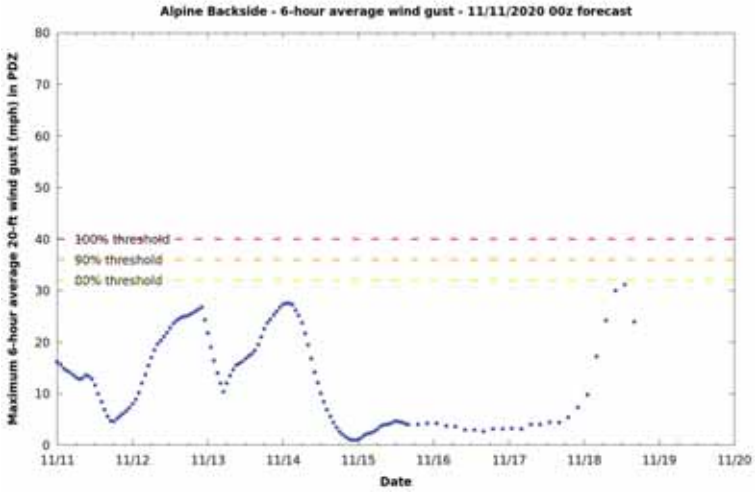
Tahoe Park Heights



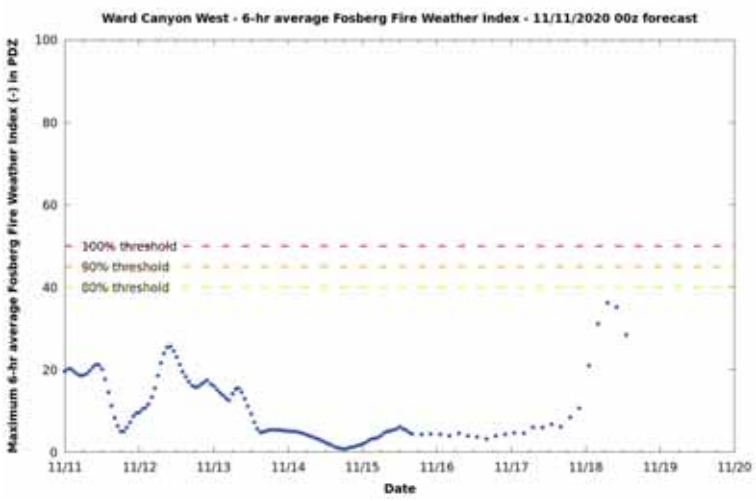


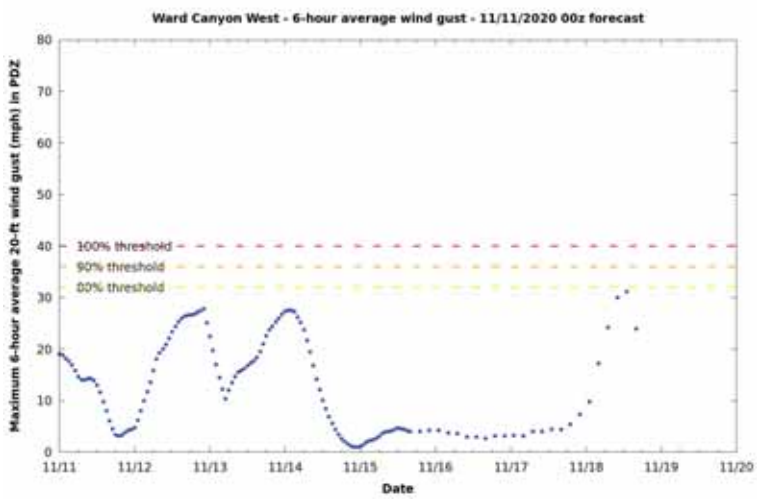
Alpine Backside



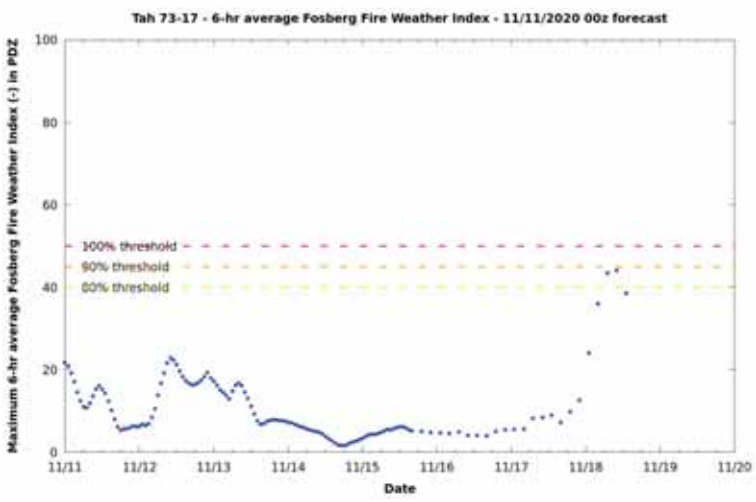


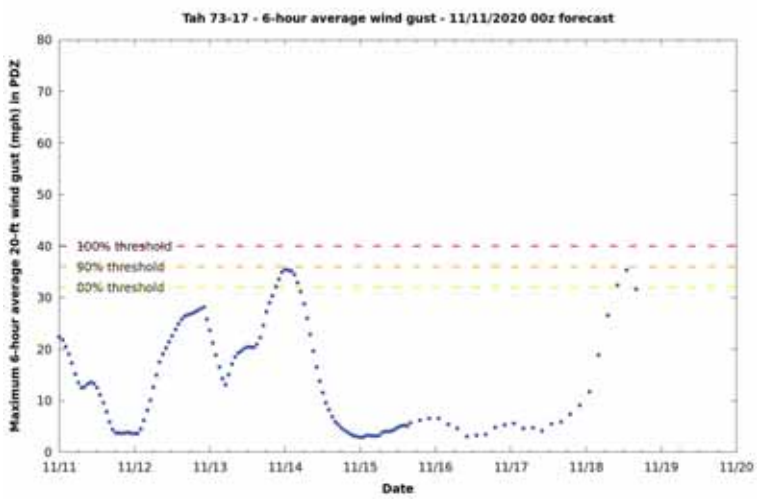
Ward Canyon West



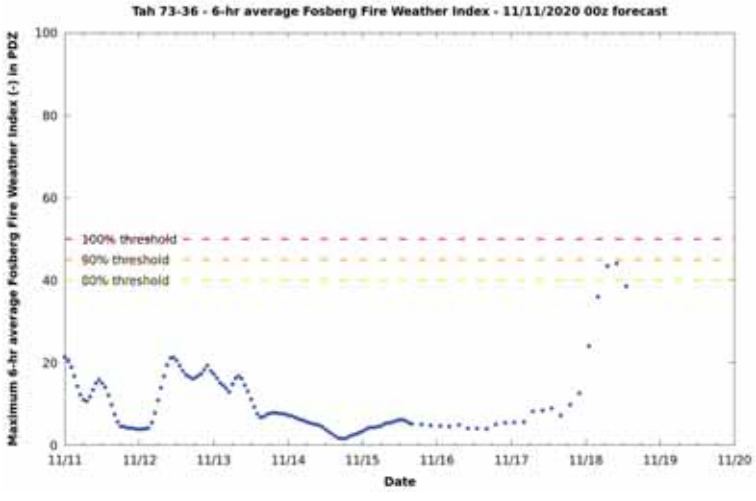


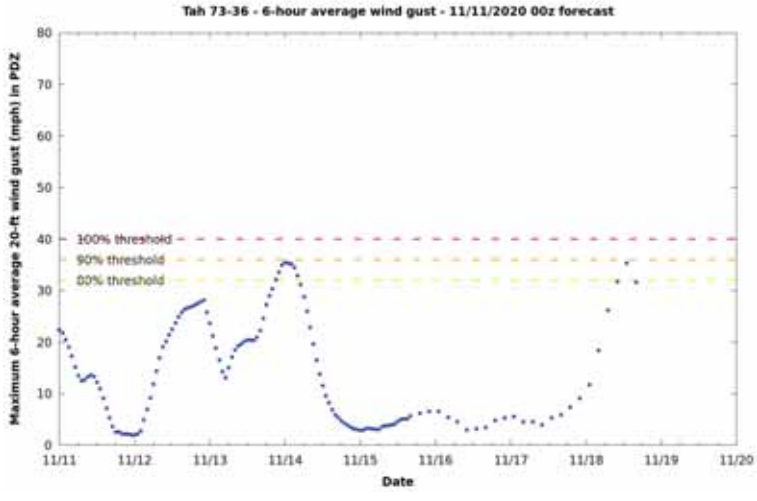
Tah 73-17



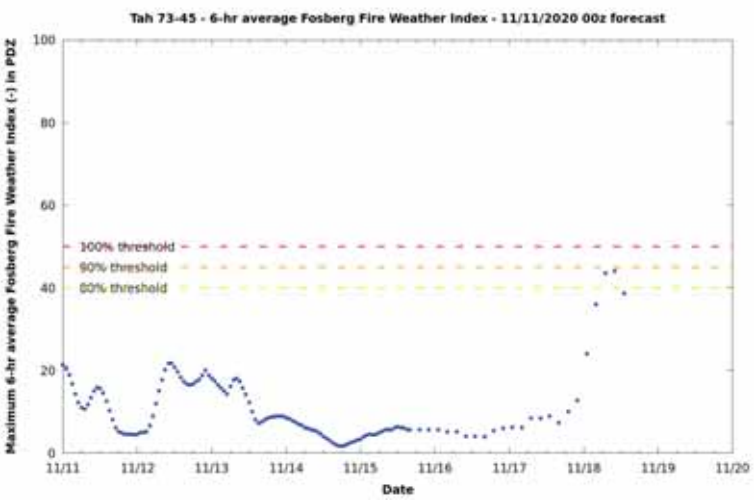


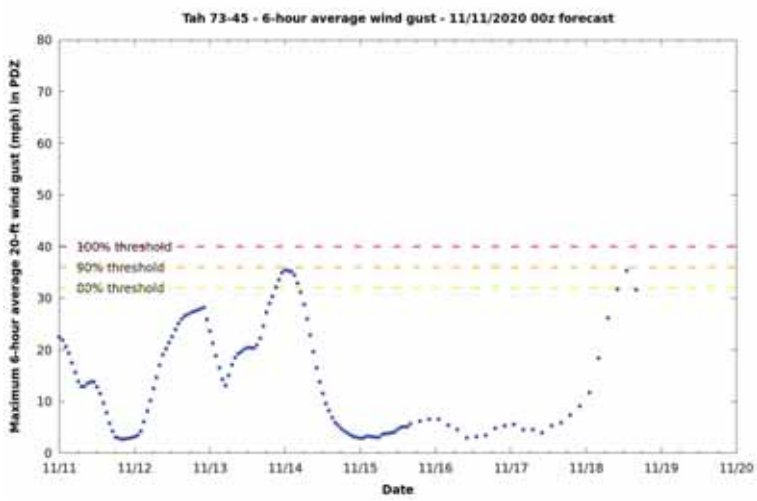
Tah 73-36



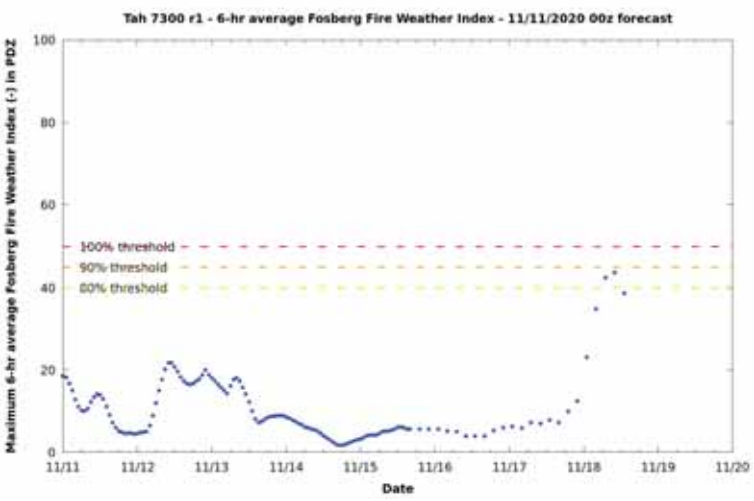


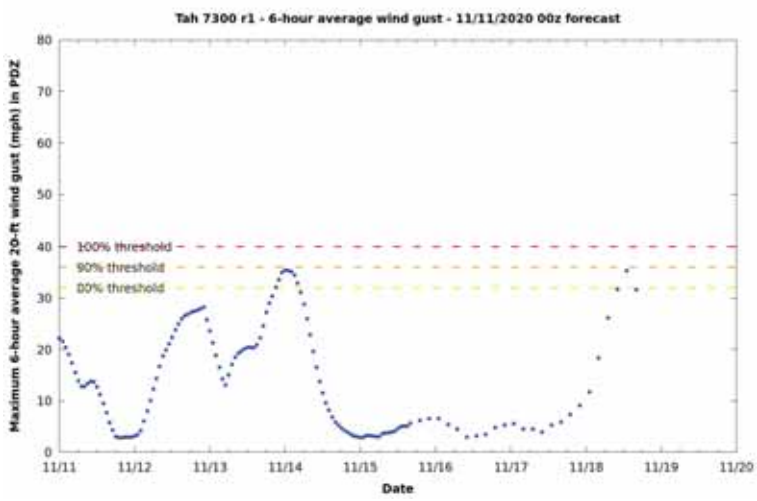
Tah 73-45



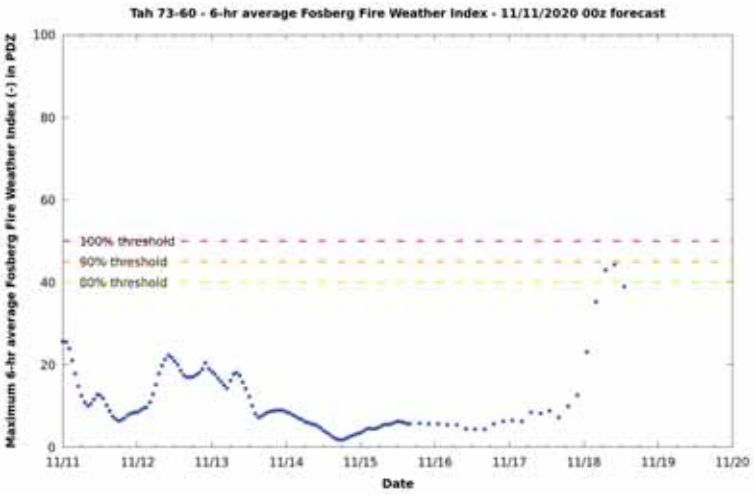


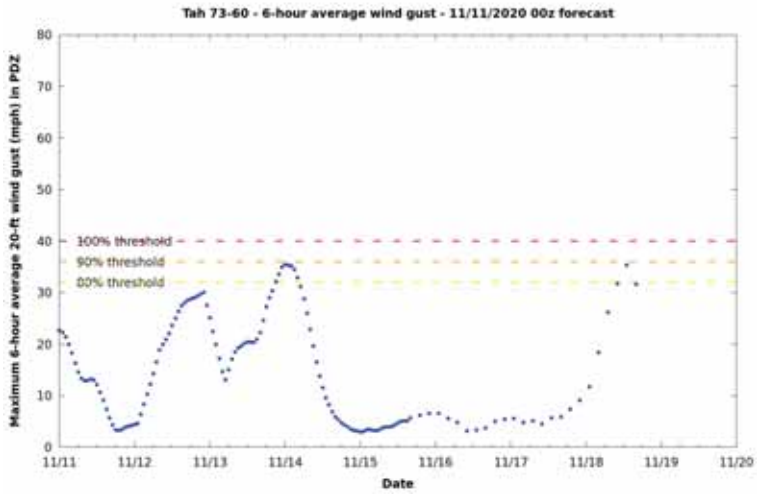
Tah 7300 r1



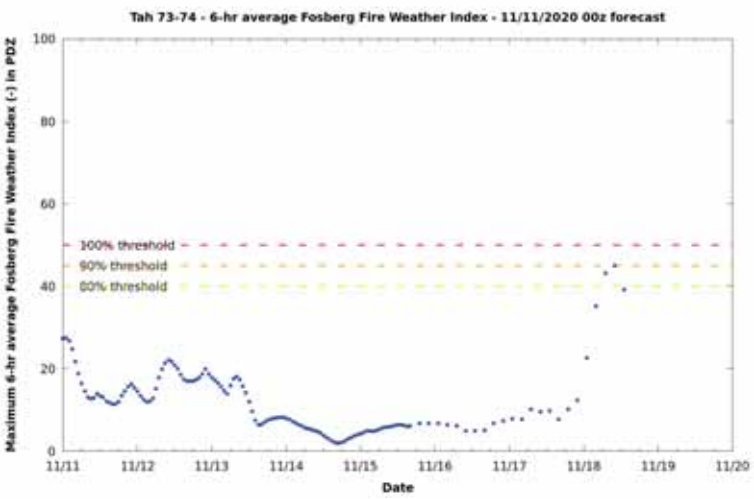


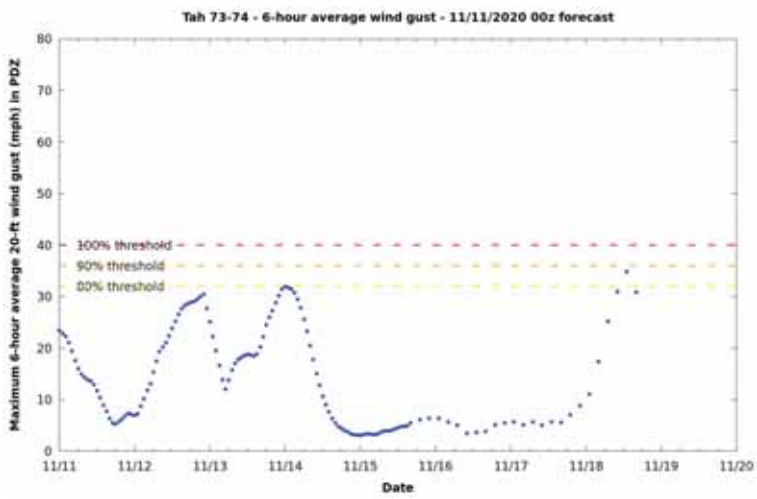
Tah 73-60



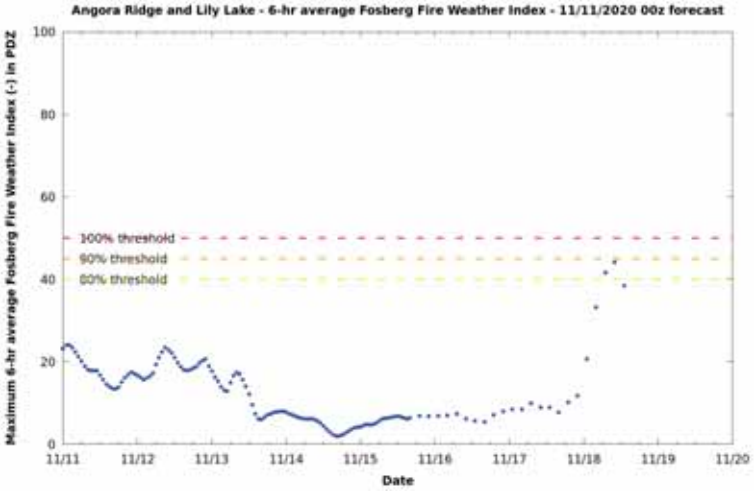


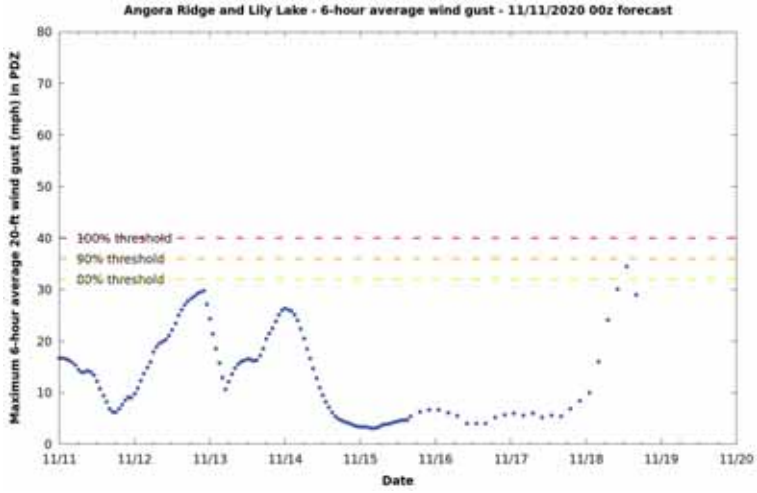
Tah 73-74



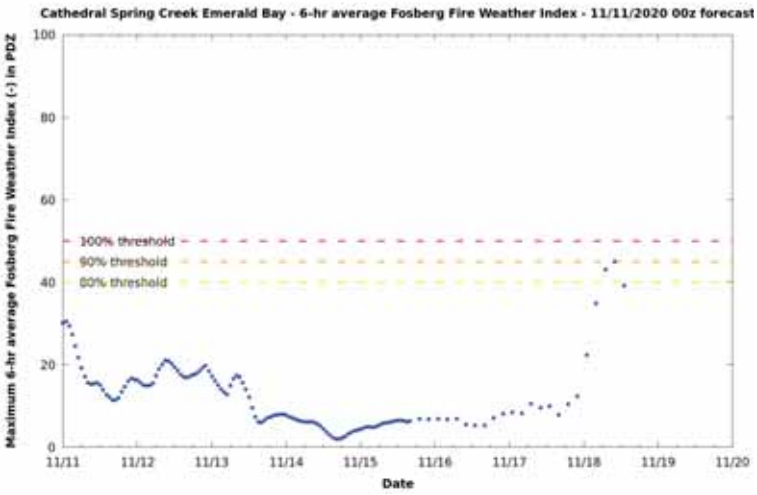


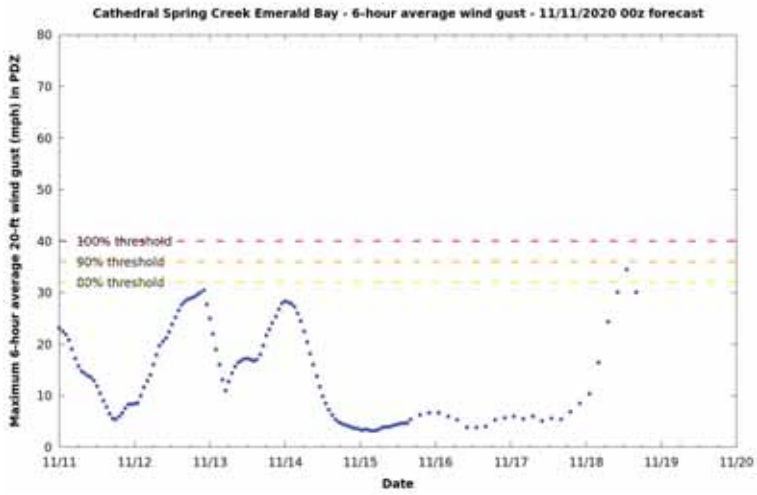
Angora Ridge and Lily Lake



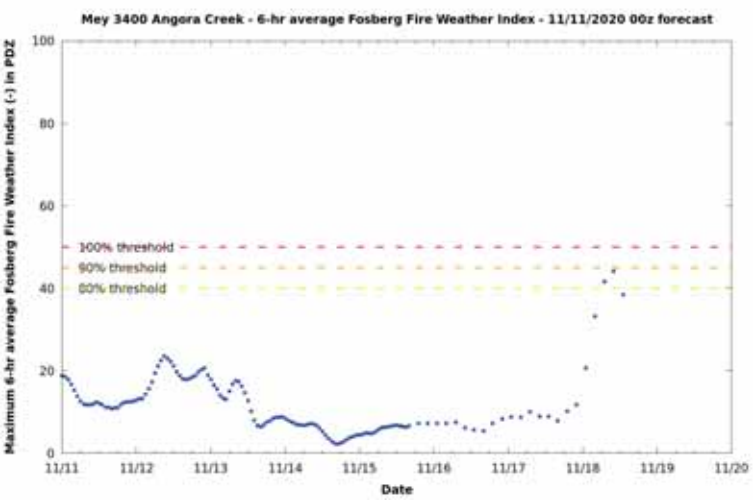


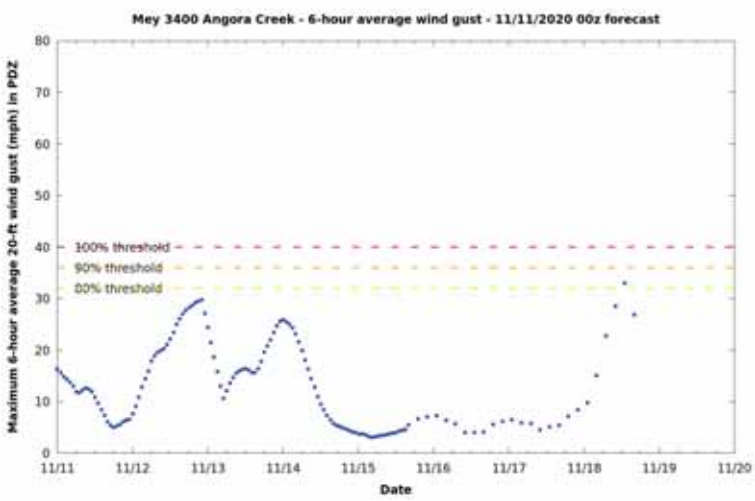
Cathedral Spring Creek Emerald Bay



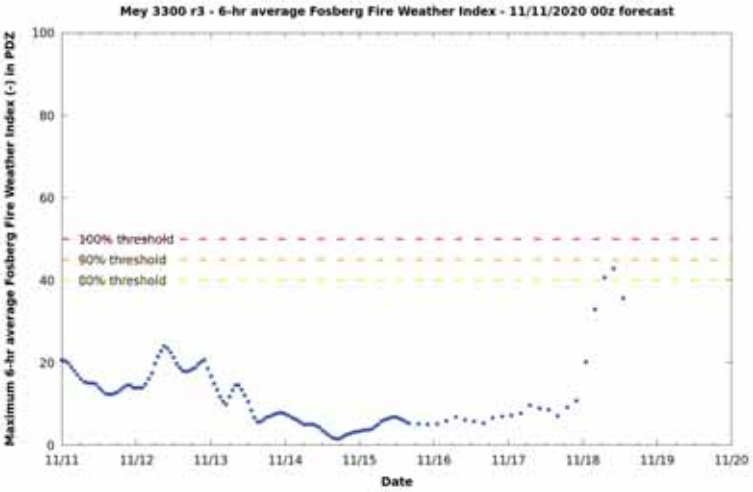


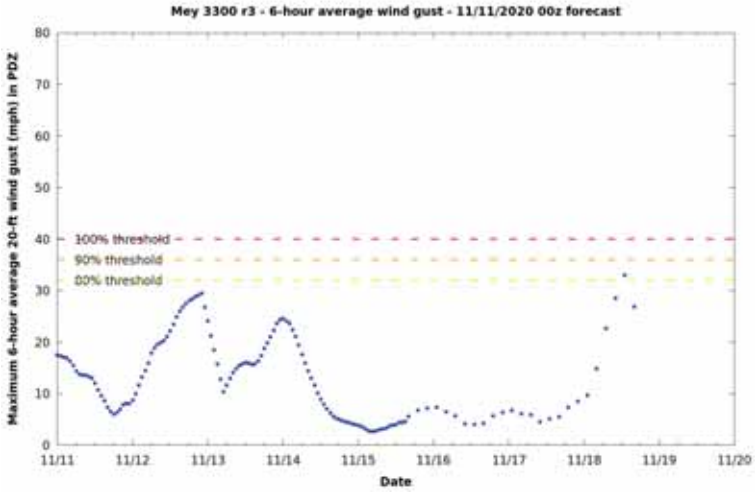
Mey 3400 Angora Creek



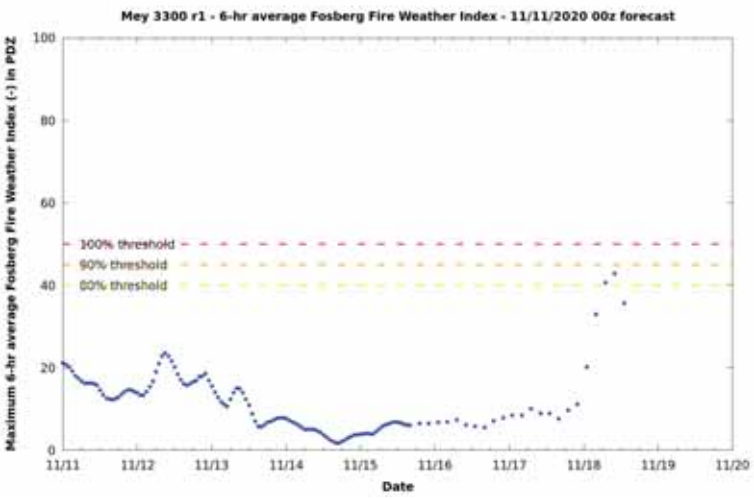


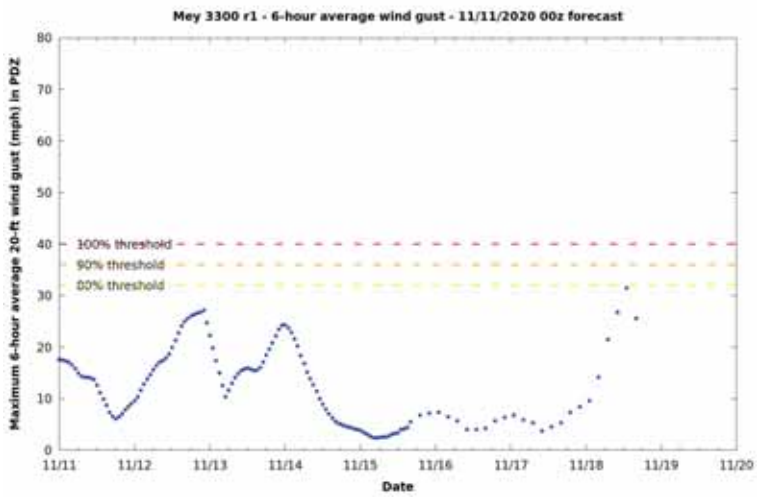
Mey 3300 r3



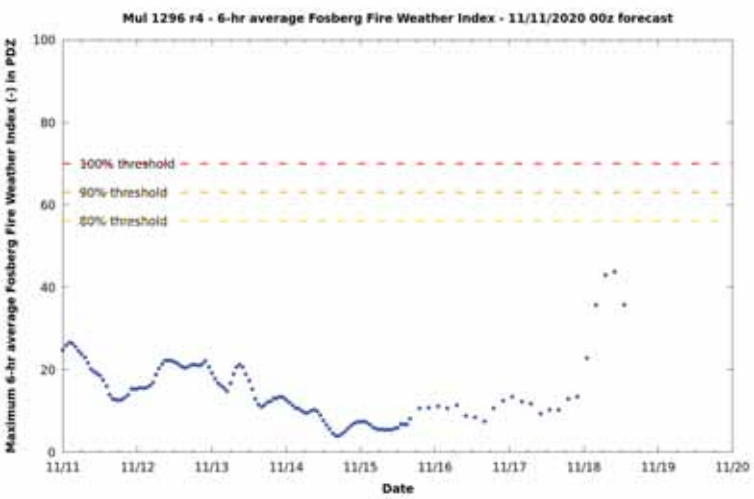


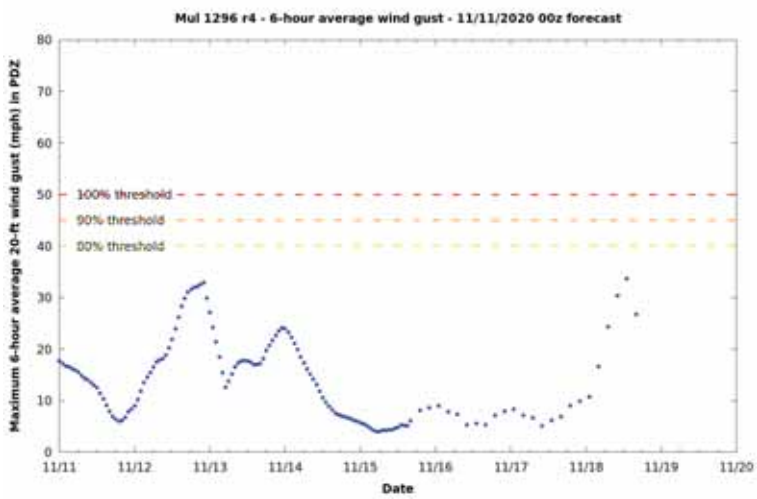
Mey 3300 r1



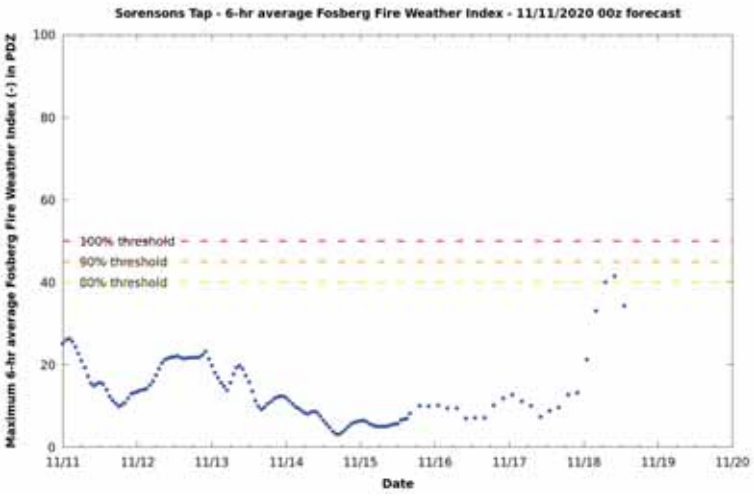


Mul 1296 r4



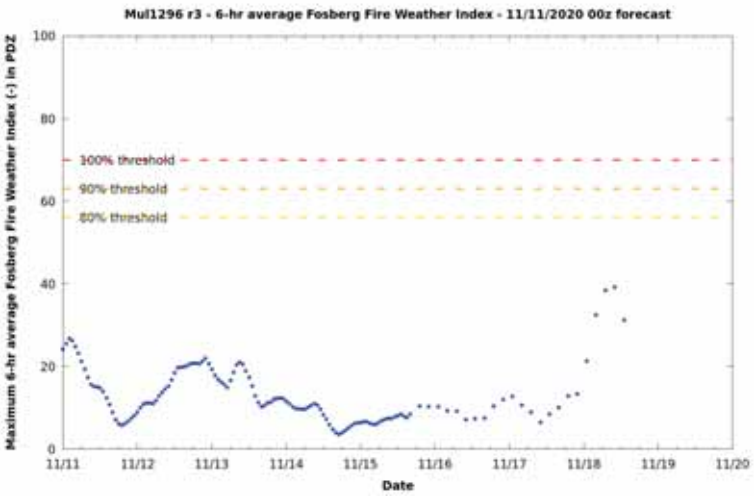


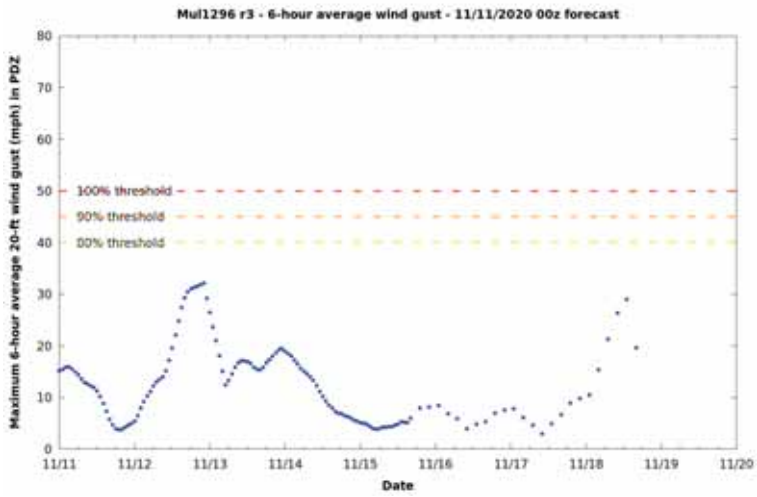
Sorensons Tap



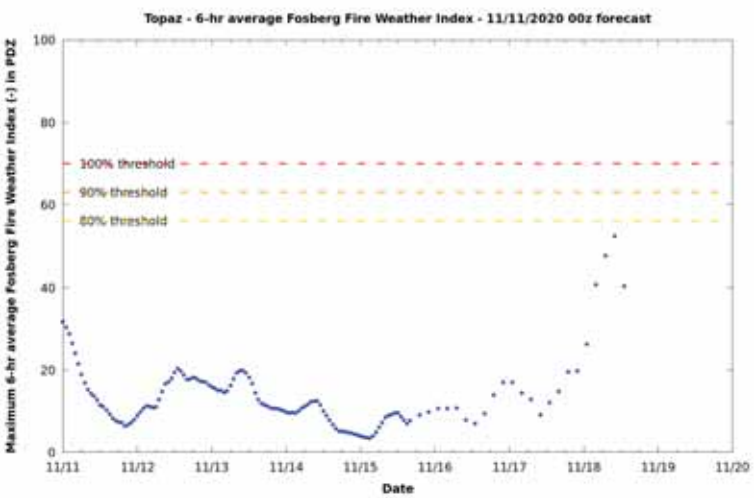


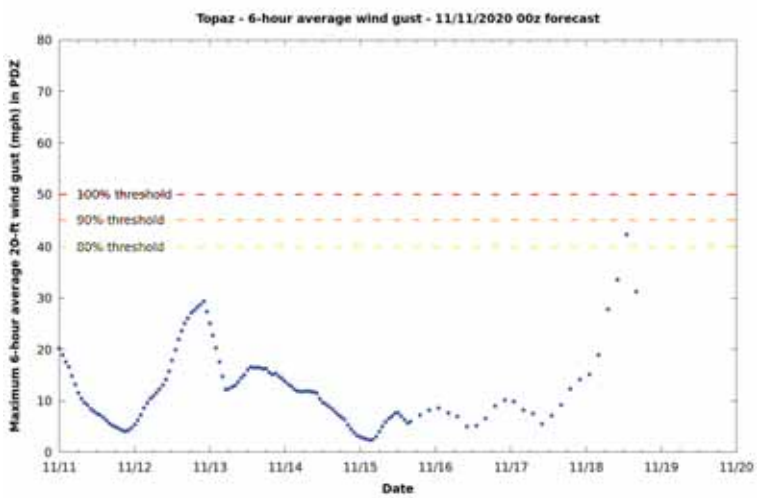
Mul 1296 r3



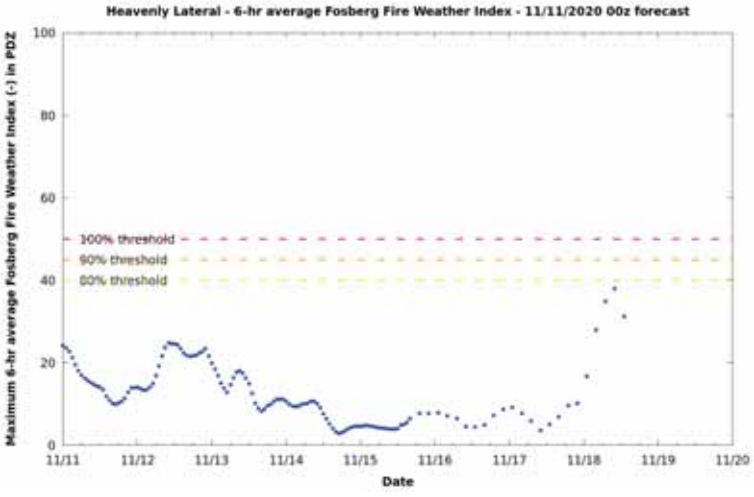


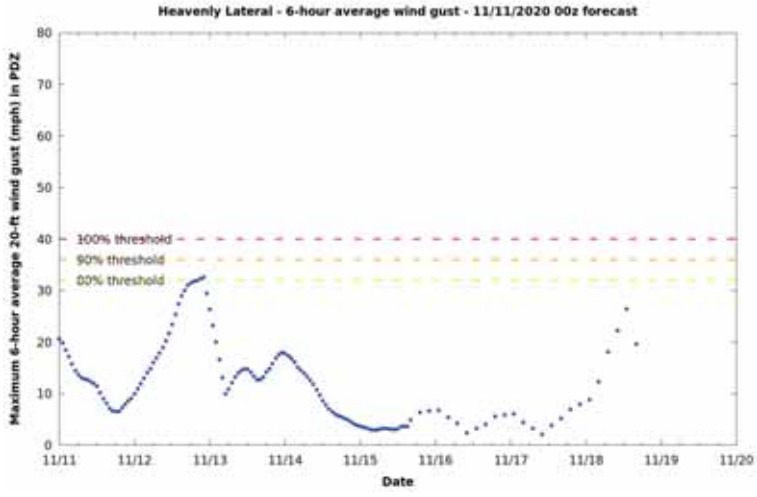
Topaz



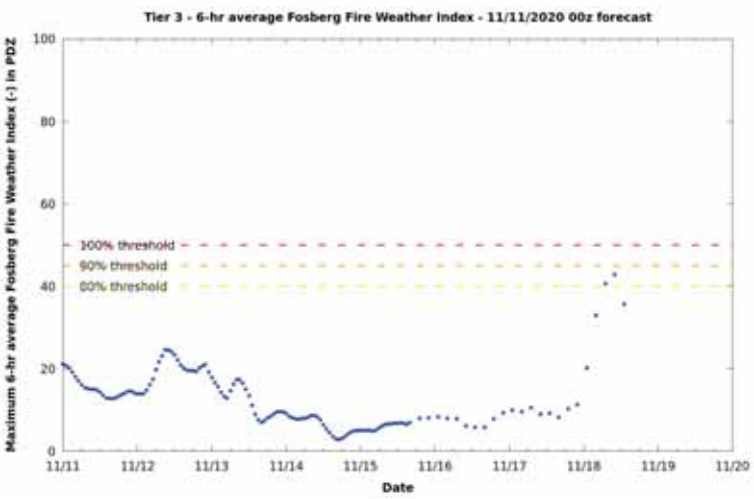


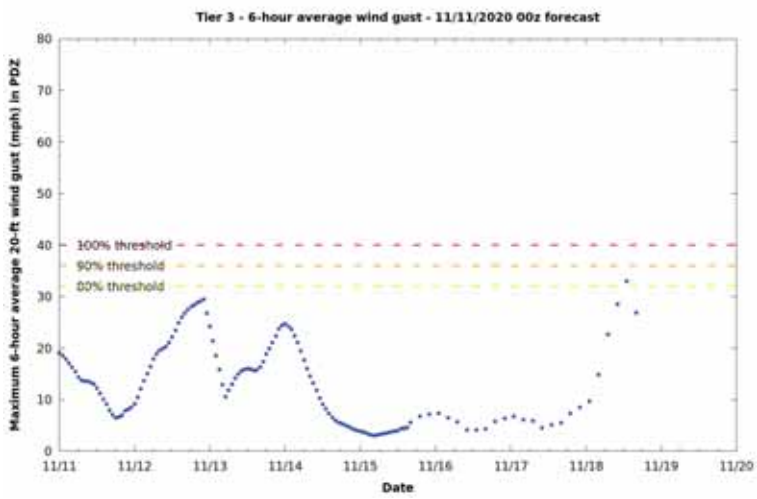
Heavenly Lateral



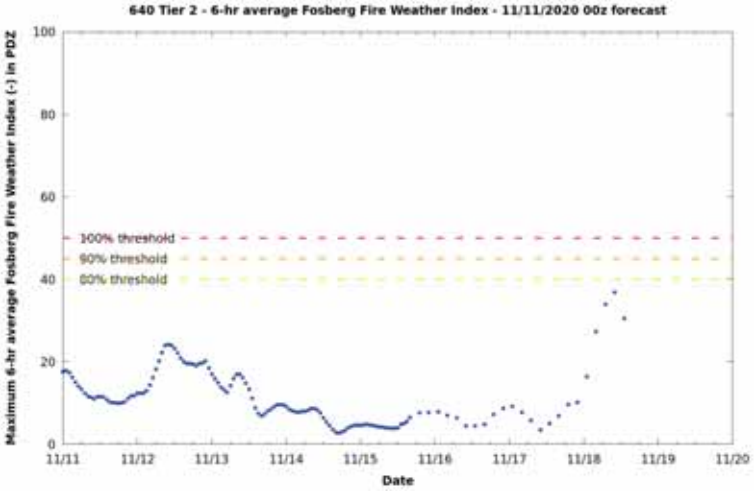


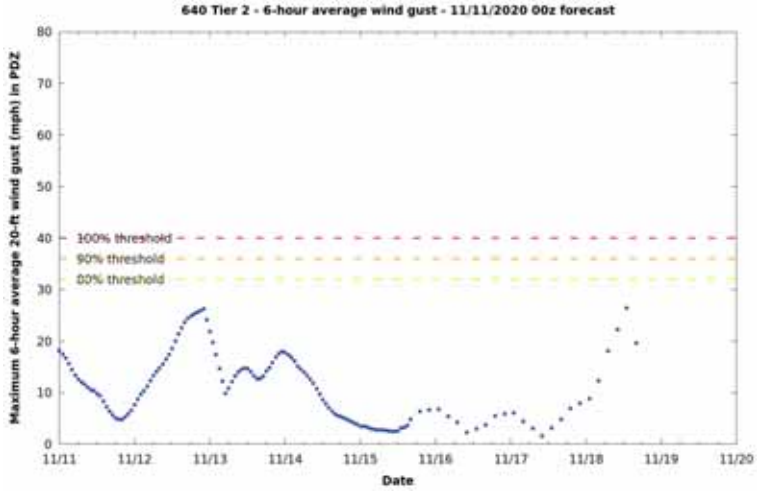
Tier 3



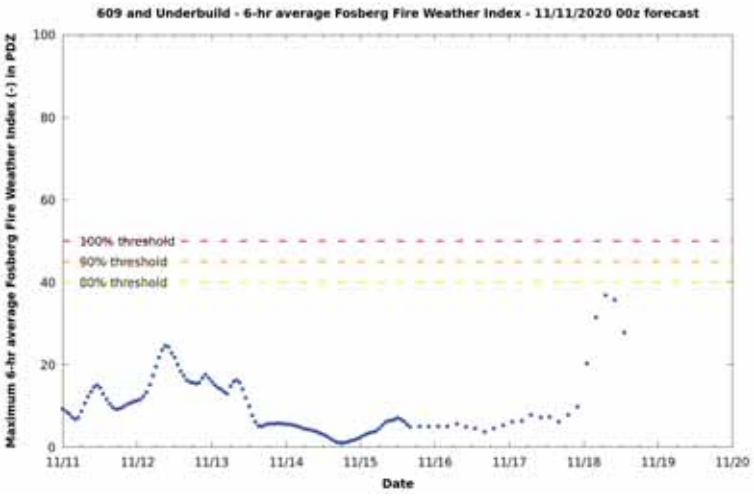


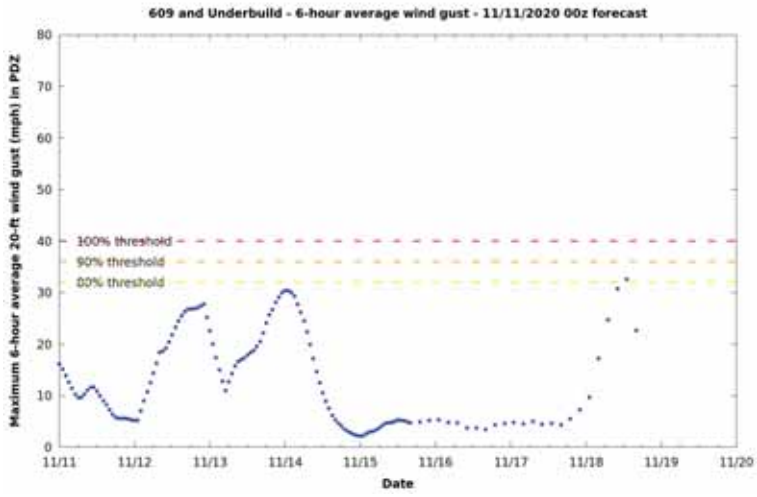
640 Tier 2



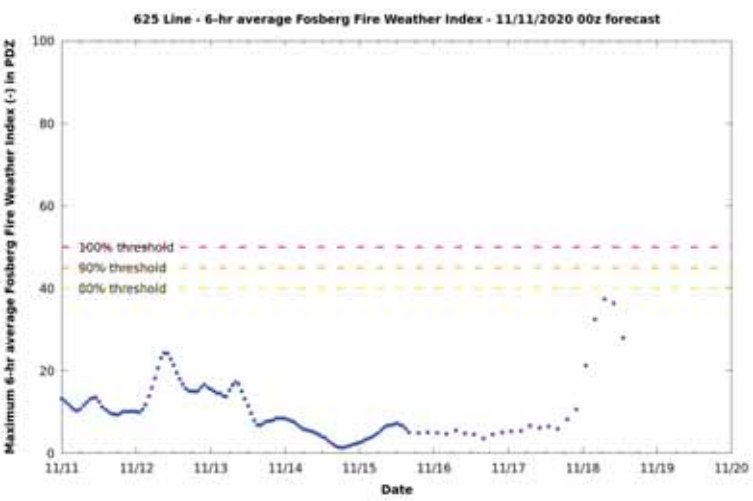


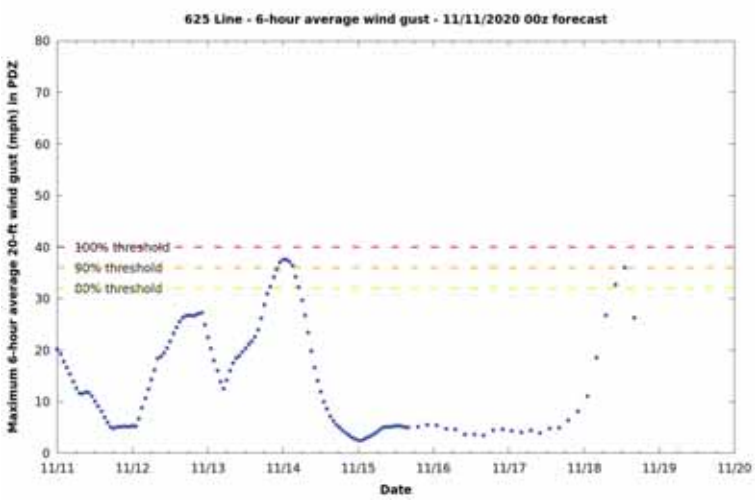
609 and Underbuild



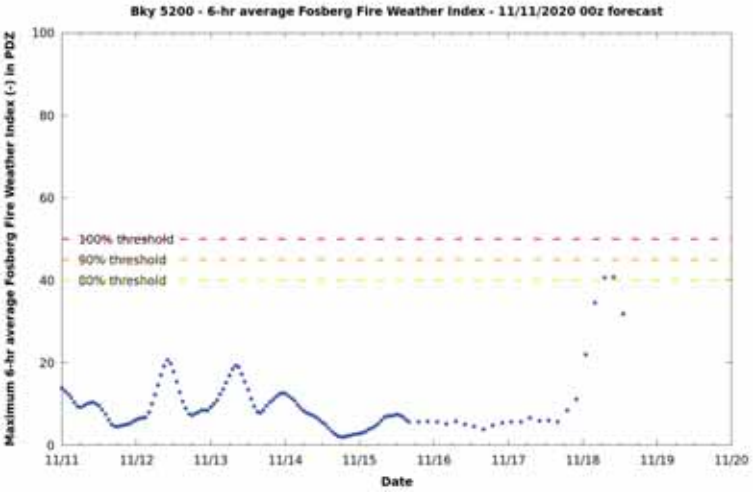


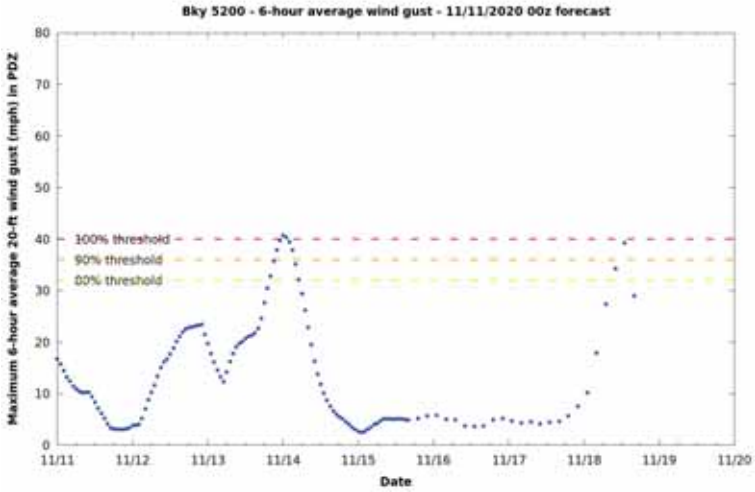
625 Line



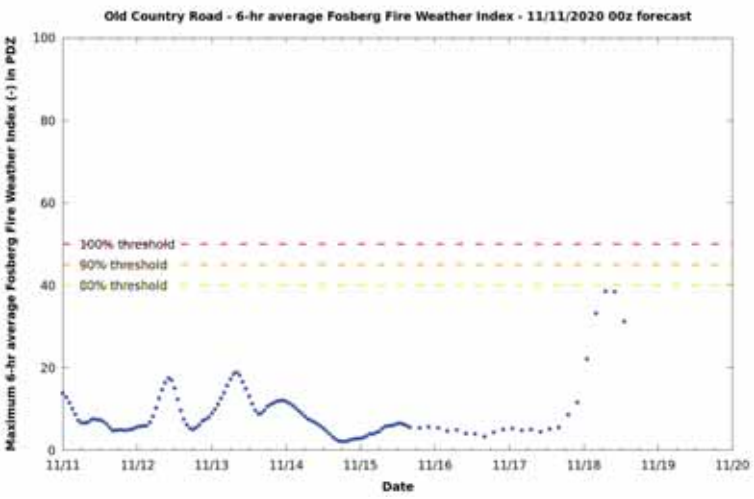


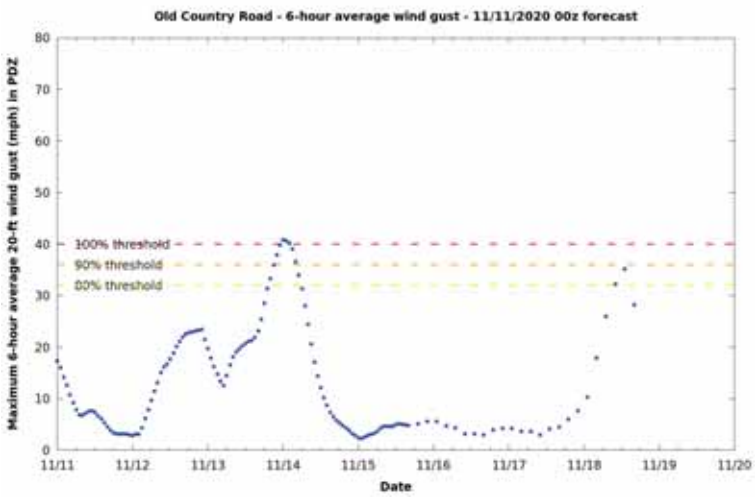
Bky 5200



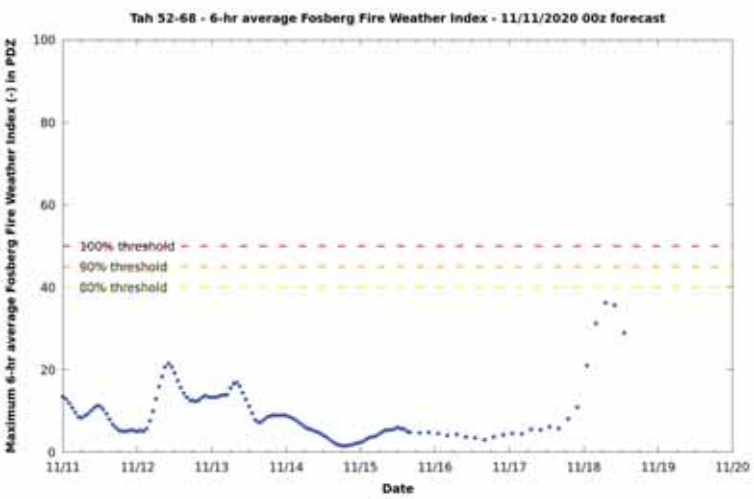


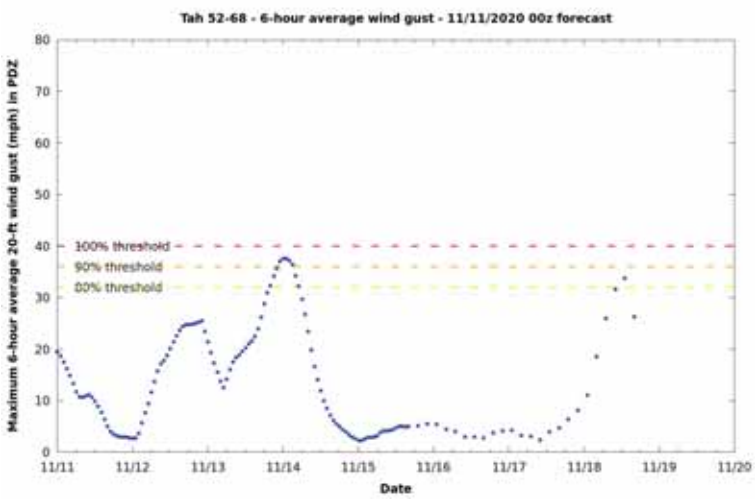
Old Country Road



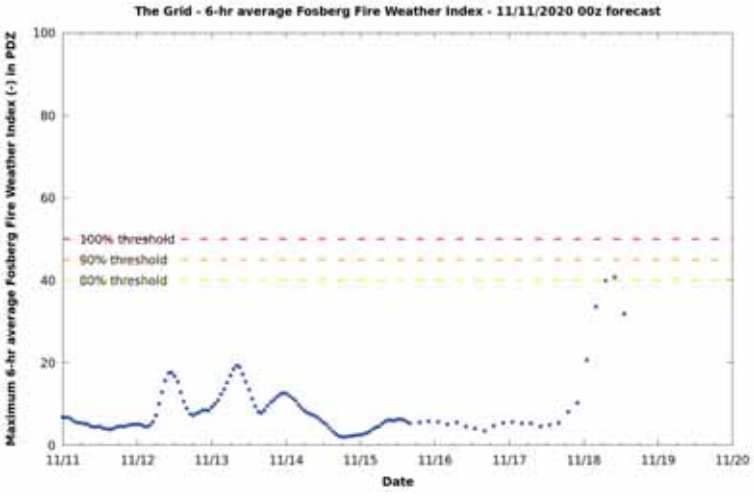


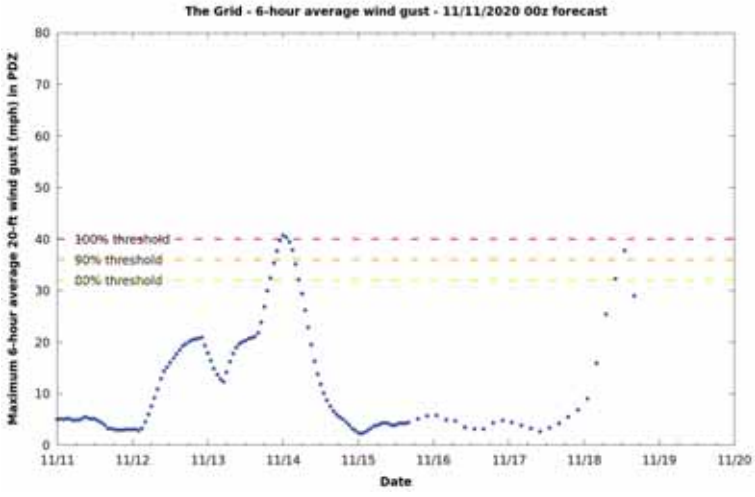
Tah 52-68



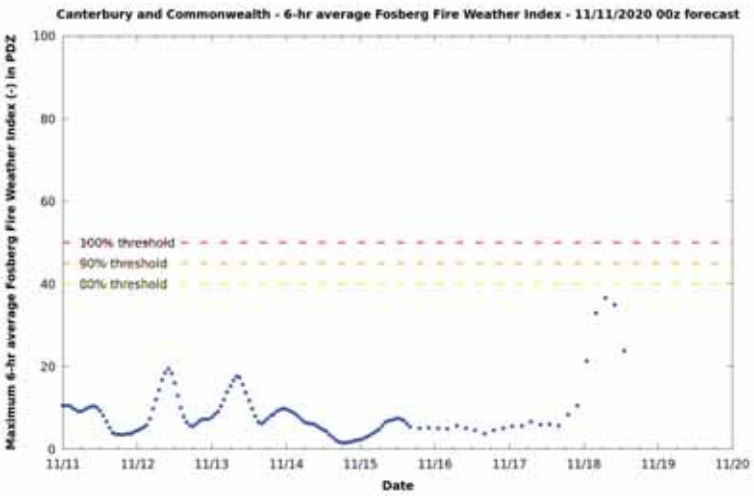


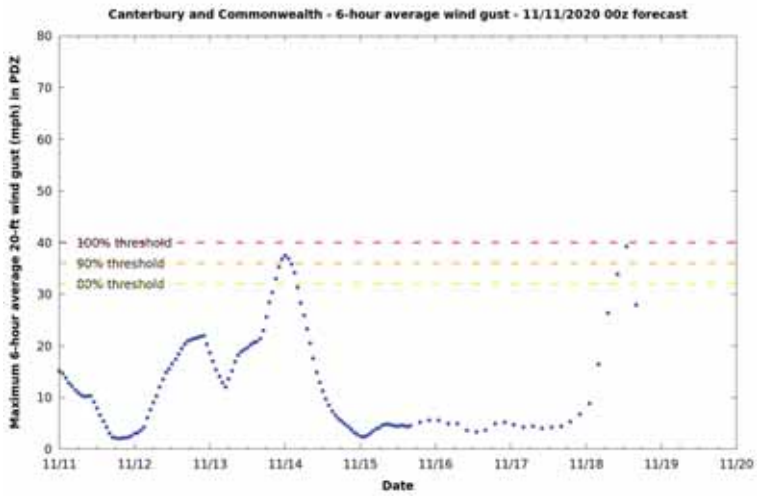
The Grid



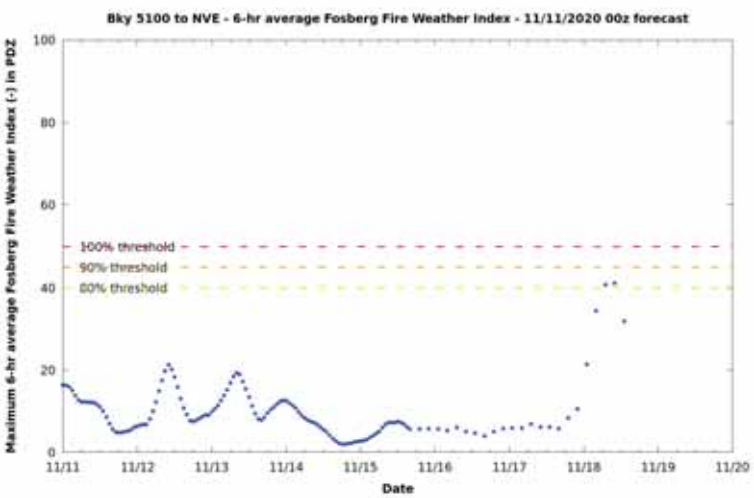


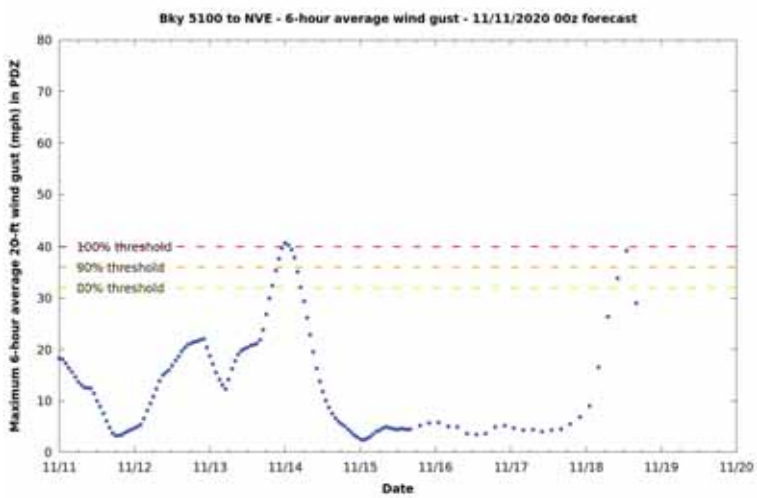
Canterbuy and Commonwealth



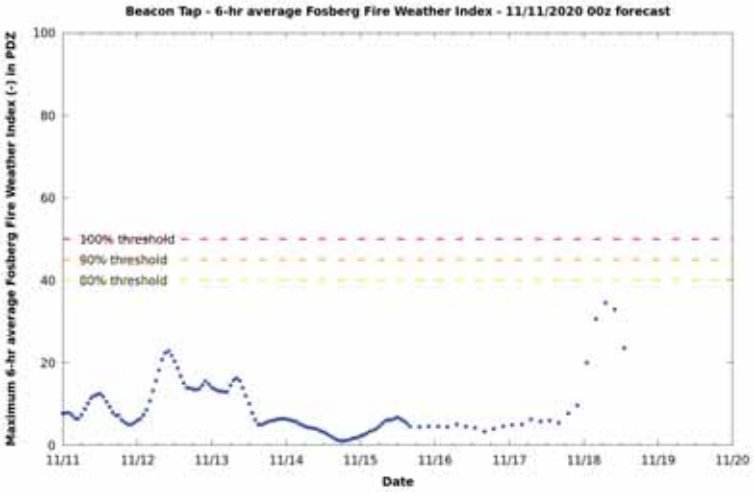


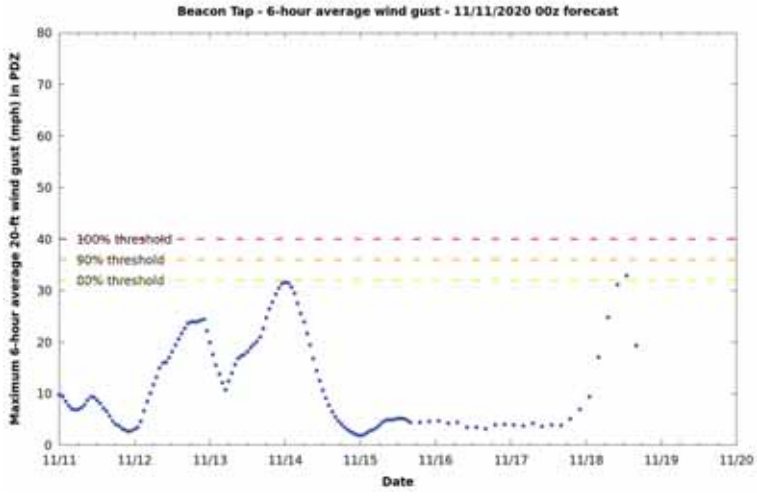
Bky 5100 to NVE



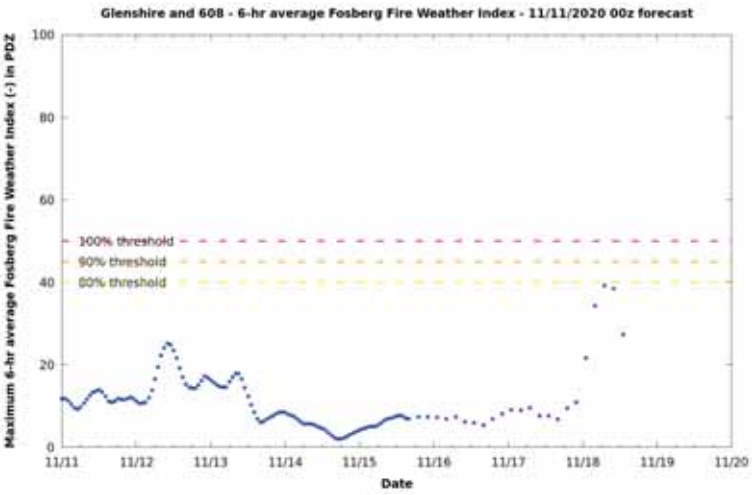


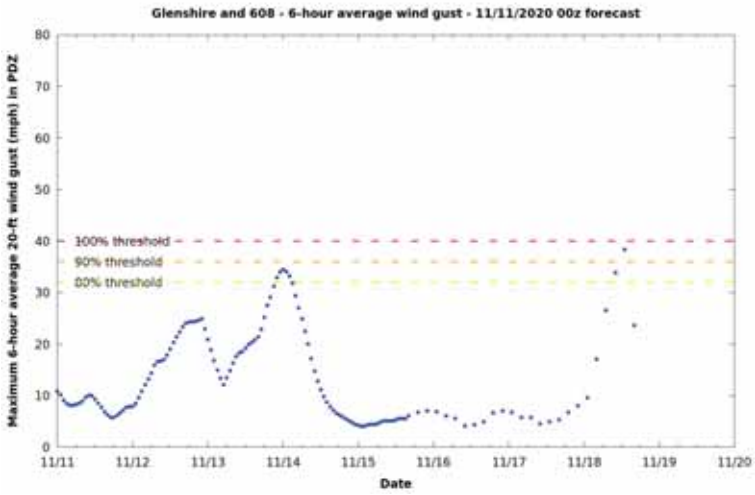
Beacon Tap



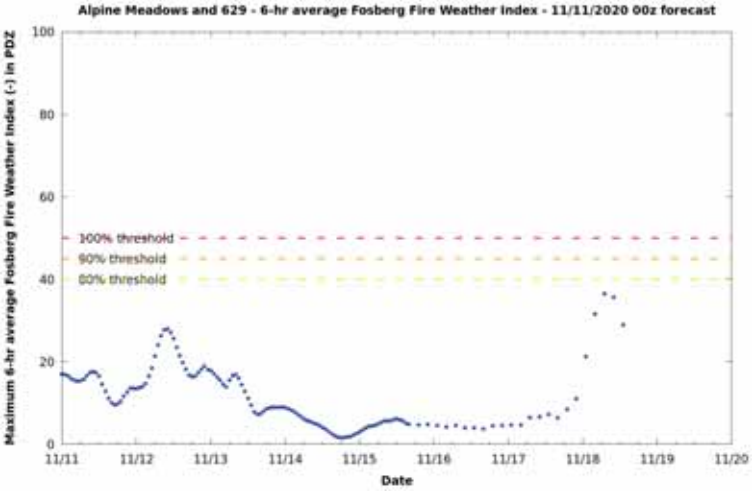


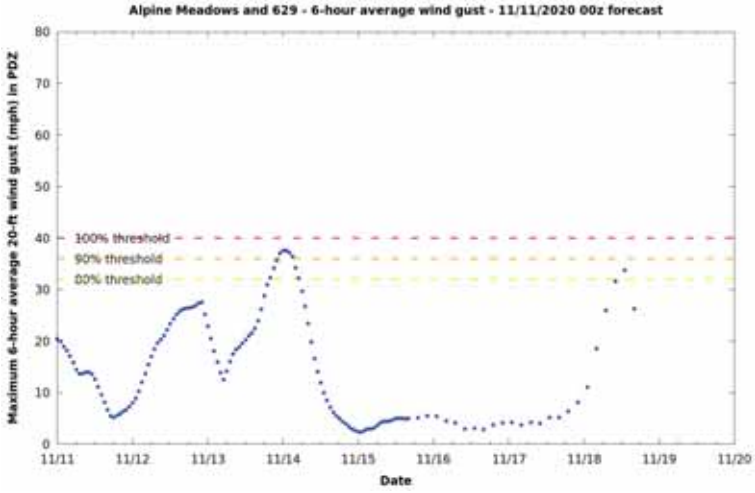
Glenshire and 608



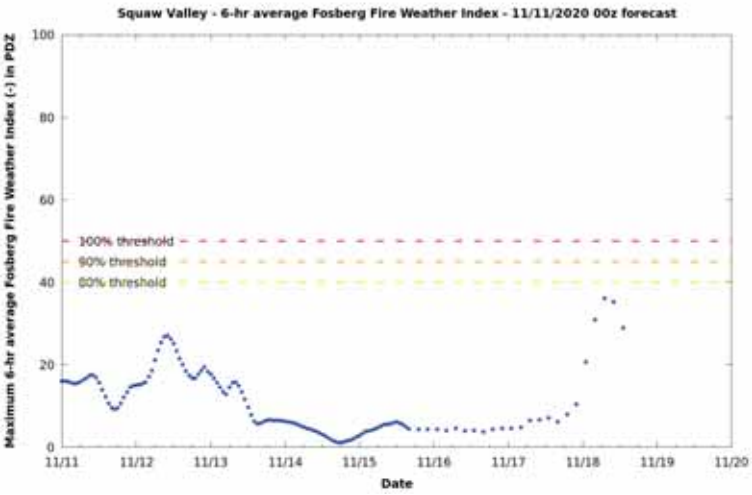


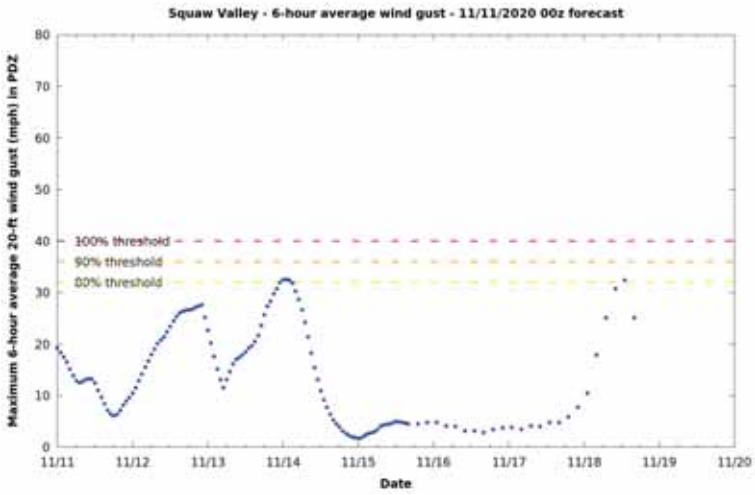
Alpine Meadows and 629



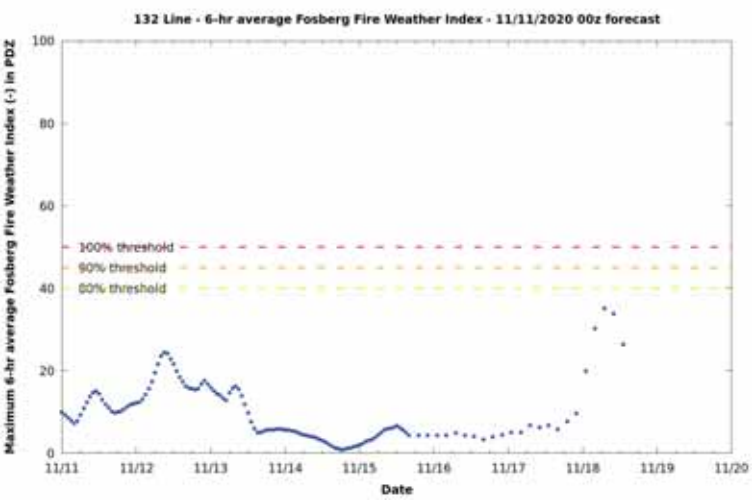


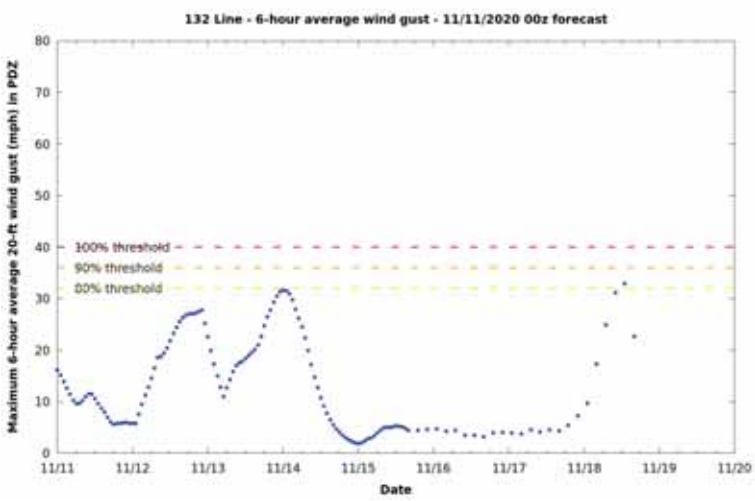
Squaw Valley



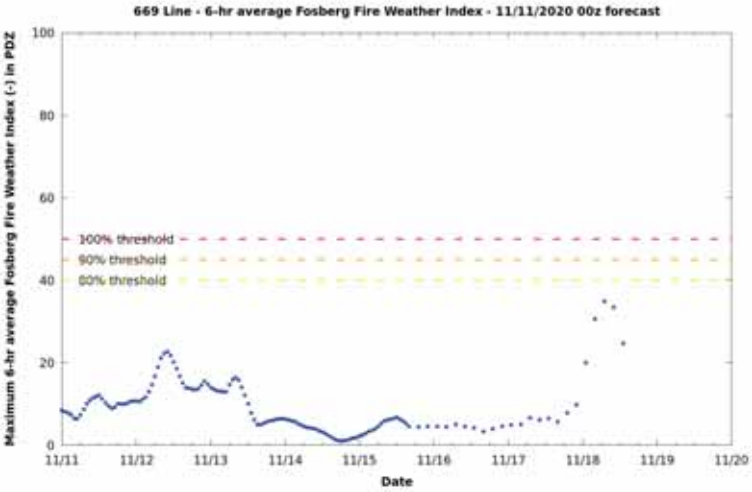


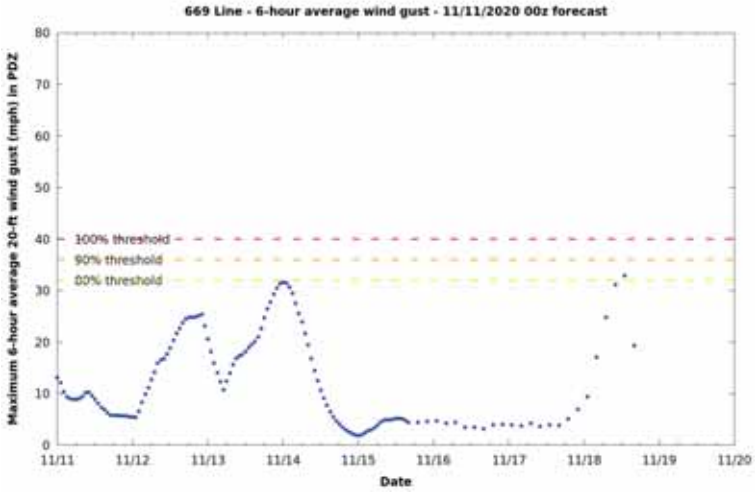
132 Line



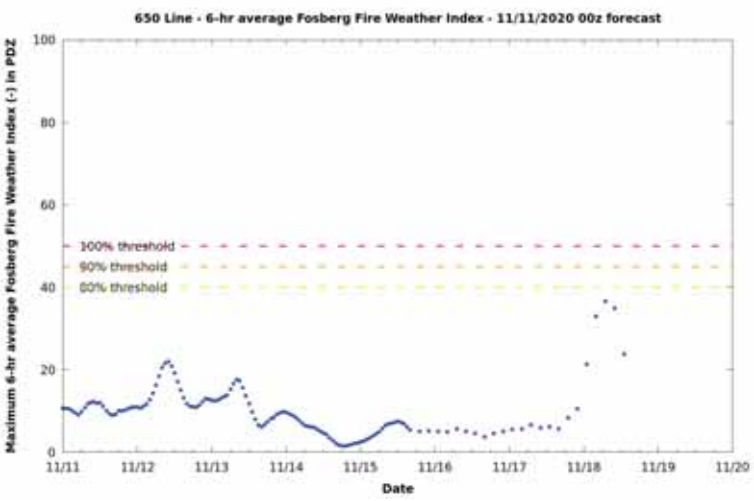


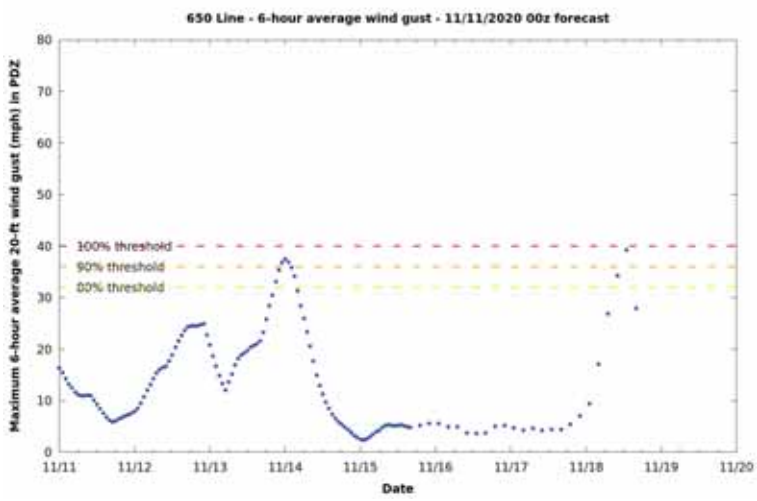
669 Line



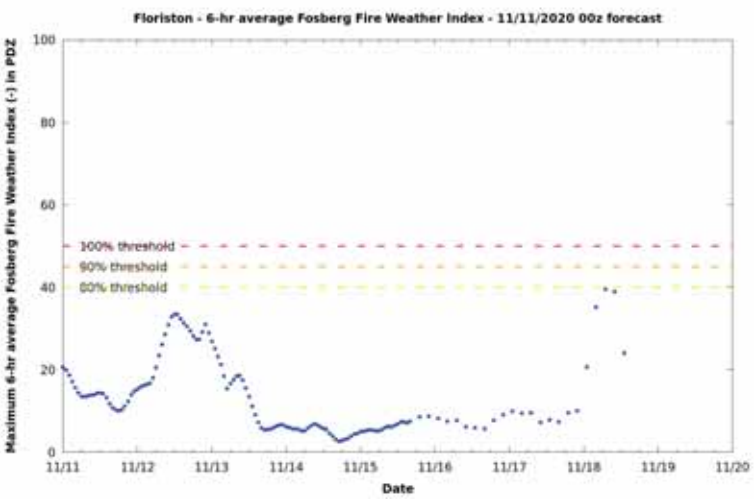


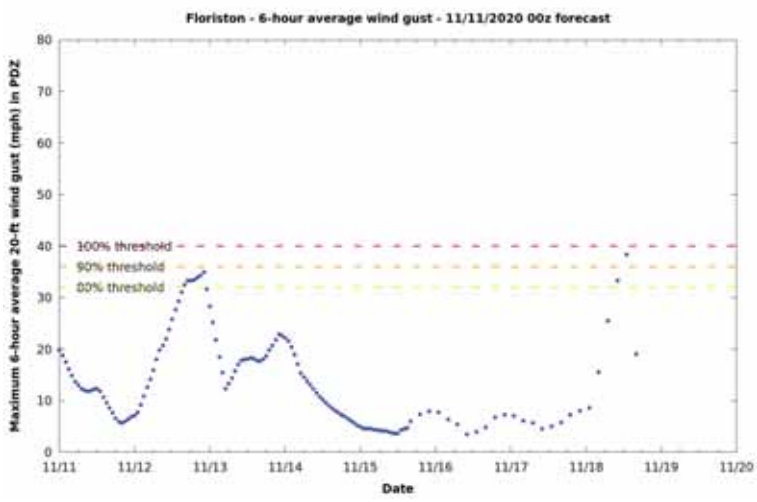
650 Line



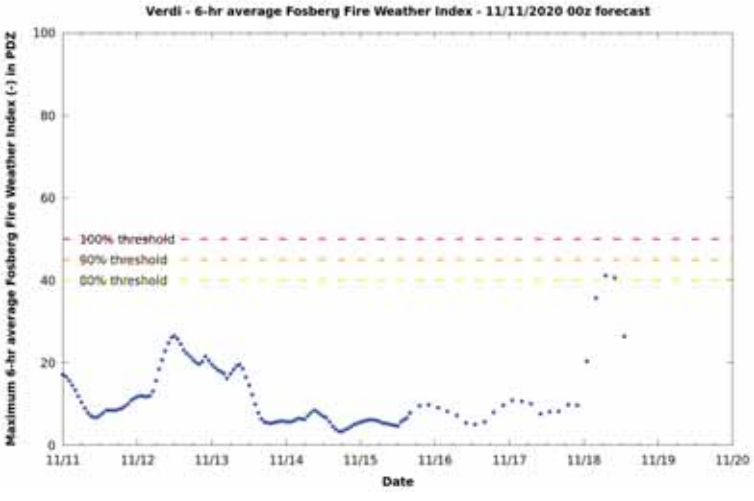


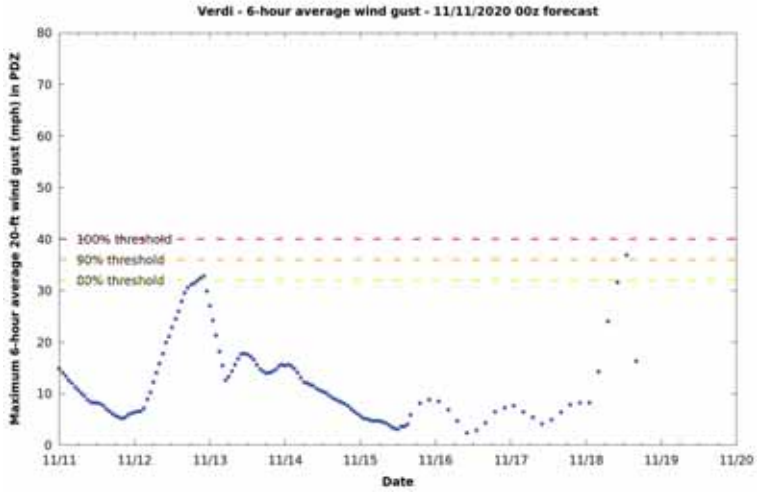
Floriston



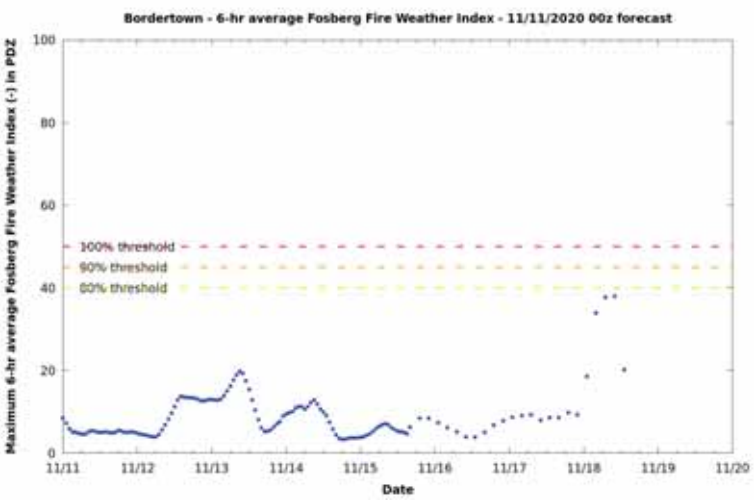


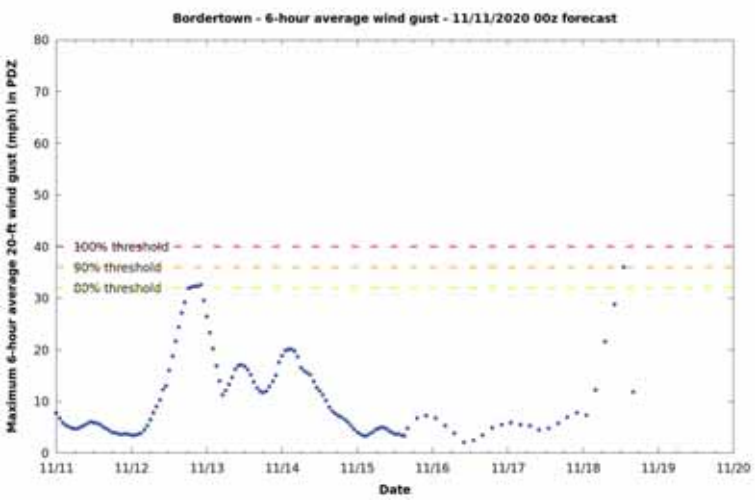
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/11/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
0
20
40
60
80
100
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
Date


Bordertown - 6-hour average wind gust - 11/11/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
0
10
20
30
40
50
60
70
80
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
Date

Liberty Utilities Fire Potential Index Forecast for 11/11/20 - 11/17/20

Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

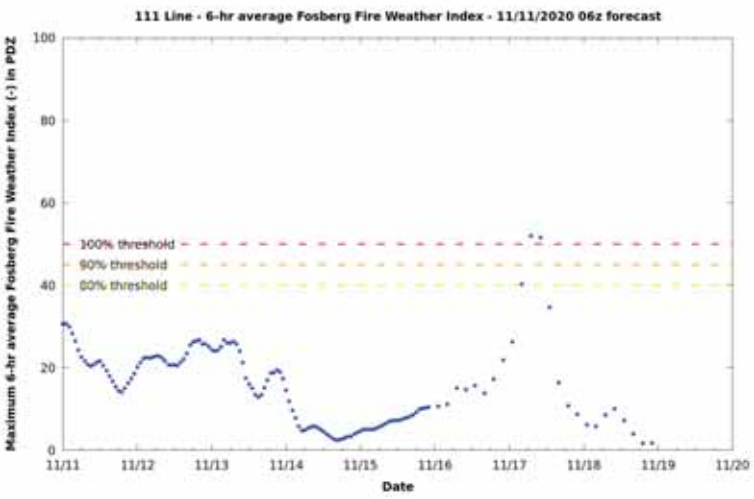
Liberty Utilities Energy Release Component Forecast for 11/11/20 - 11/17/20

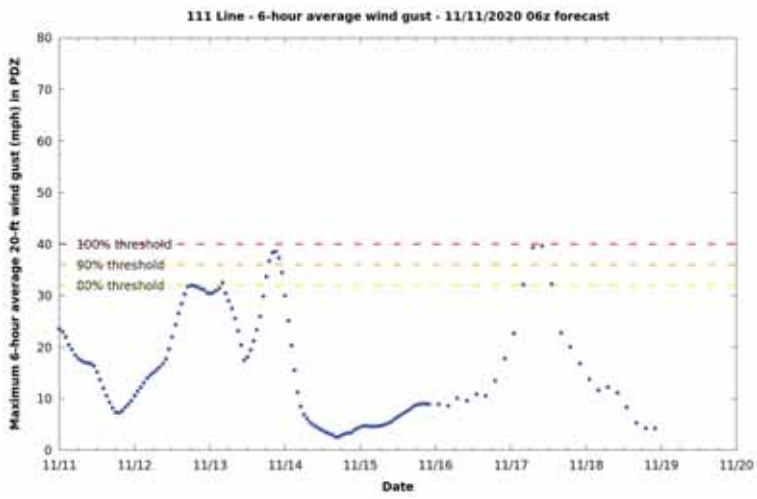
Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	59.0	46.0	38.0	34.0	32.0	30.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

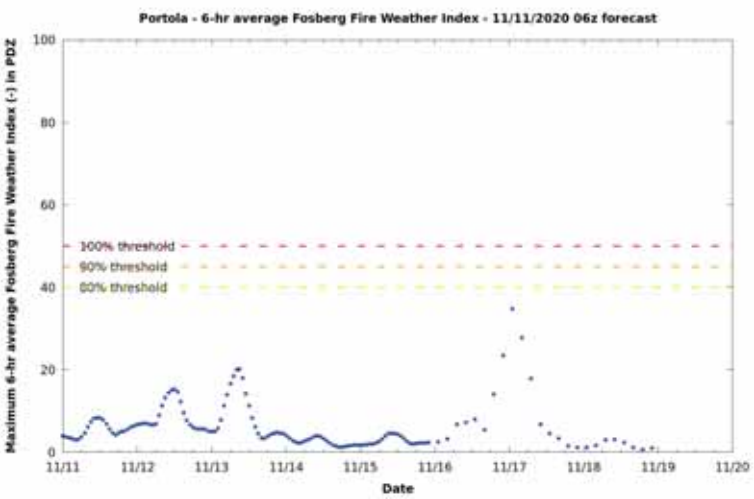
Liberty Utilities Fire Weather Summary Plots - 11/11/2020 06z forecast

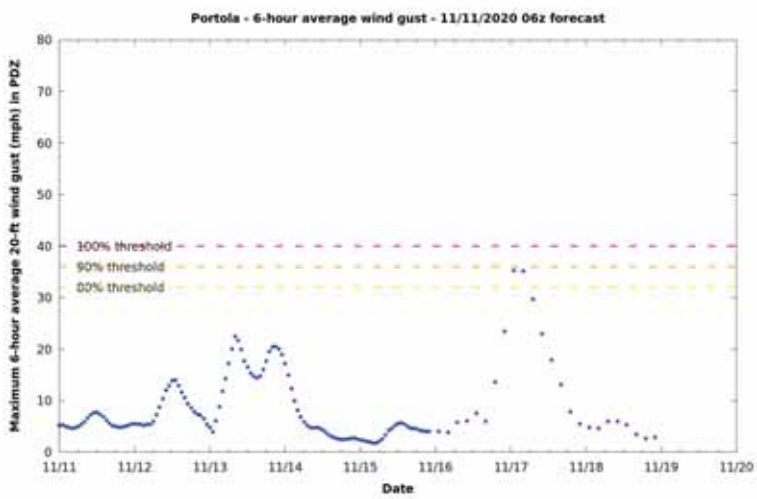
111 Line



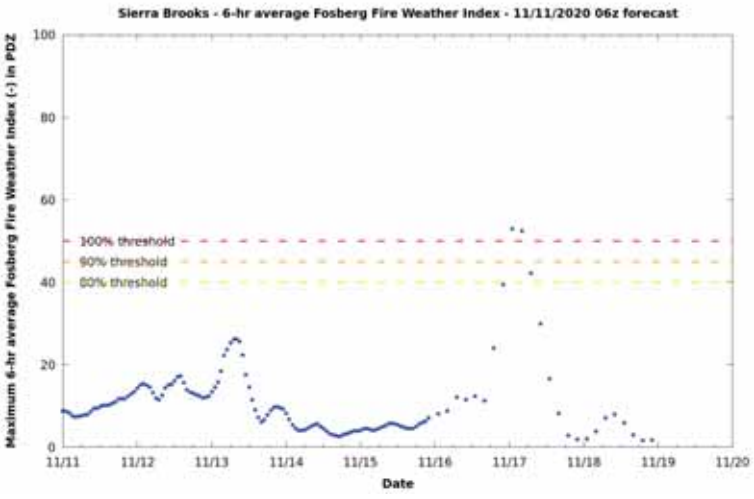


Portola



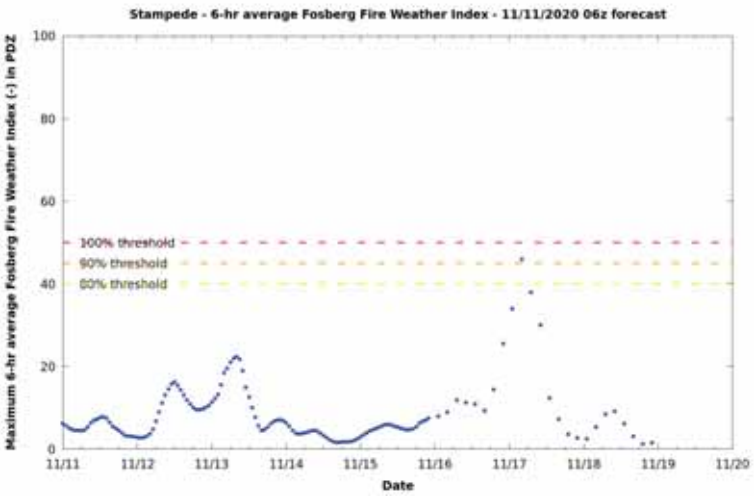


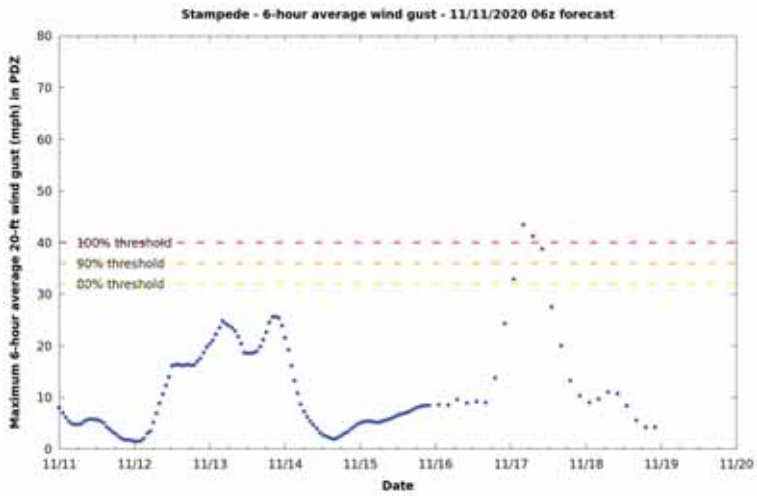
Sierra Brooks



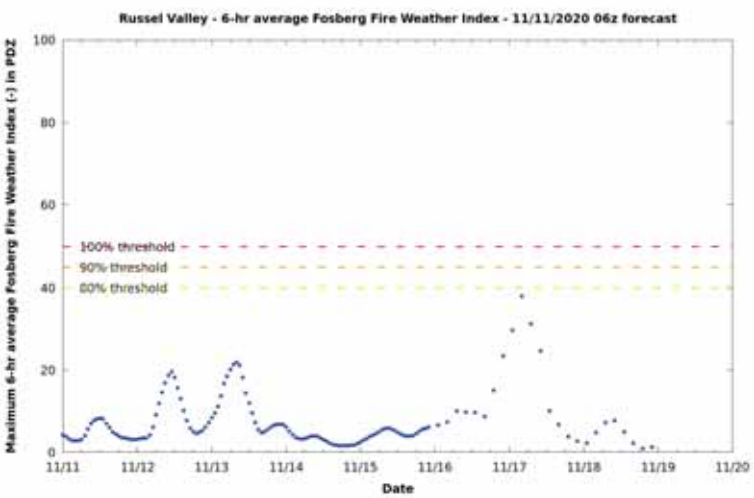


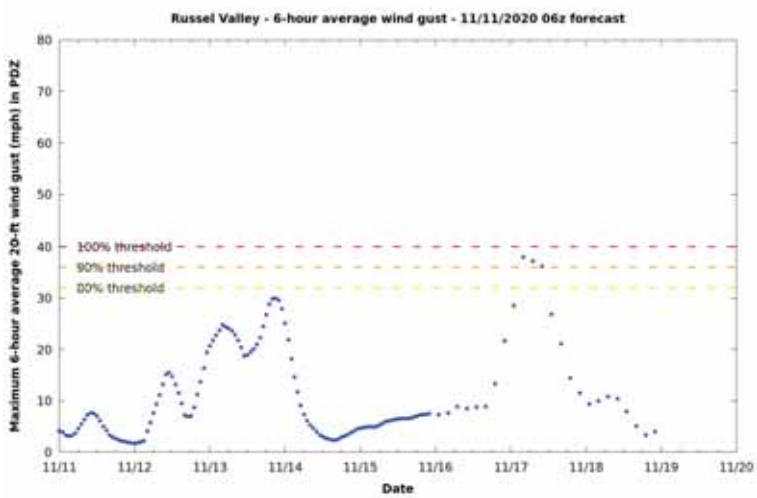
Stampede



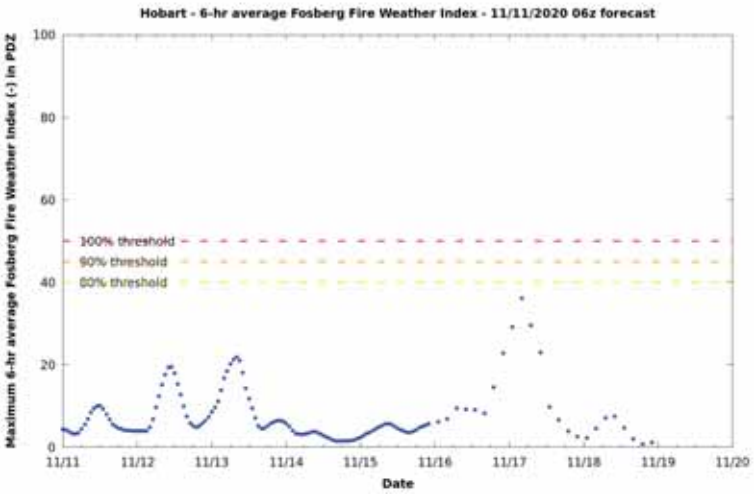


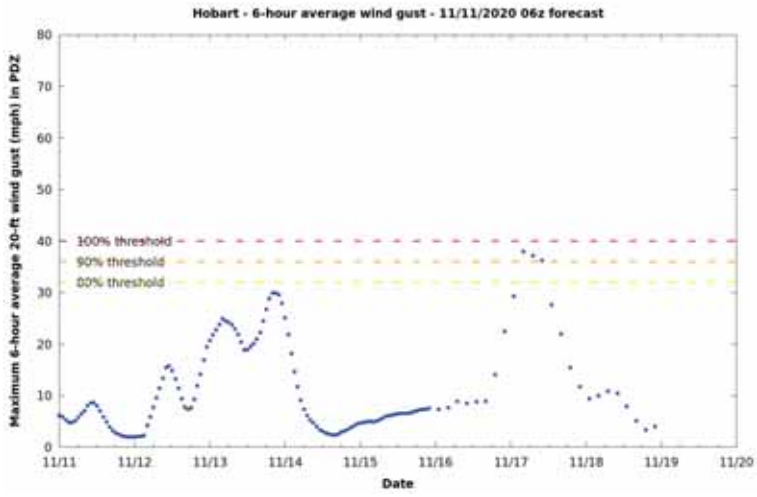
Russell Valley



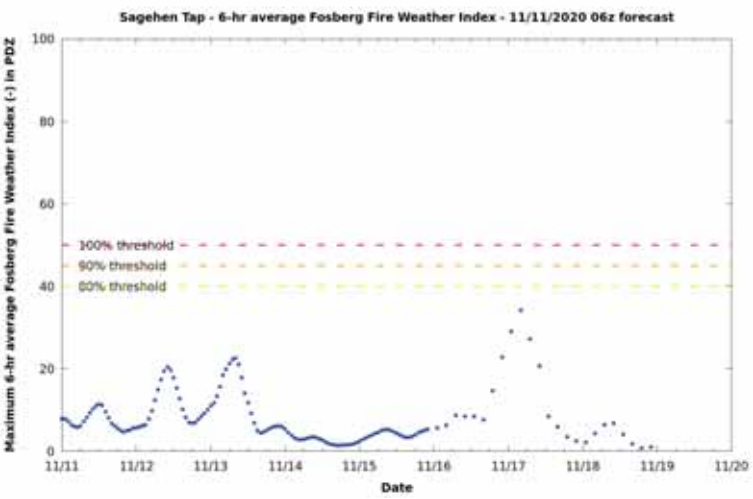


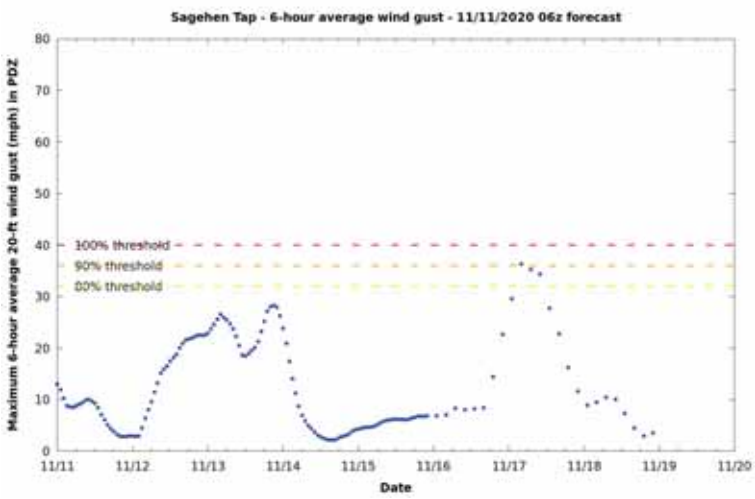
Hobart



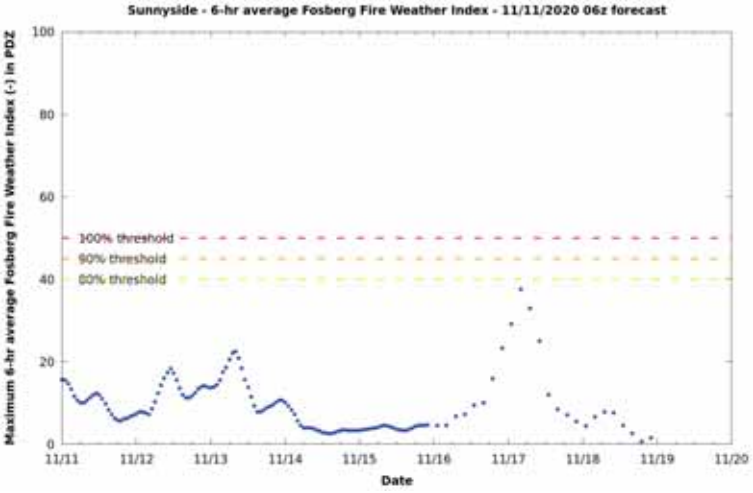


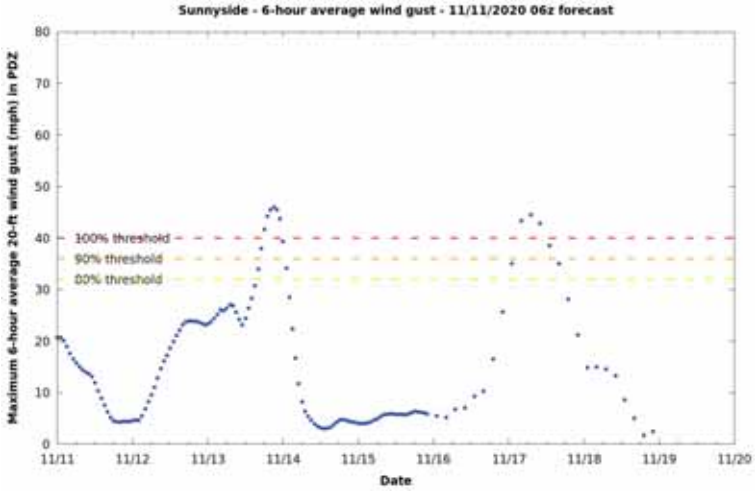
Sagehen tap



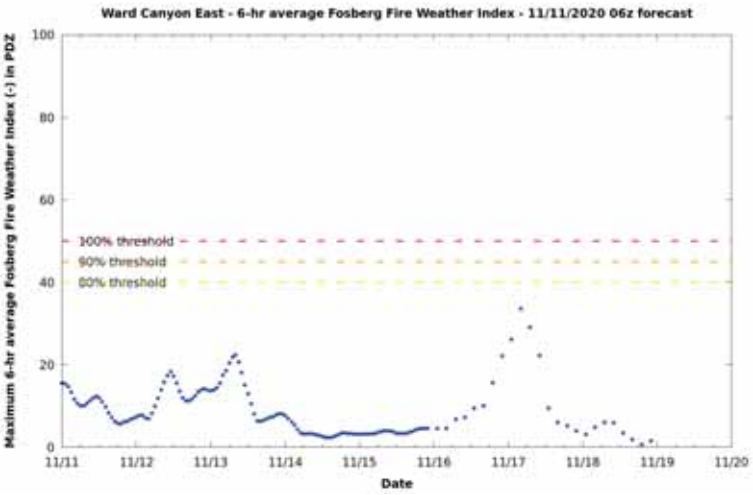


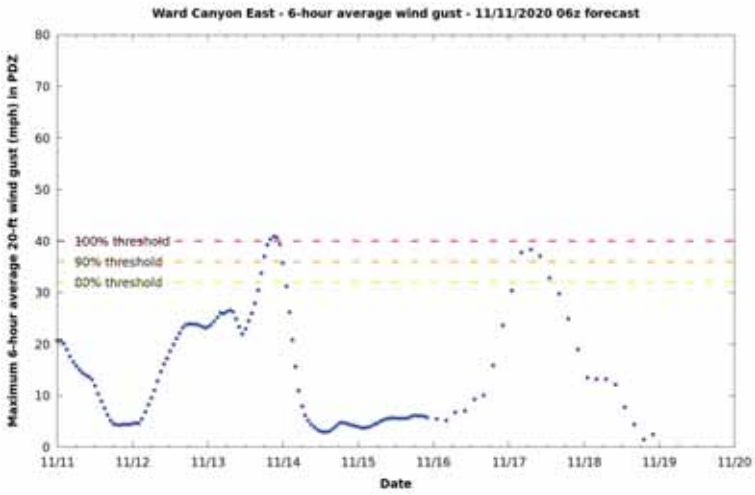
Sunnyside



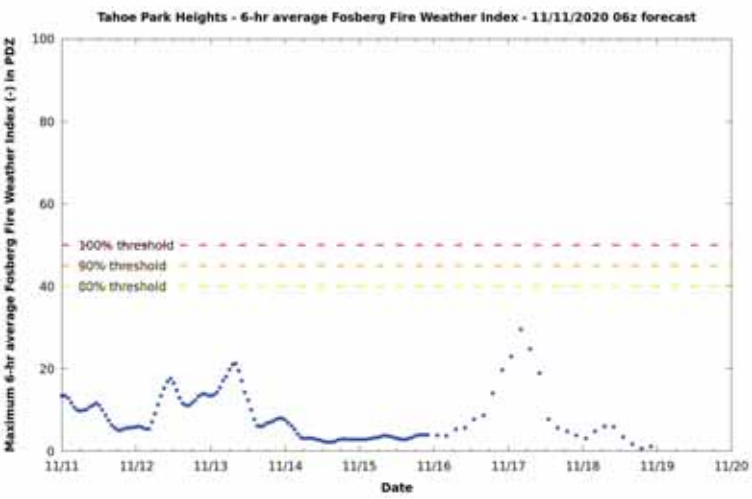


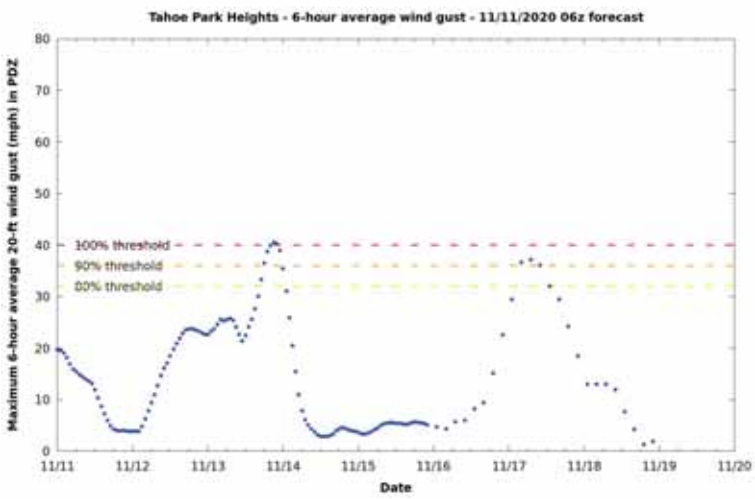
Ward Canyon East



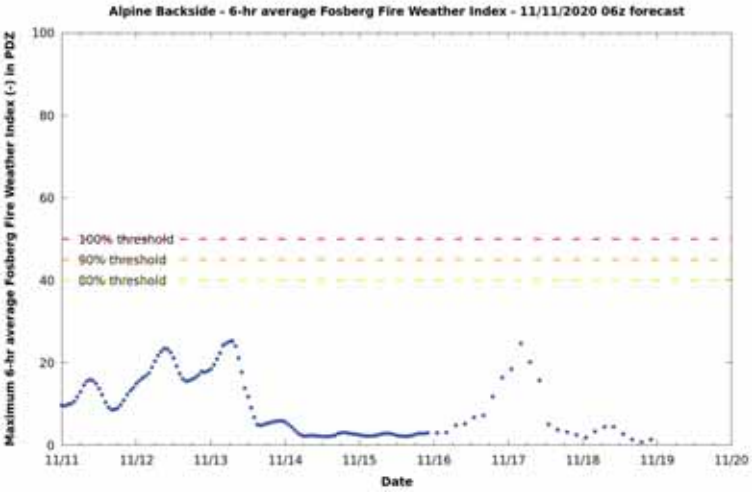


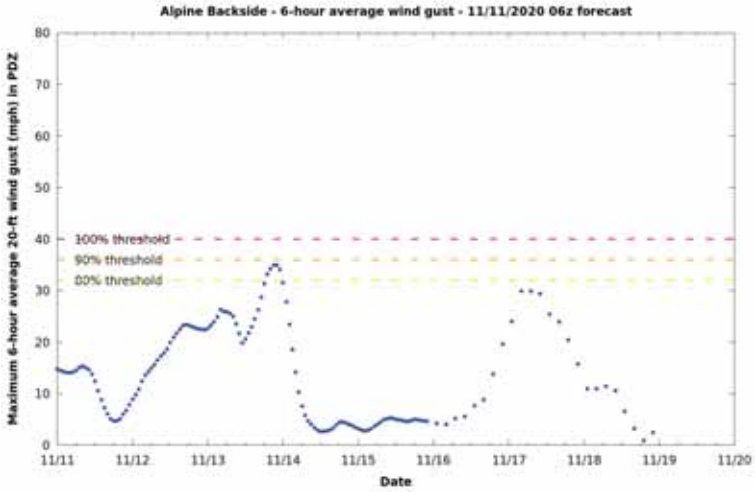
Tahoe Park Heights



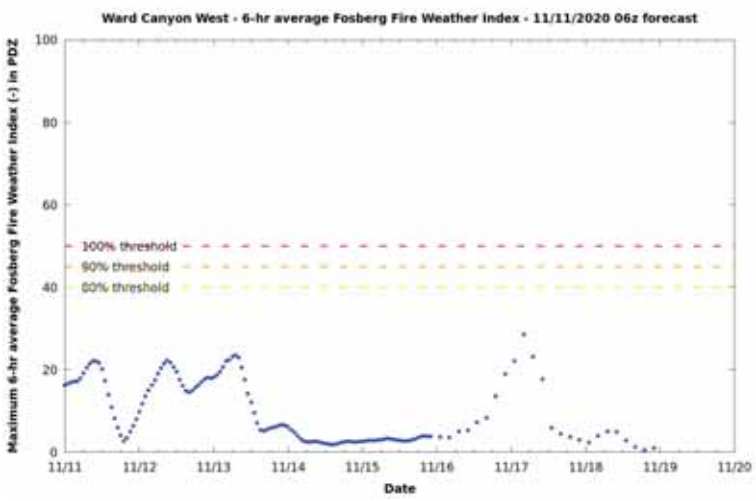


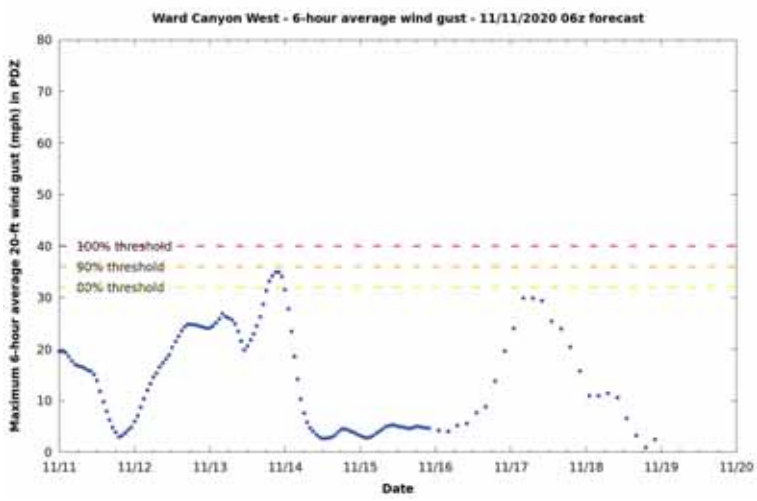
Alpine Backside



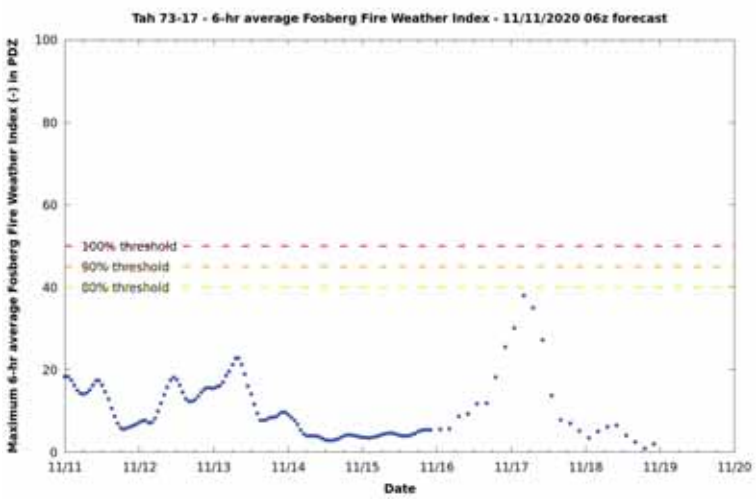


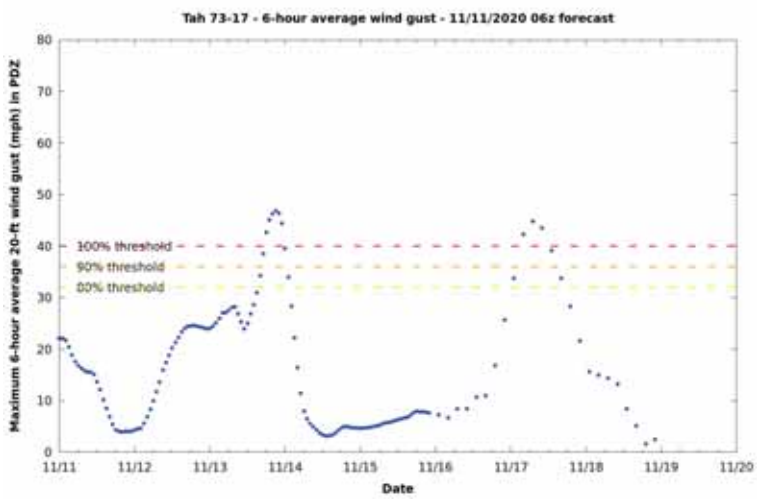
Ward Canyon West



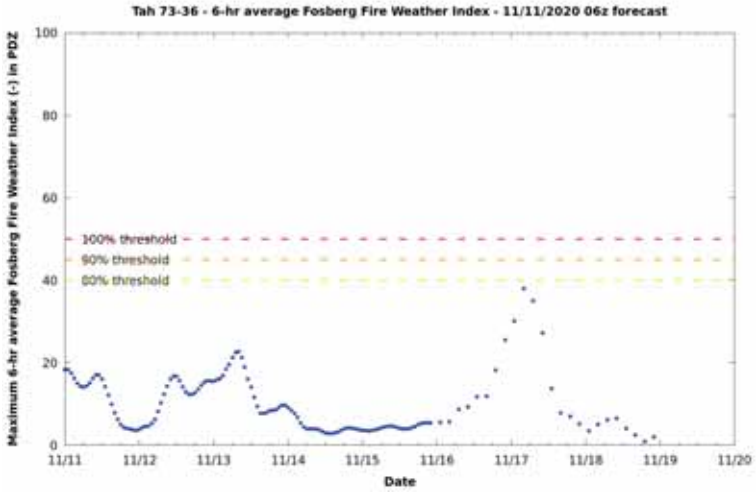


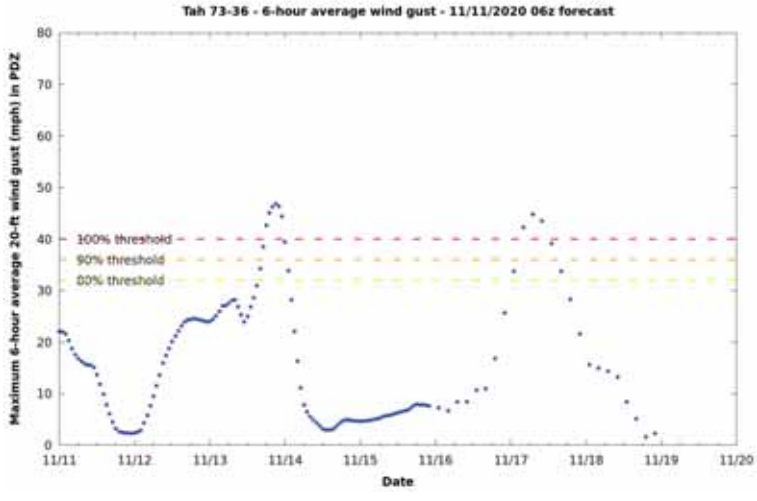
Tah 73-17



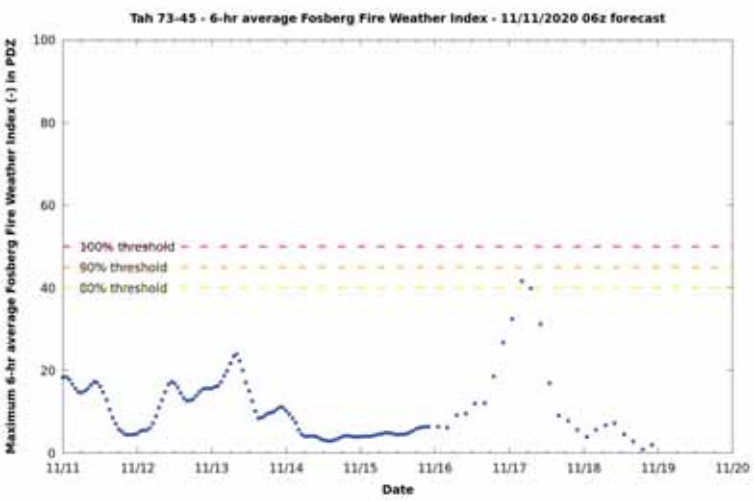


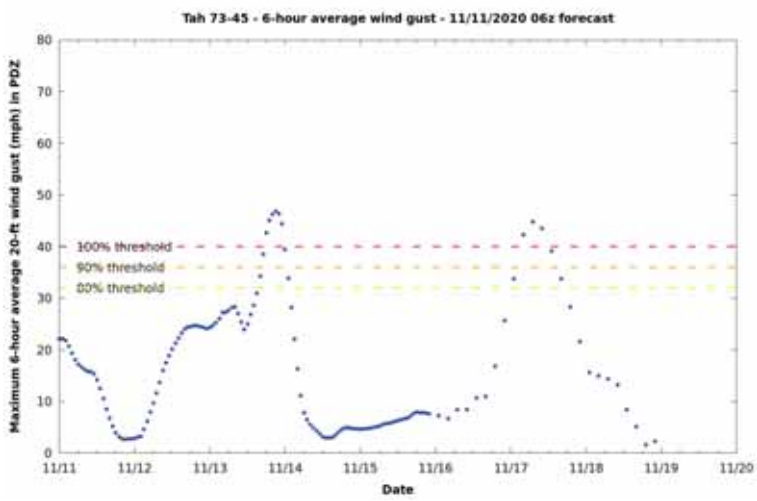
Tah 73-36



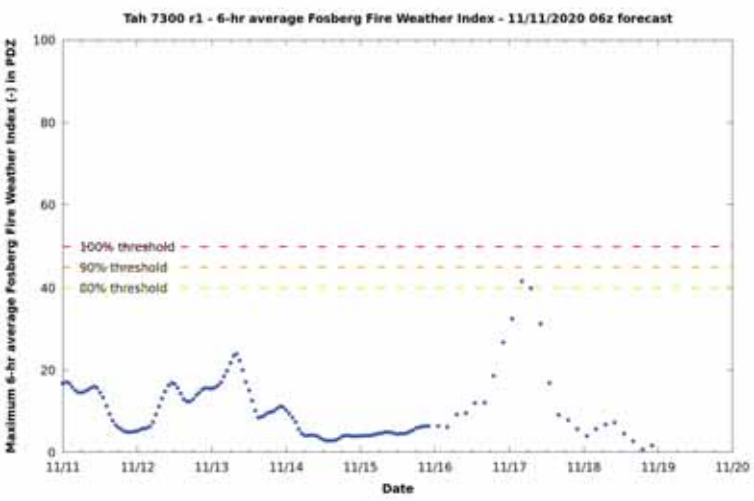


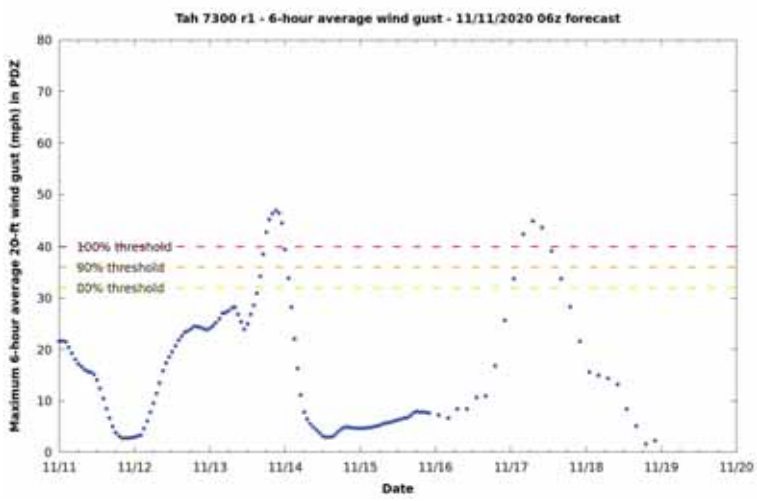
Tah 73-45



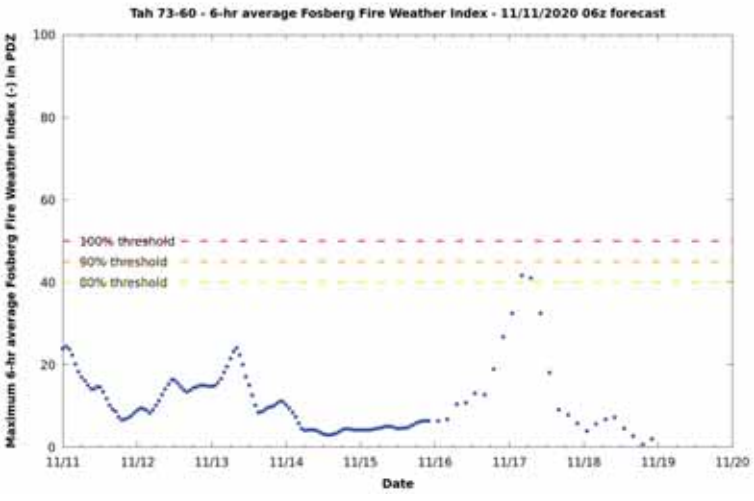


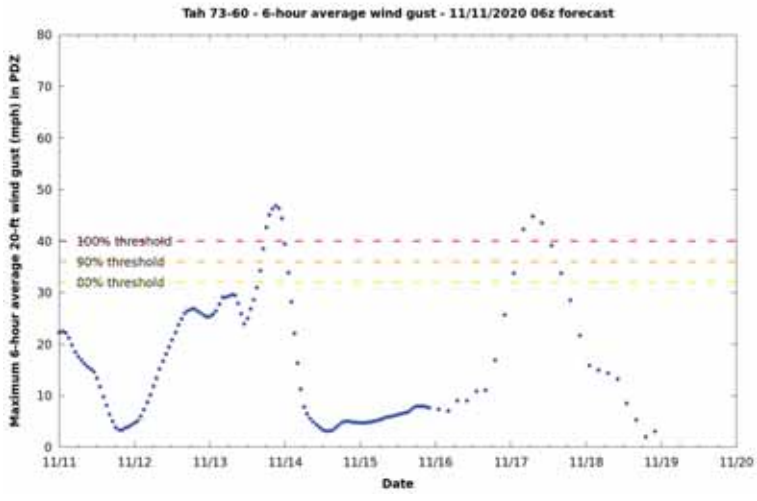
Tah 7300 r1



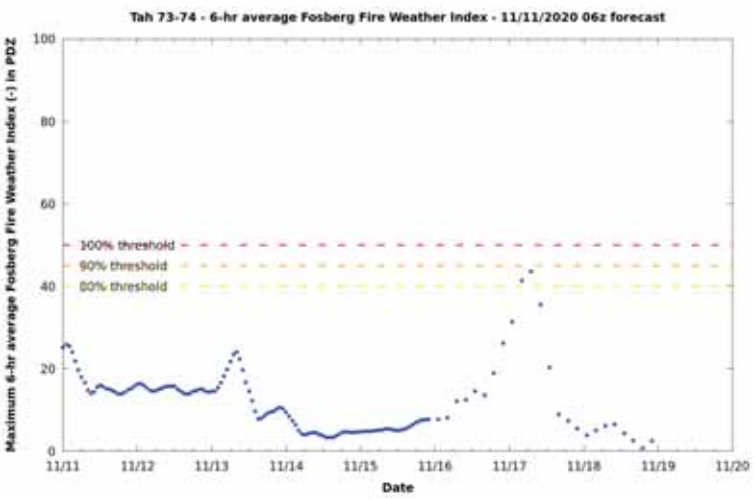


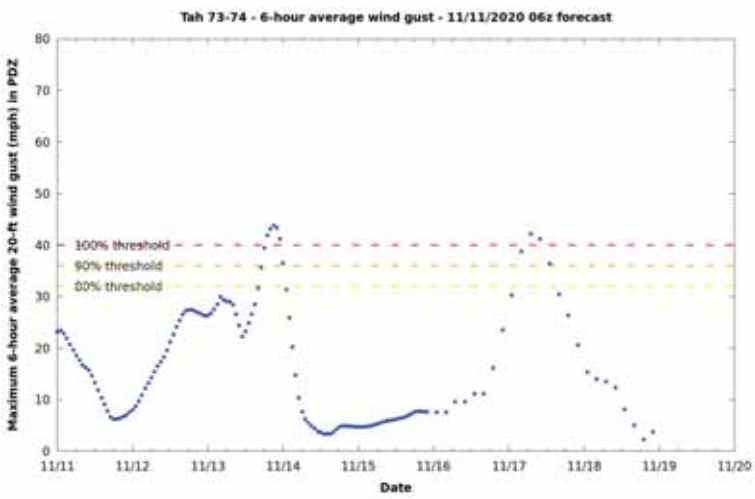
Tah 73-60



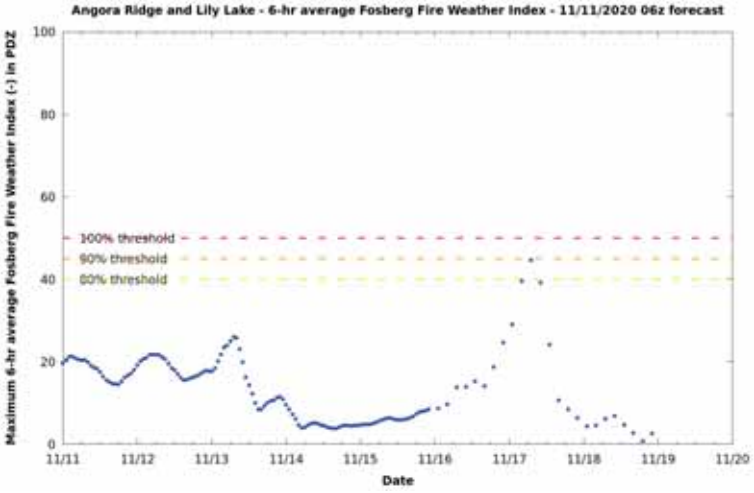


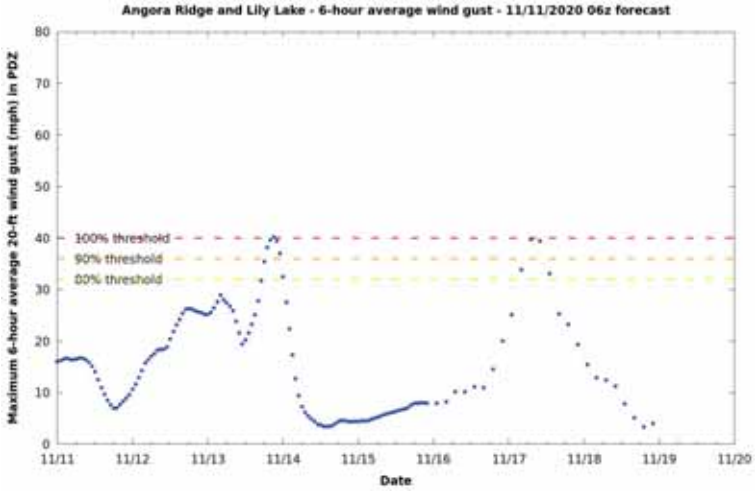
Tah 73-74



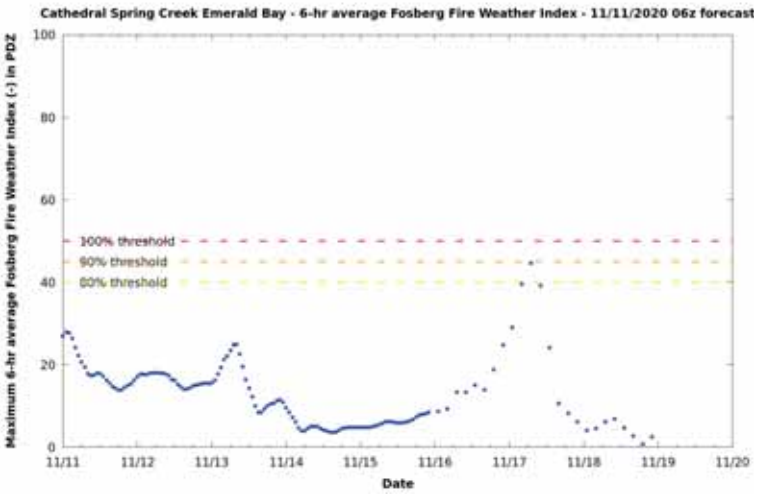


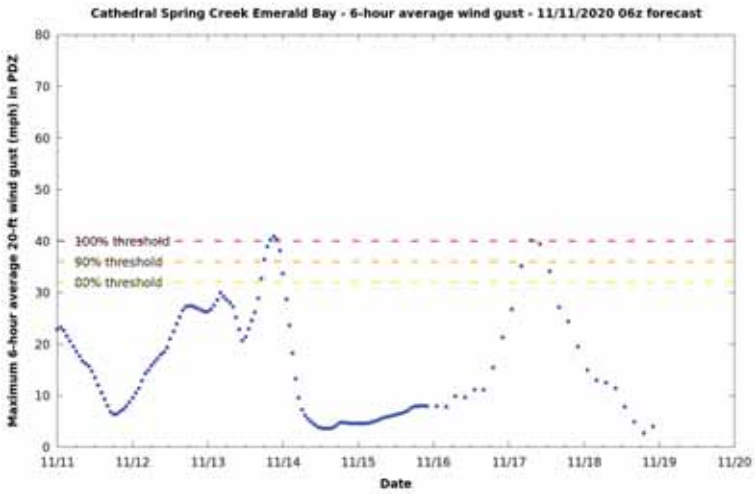
Angora Ridge and Lily Lake



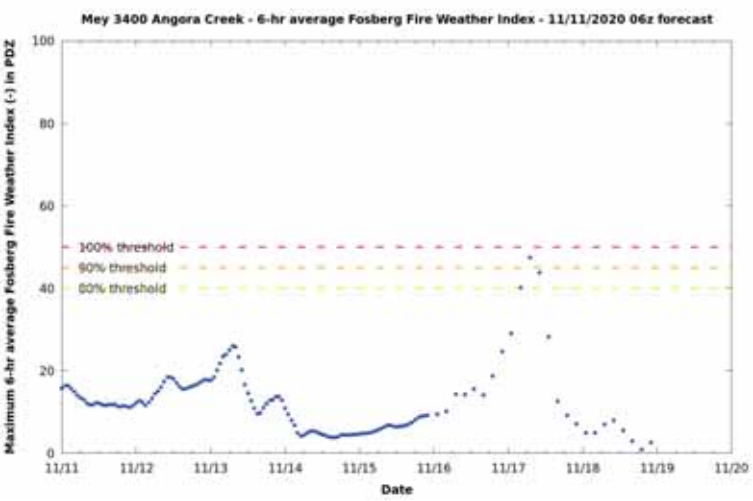


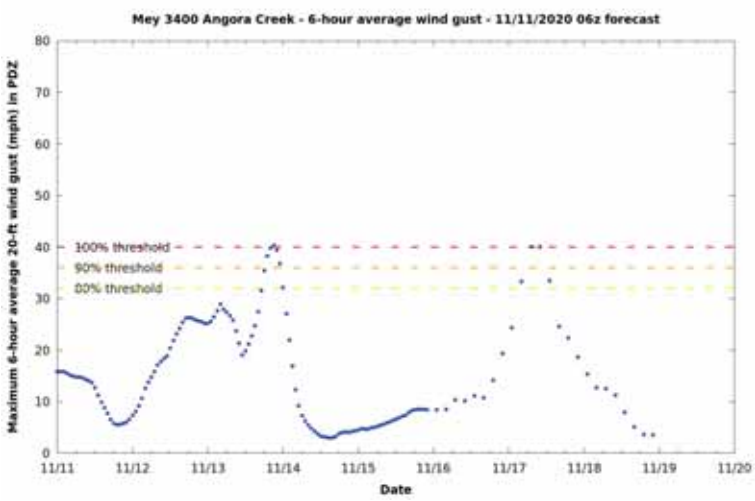
Cathedral Spring Creek Emerald Bay



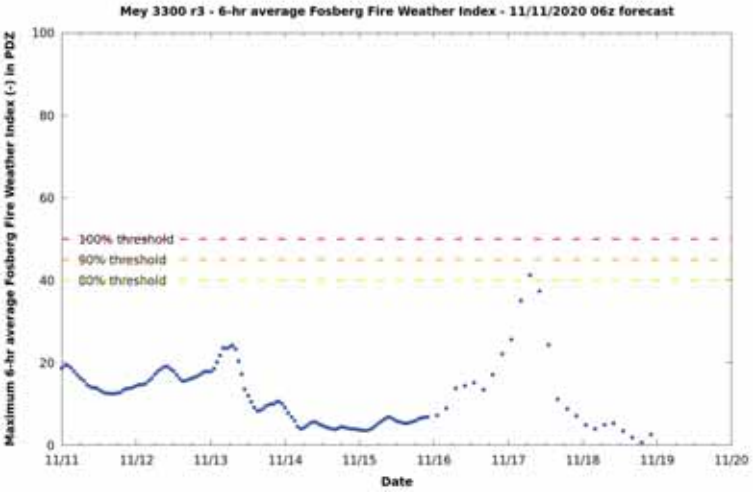


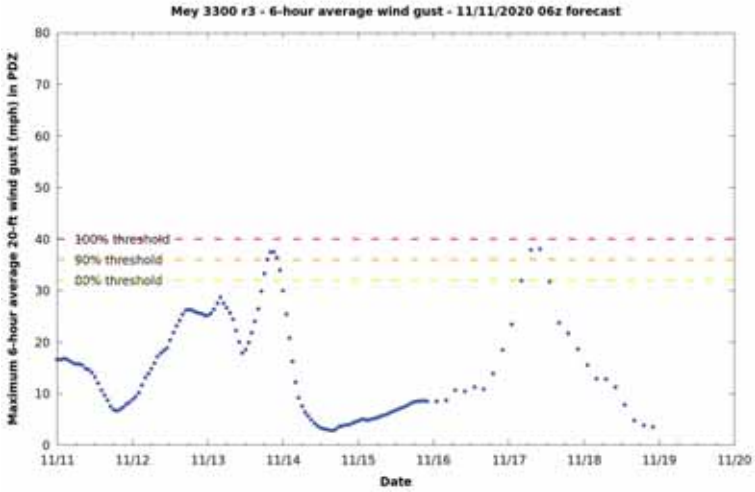
Mey 3400 Angora Creek



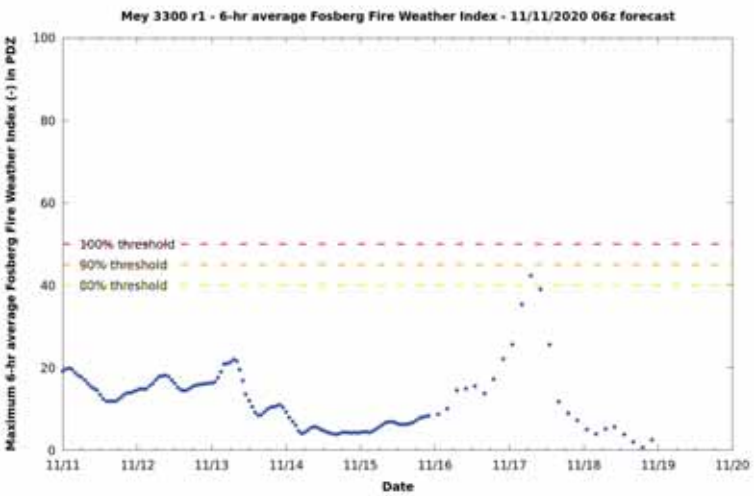


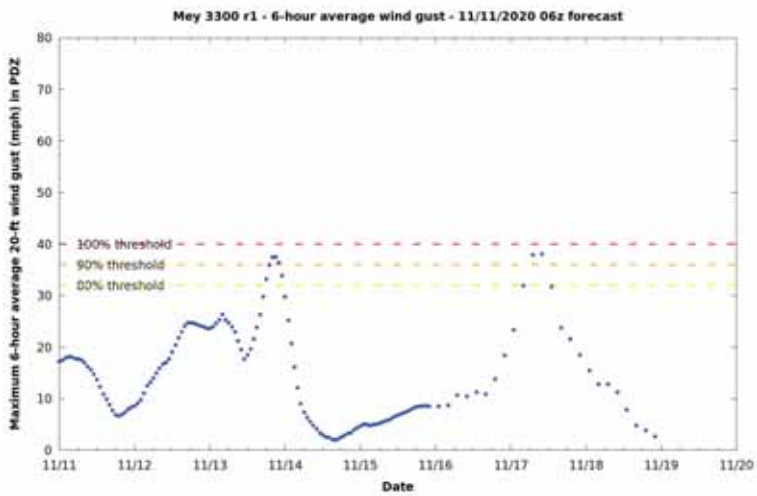
Mey 3300 r3



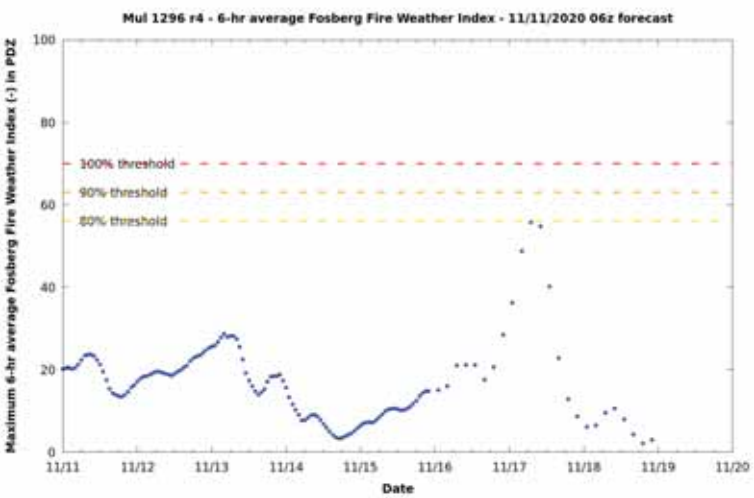


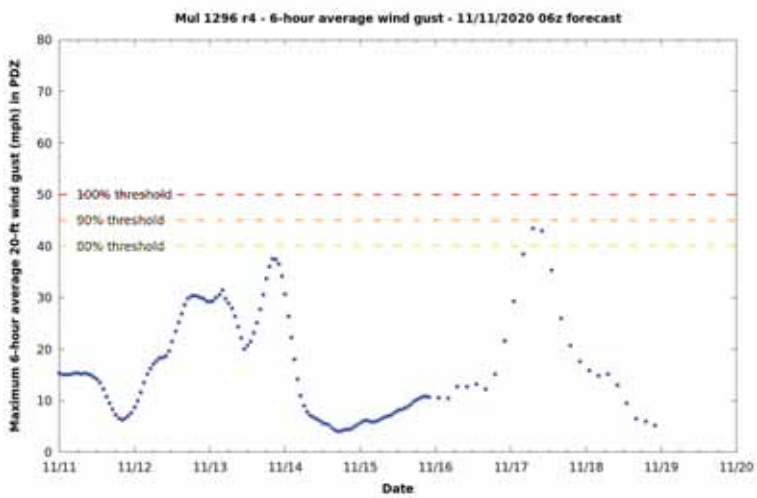
Mey 3300 r1



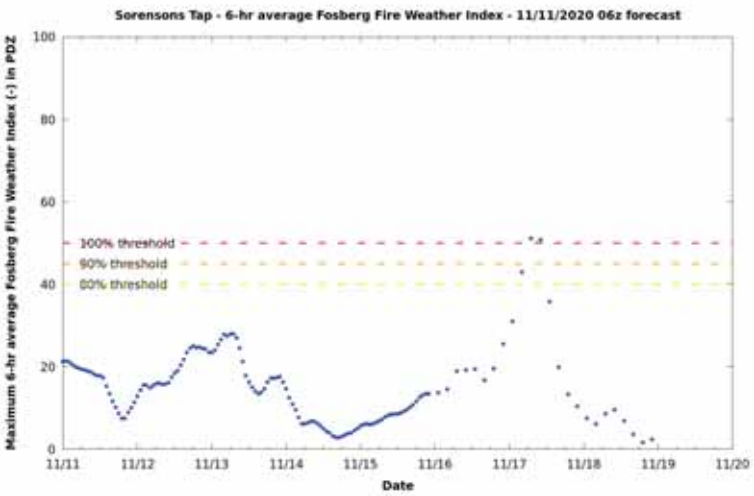


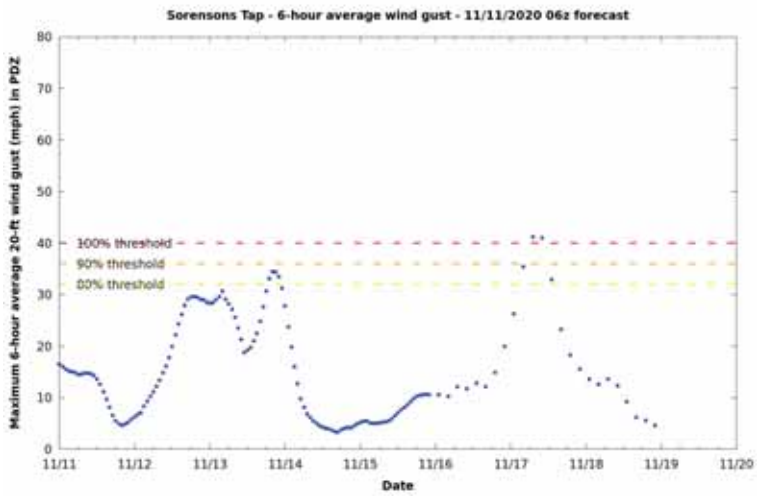
Mul 1296 r4



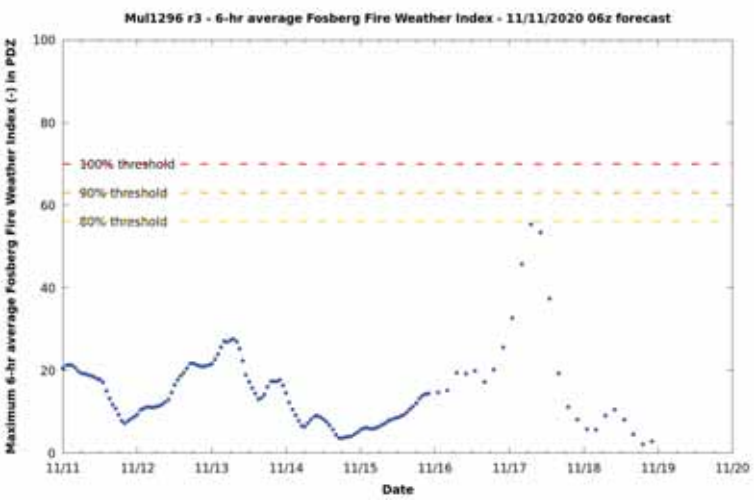


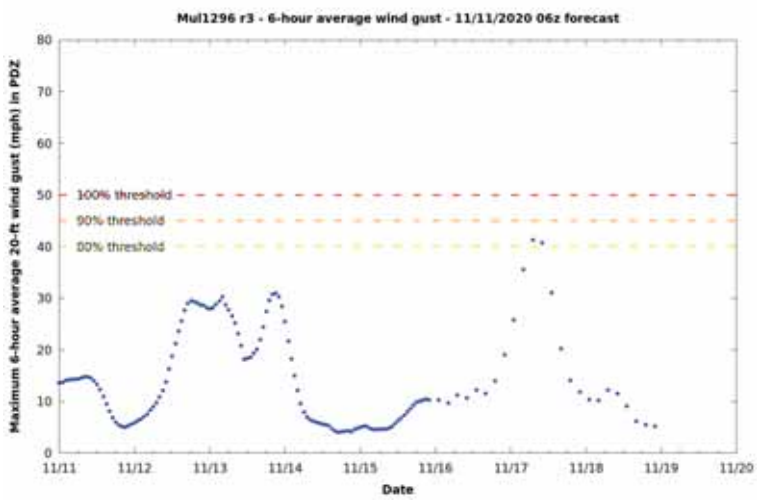
Sorensons Tap



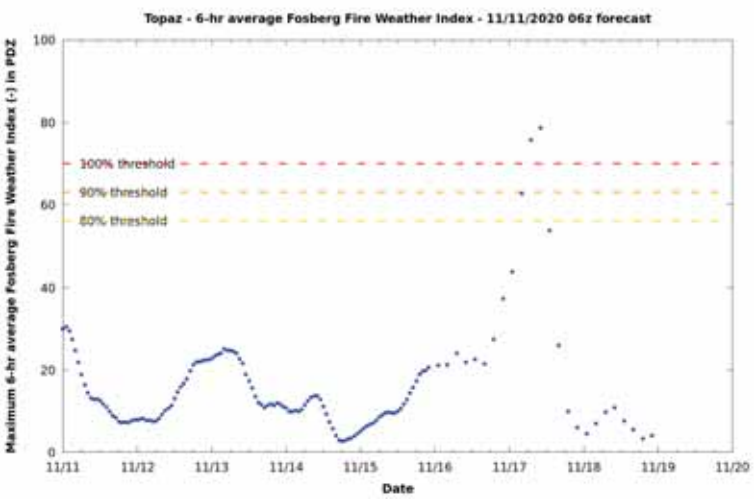


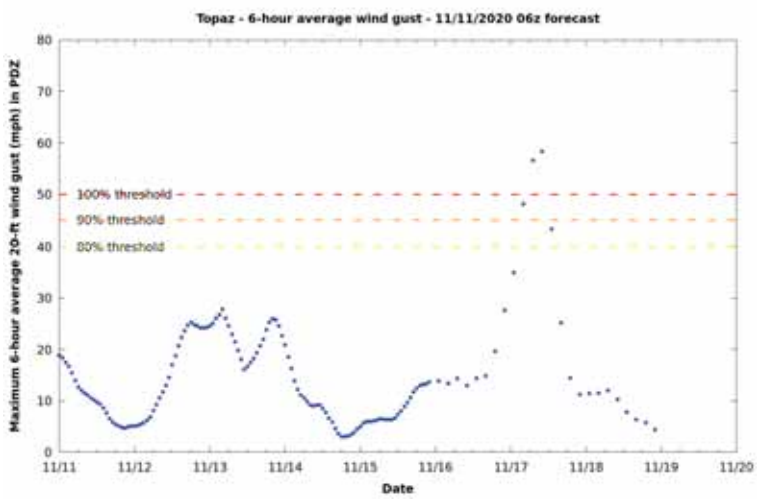
Mul 1296 r3



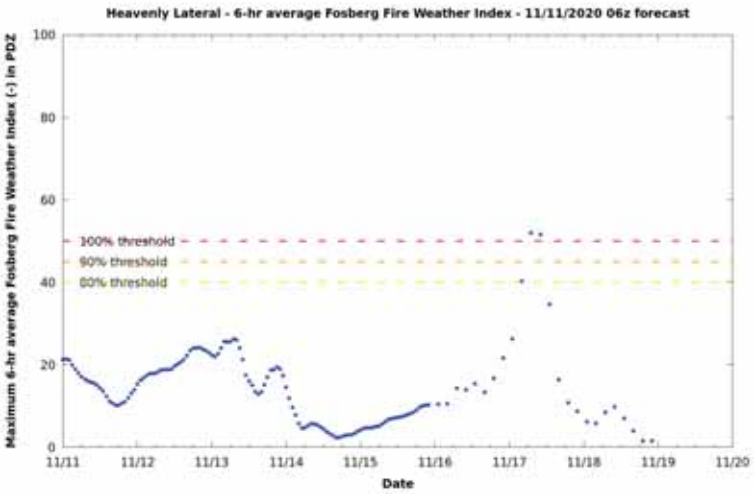


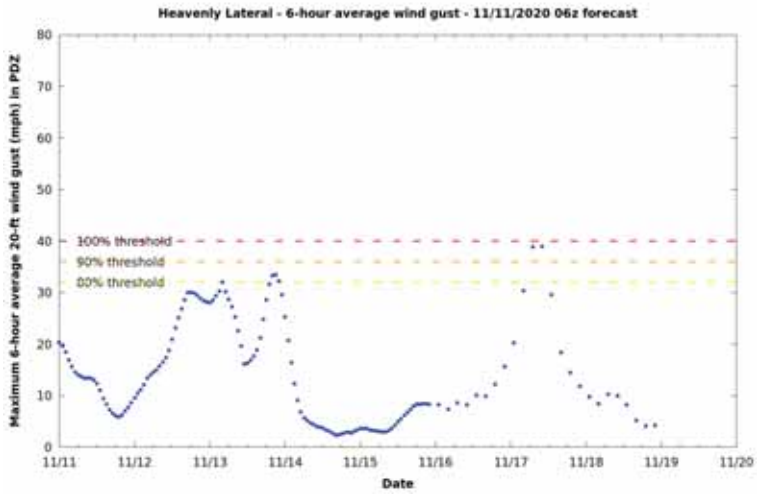
Topaz



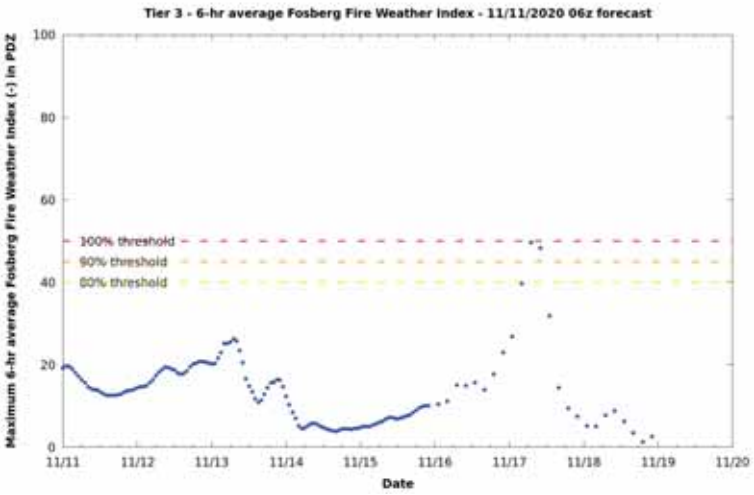


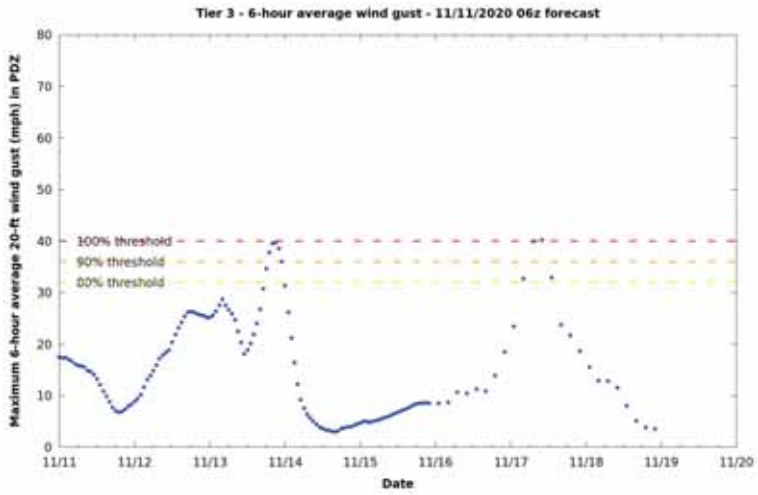
Heavenly Lateral



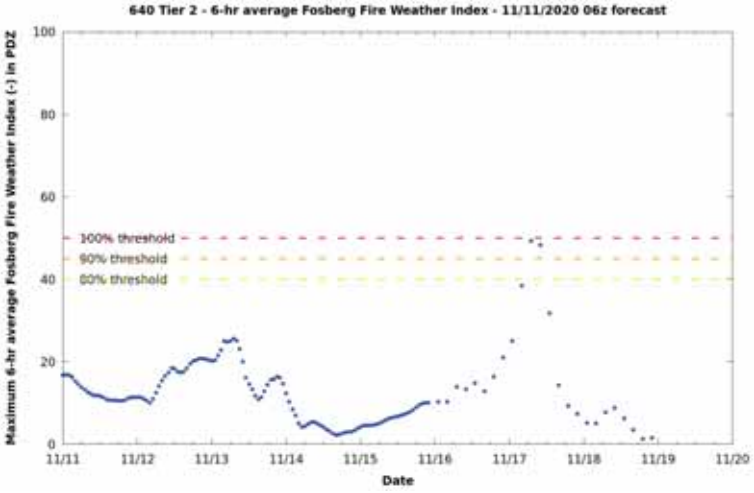


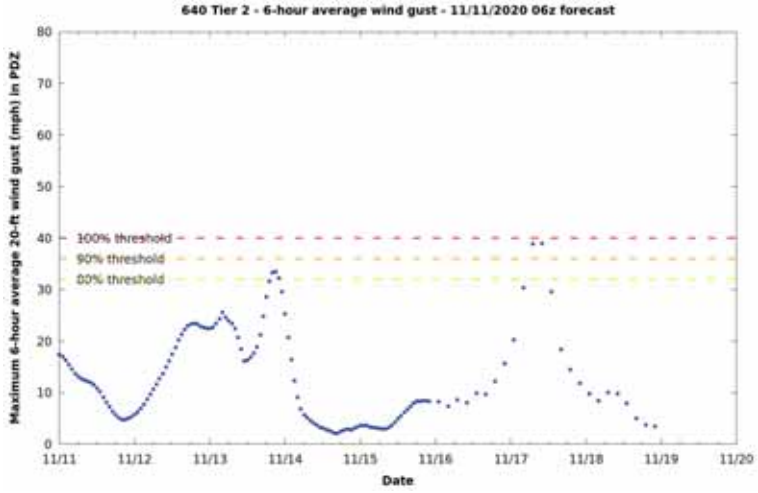
Tier 3



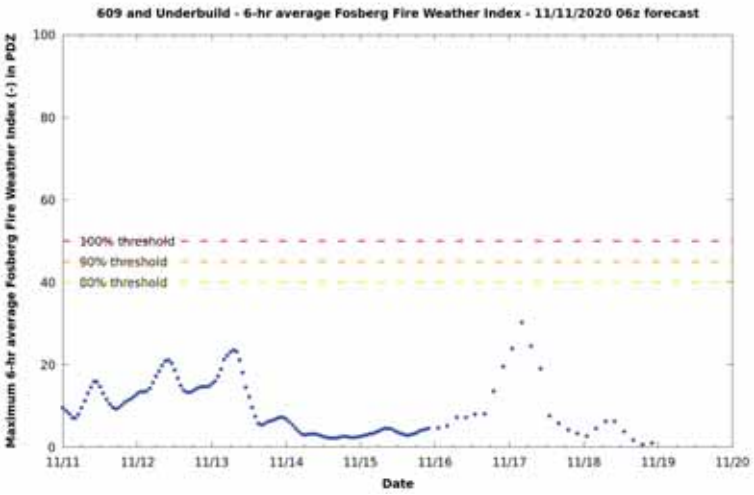


640 Tier 2



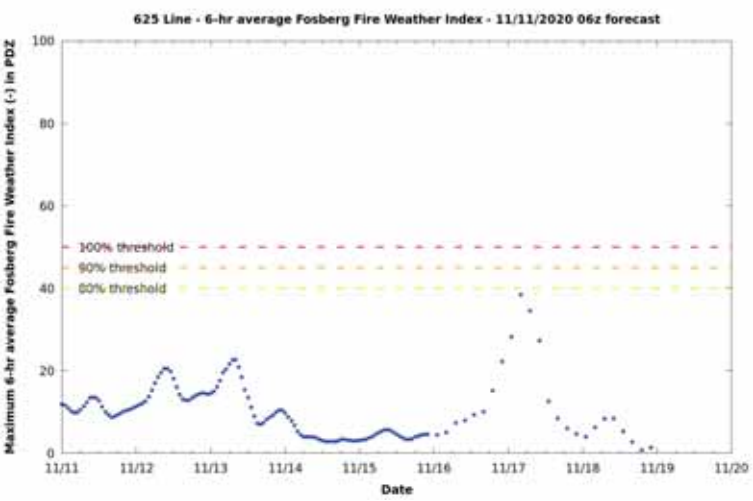


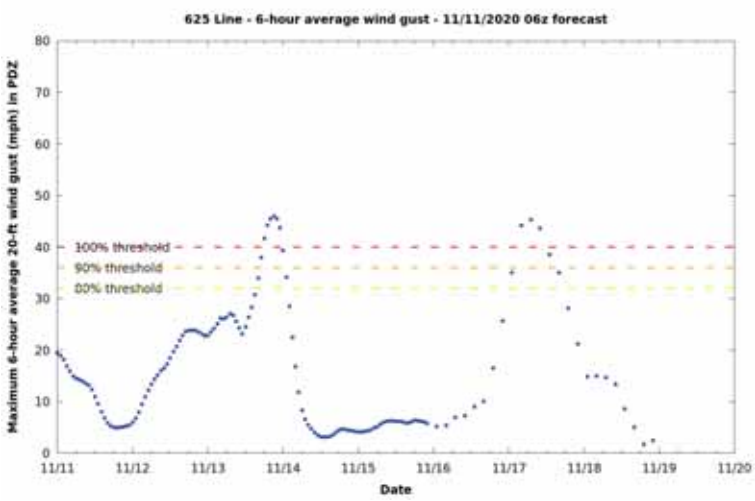
609 and Underbuild



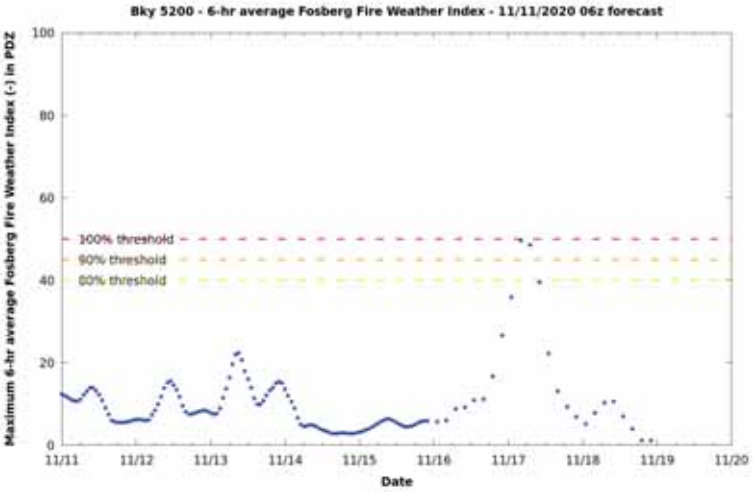


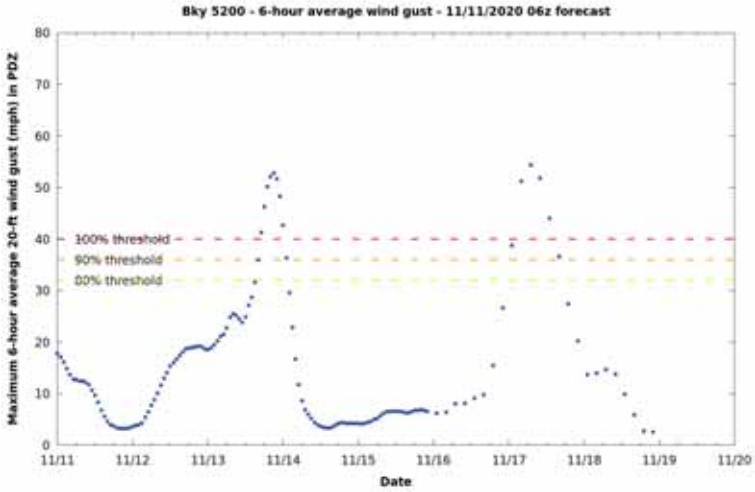
625 Line



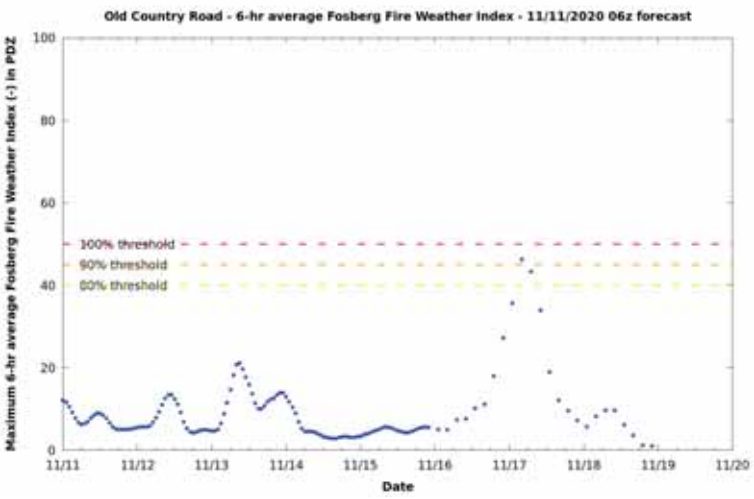


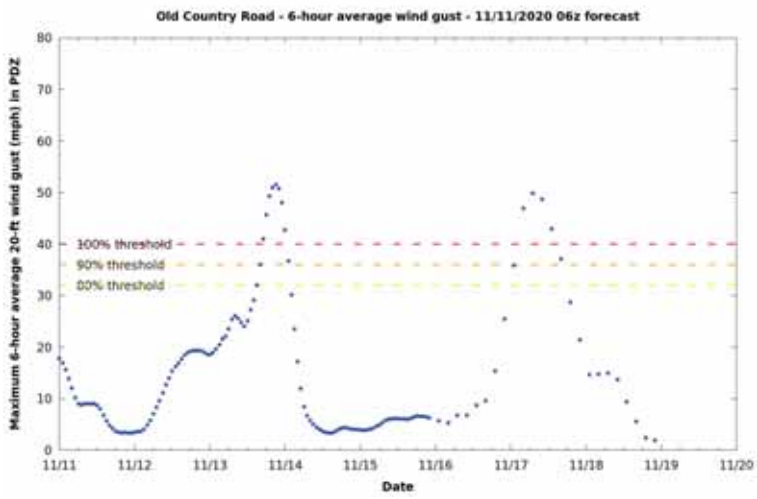
Bky 5200



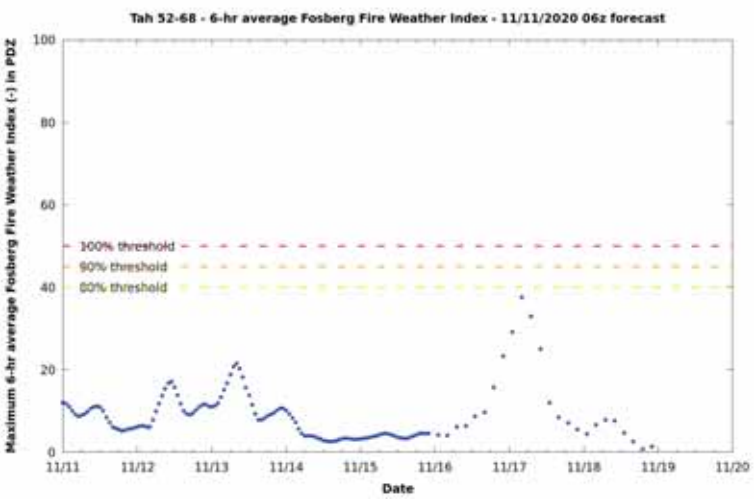


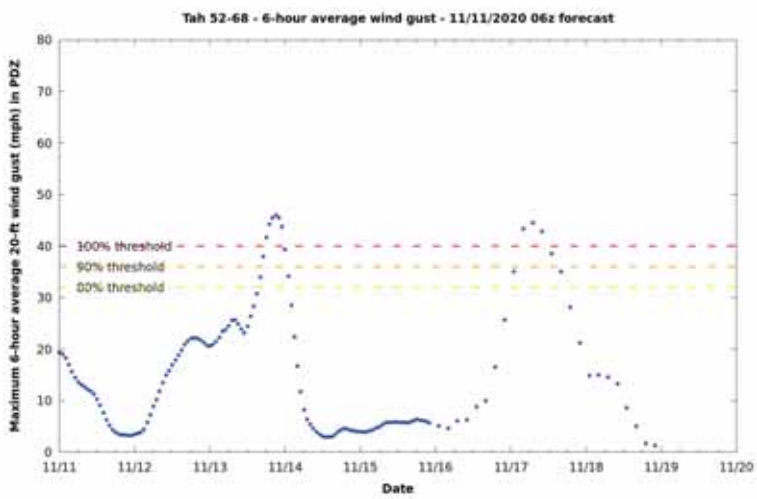
Old Country Road



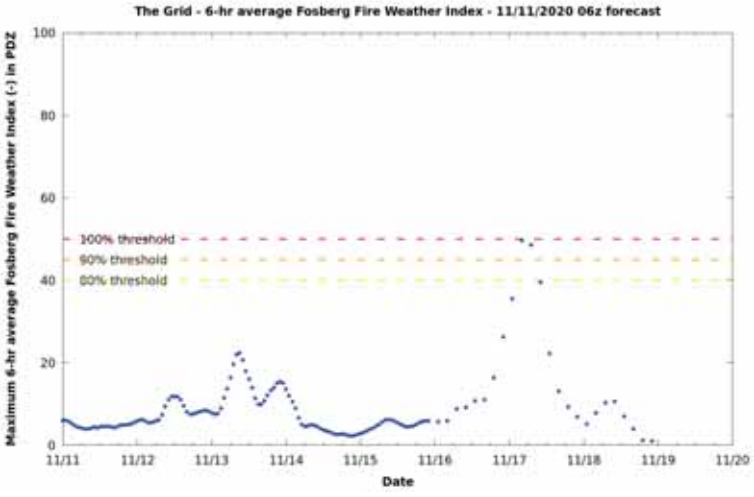


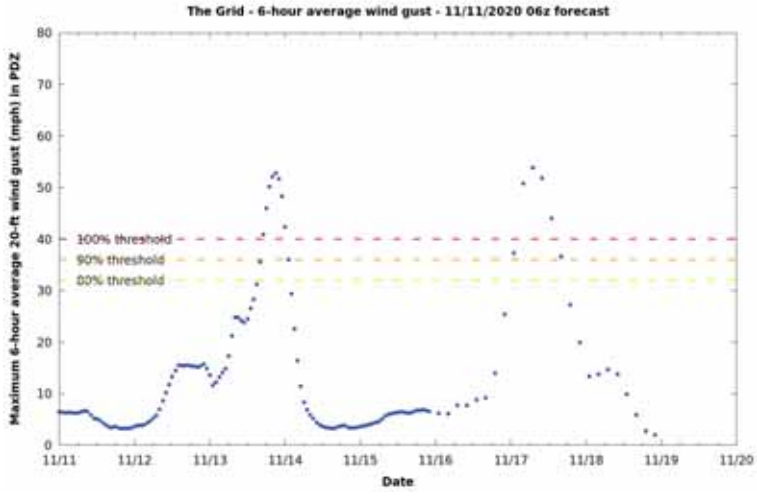
Tah 52-68



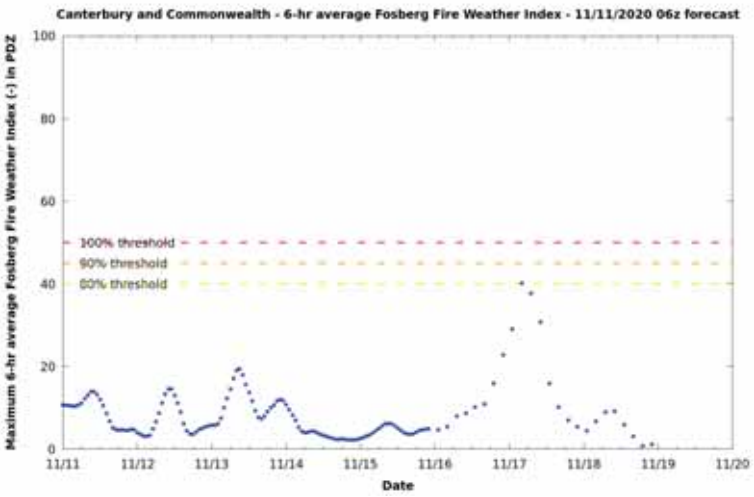


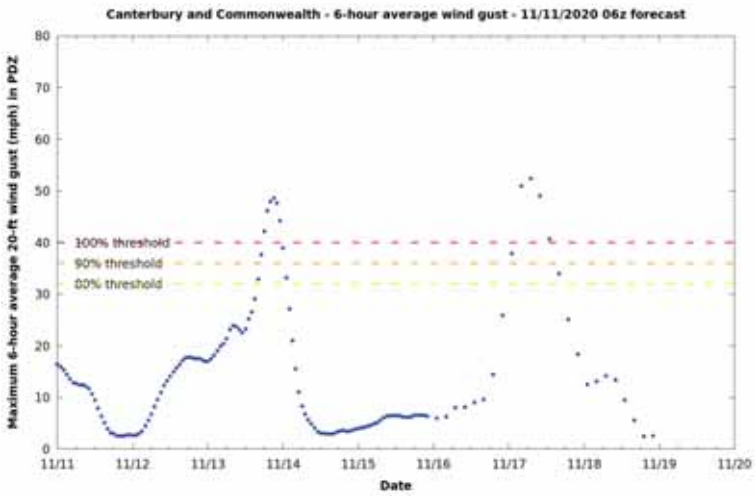
The Grid



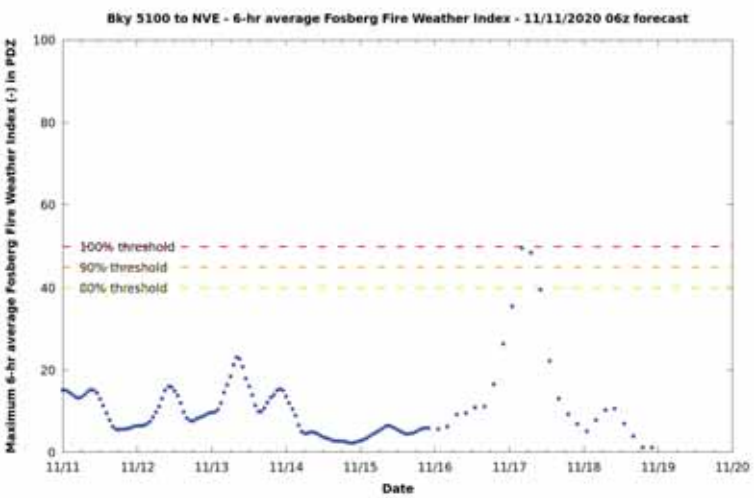


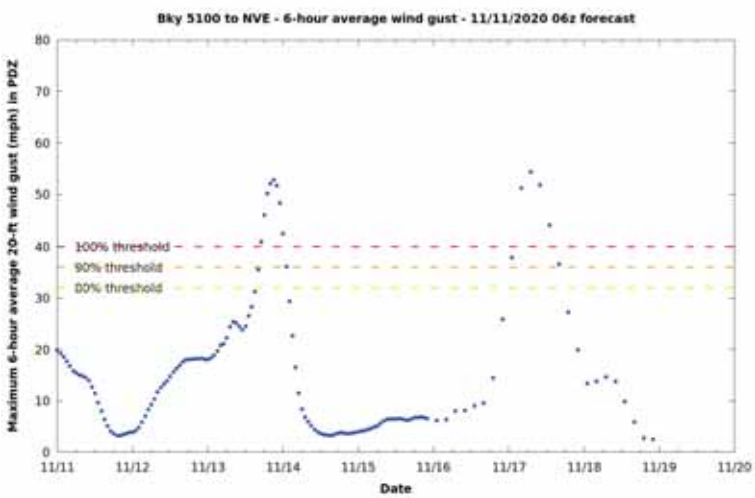
Canterbuy and Commonwealth



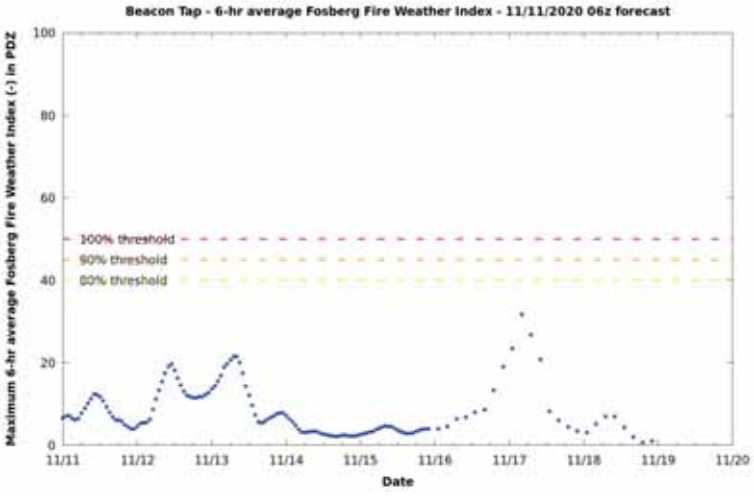


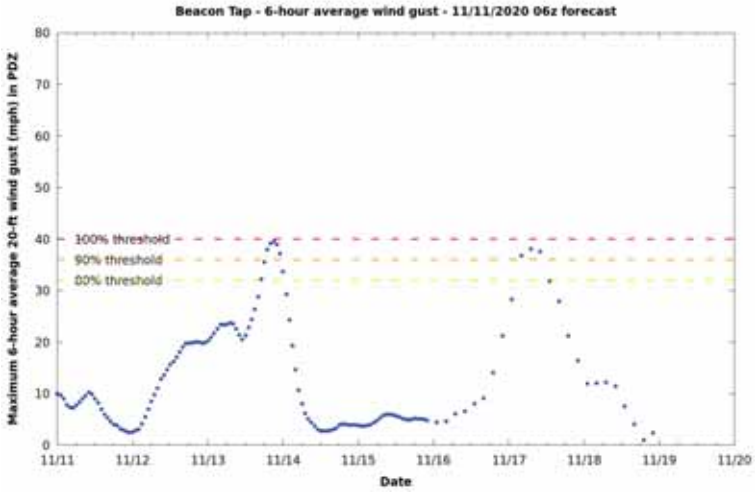
Bky 5100 to NVE



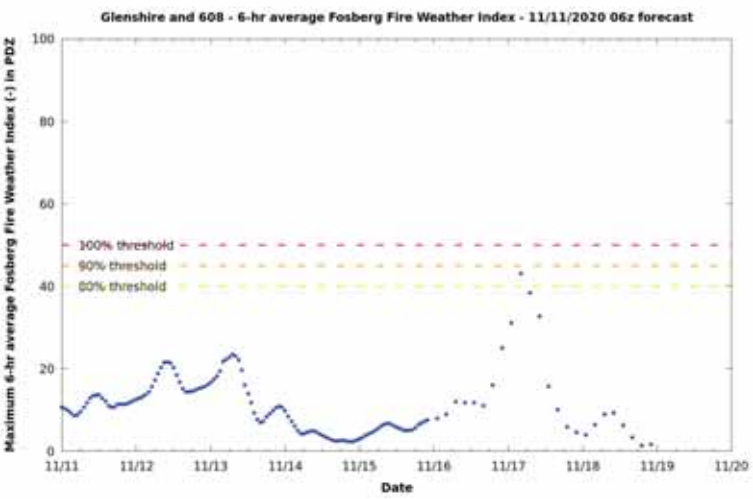


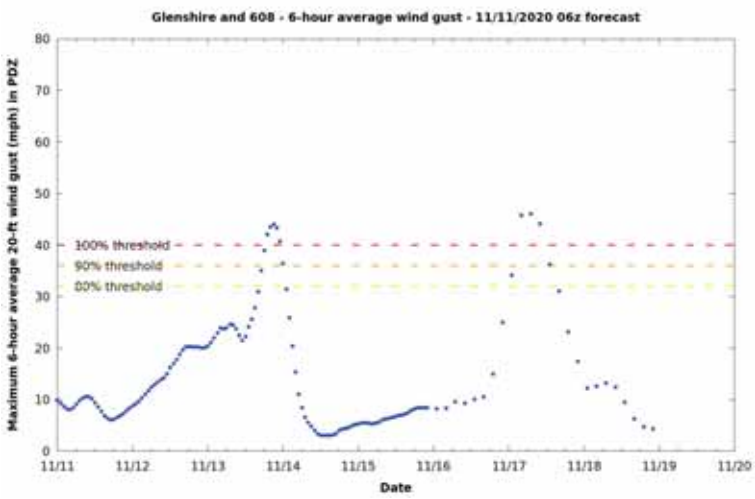
Beacon Tap



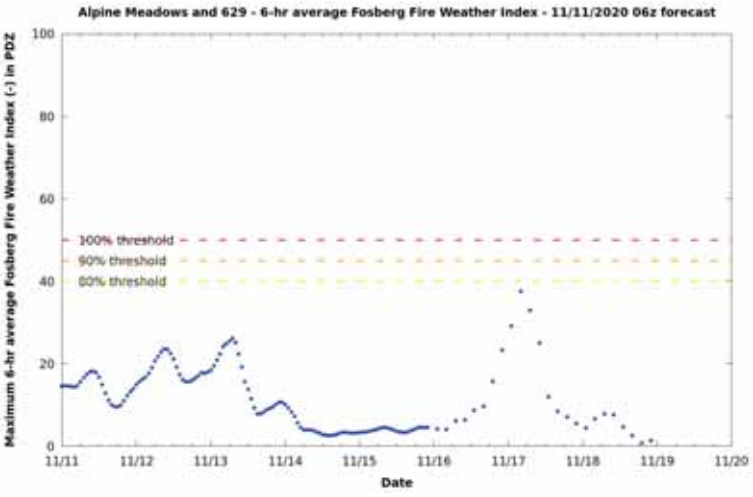


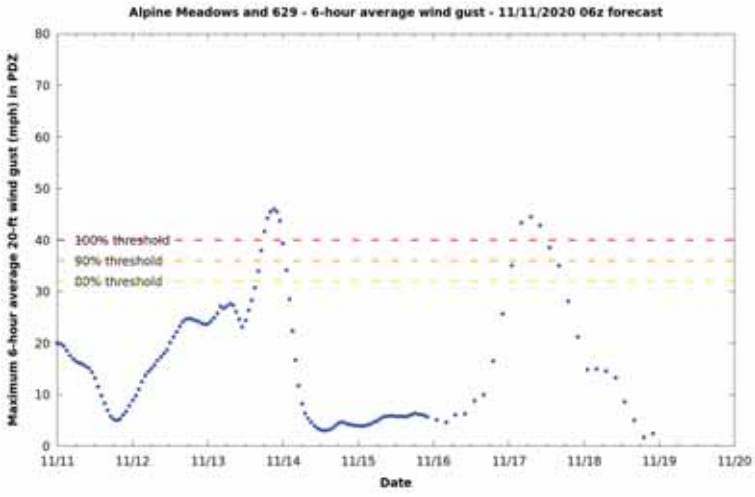
Glenshire and 608



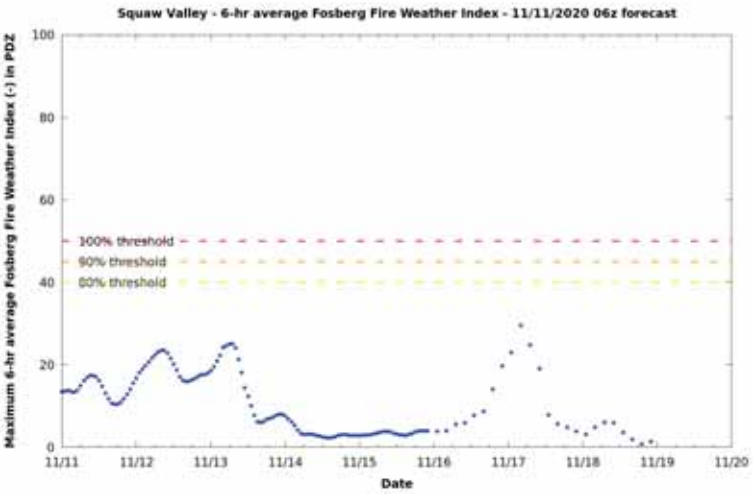


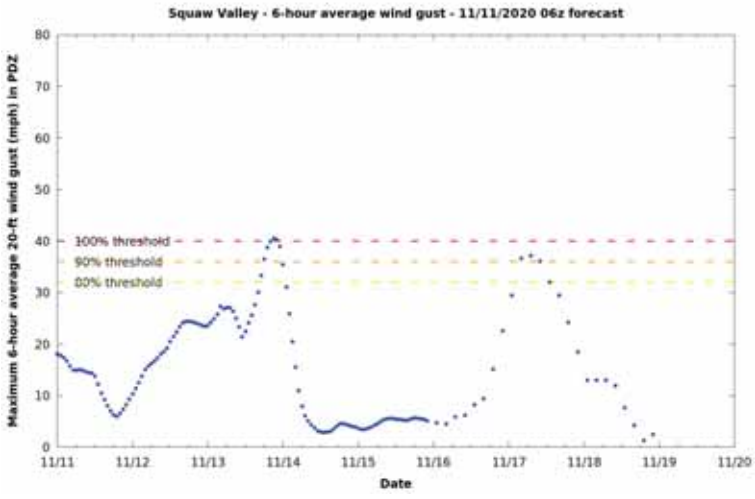
Alpine Meadows and 629



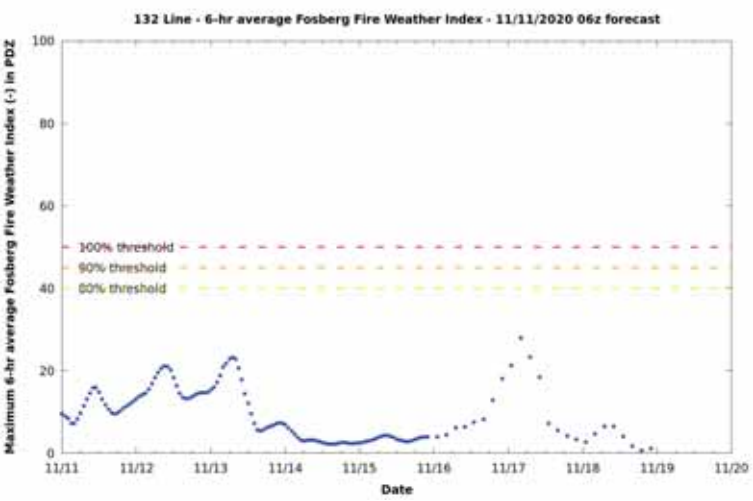


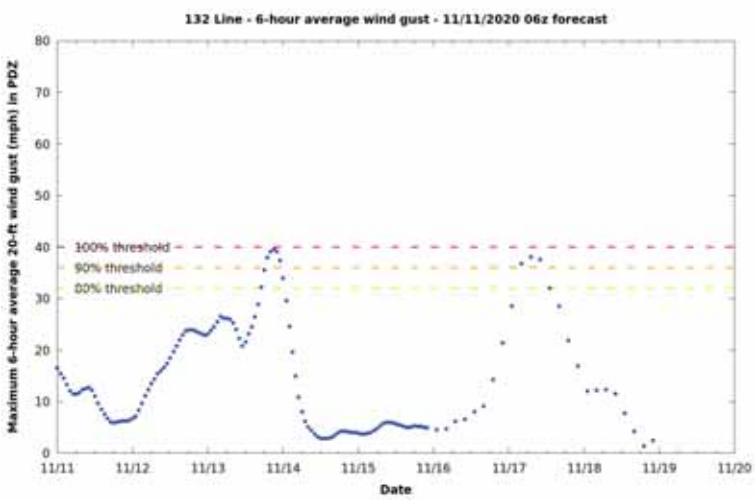
Squaw Valley



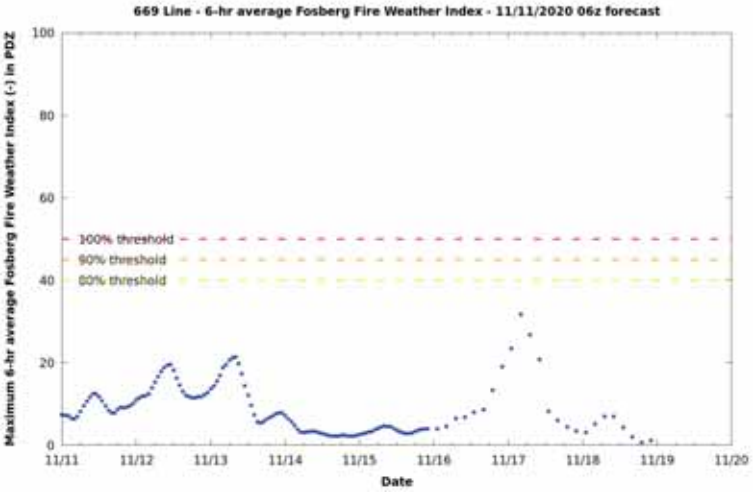


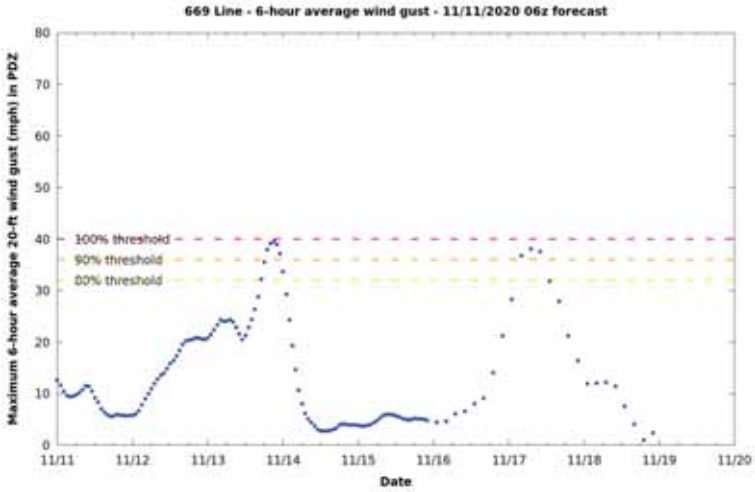
132 Line



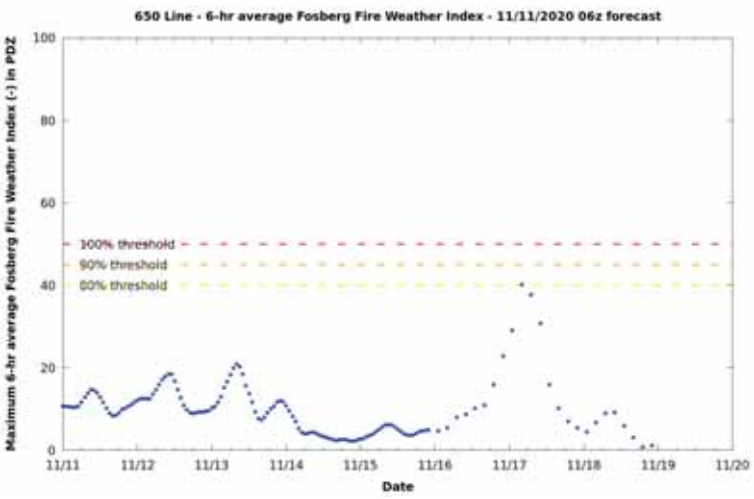


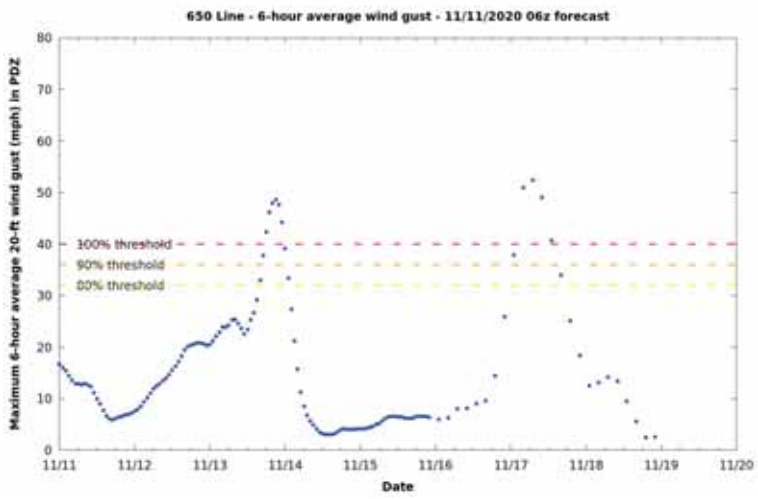
669 Line



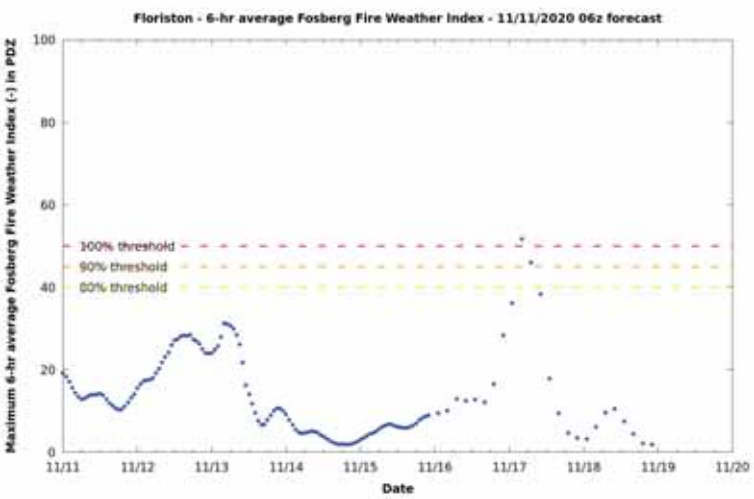


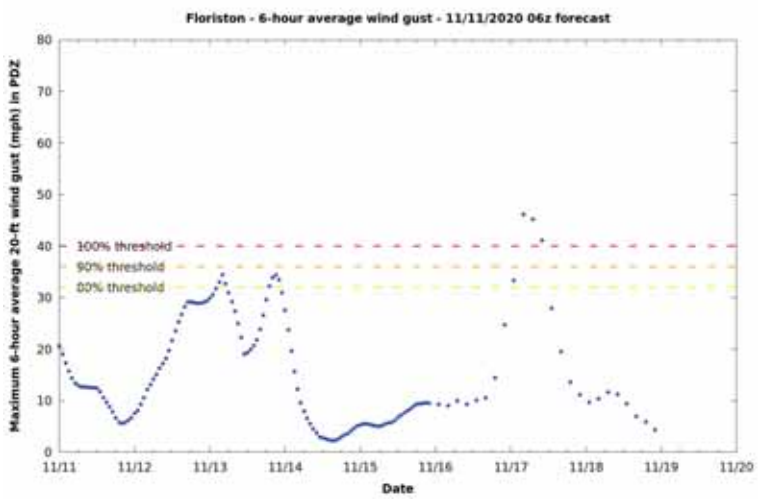
650 Line



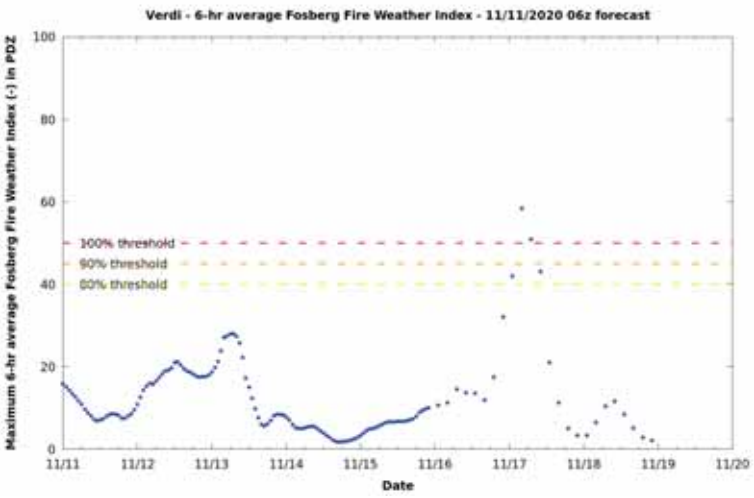


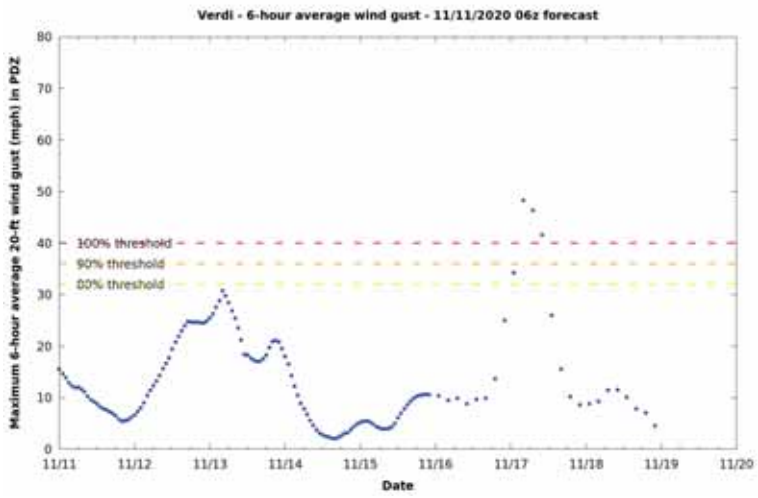
Floriston



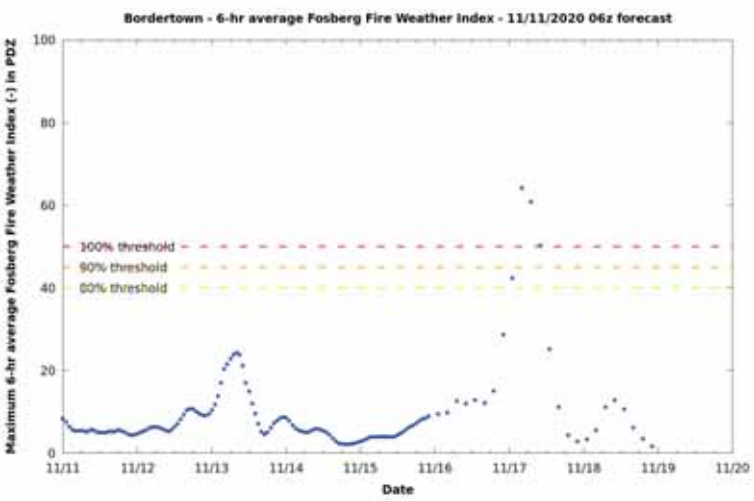


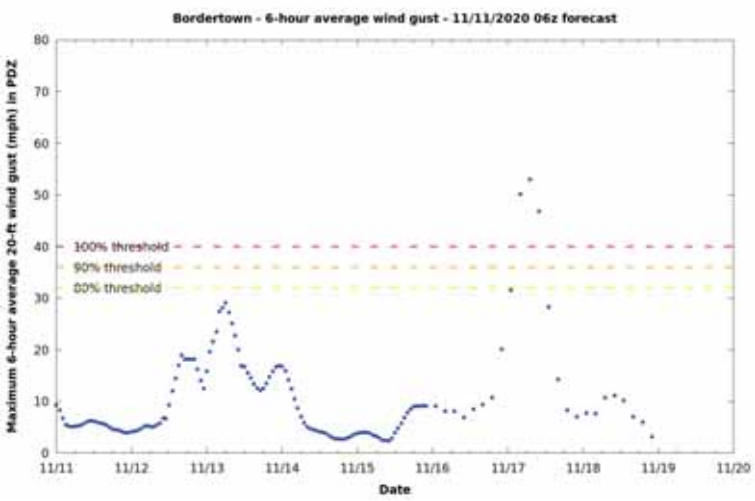
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/11/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20


Bordertown - 6-hour average wind gust - 11/11/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20

Liberty Utilities Fire Potential Index Forecast for 11/11/20 - 11/17/20

Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

Liberty Utilities Energy Release Component Forecast for 11/11/20 - 11/17/20

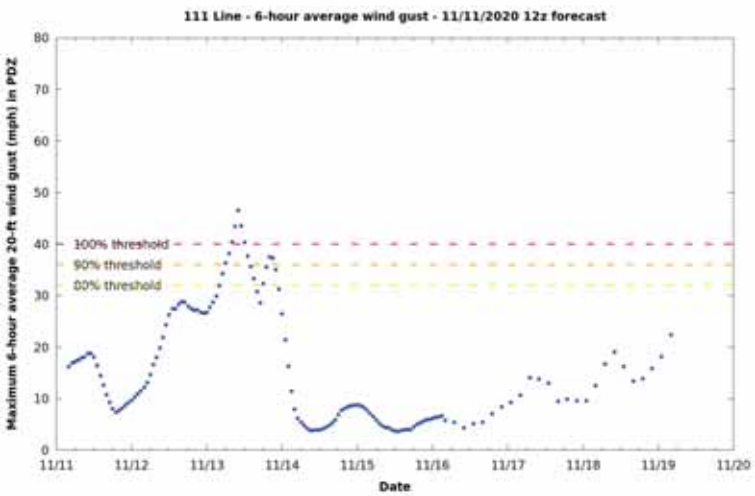
Zone	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	42.0	39.0	33.0	34.0	31.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

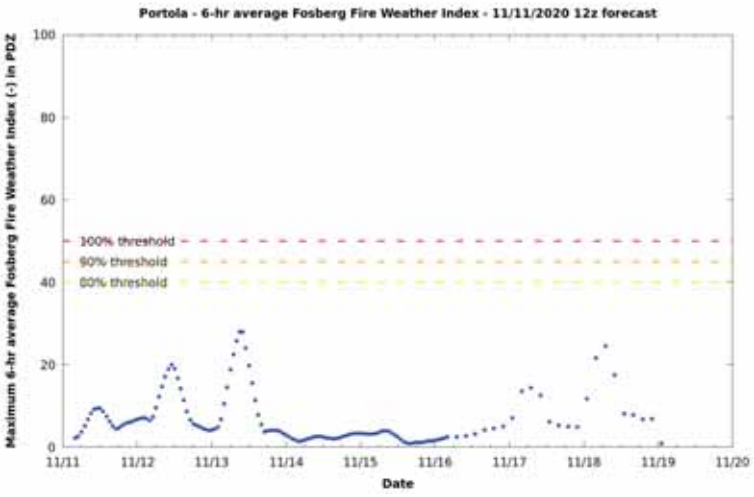
Liberty Utilities Fire Weather Summary Plots - 11/11/2020 12z forecast

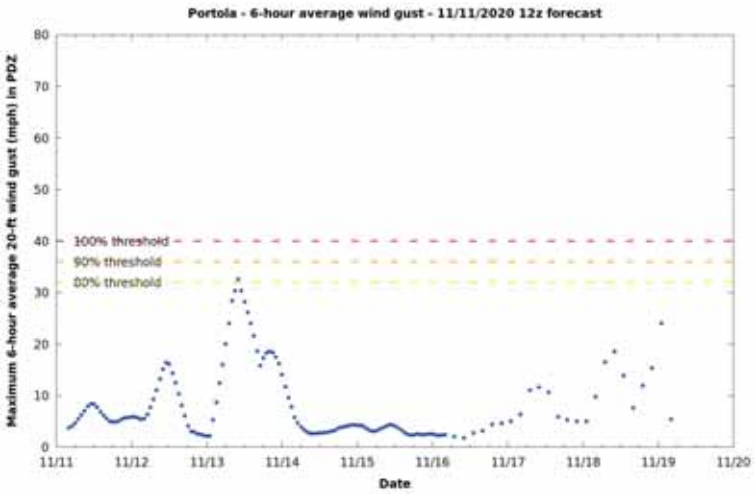
111 Line



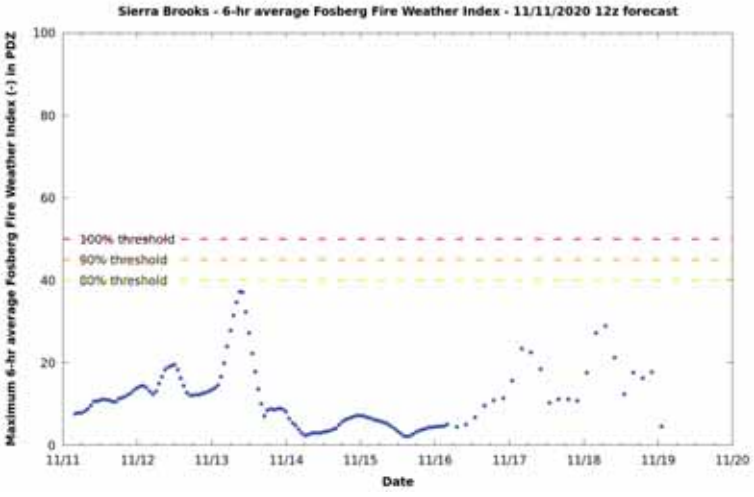


Portola



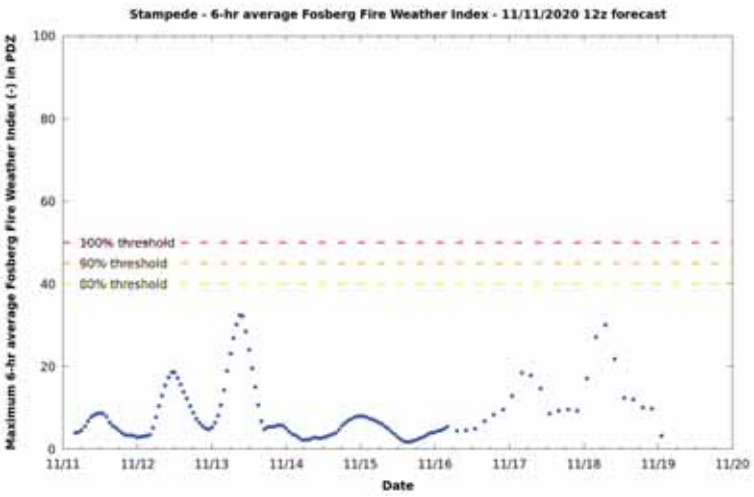


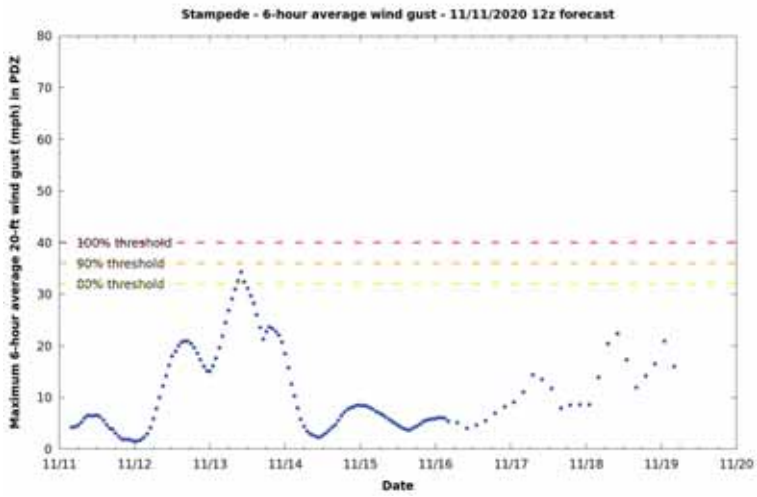
Sierra Brooks



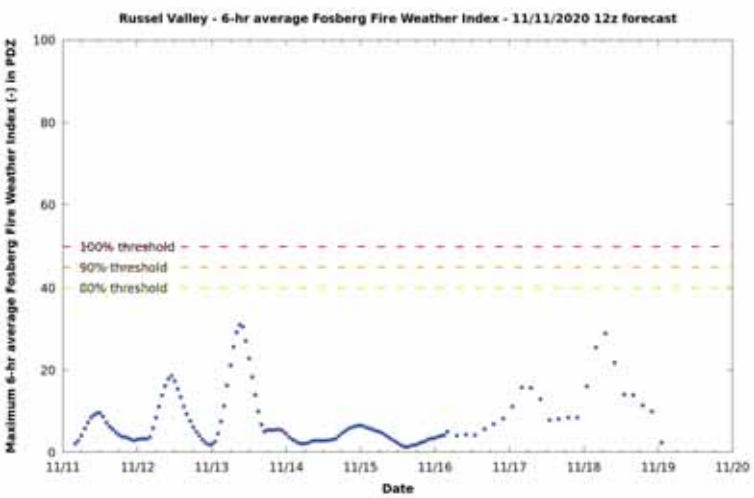


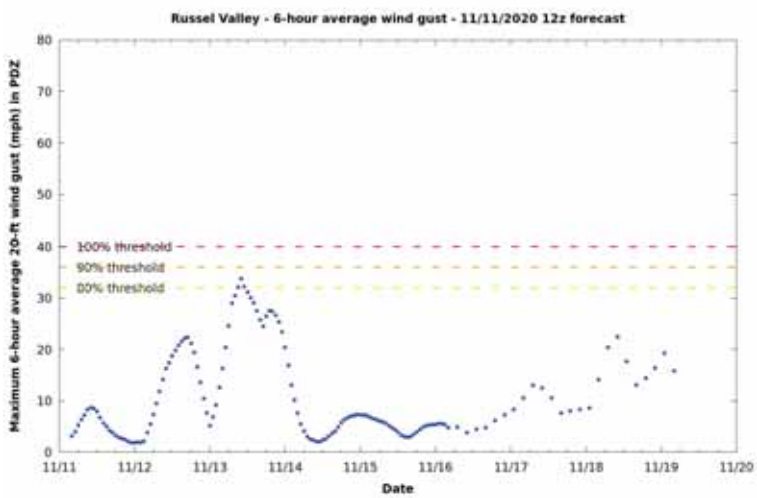
Stampede



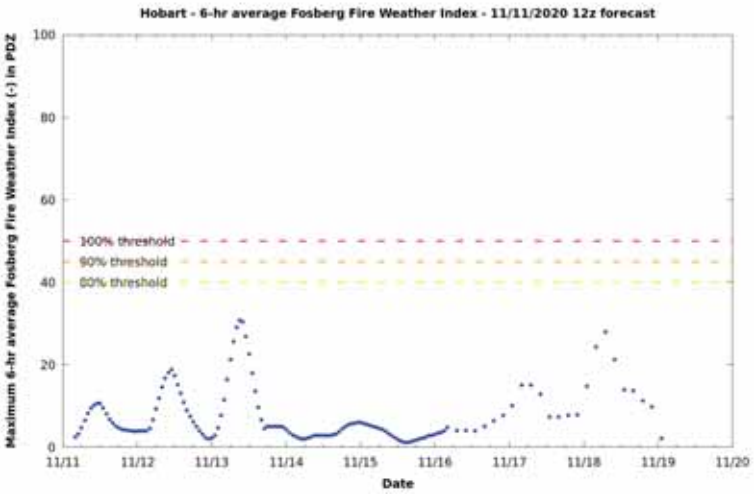


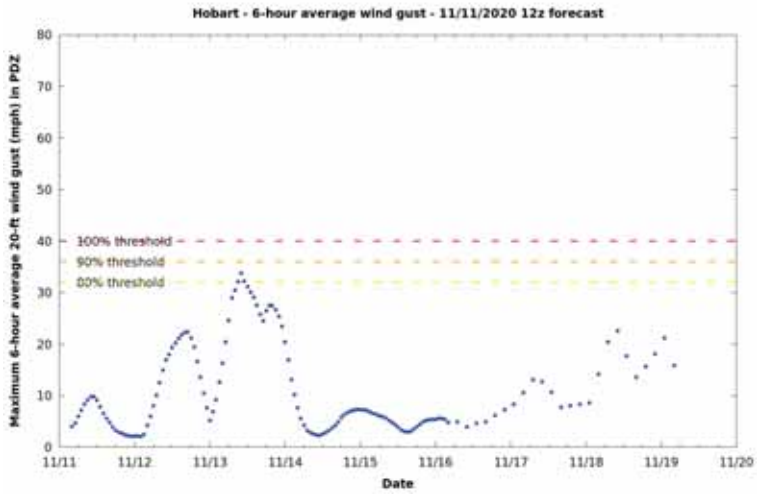
Russell Valley



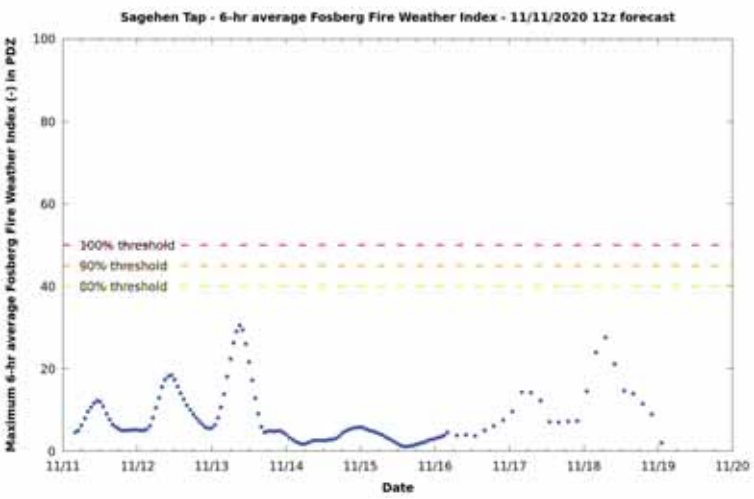


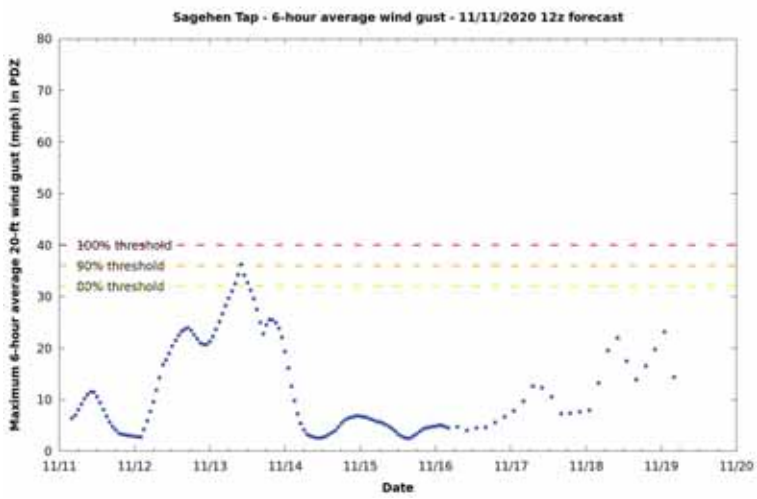
Hobart



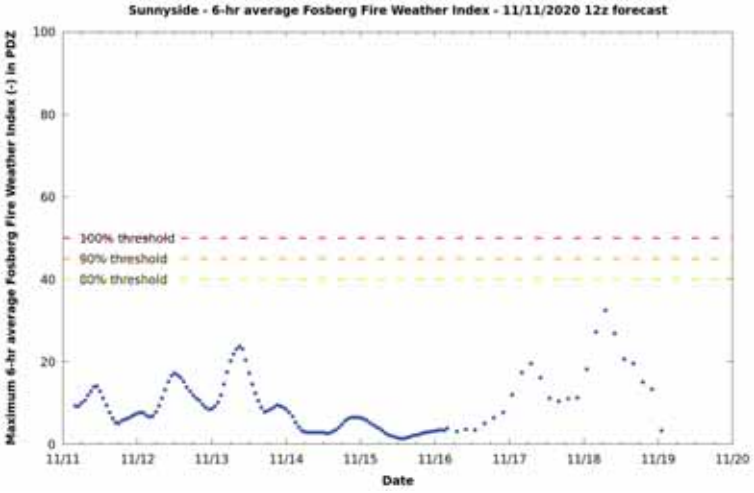


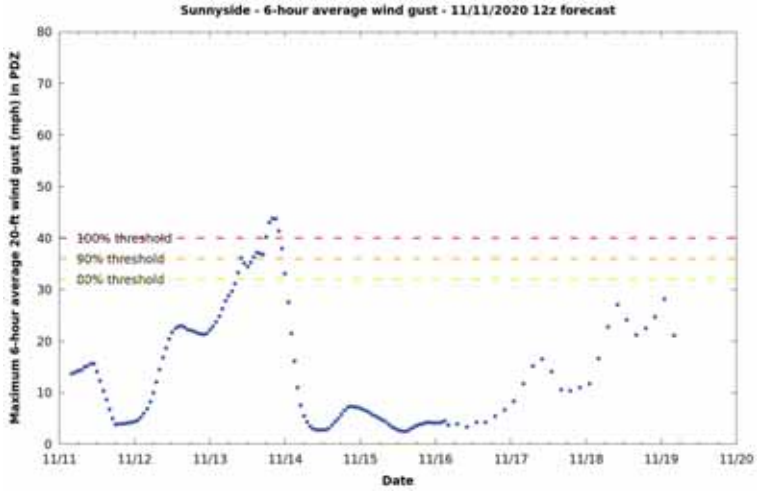
Sagehen tap



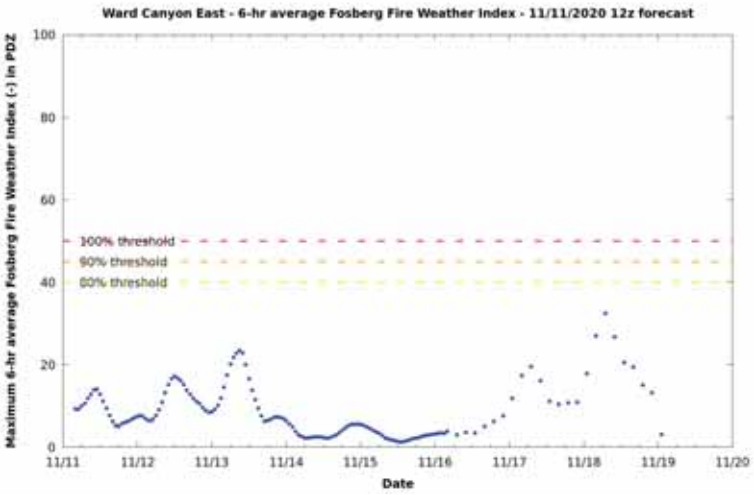


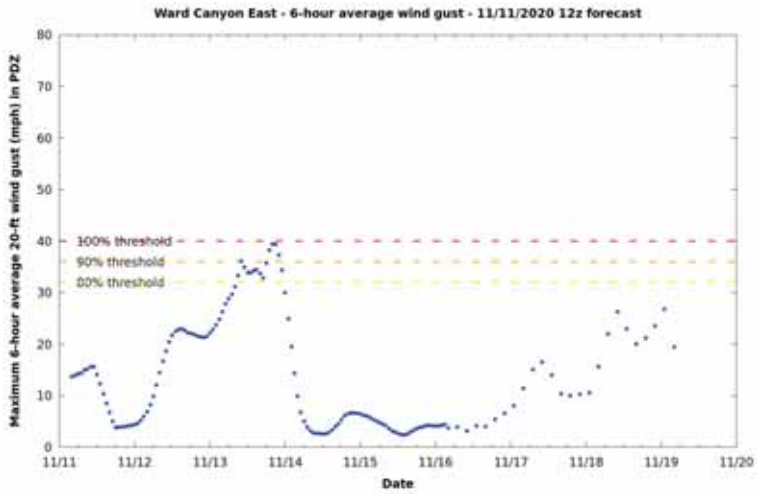
Sunnyside



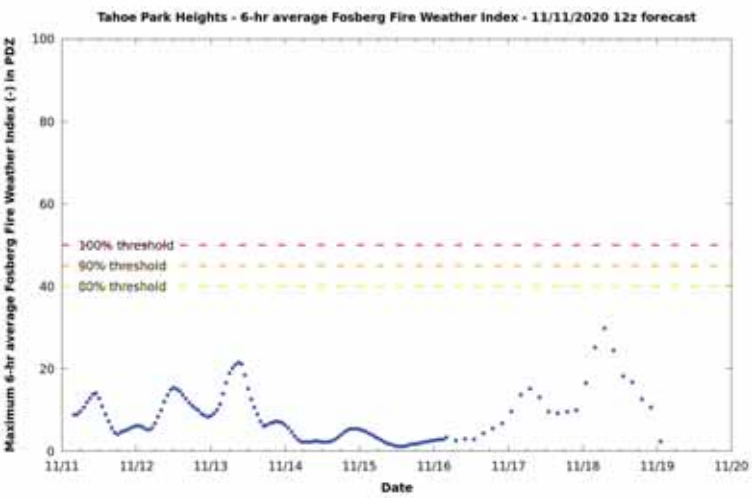


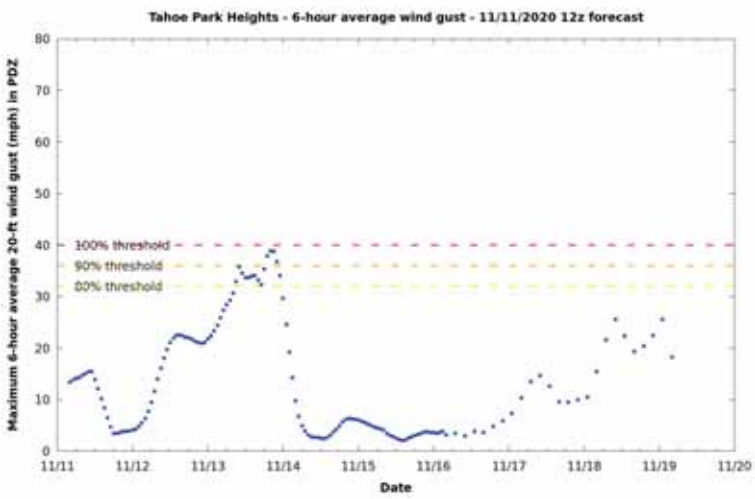
Ward Canyon East



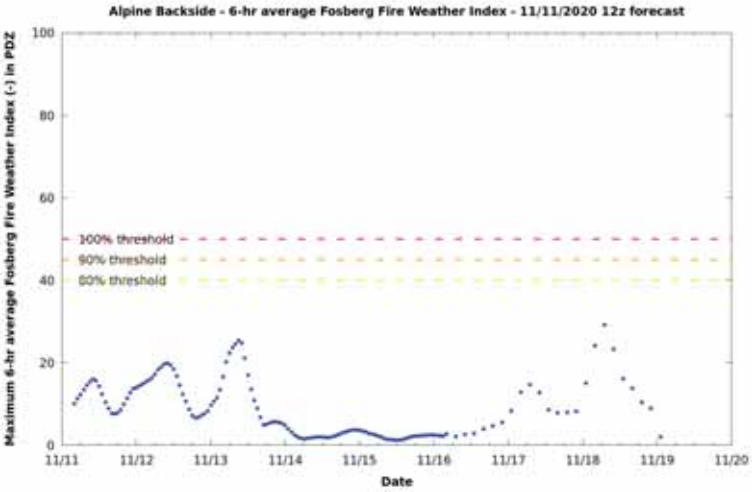


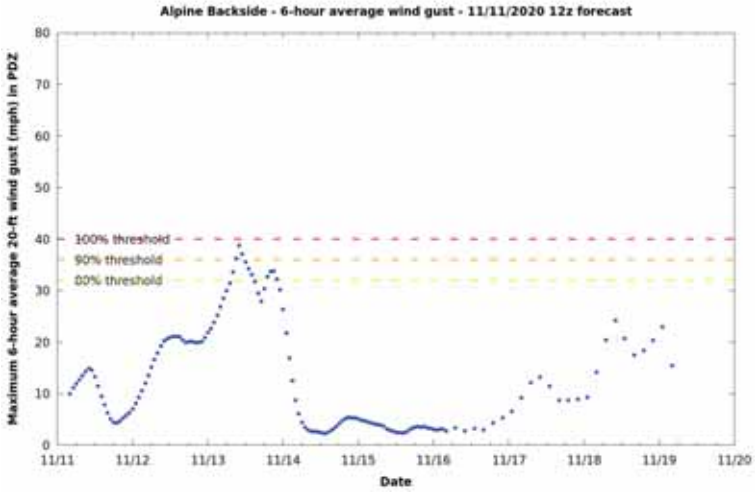
Tahoe Park Heights



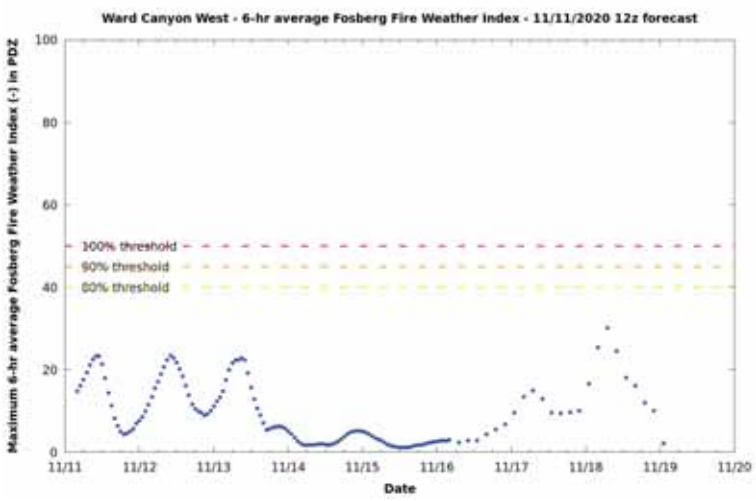


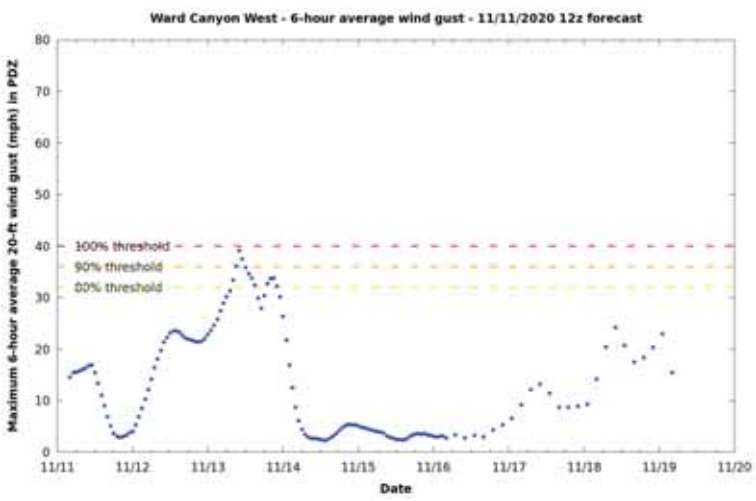
Alpine Backside



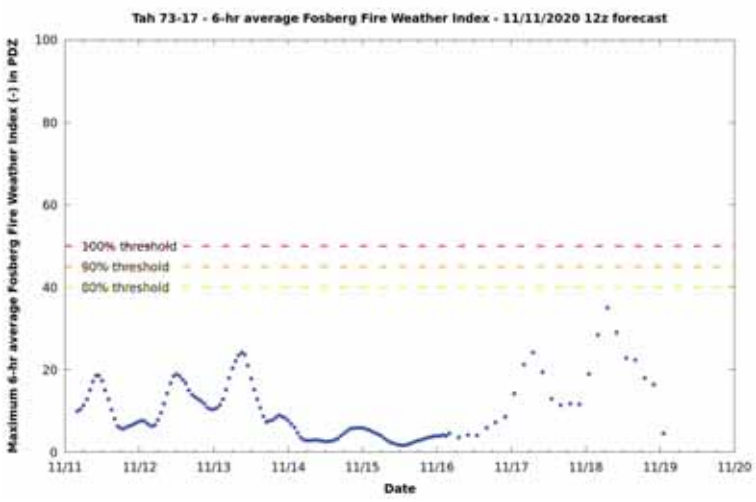


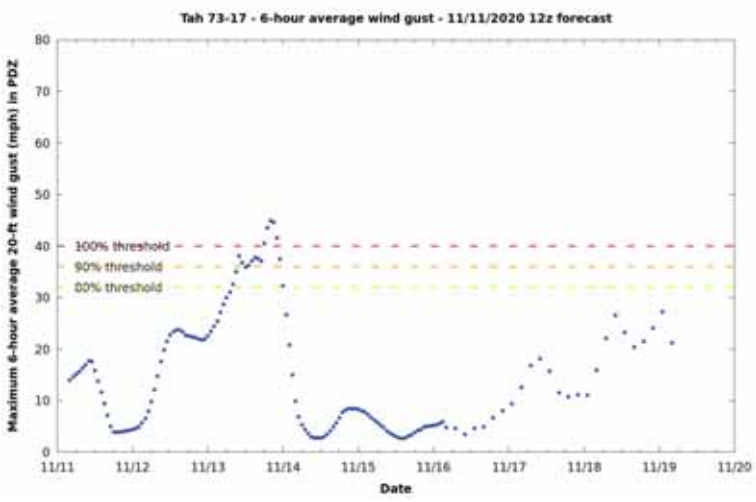
Ward Canyon West



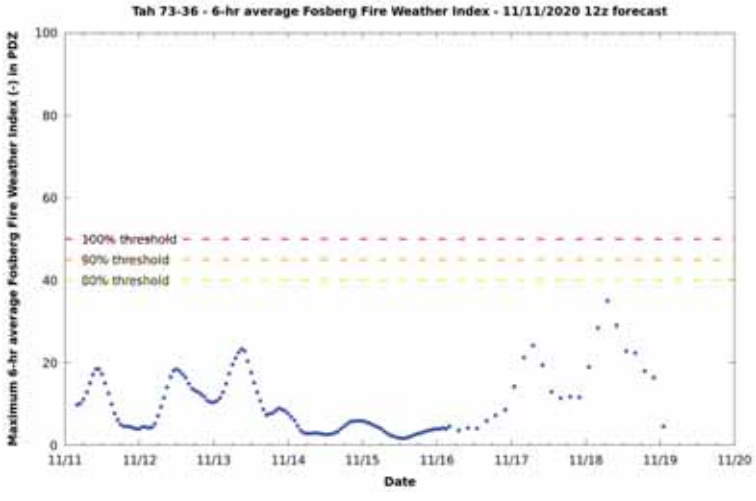


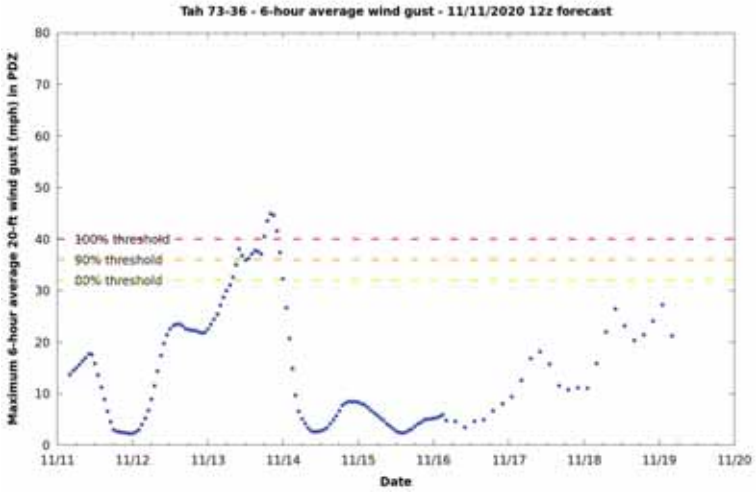
Tah 73-17



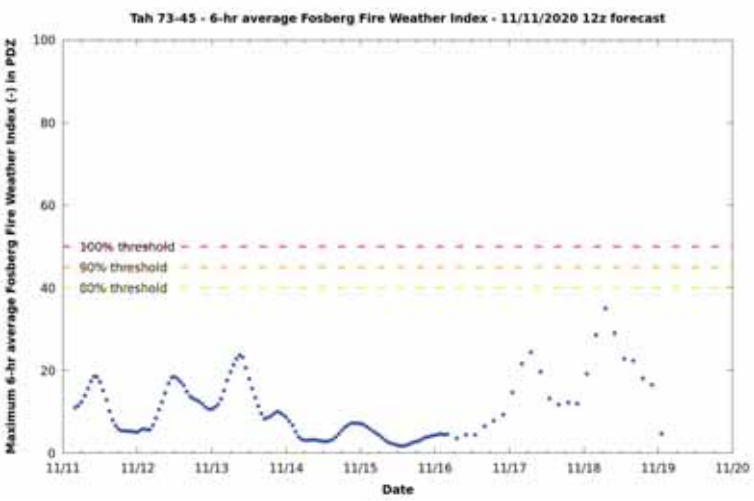


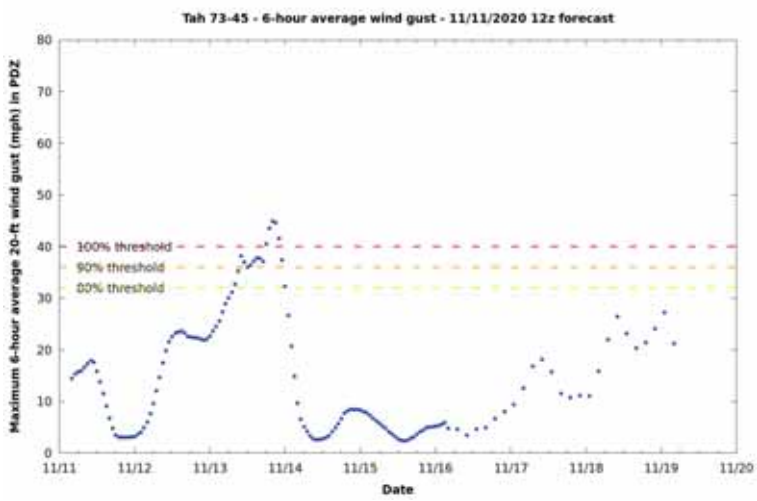
Tah 73-36



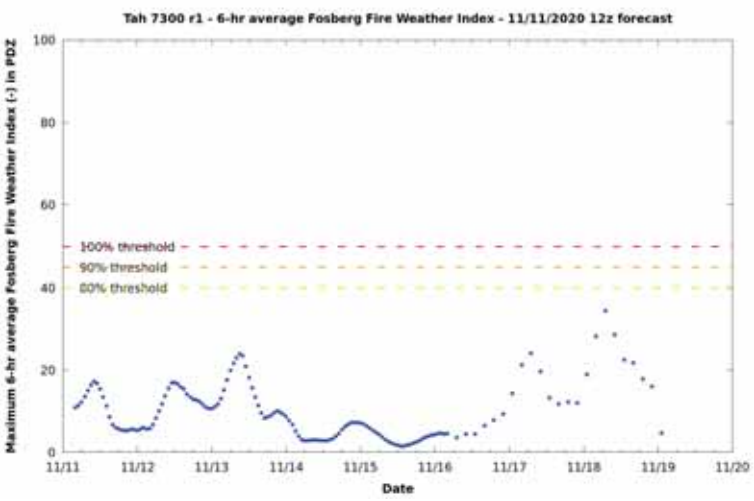


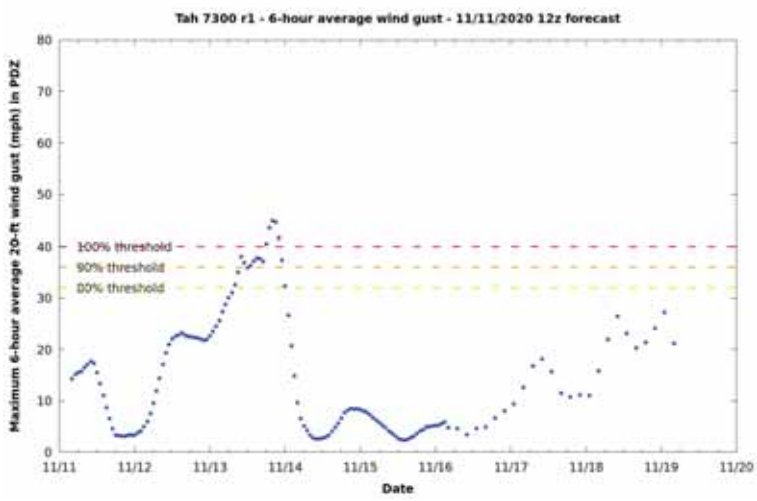
Tah 73-45



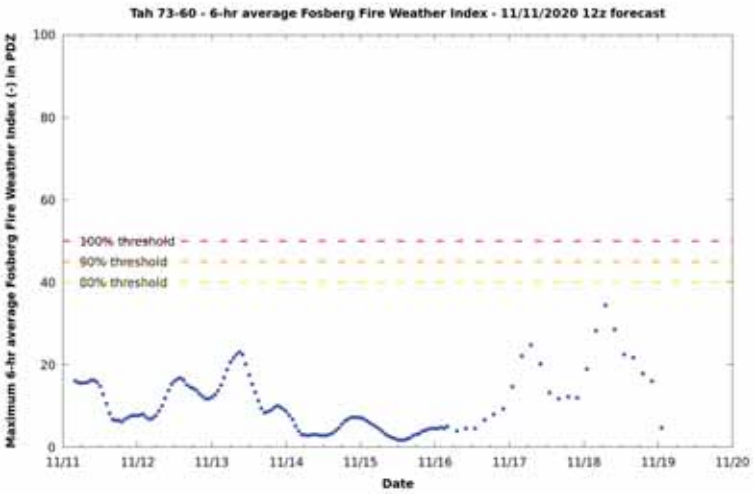


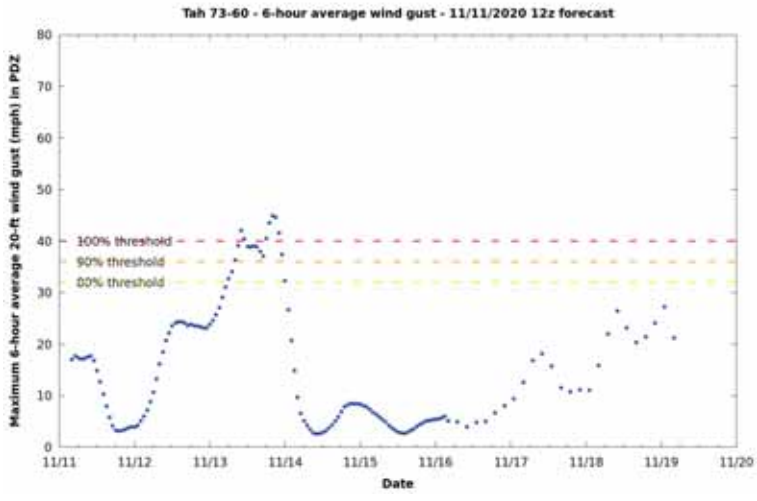
Tah 7300 r1



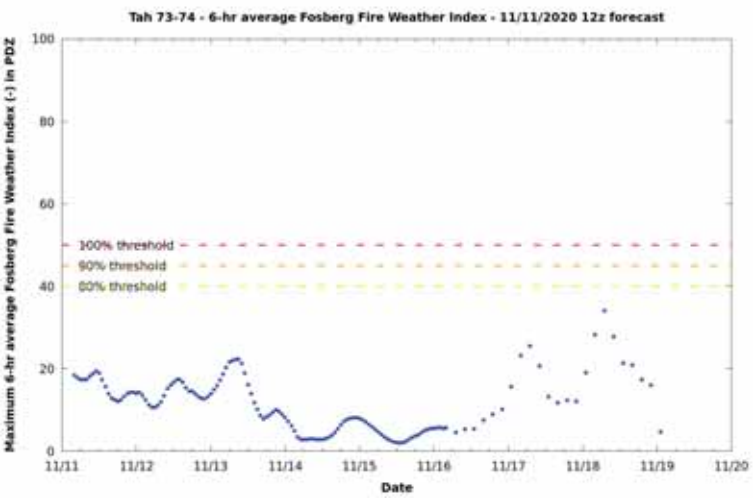


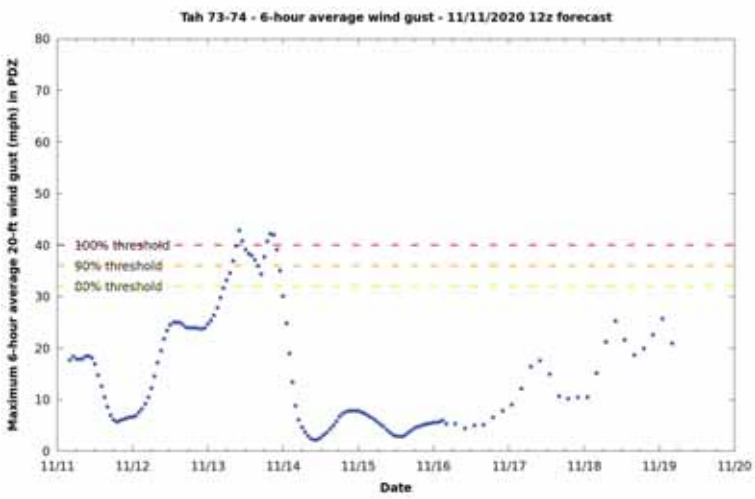
Tah 73-60



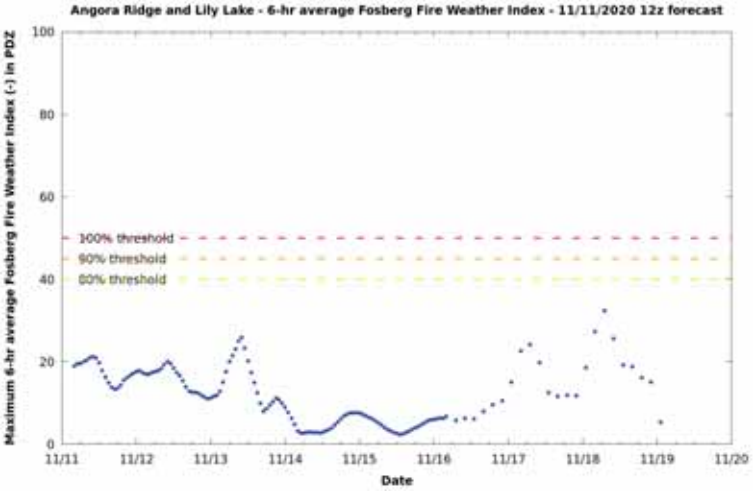


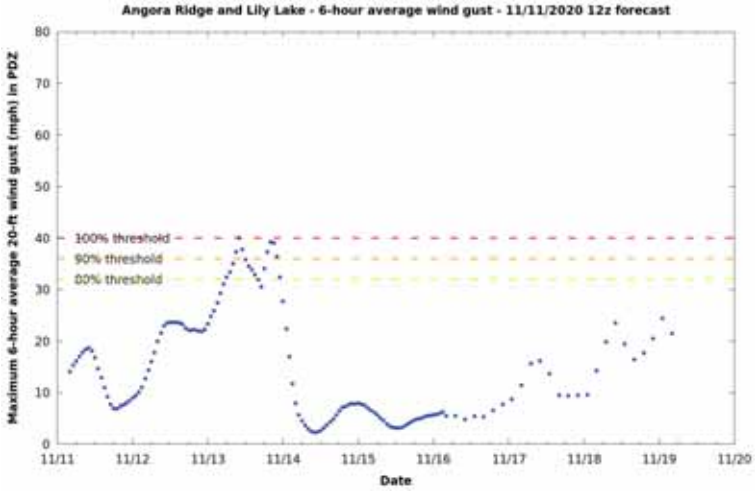
Tah 73-74



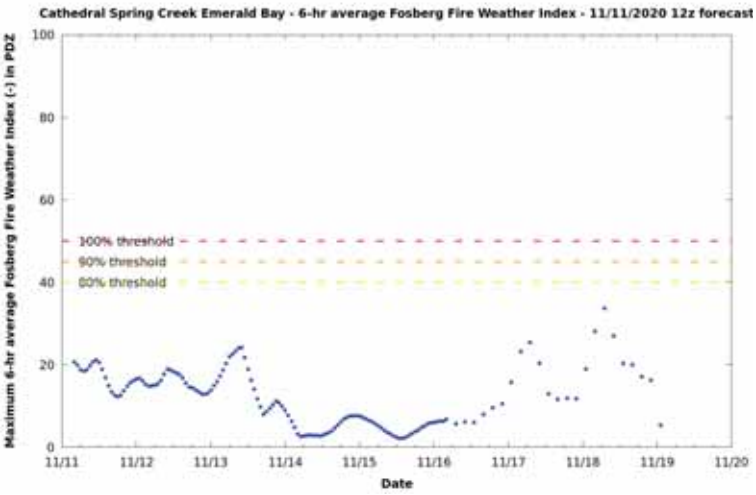


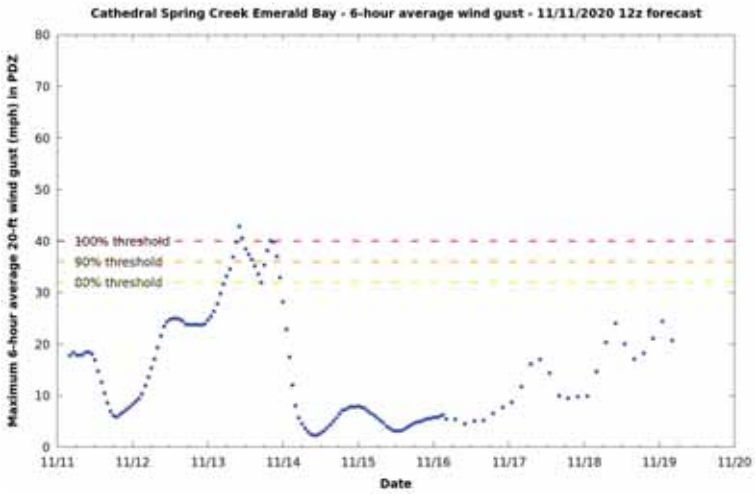
Angora Ridge and Lily Lake



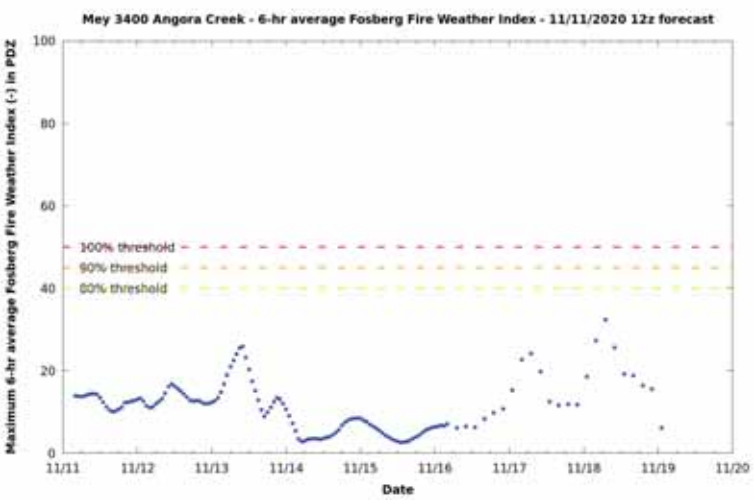


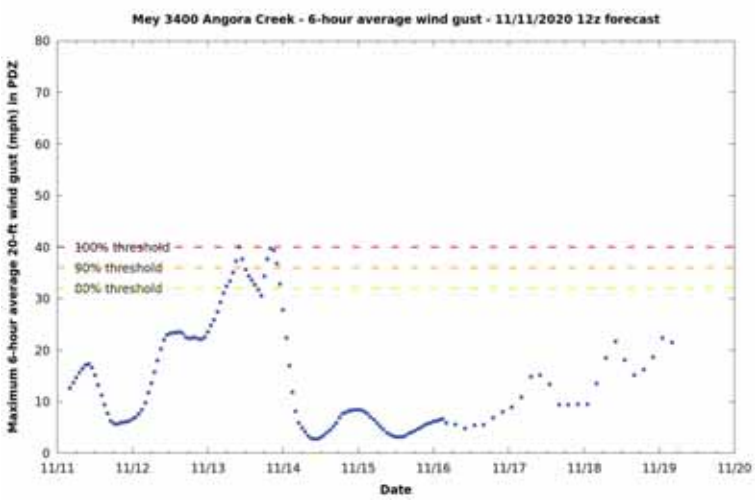
Cathedral Spring Creek Emerald Bay



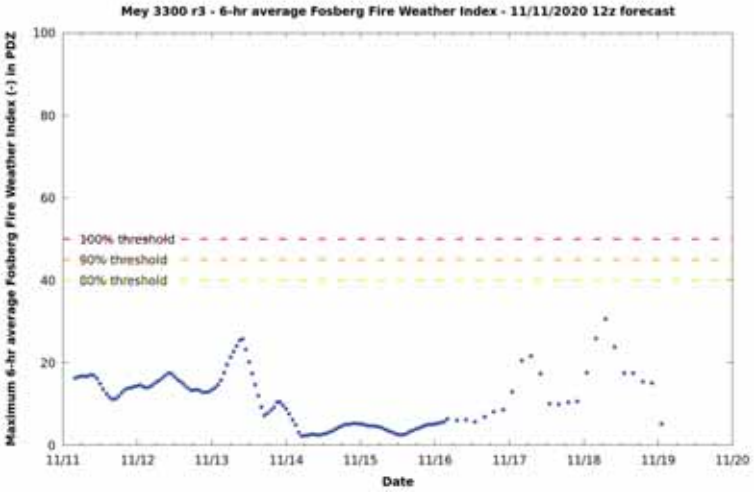


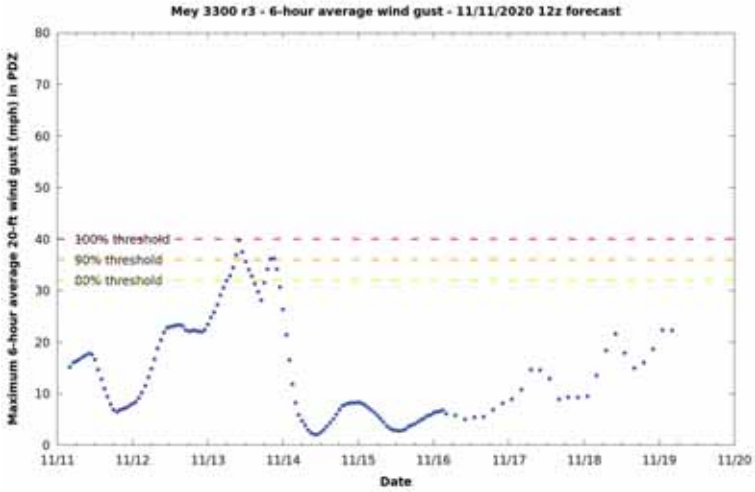
Mey 3400 Angora Creek



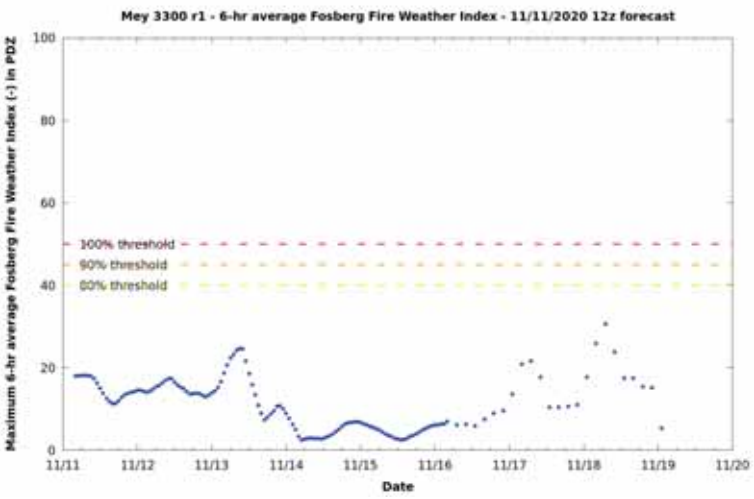


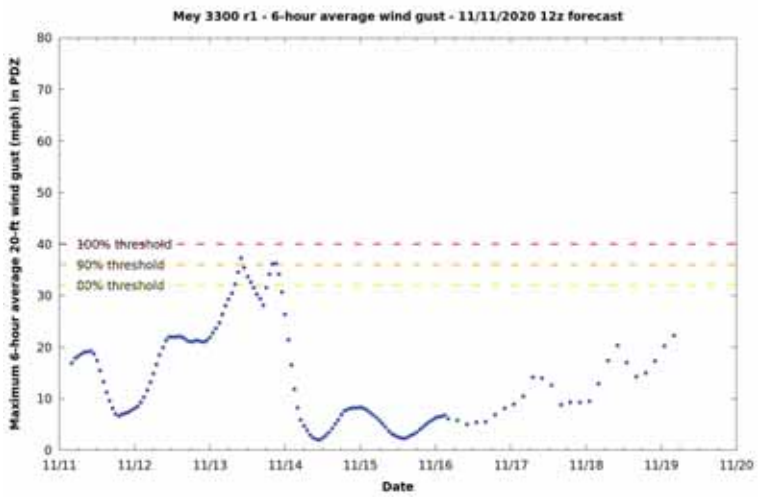
Mey 3300 r3



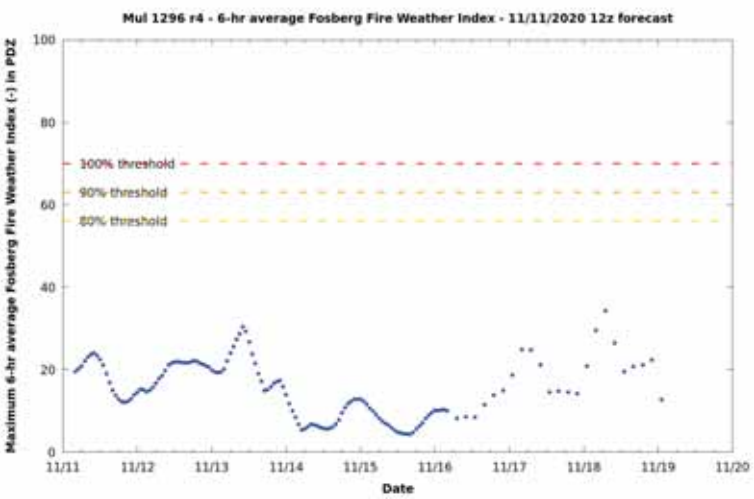


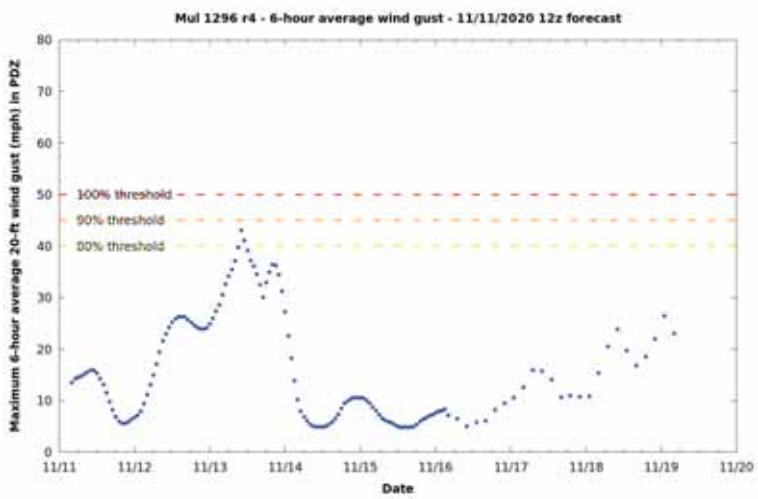
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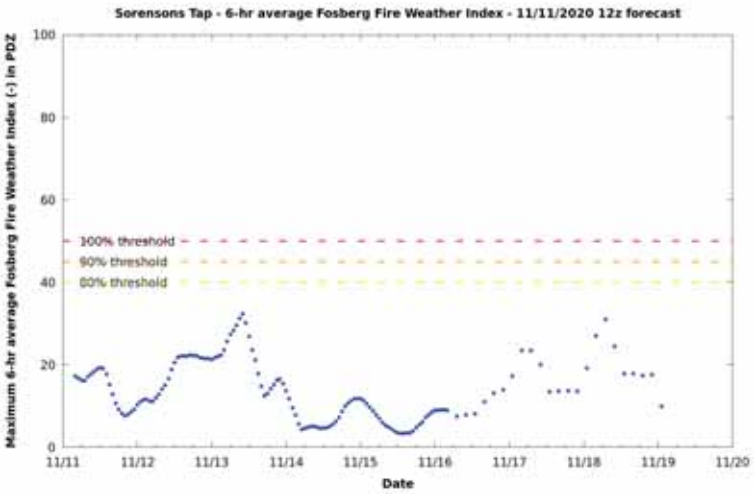


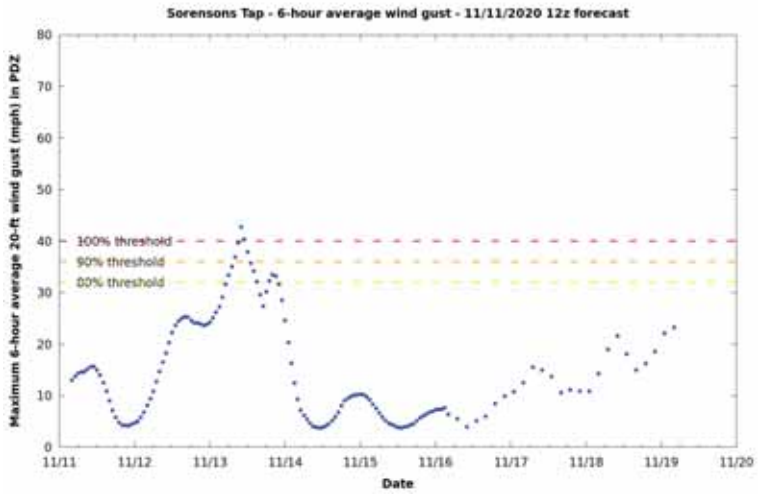
Mul 1296 r4



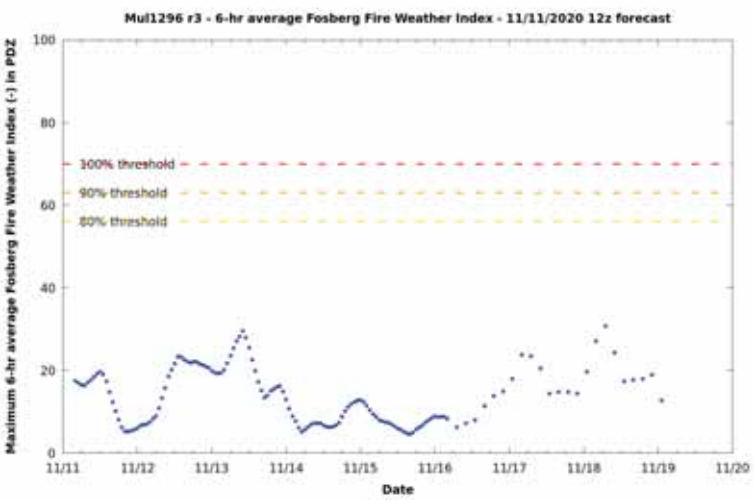


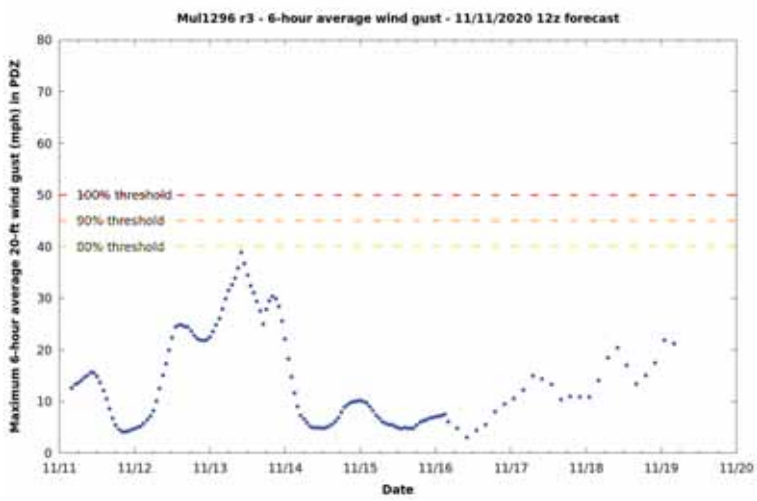
Sorensons Tap



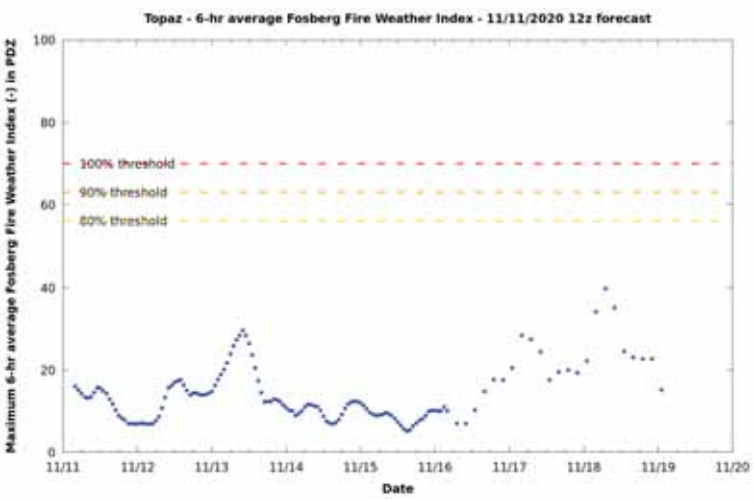


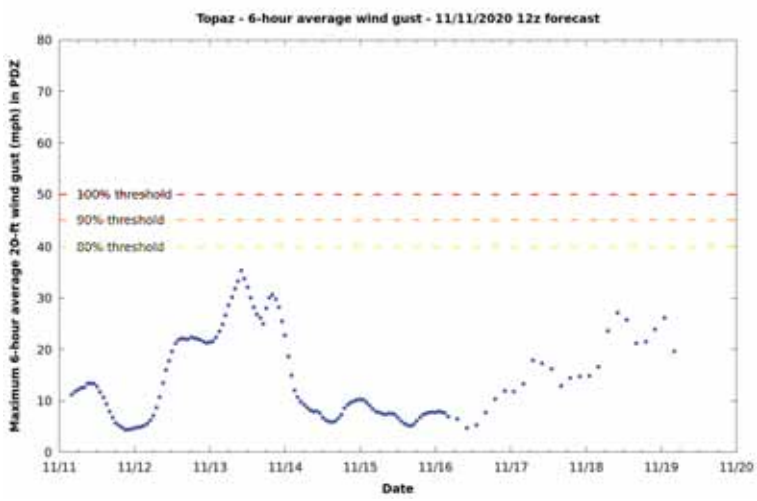
Mul 1296 r3



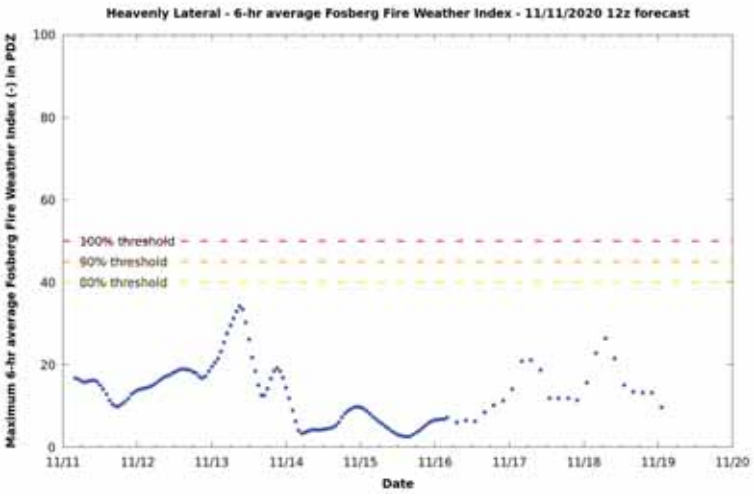


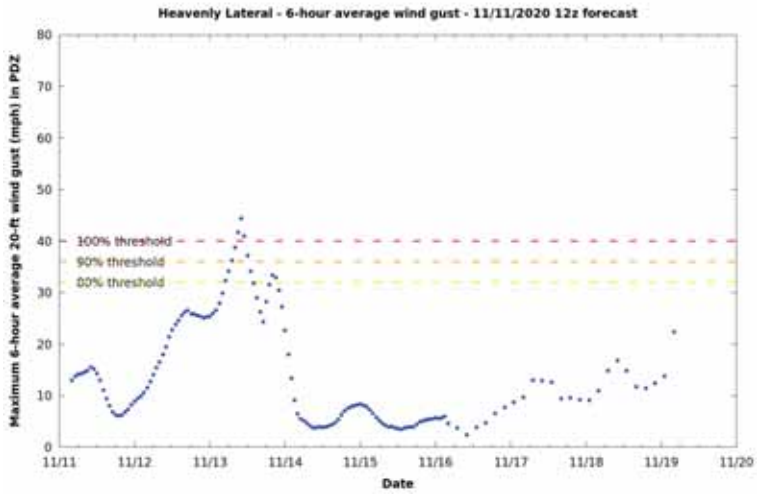
Topaz



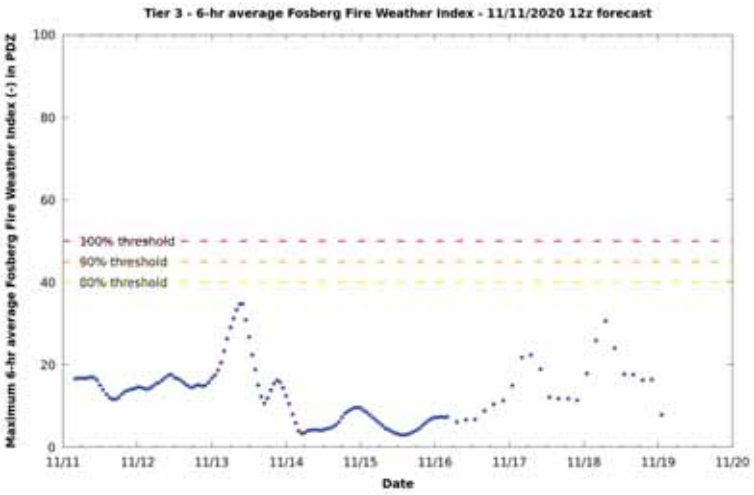


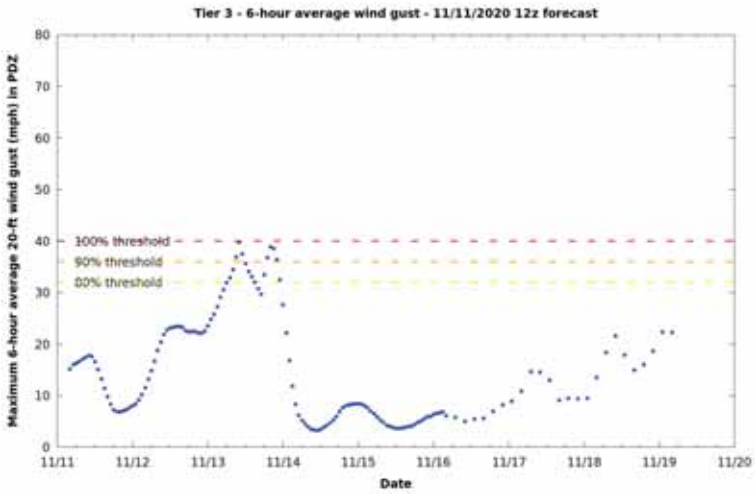
Heavenly Lateral



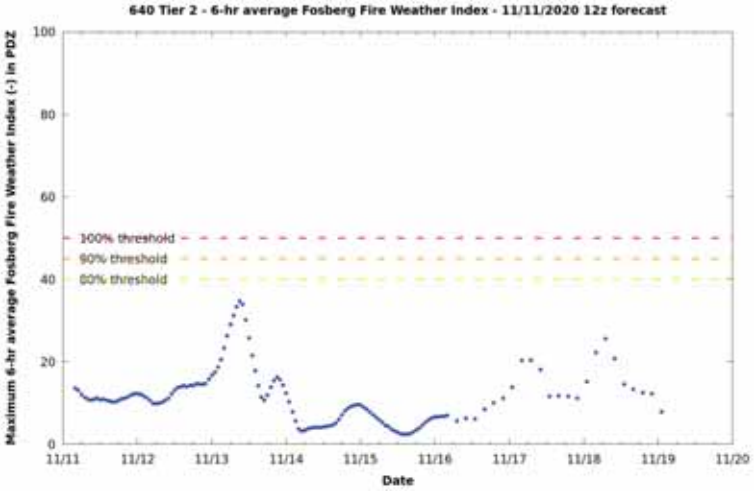


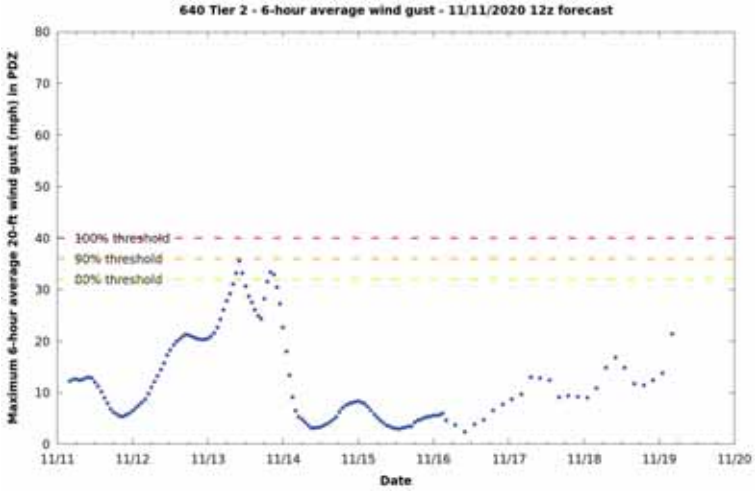
Tier 3



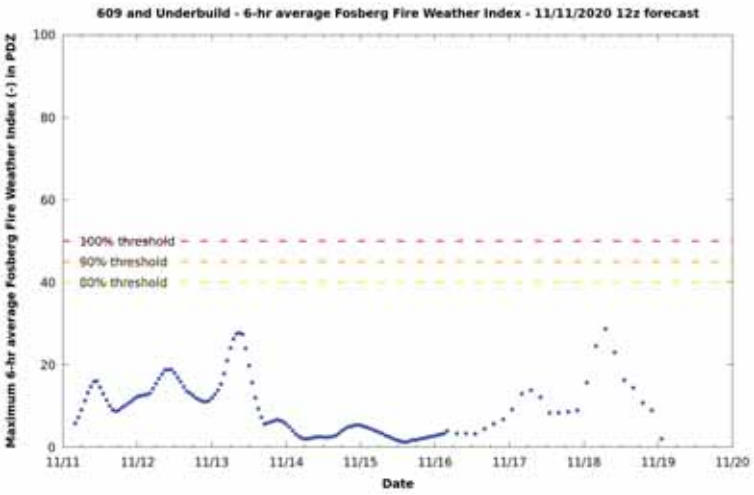


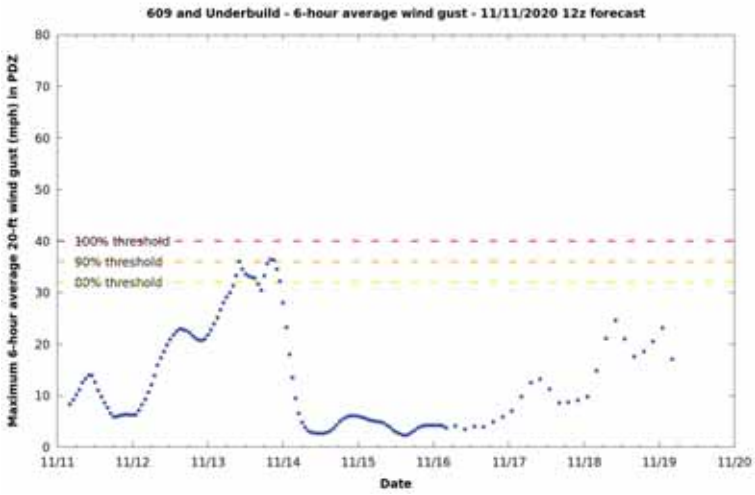
640 Tier 2



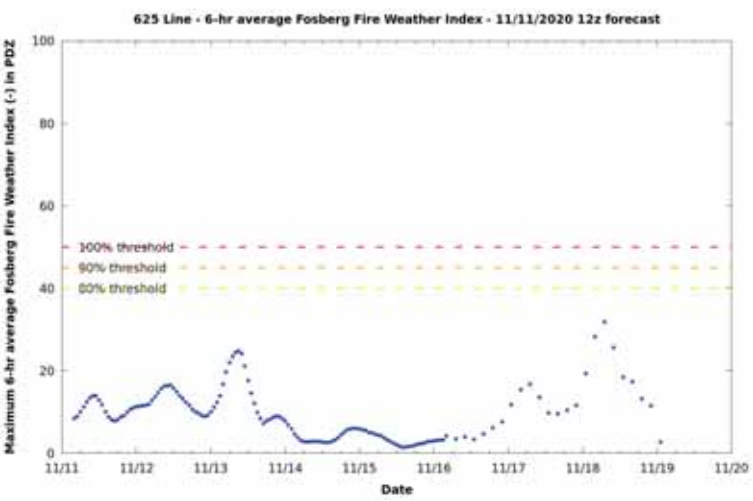


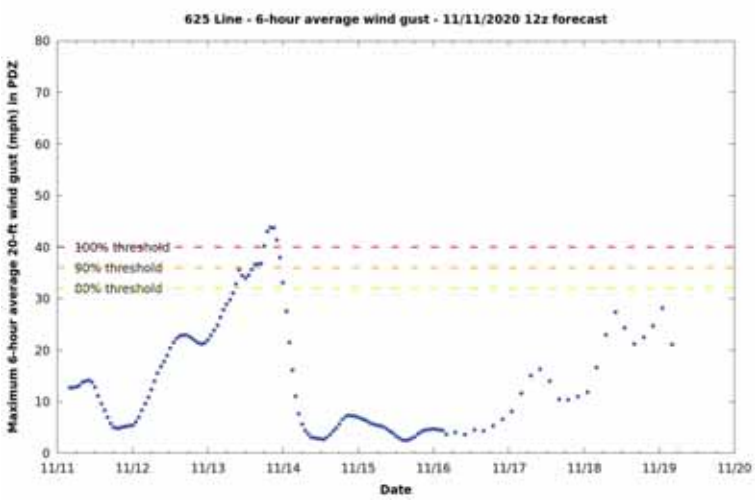
609 and Underbuild



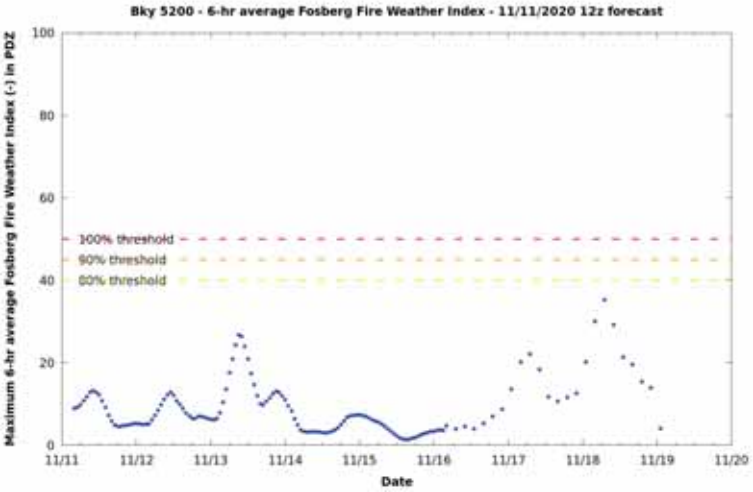


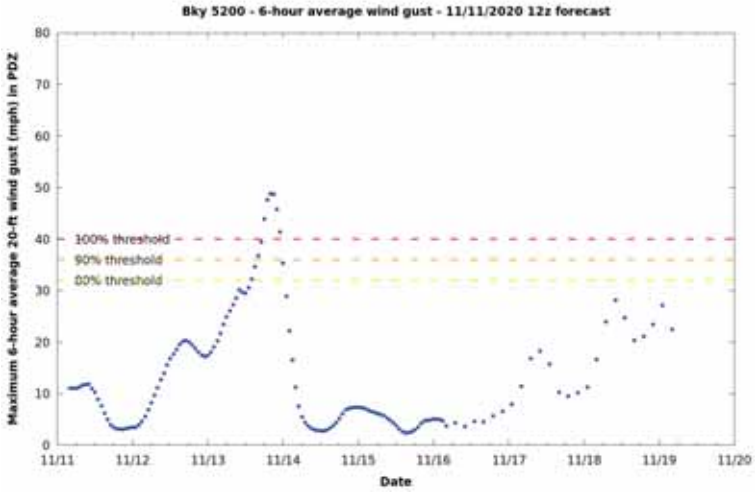
625 Line



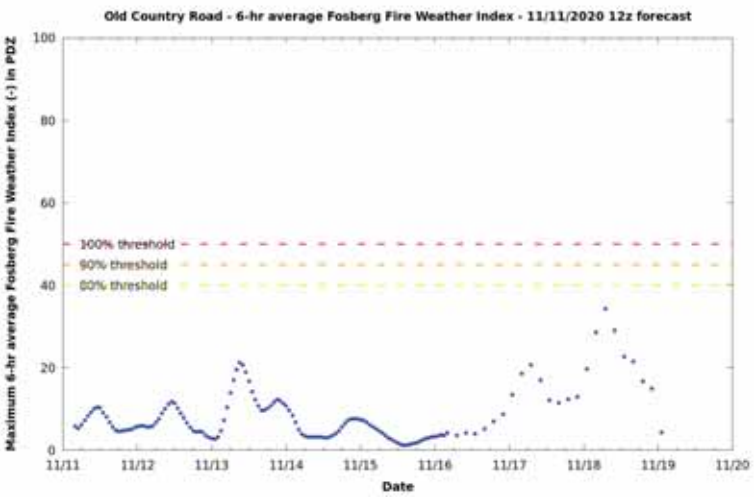


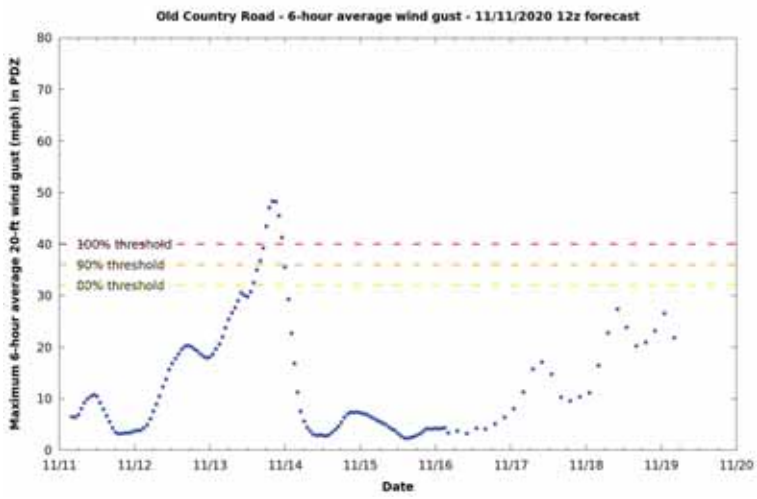
Bky 5200



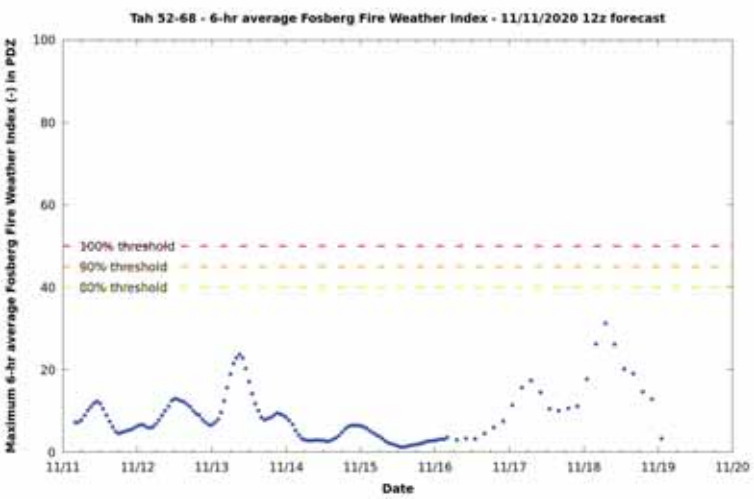


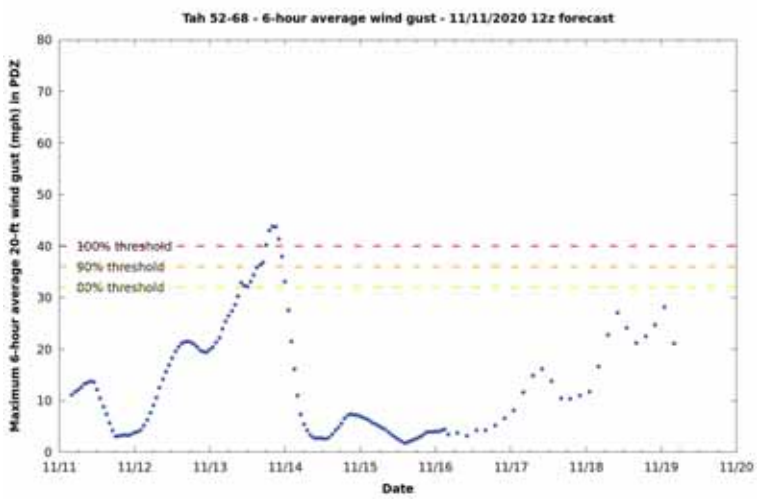
Old Country Road



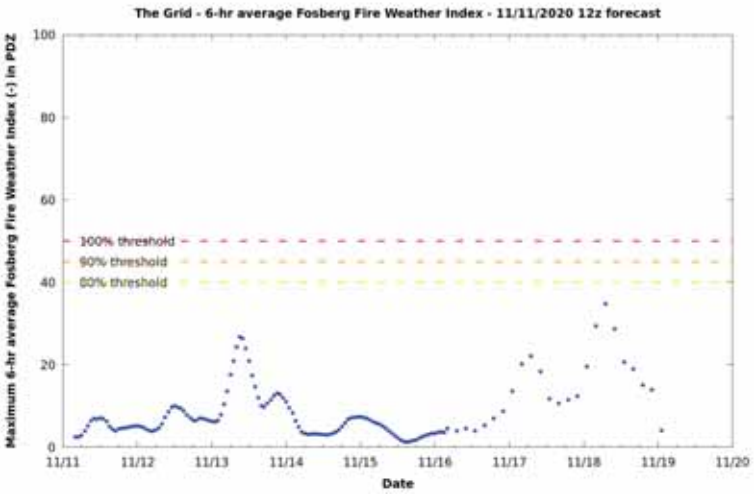


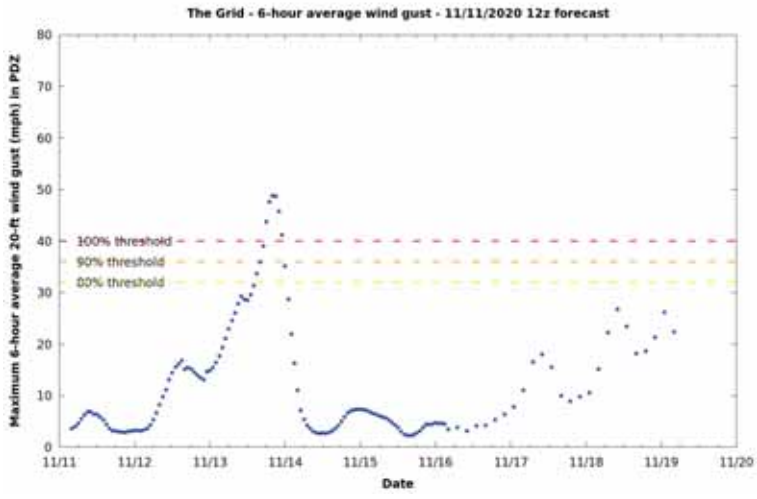
Tah 52-68



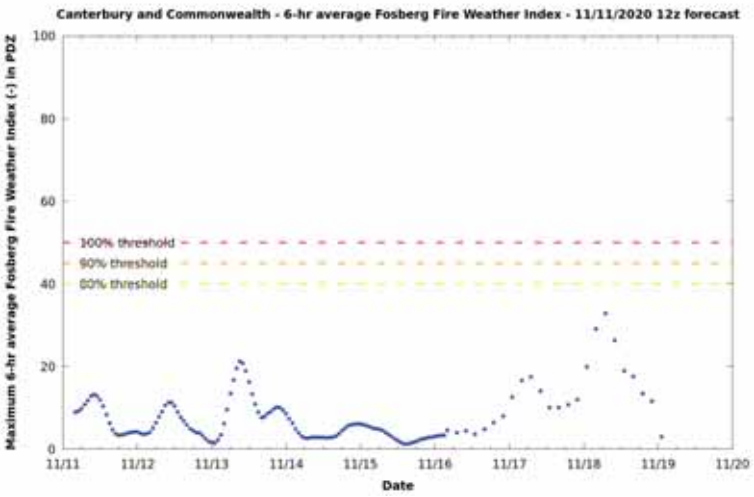


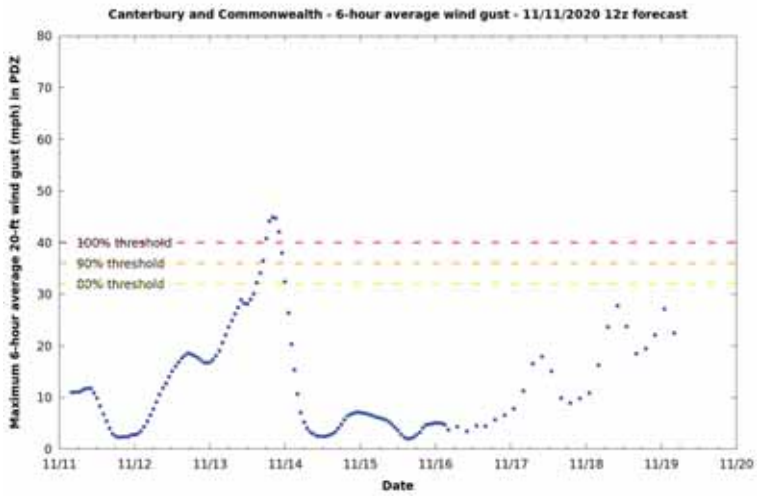
The Grid



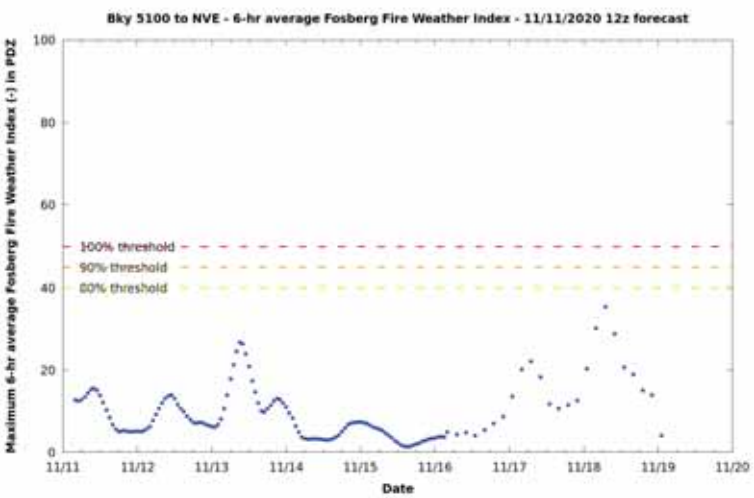


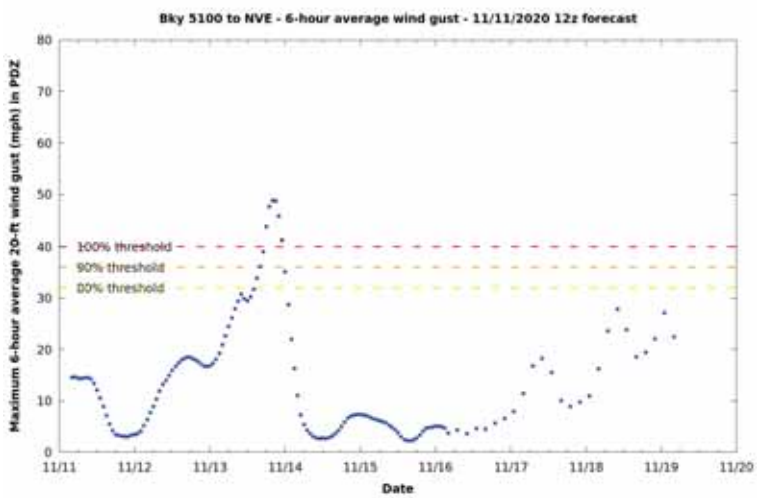
Canterbuy and Commonwealth



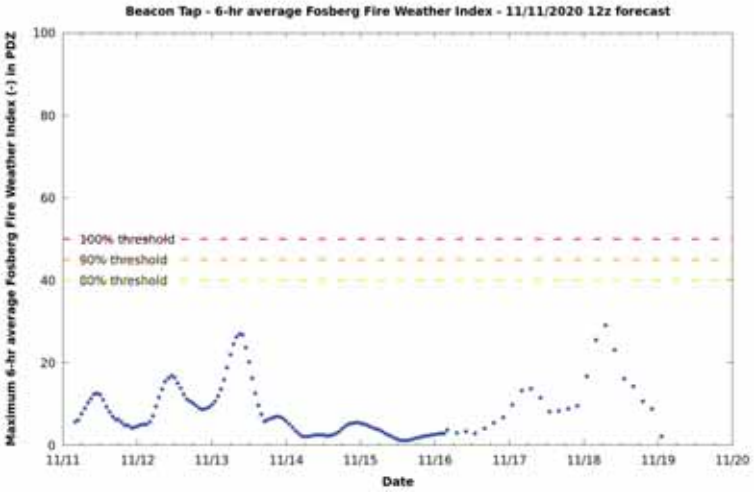


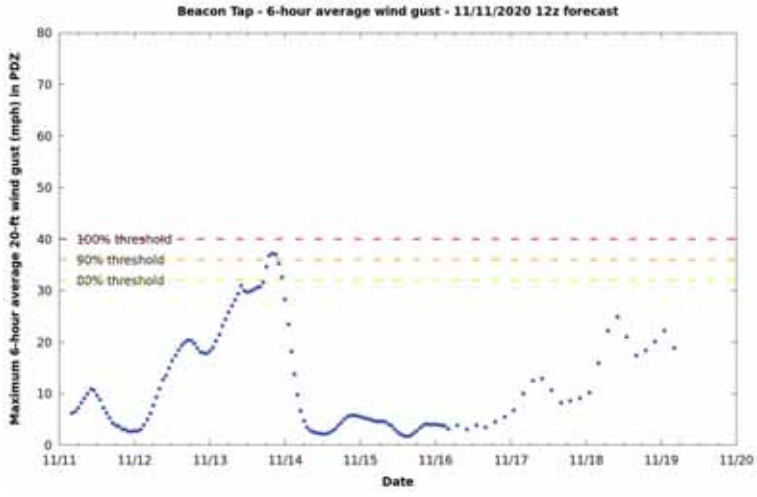
Bky 5100 to NVE



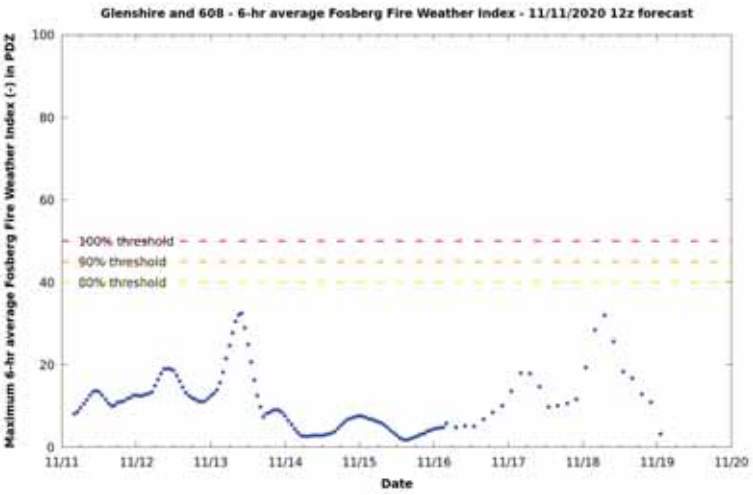


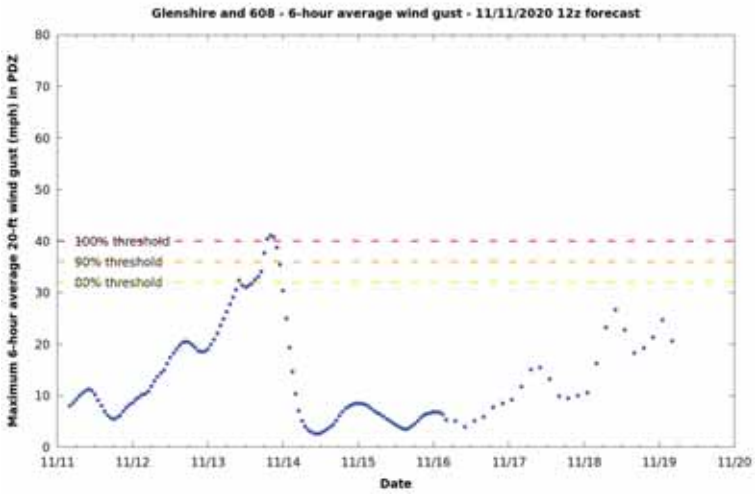
Beacon Tap



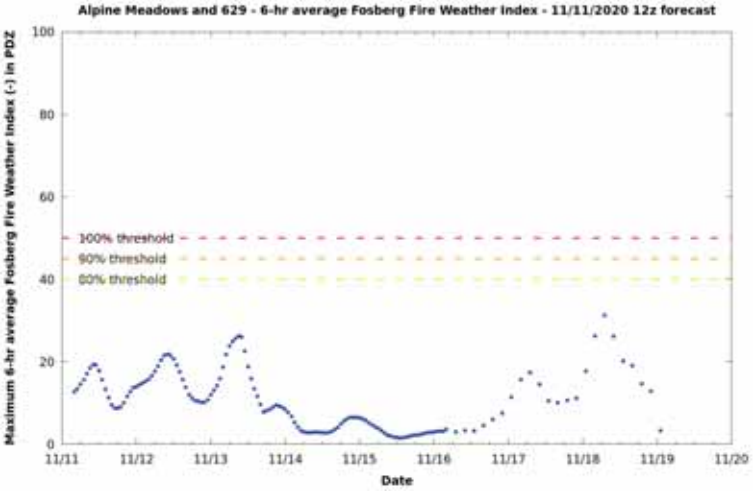


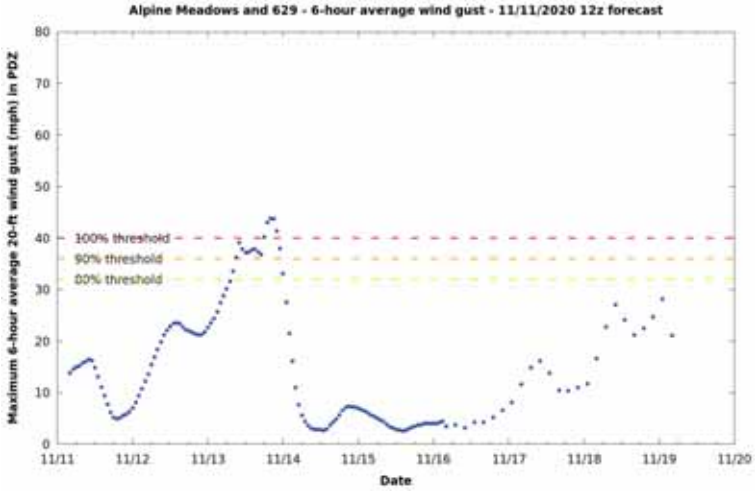
Glenshire and 608



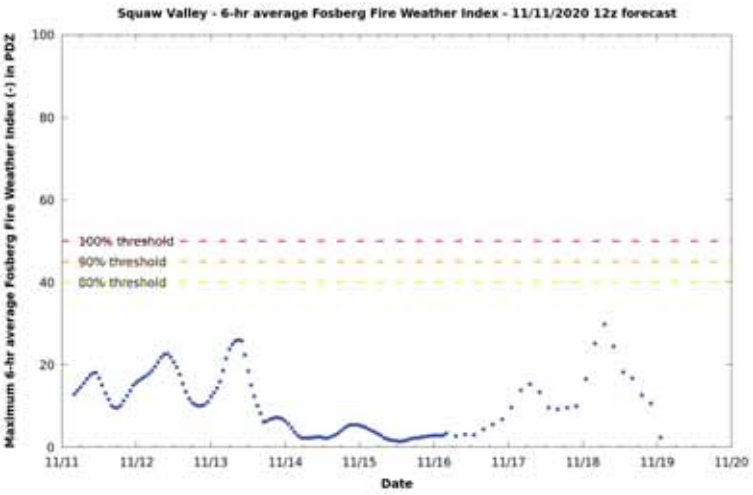


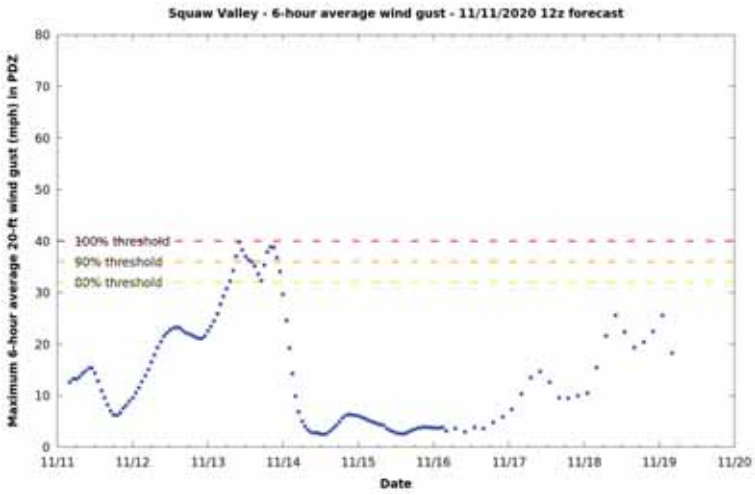
Alpine Meadows and 629



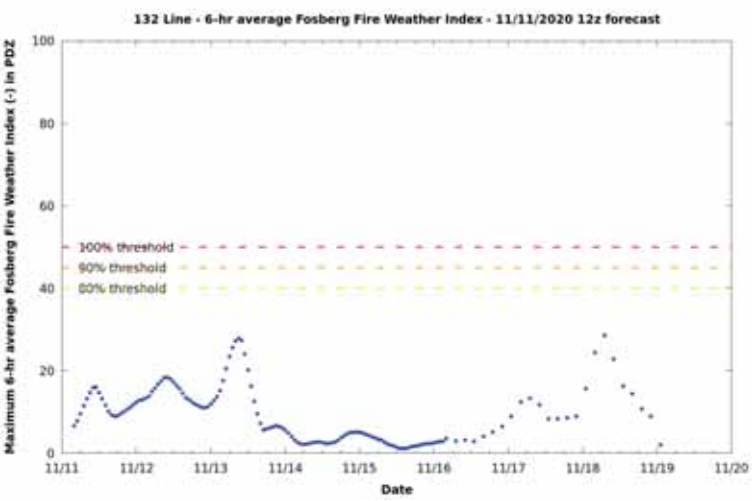


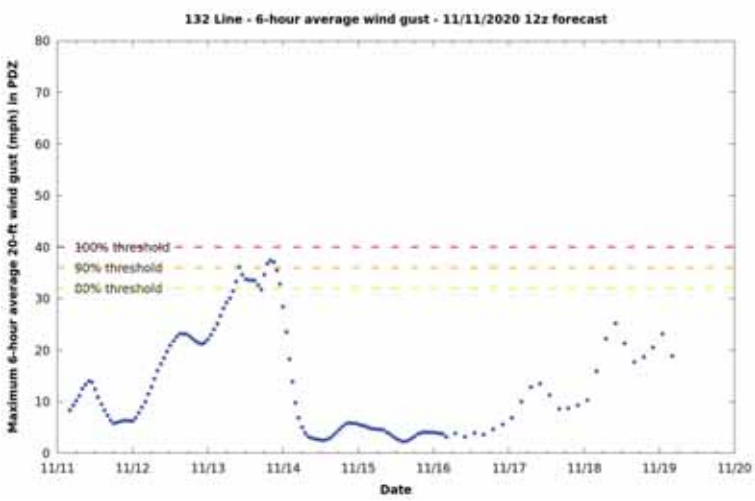
Squaw Valley



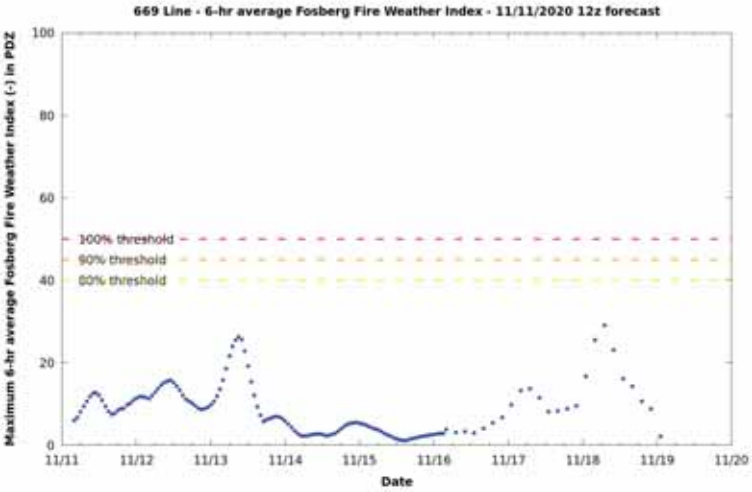


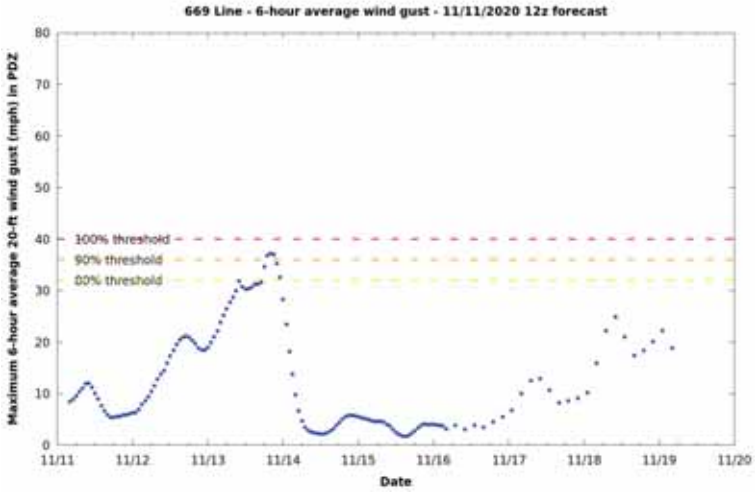
132 Line



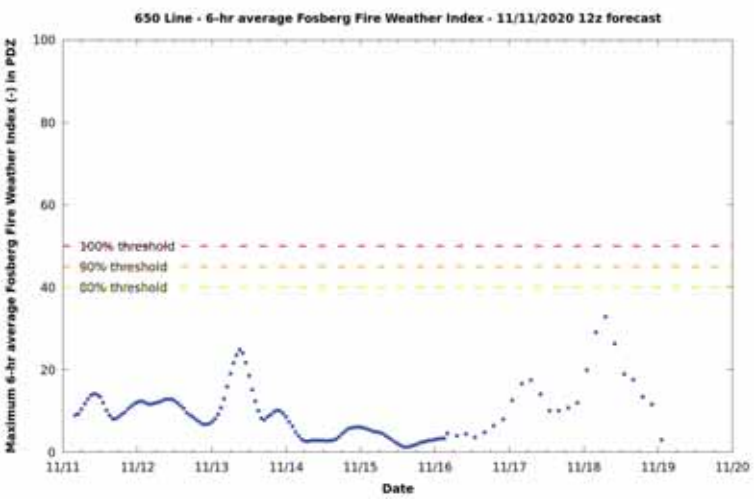


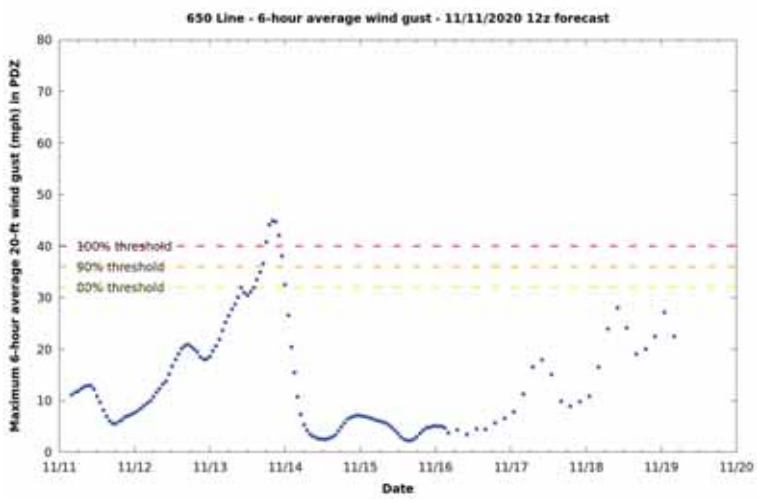
669 Line



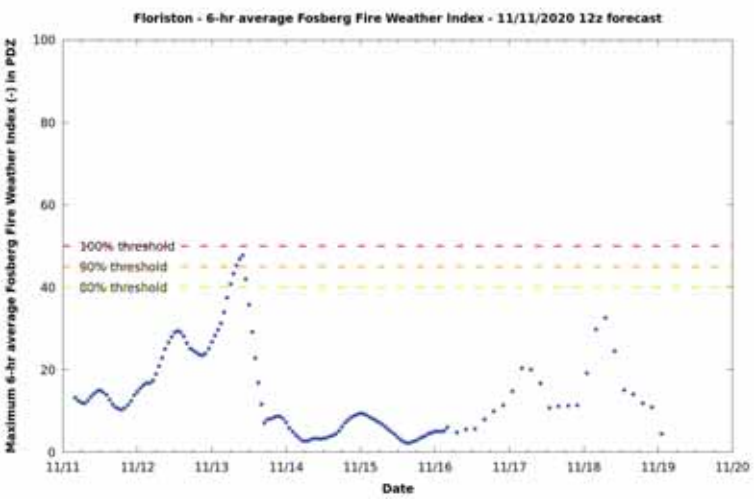


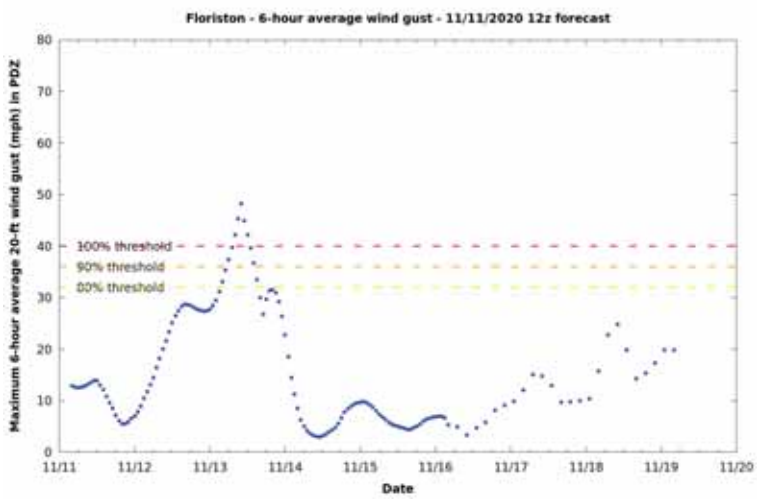
650 Line



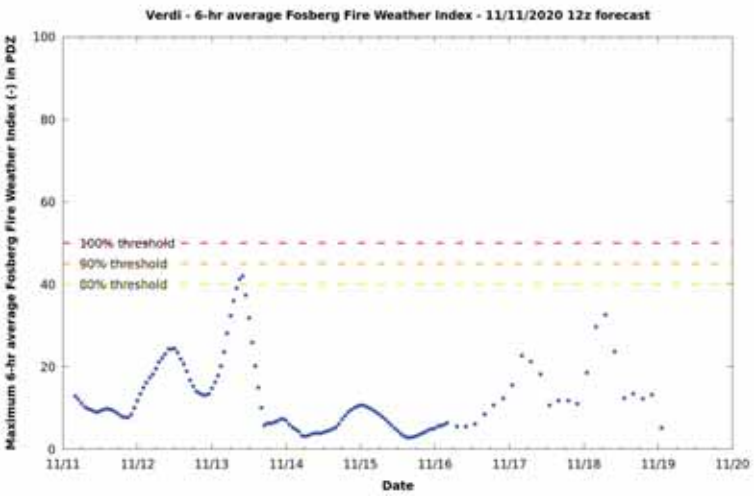


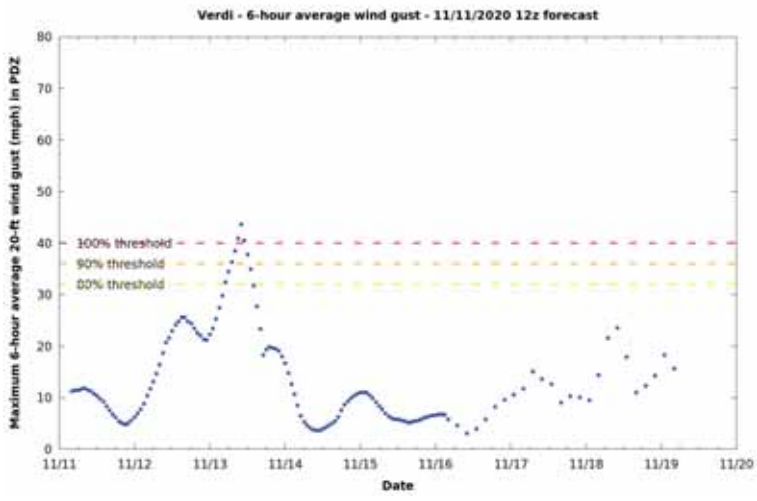
Floriston



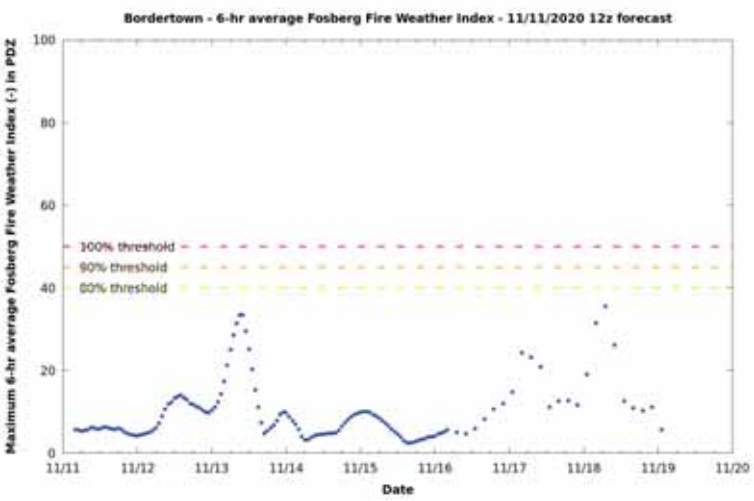


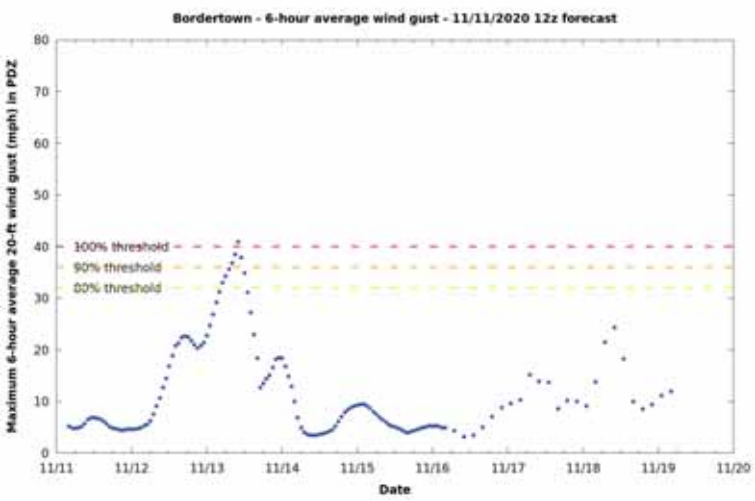
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/11/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
0
20
40
60
80
100
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
Date


Bordertown - 6-hour average wind gust - 11/11/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
0
10
20
30
40
50
60
70
80
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
Date

Liberty Utilities Fire Potential Index Forecast for 11/12/20 - 11/18/20

Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

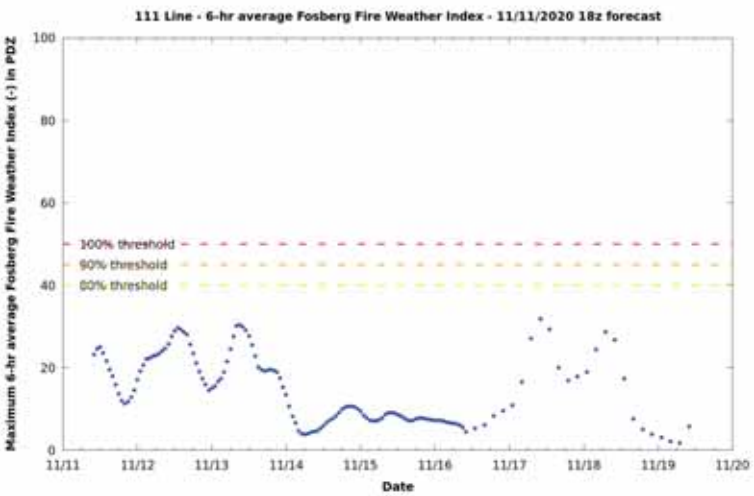
Liberty Utilities Energy Release Component Forecast for 11/12/20 - 11/18/20

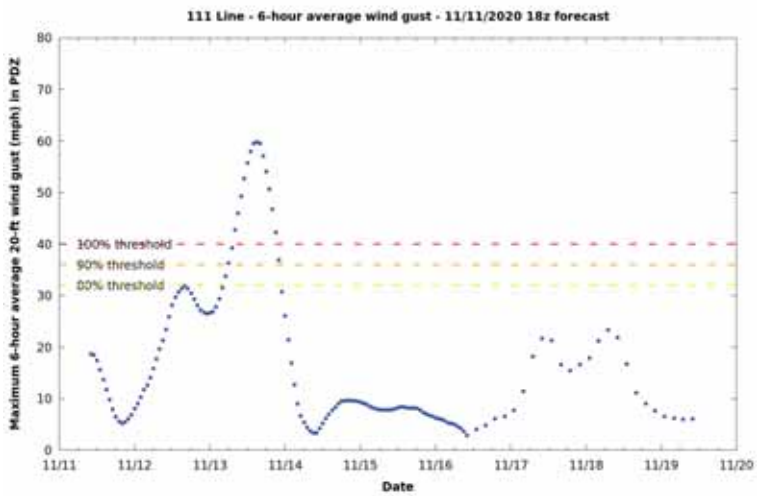
Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	42.0	39.0	33.0	34.0	31.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

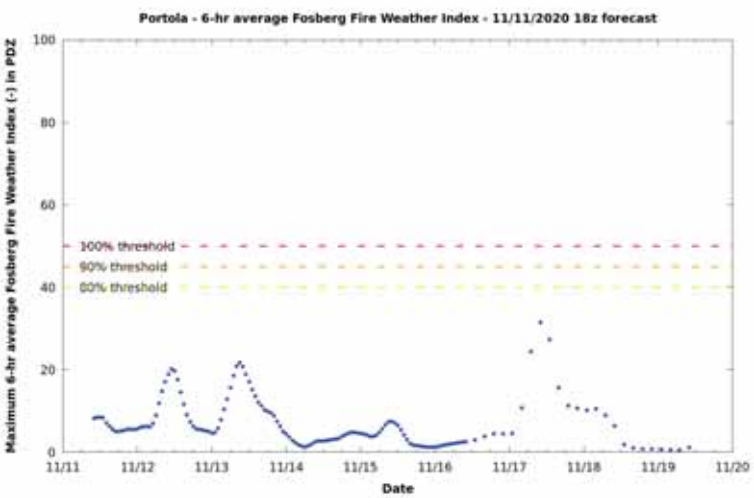
Liberty Utilities Fire Weather Summary Plots - 11/11/2020 18z forecast

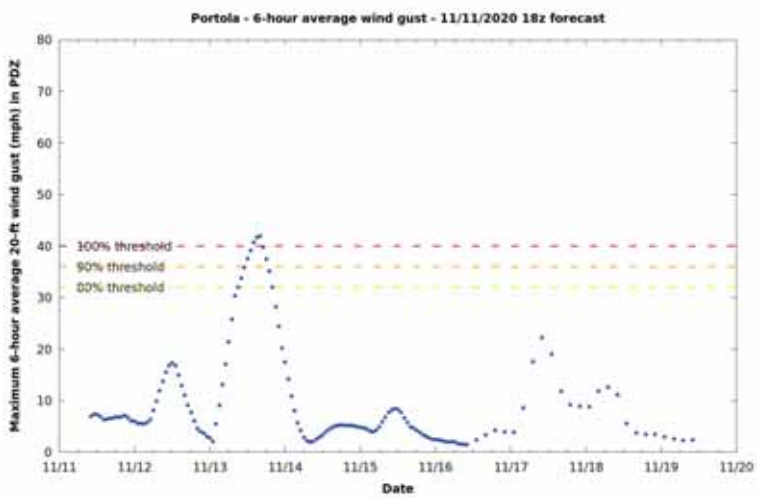
111 Line



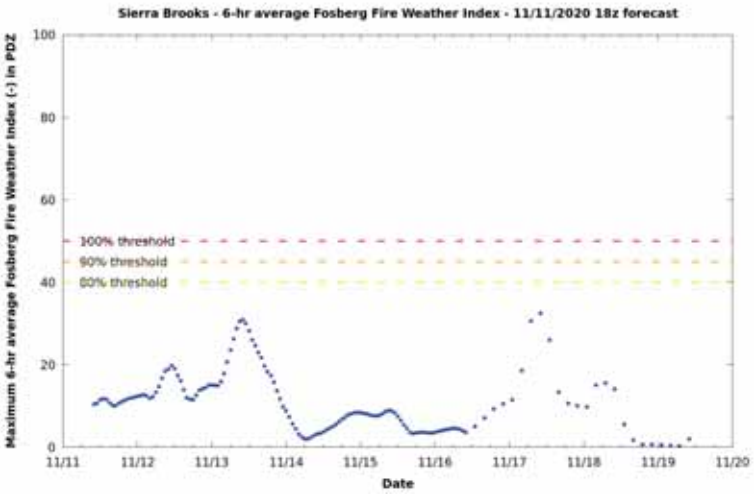


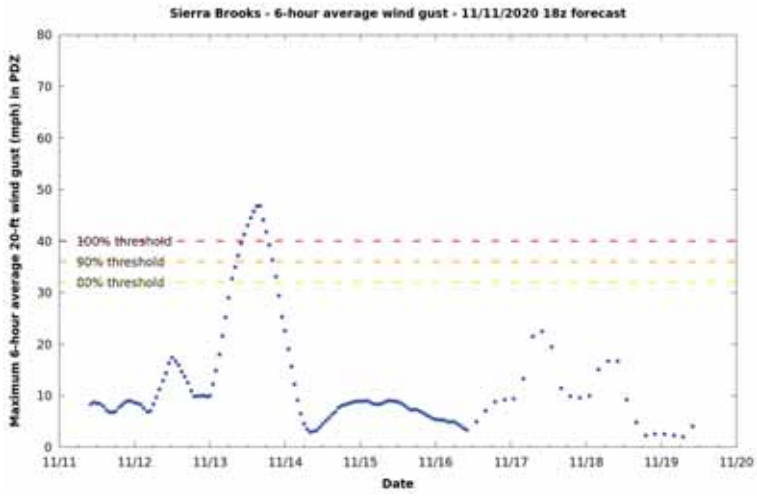
Portola



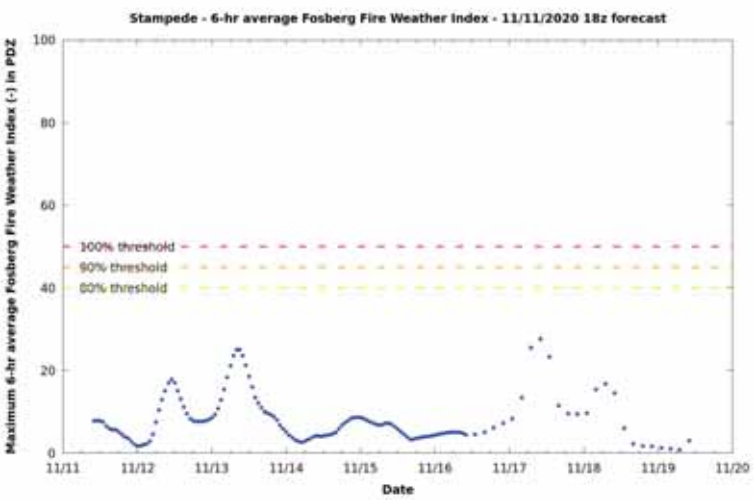


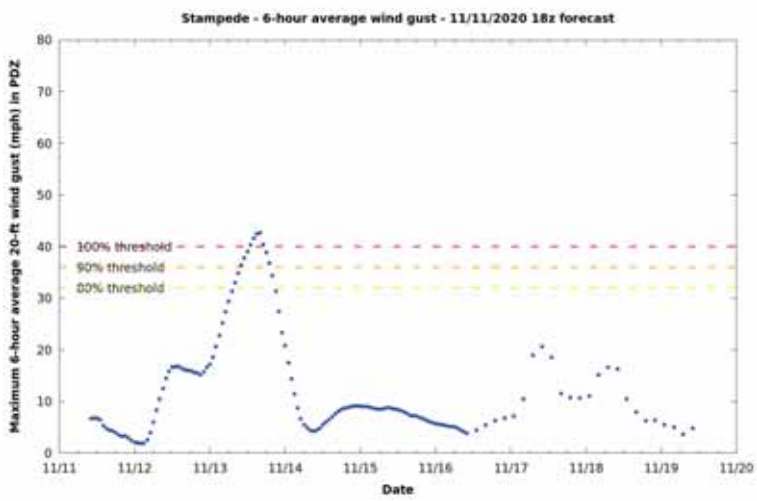
Sierra Brooks



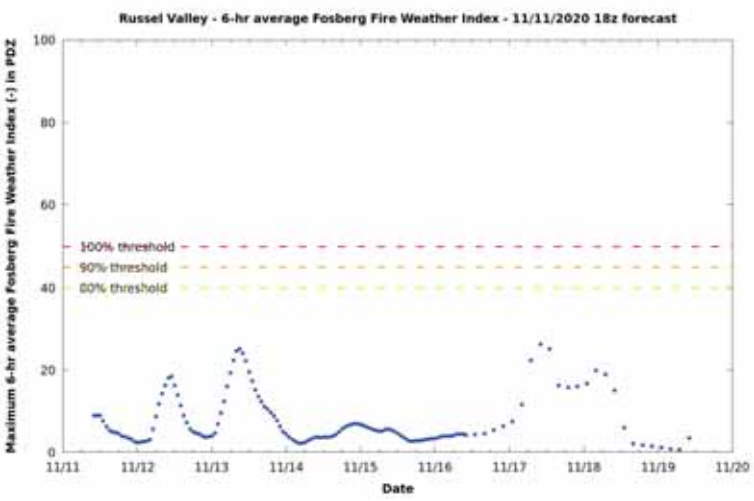


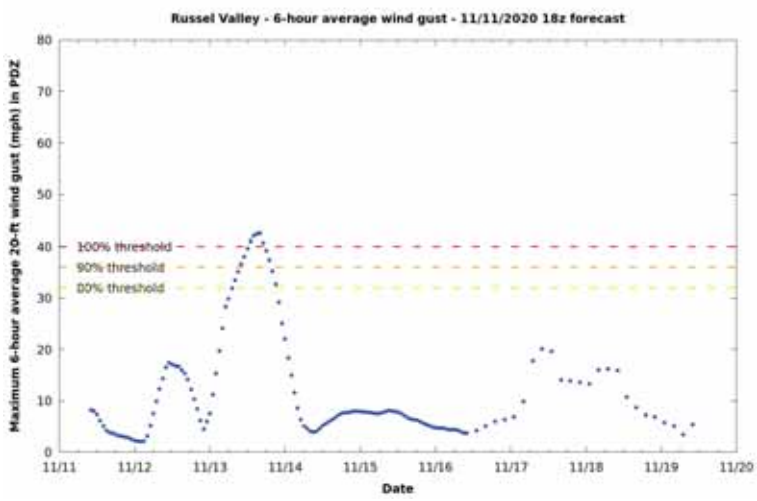
Stampede



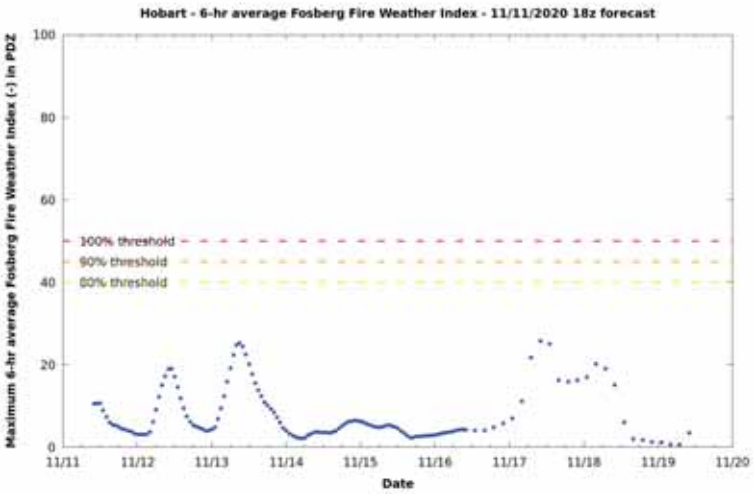


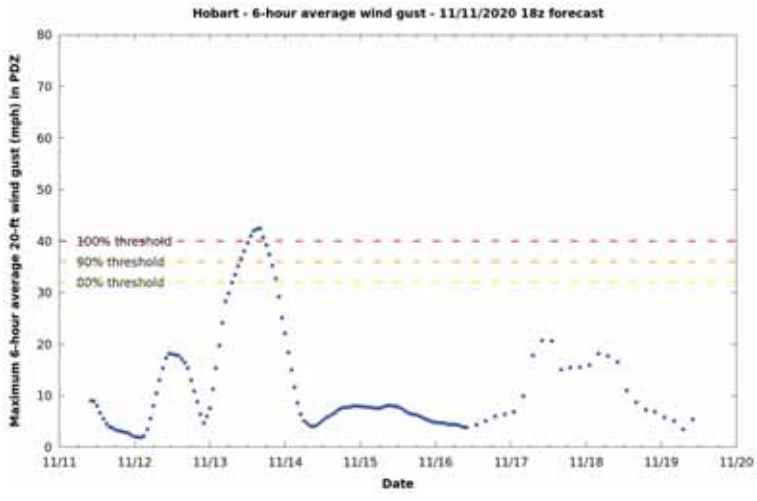
Russell Valley



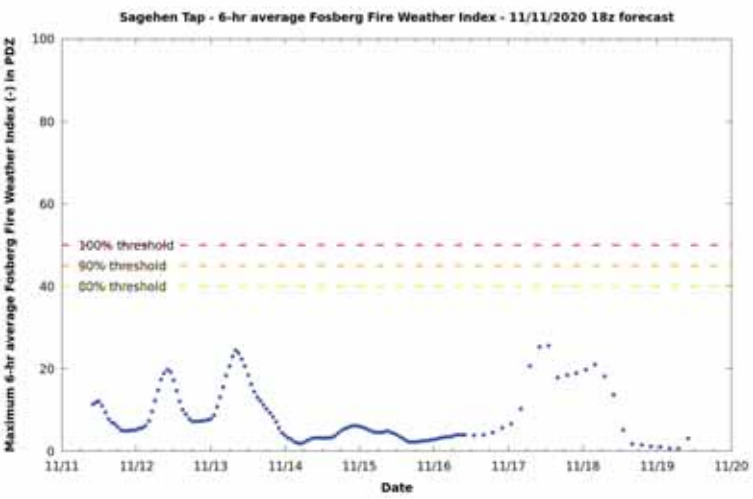


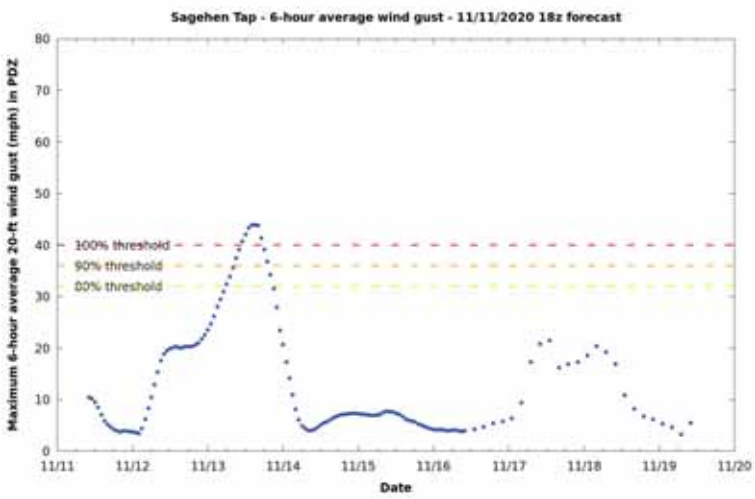
Hobart



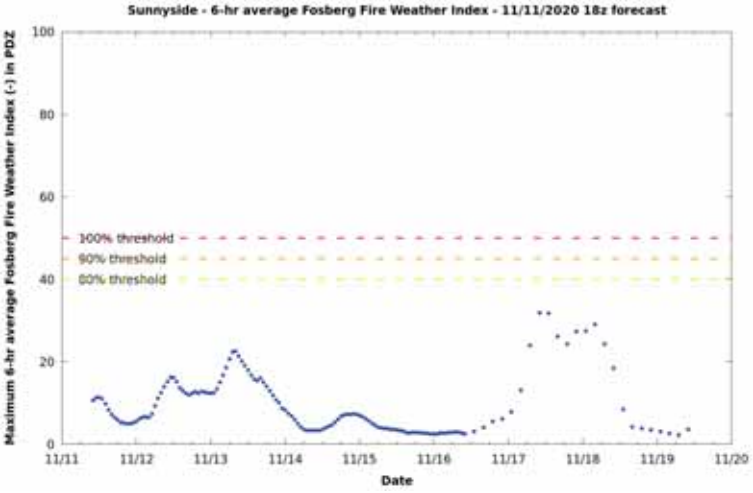


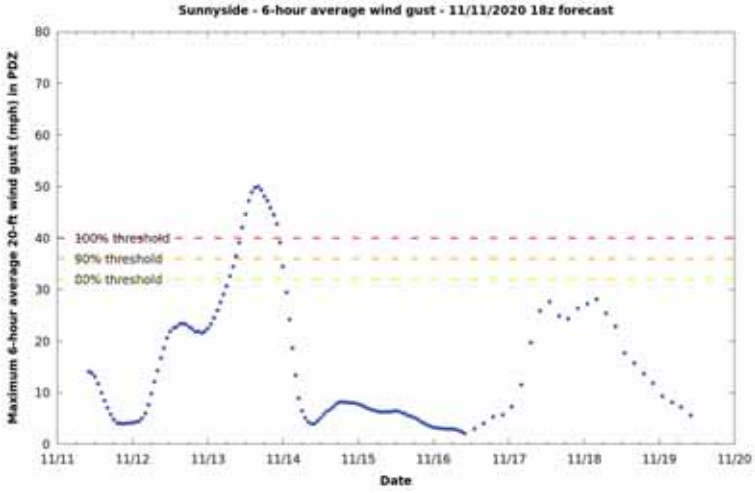
Sagehen tap



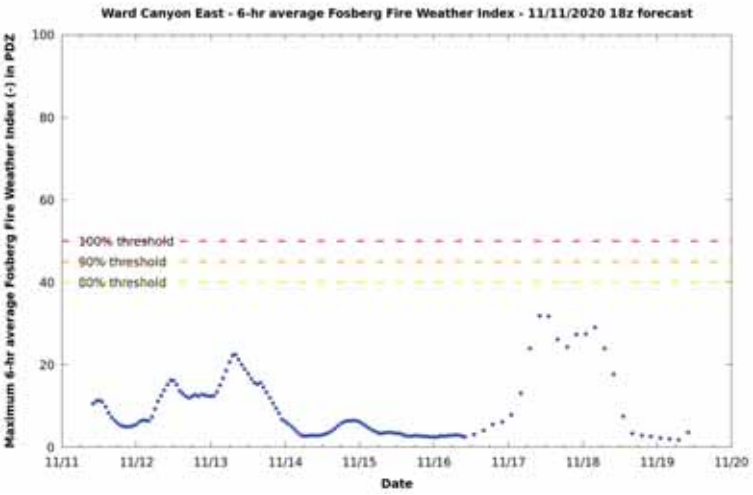


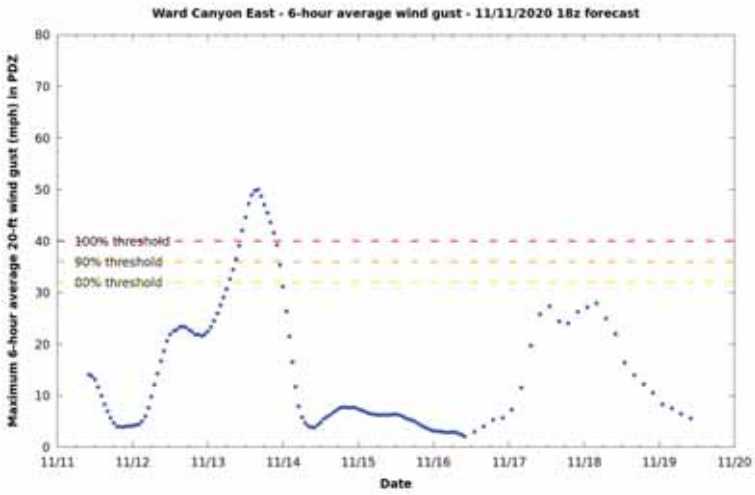
Sunnyside



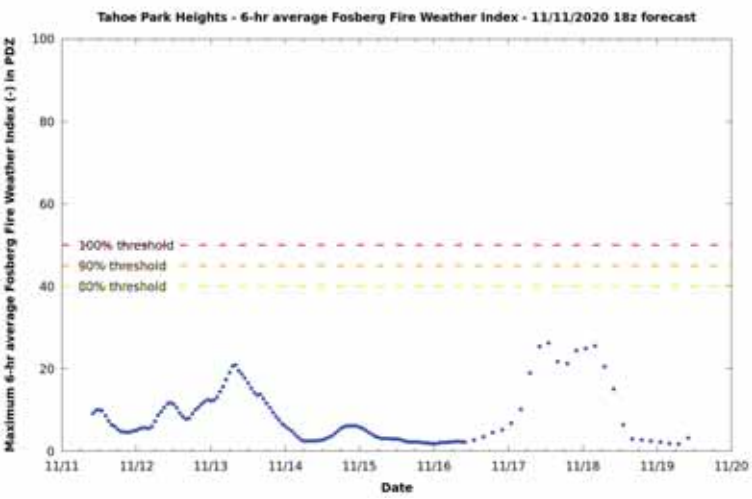


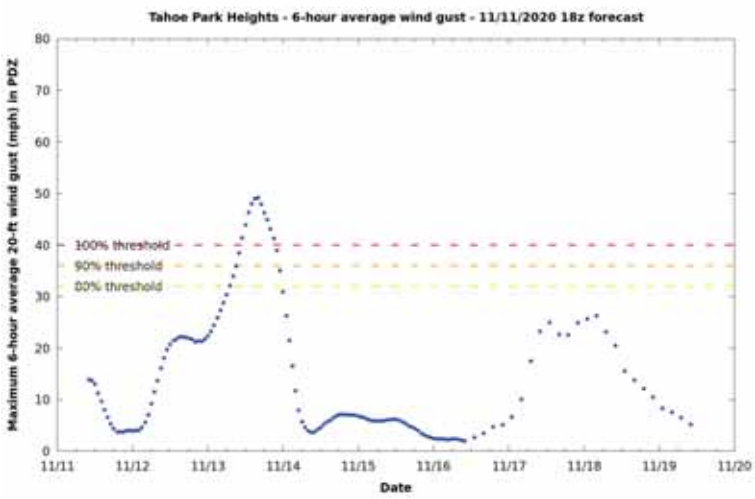
Ward Canyon East



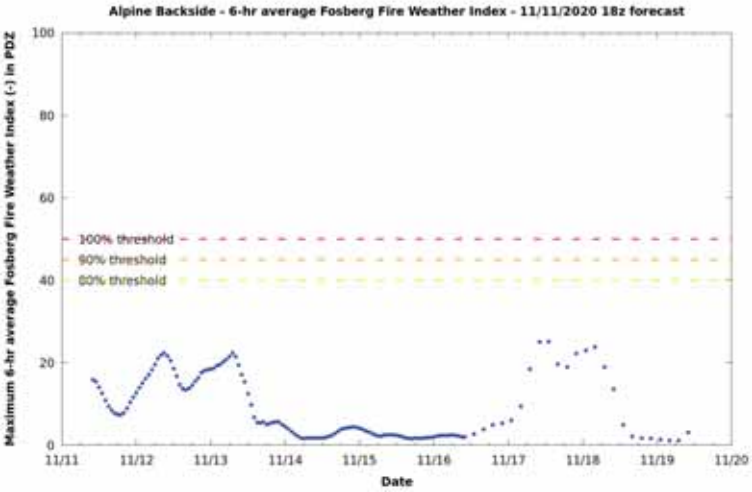


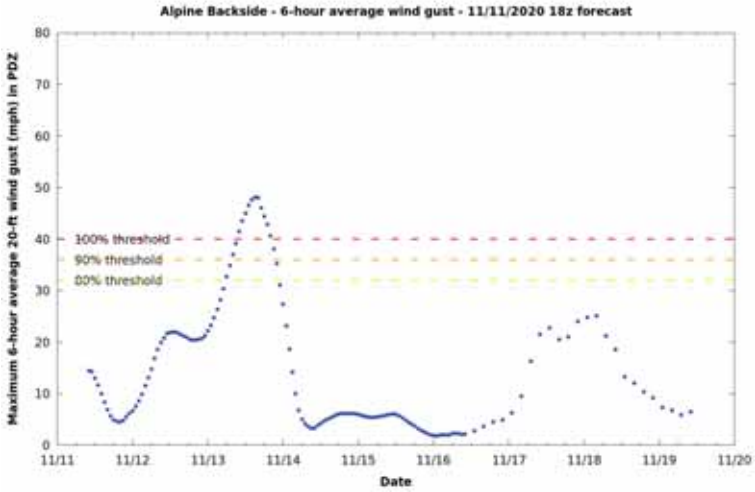
Tahoe Park Heights



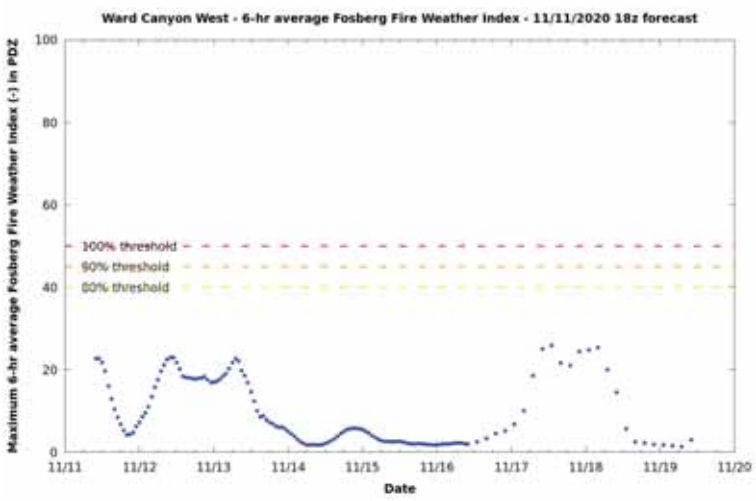


Alpine Backside



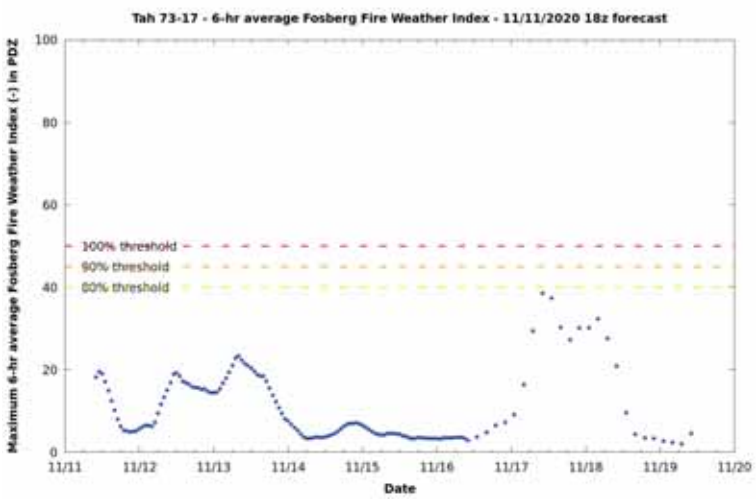


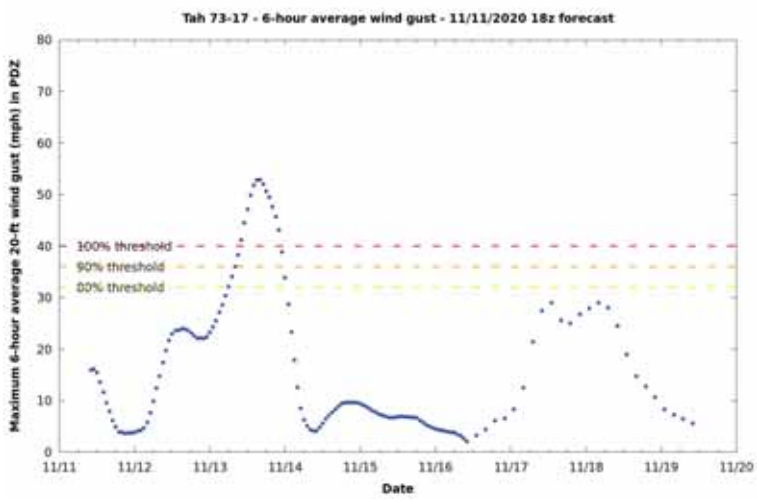
Ward Canyon West



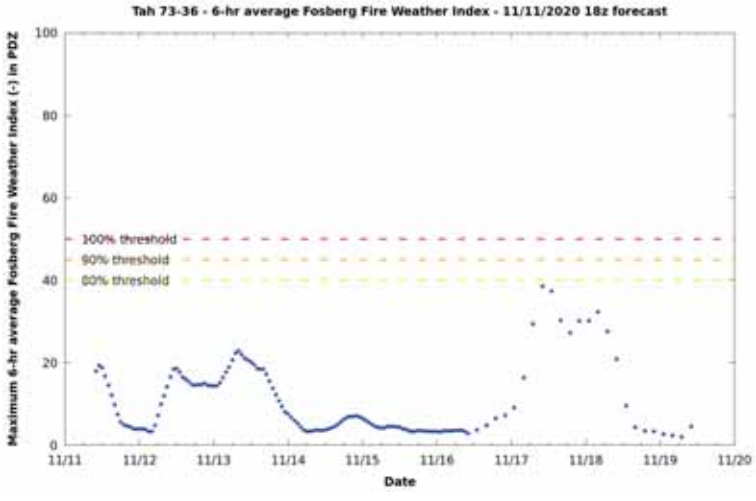


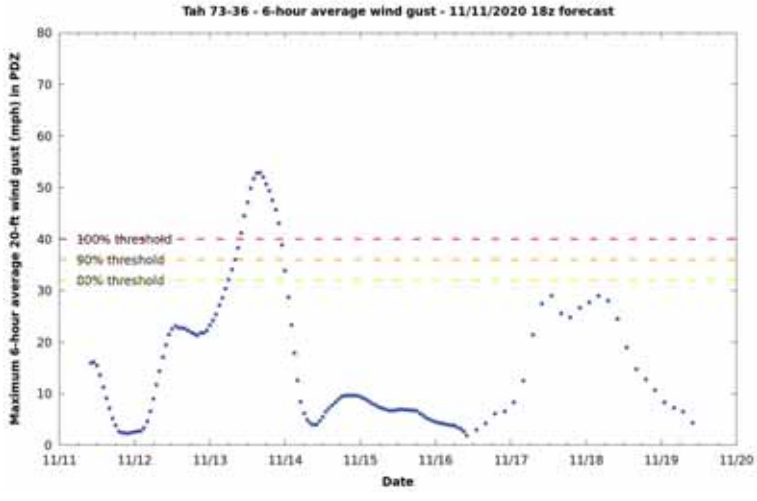
Tah 73-17



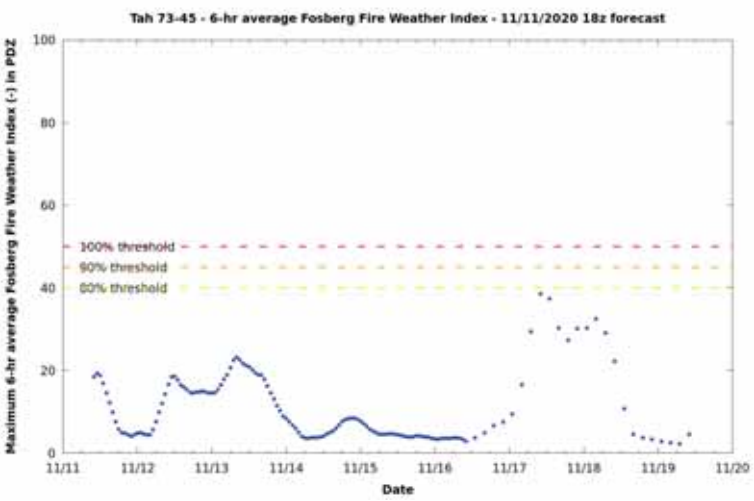


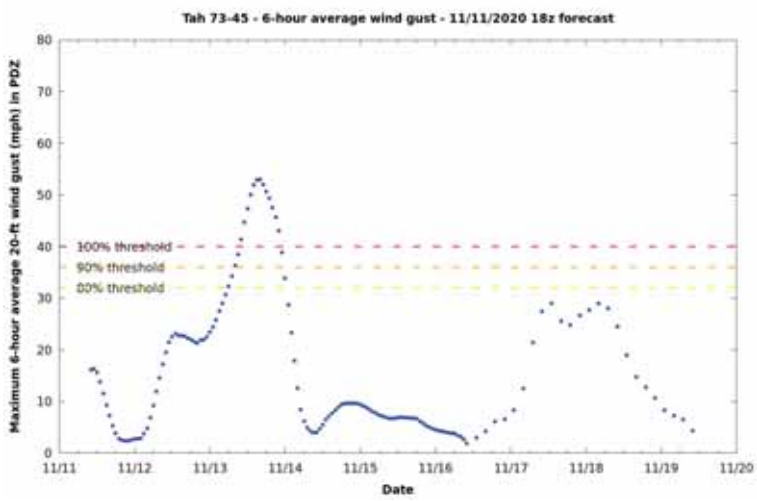
Tah 73-36



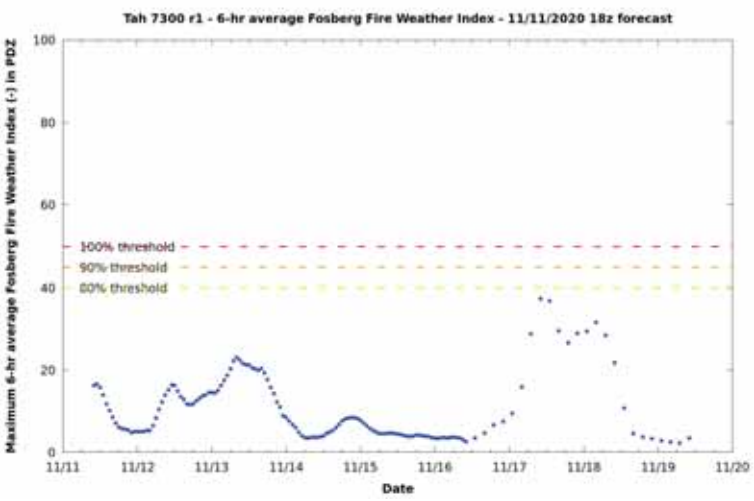


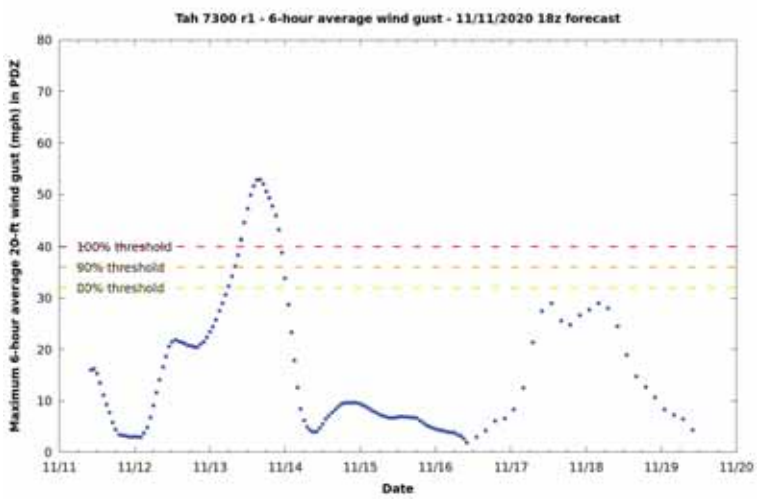
Tah 73-45



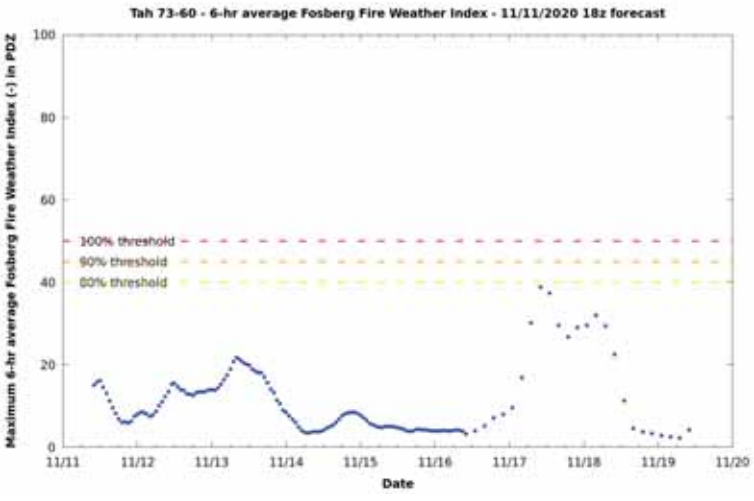


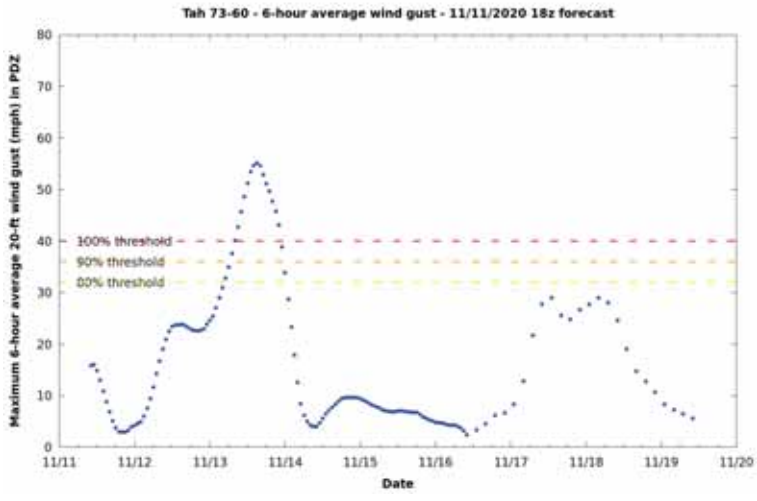
Tah 7300 r1



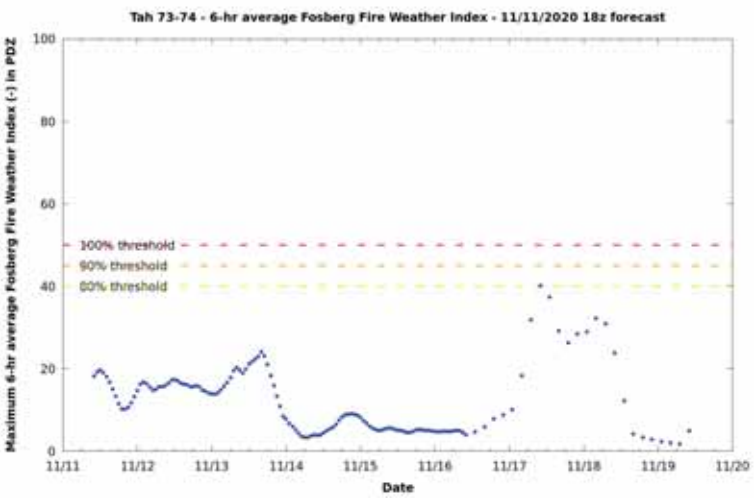


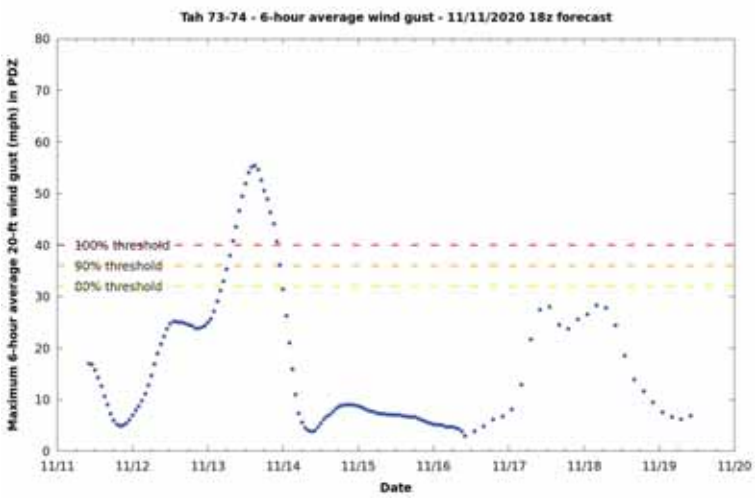
Tah 73-60



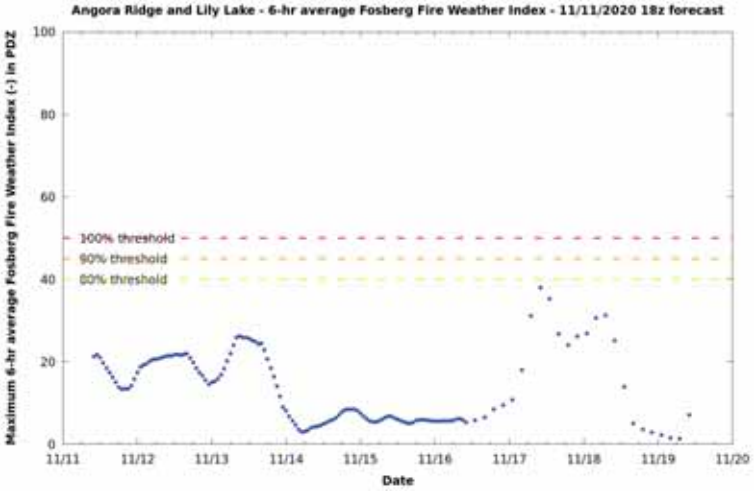


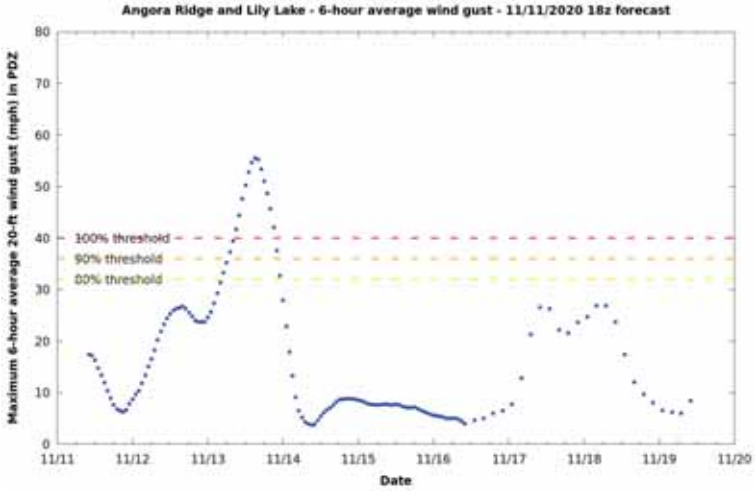
Tah 73-74



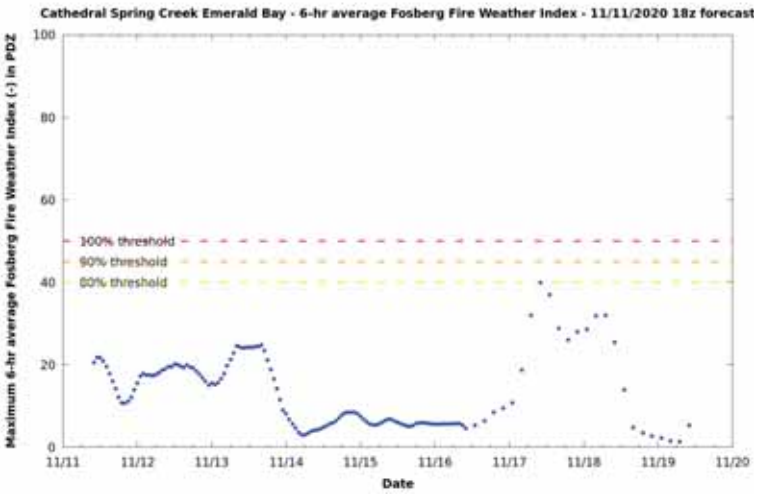


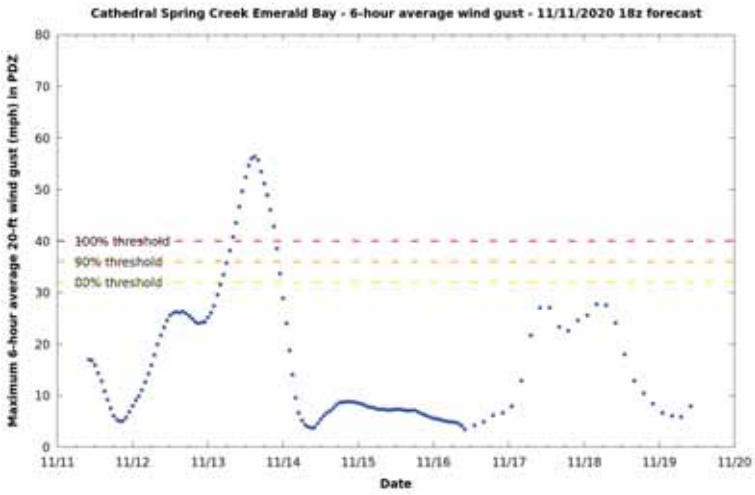
Angora Ridge and Lily Lake



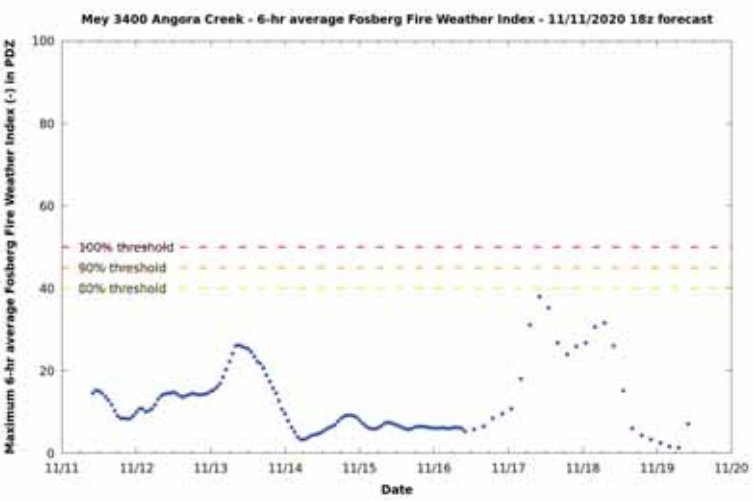


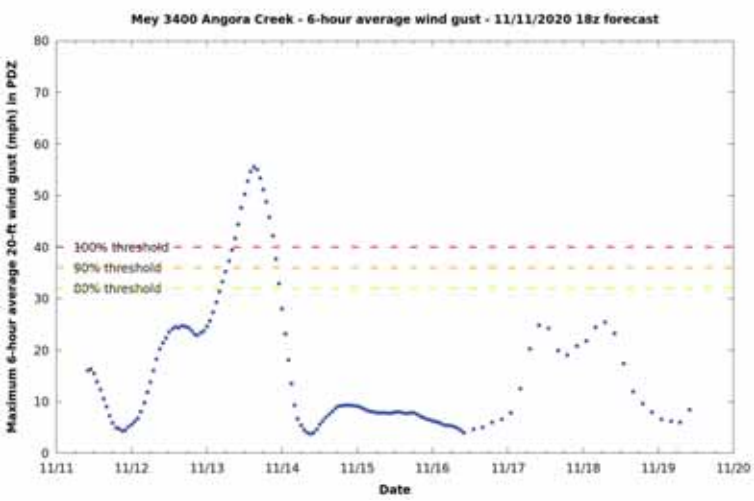
Cathedral Spring Creek Emerald Bay



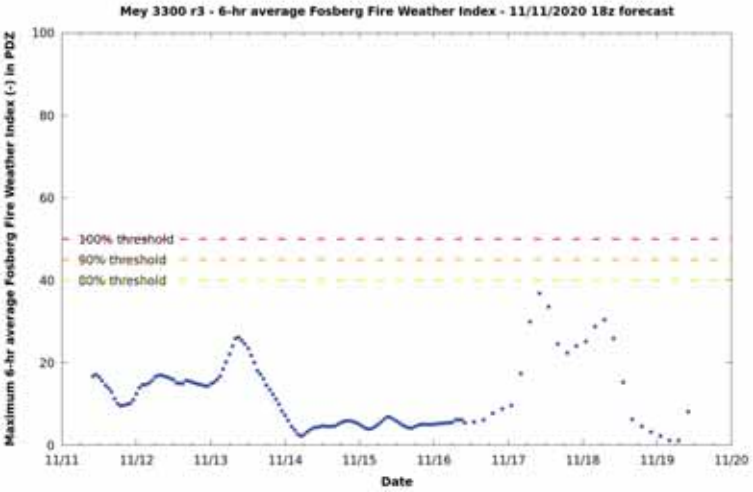


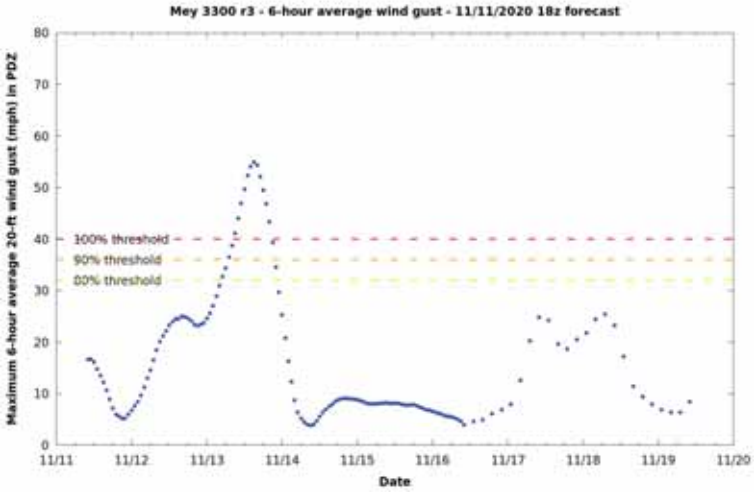
Mey 3400 Angora Creek



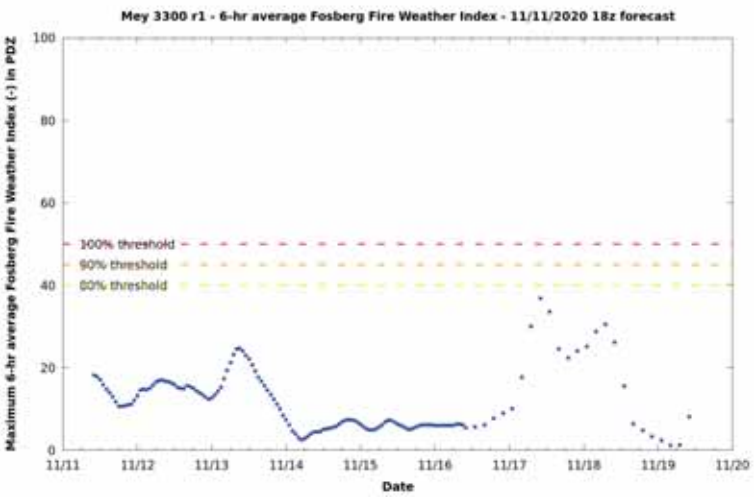


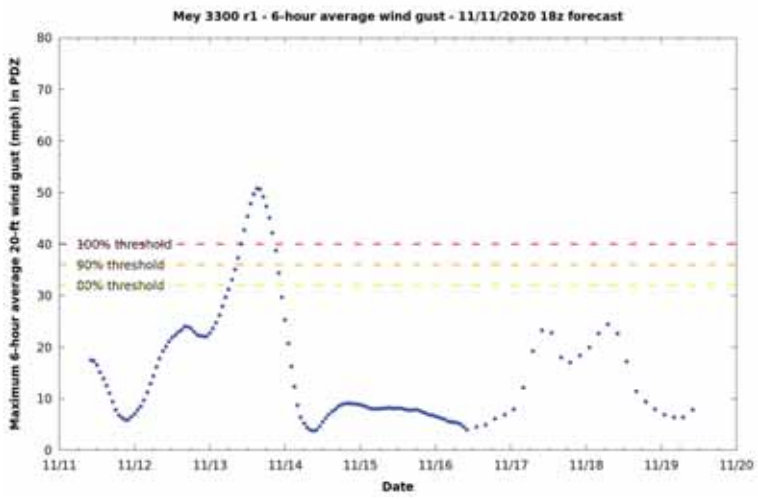
Mey 3300 r3



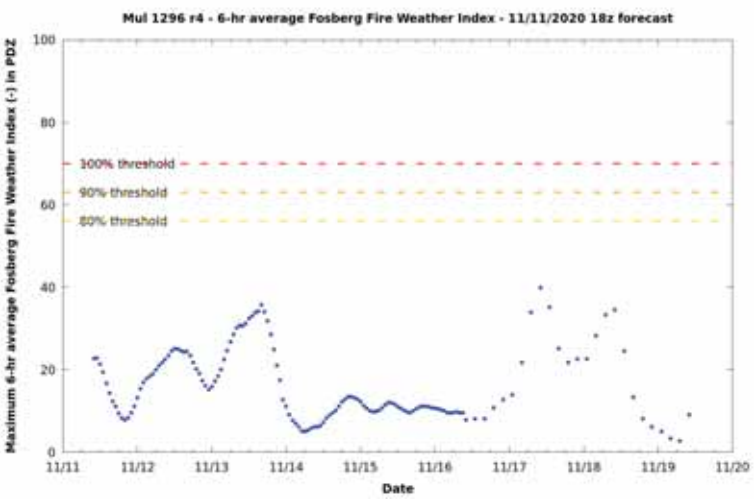


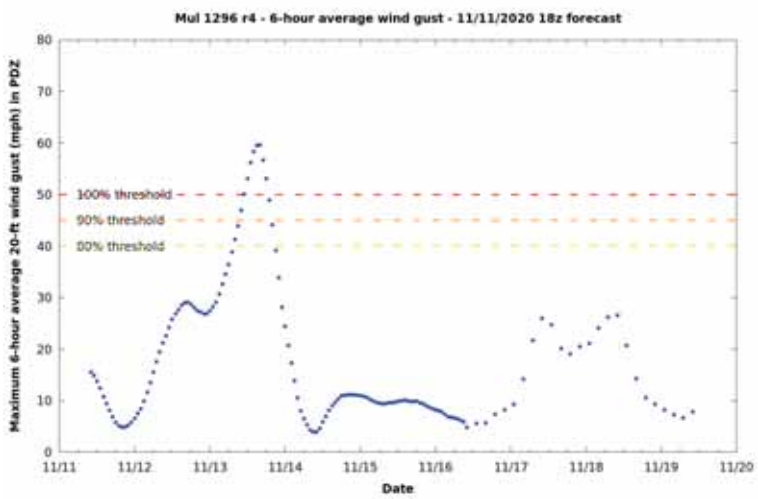
Mey 3300 r1



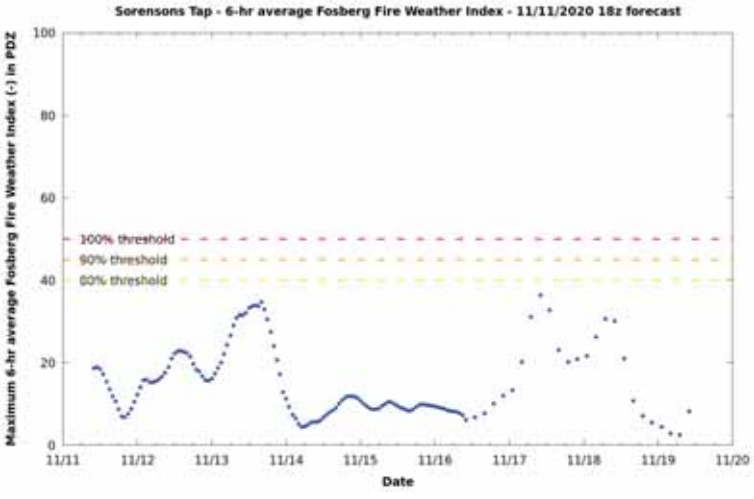


Mul 1296 r4



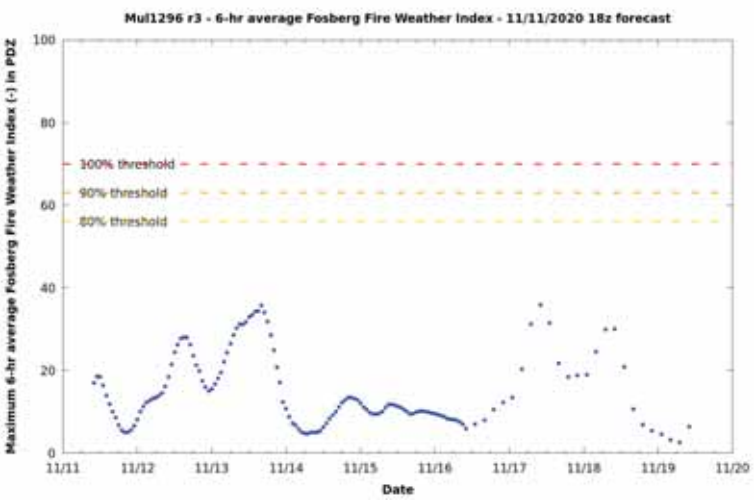


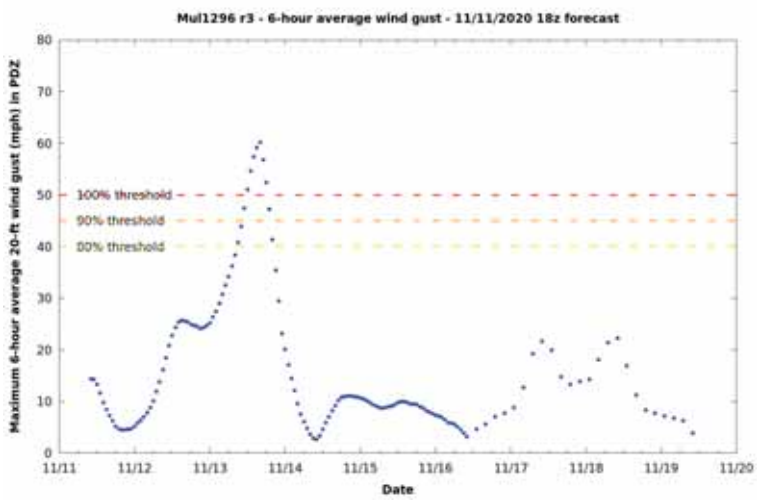
Sorensons Tap



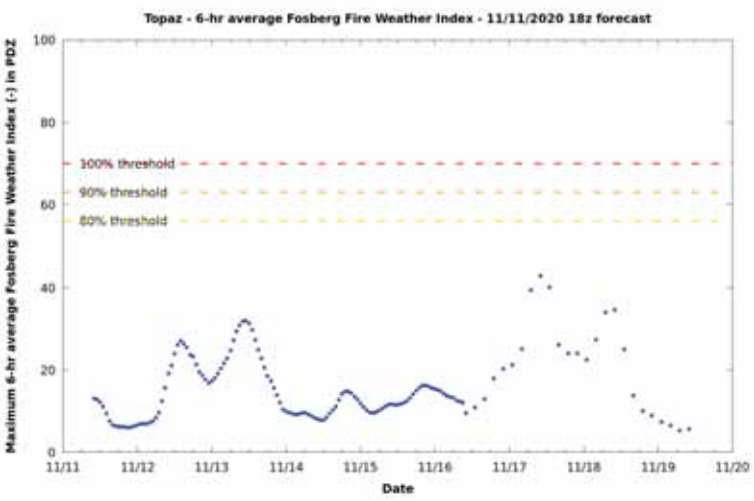


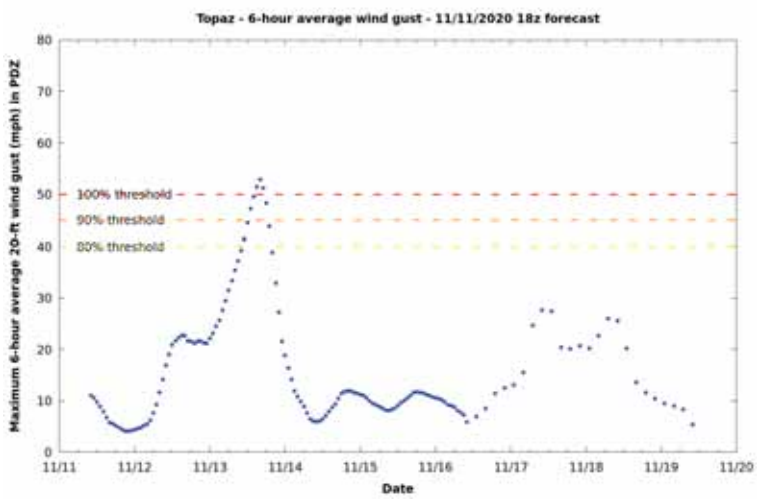
Mul 1296 r3



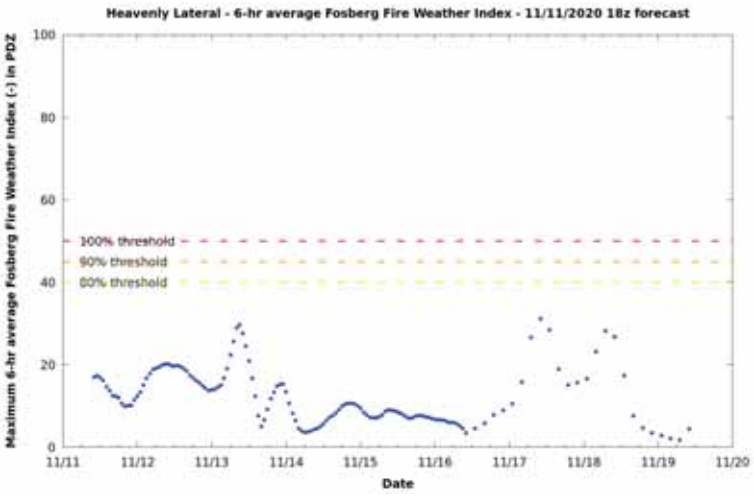


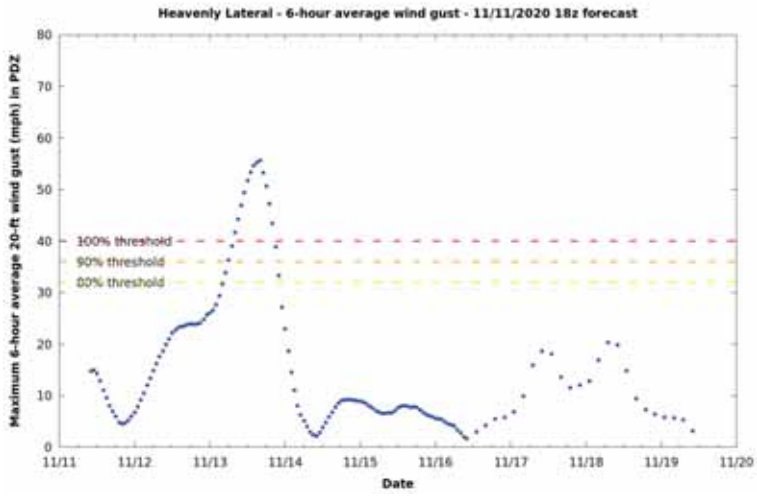
Topaz



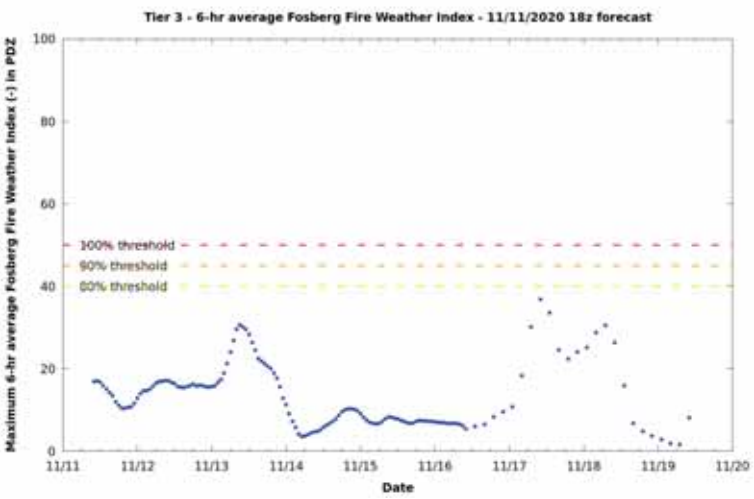


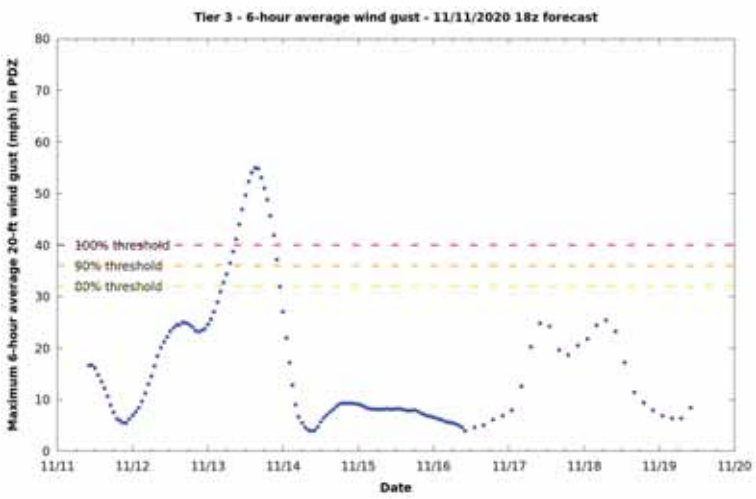
Heavenly Lateral



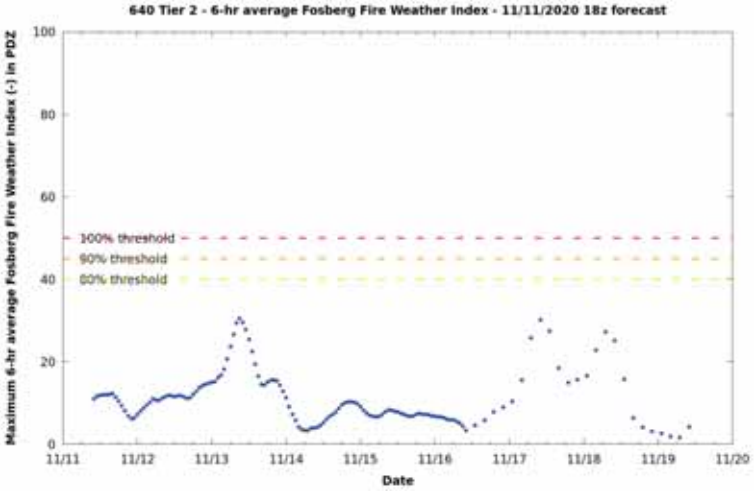


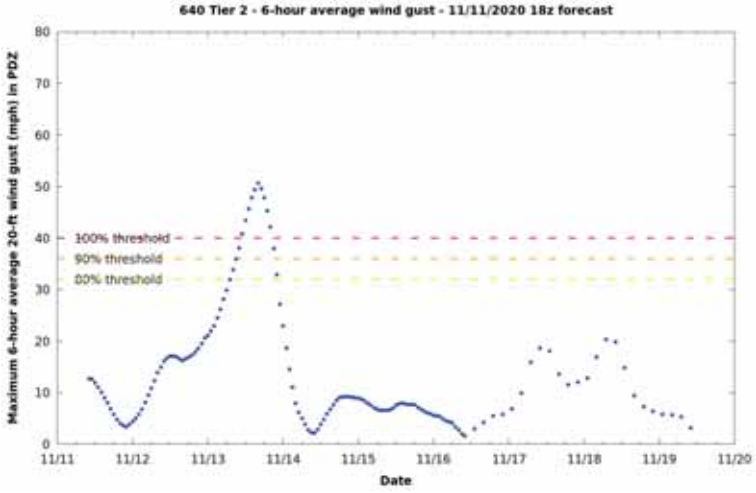
Tier 3



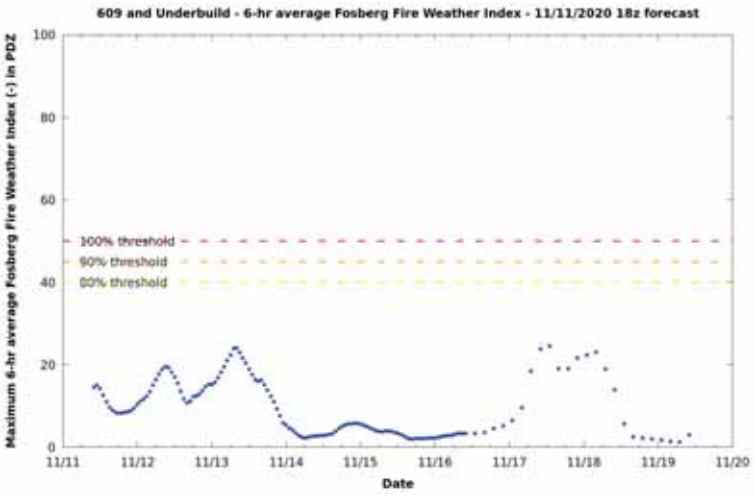


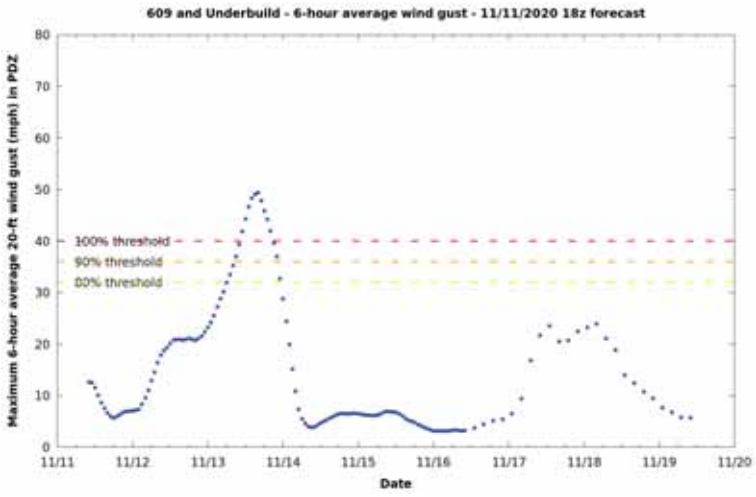
640 Tier 2



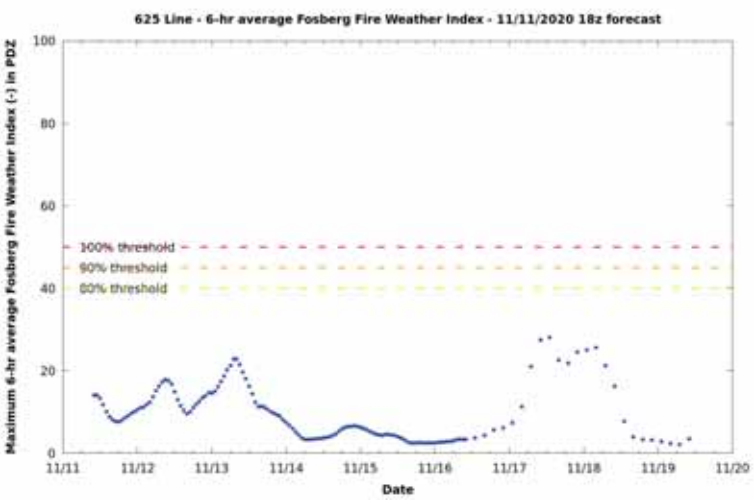


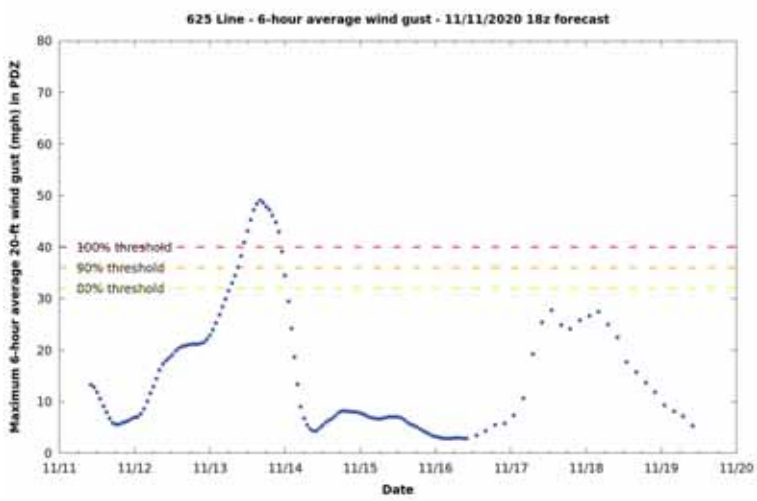
609 and Underbuild



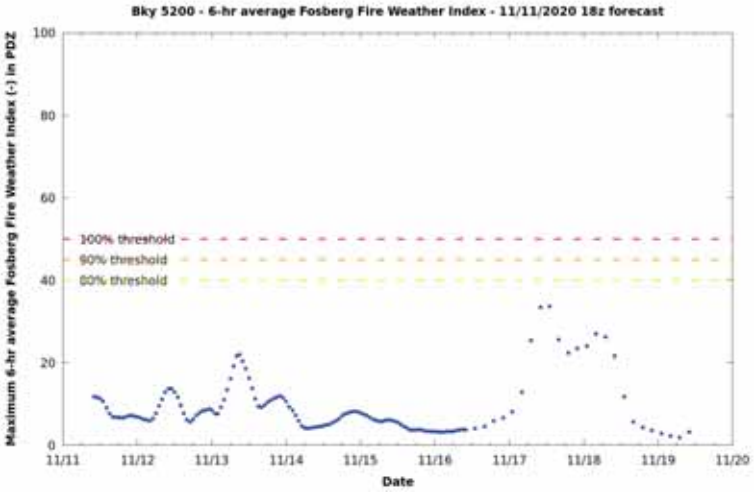


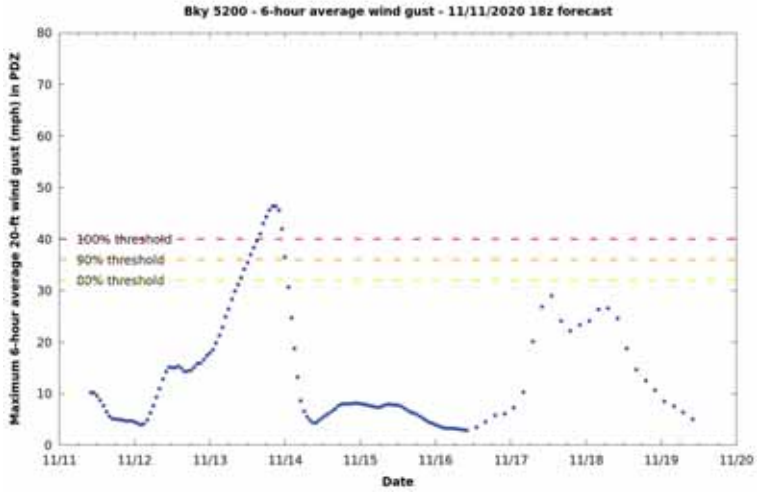
625 Line



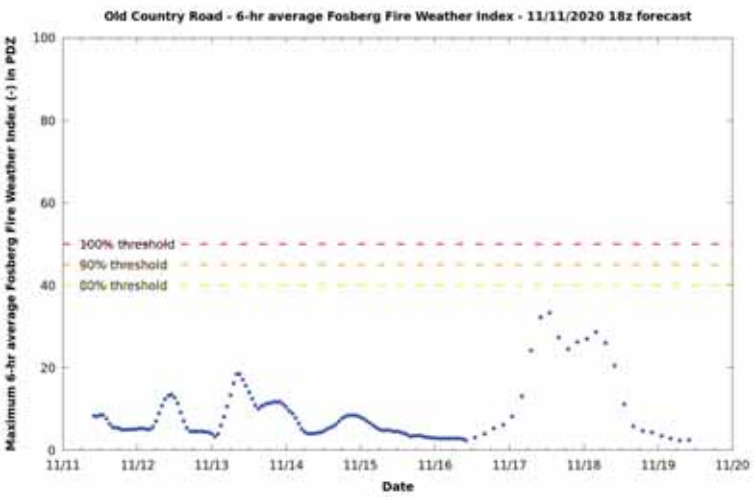


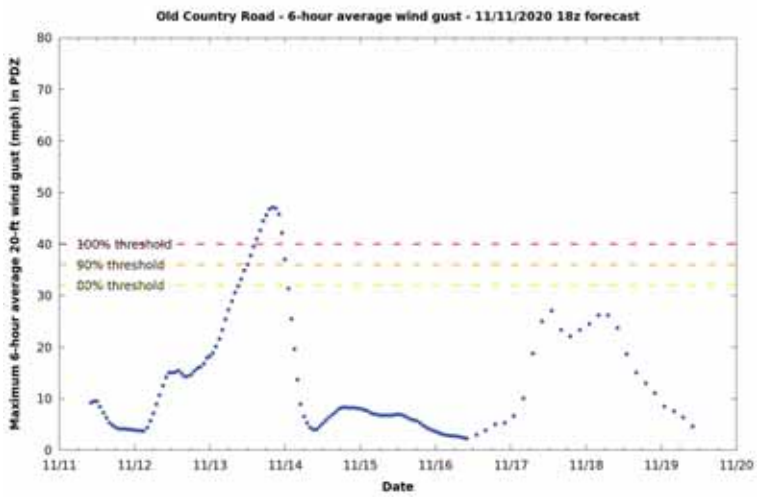
Bky 5200



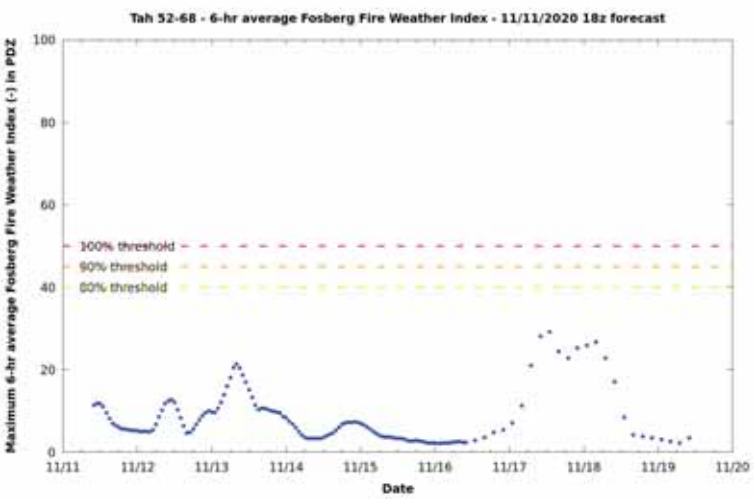


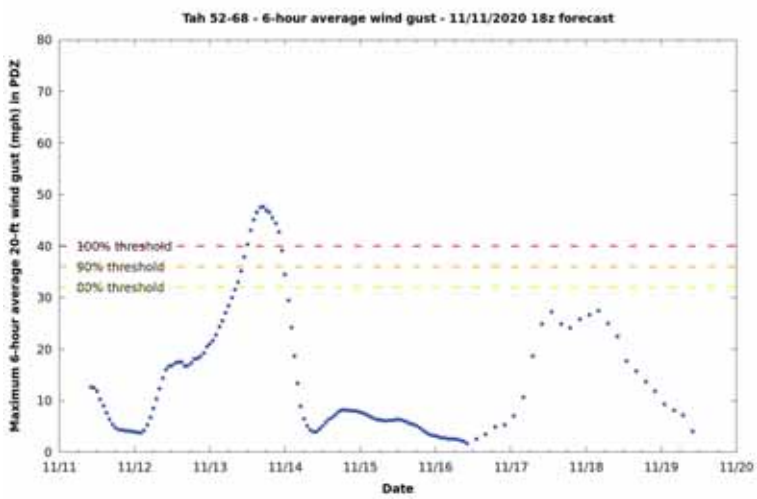
Old Country Road



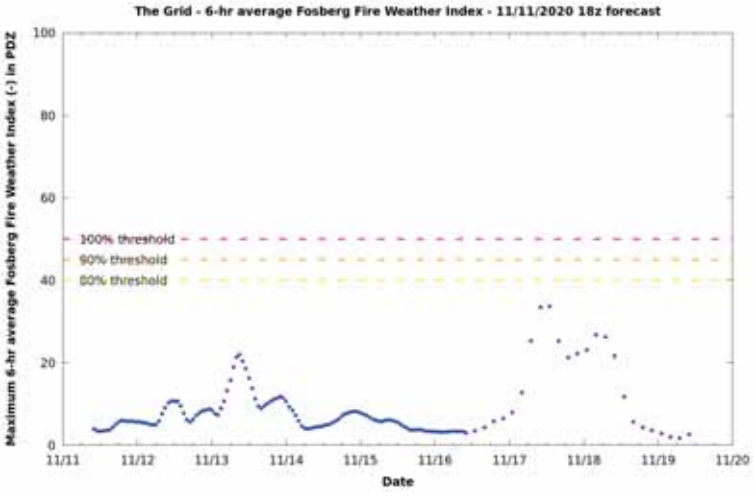


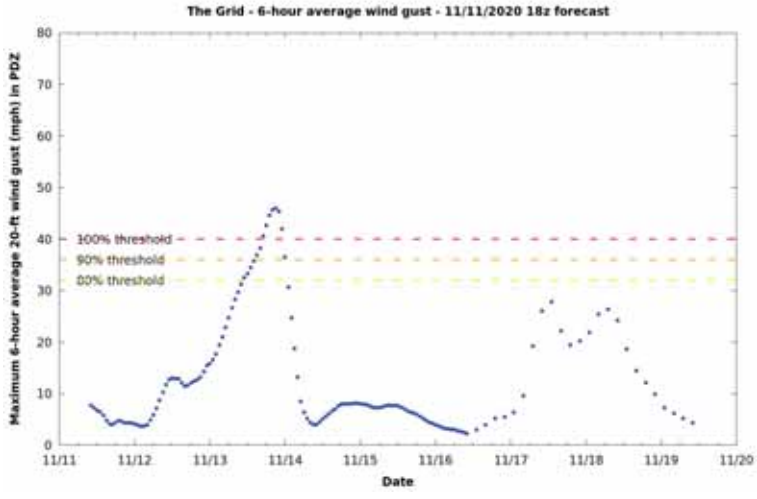
Tah 52-68



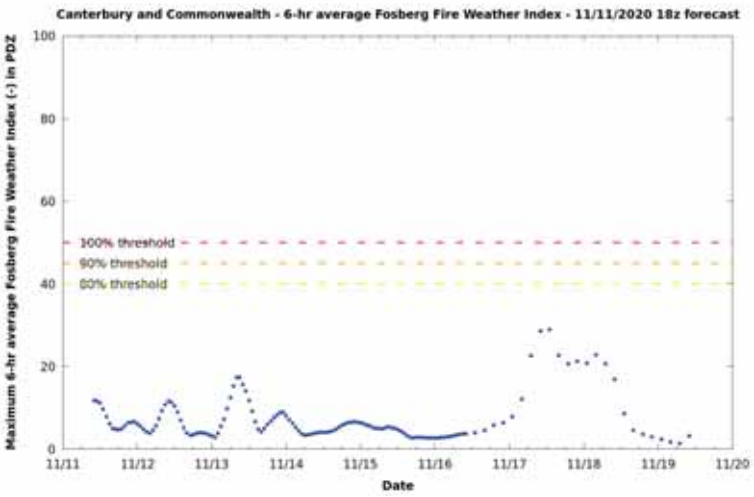


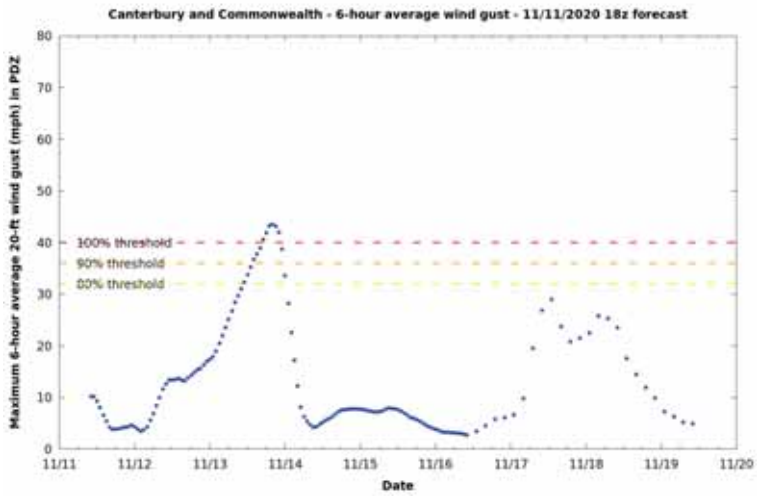
The Grid



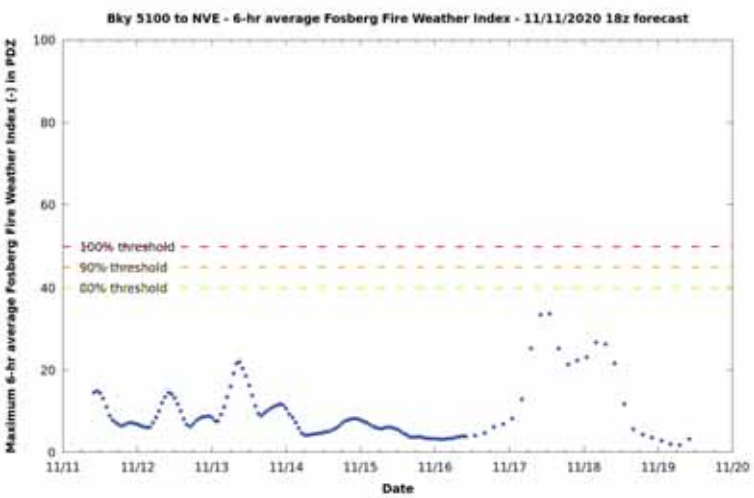


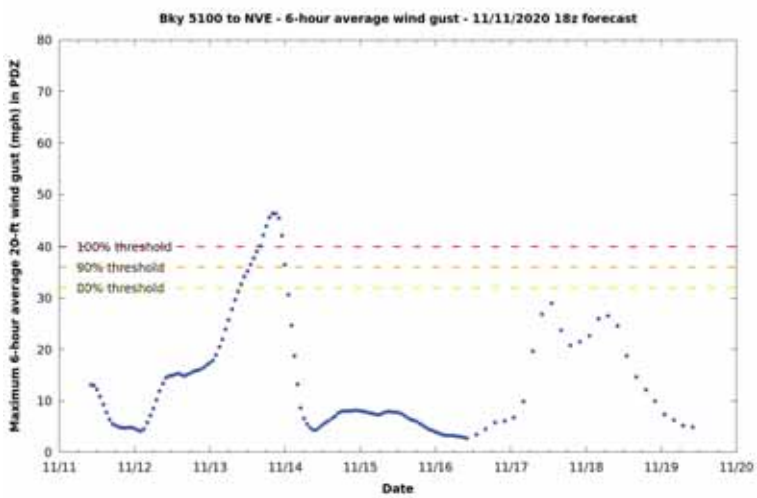
Canterbuy and Commonwealth



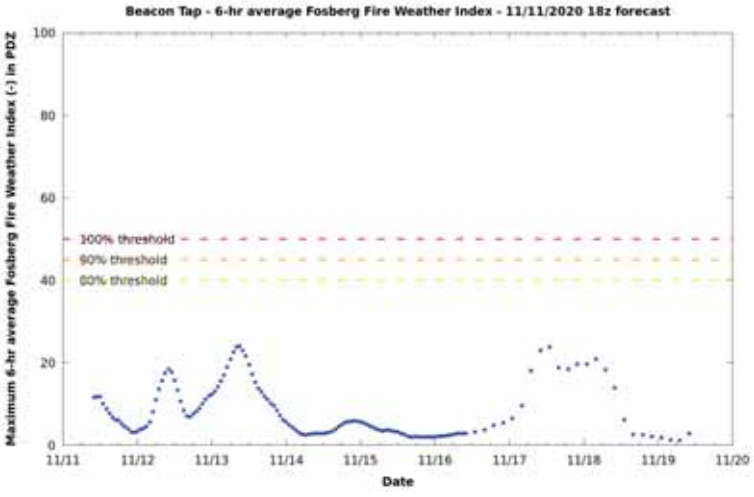


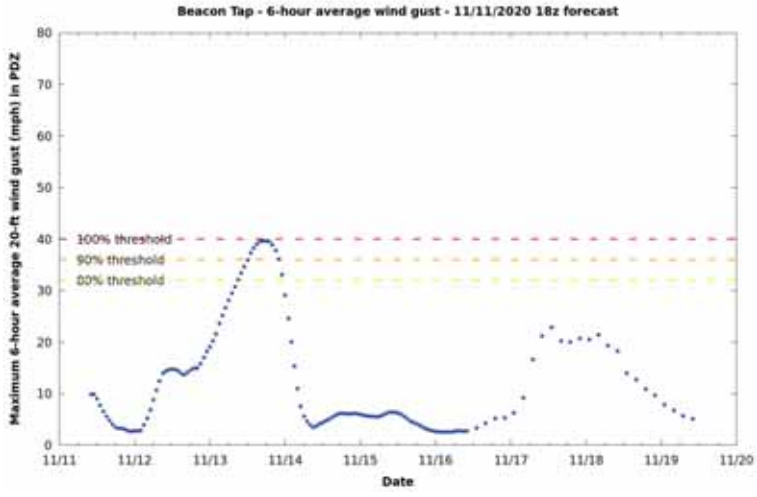
Bky 5100 to NVE



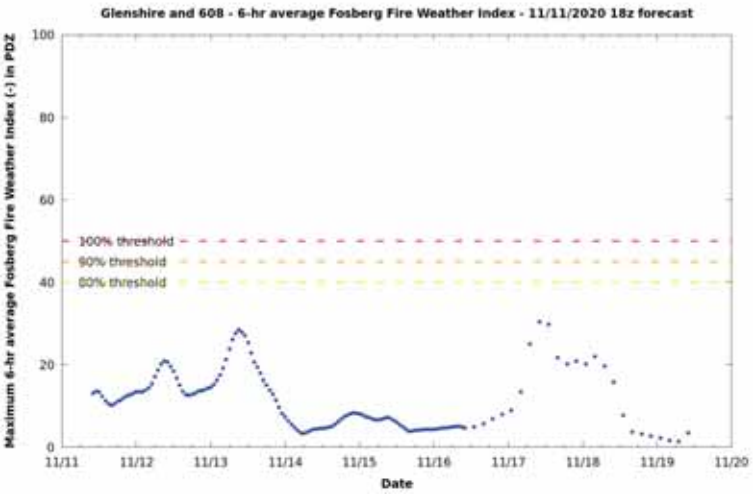


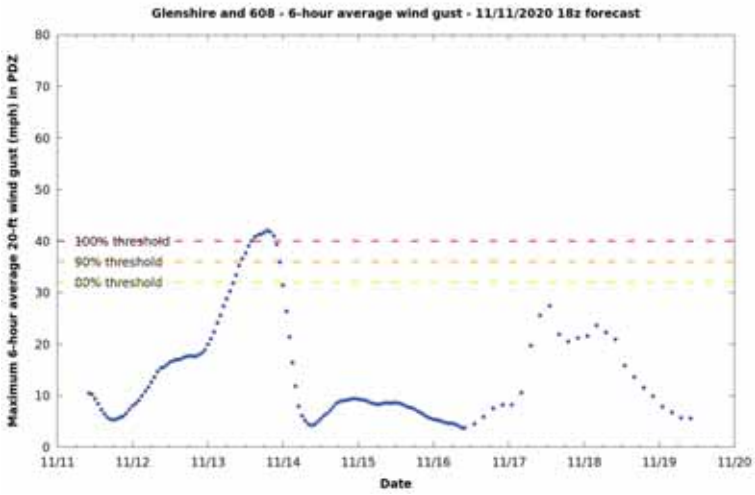
Beacon Tap



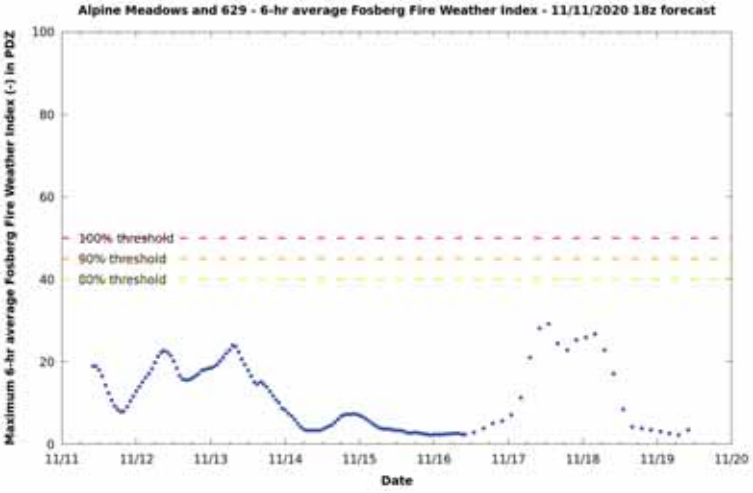


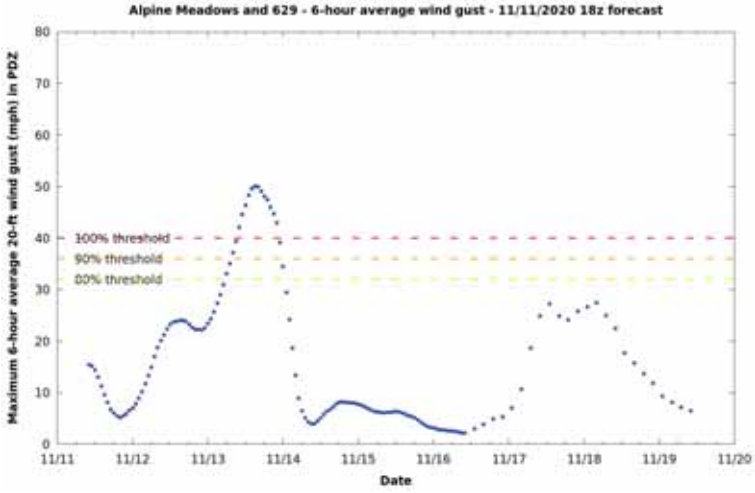
Glenshire and 608



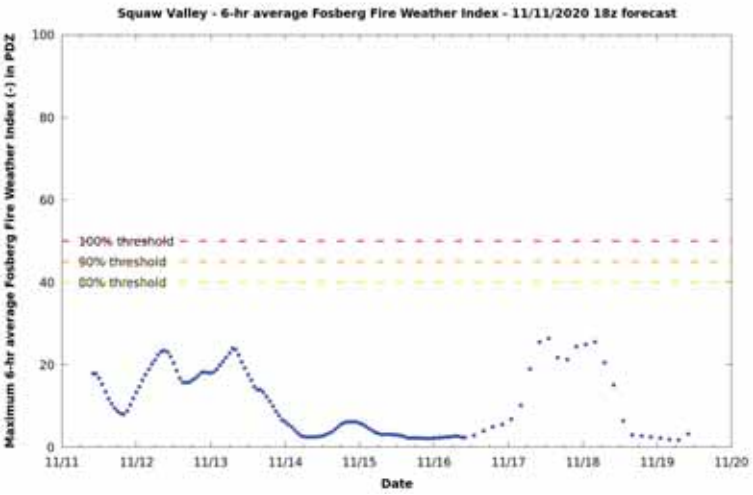


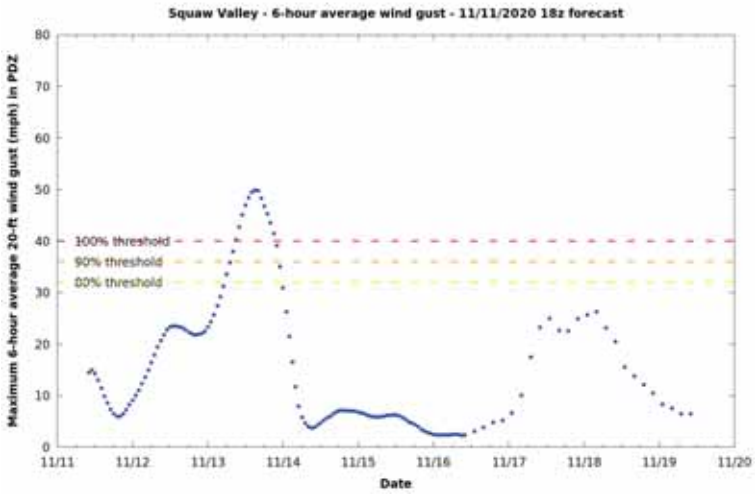
Alpine Meadows and 629



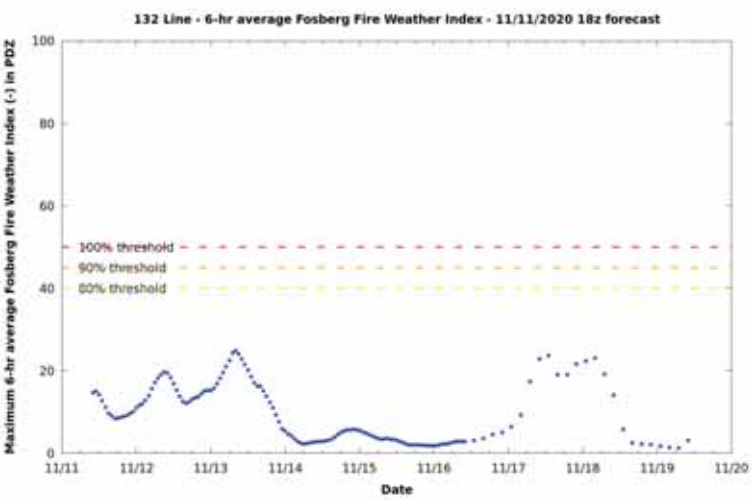


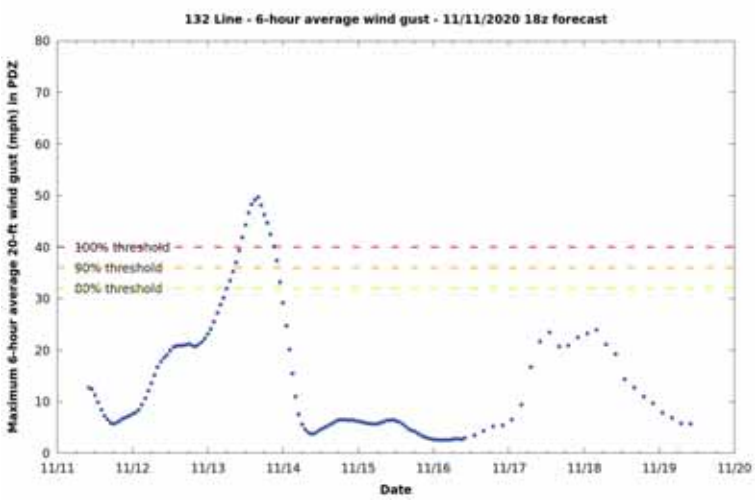
Squaw Valley



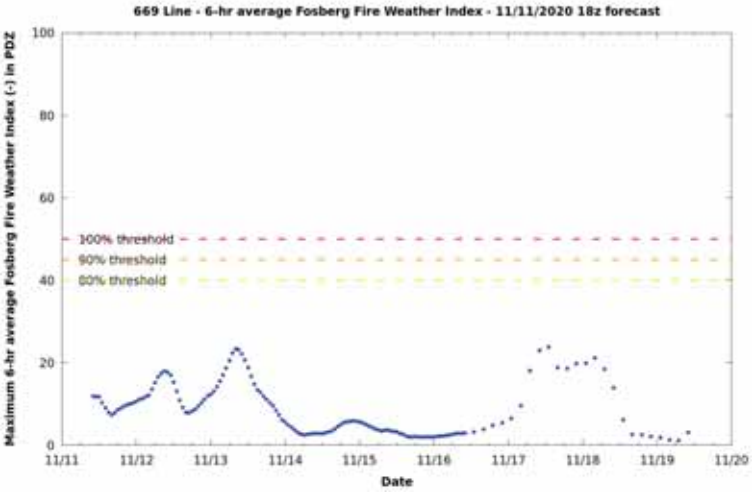


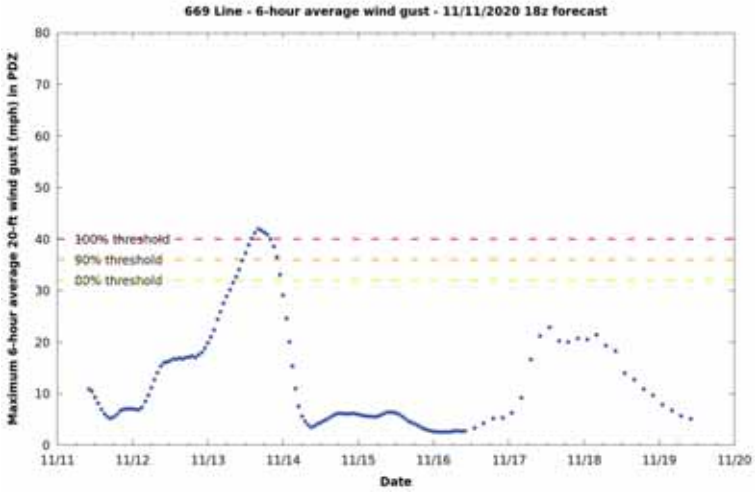
132 Line



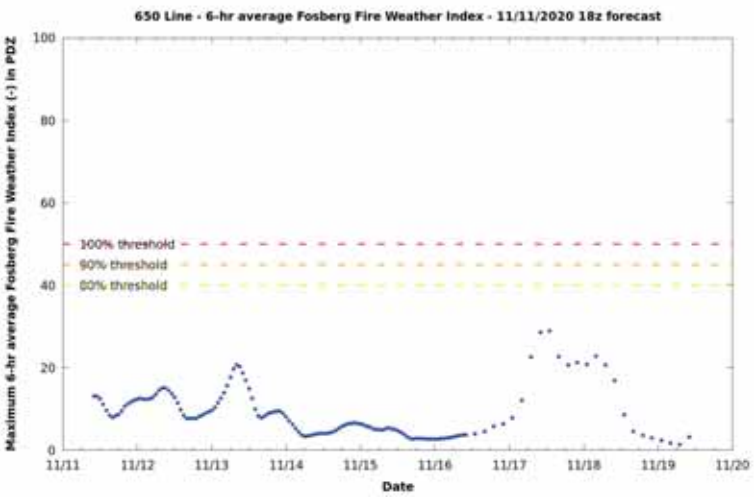


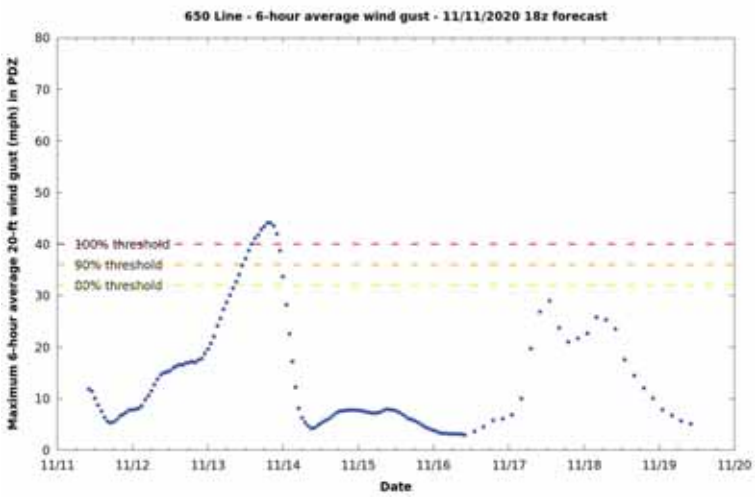
669 Line



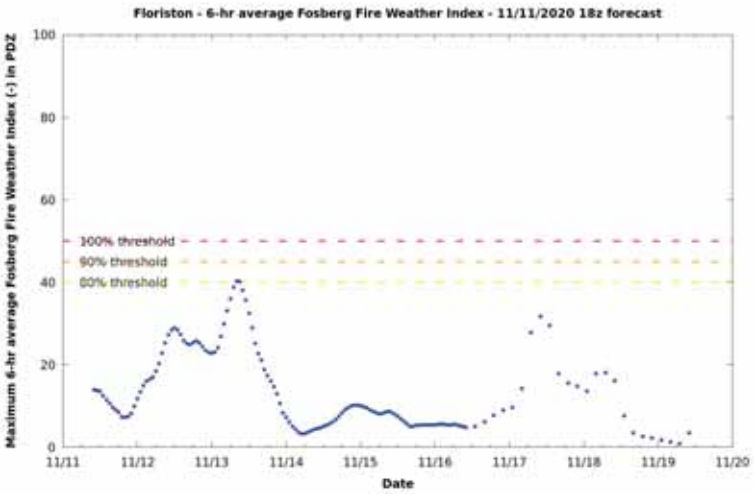


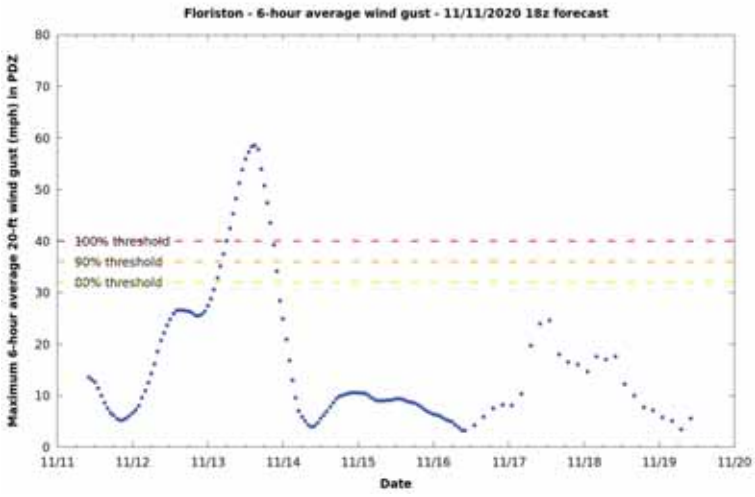
650 Line



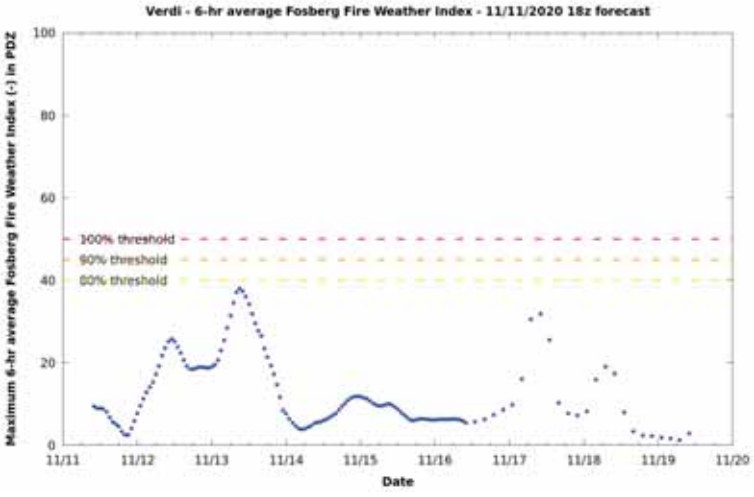


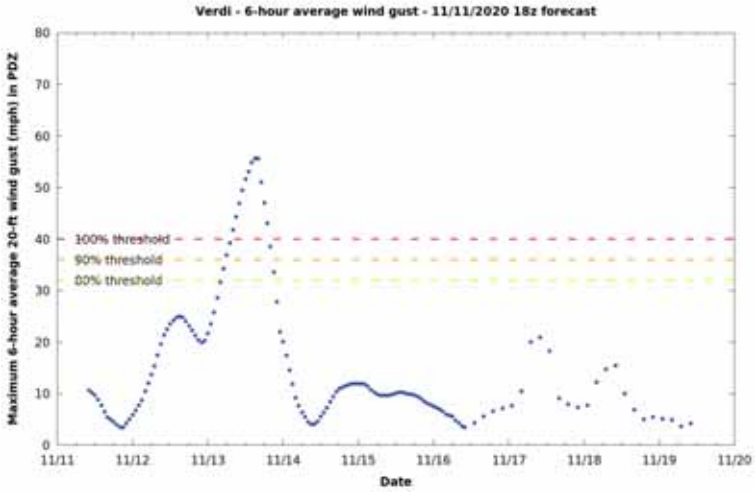
Floriston



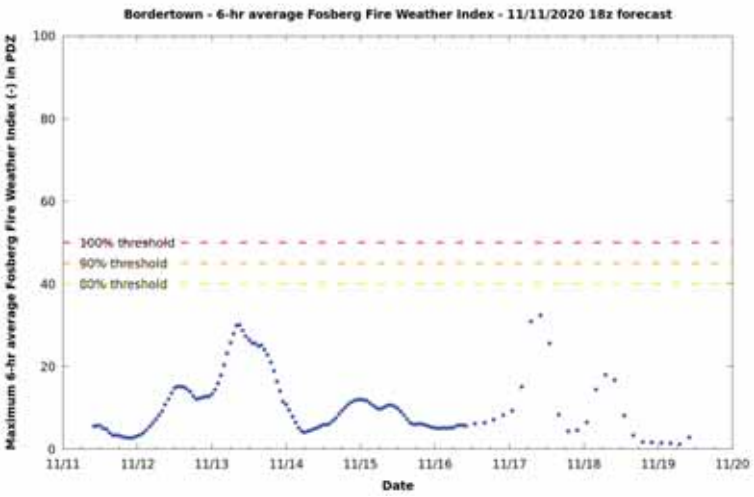


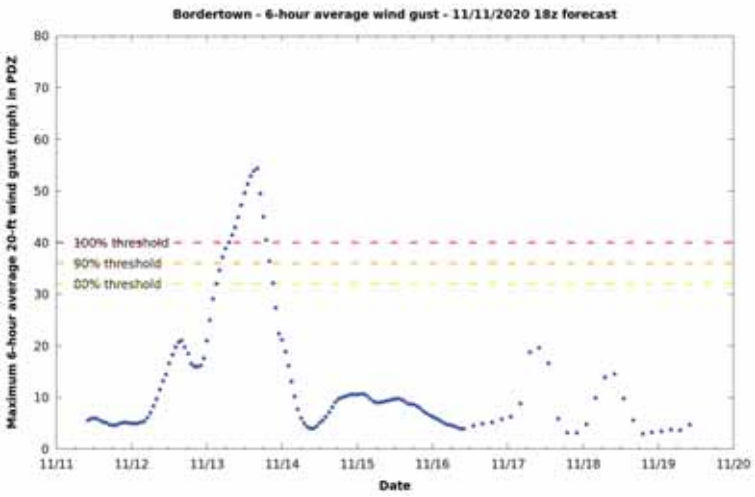
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/11/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/11/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/12/20 - 11/18/20

Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

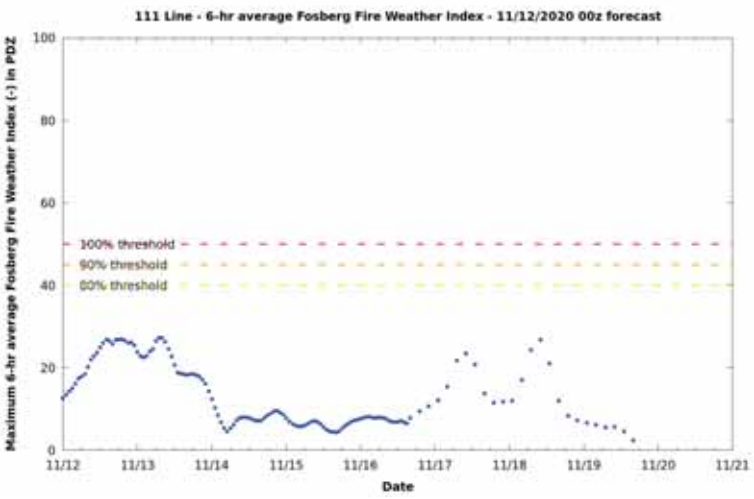
Liberty Utilities Energy Release Component Forecast for 11/12/20 - 11/18/20

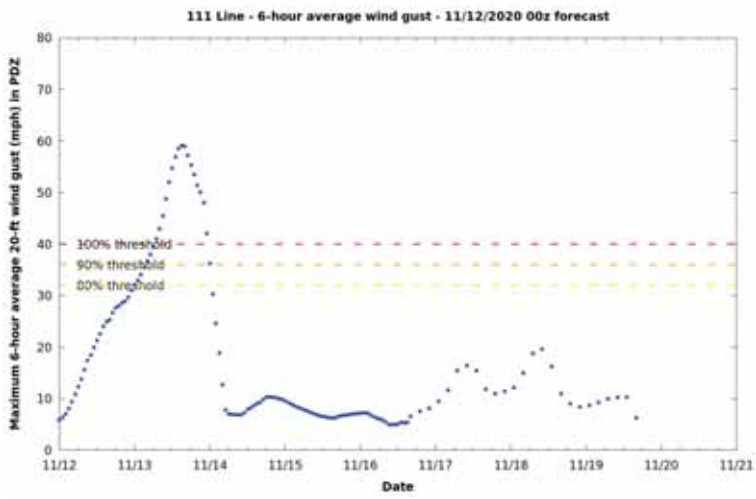
Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	42.0	39.0	33.0	34.0	31.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

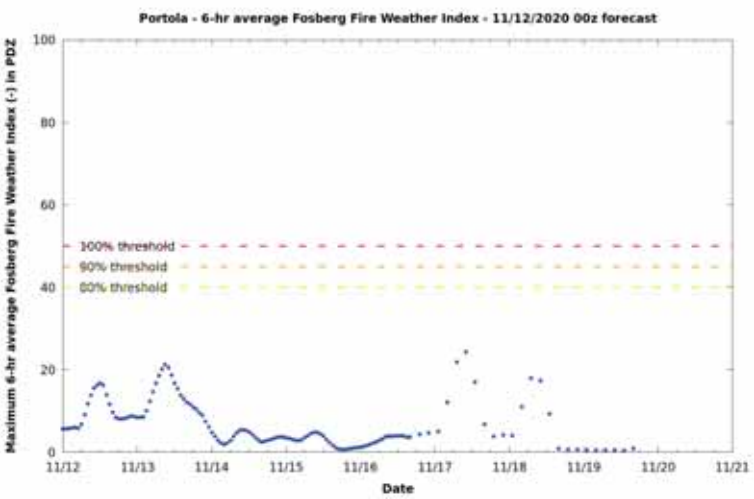
Liberty Utilities Fire Weather Summary Plots - 11/12/2020 00z forecast

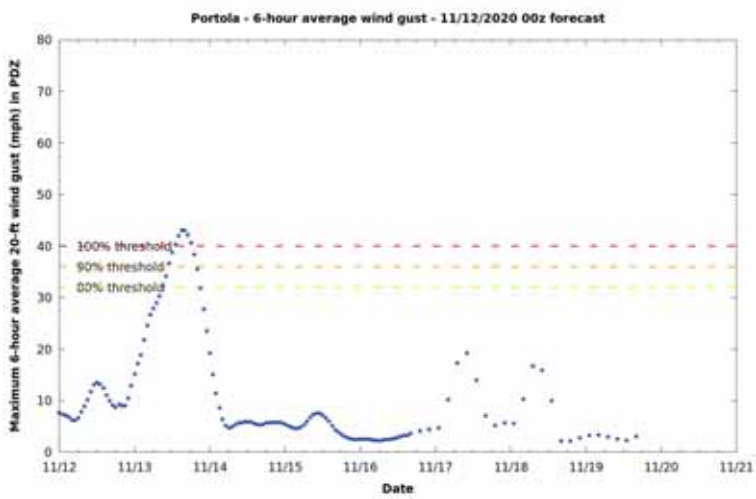
111 Line



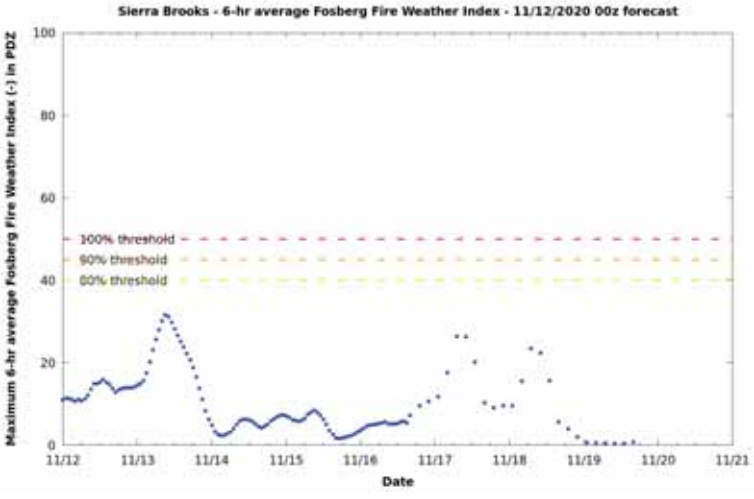


Portola



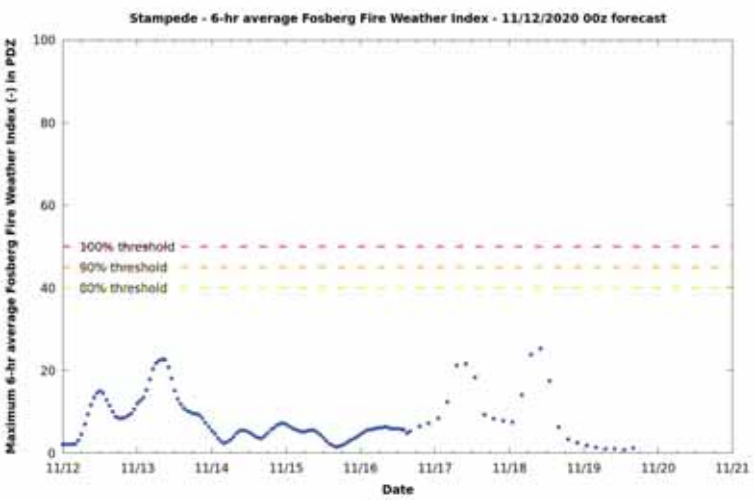


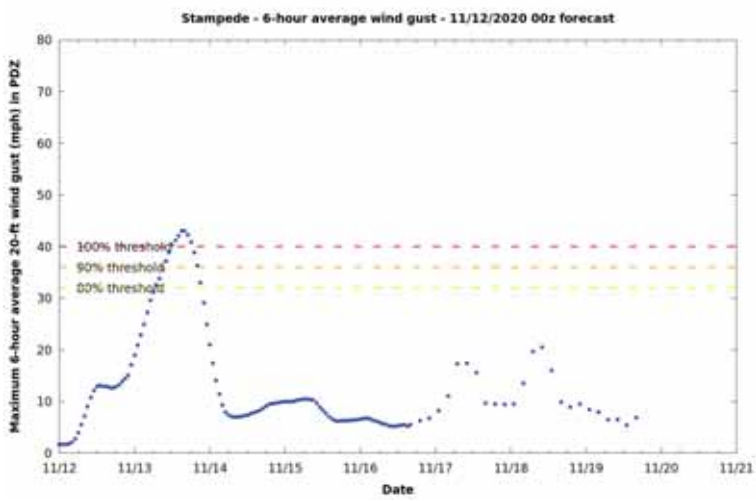
Sierra Brooks



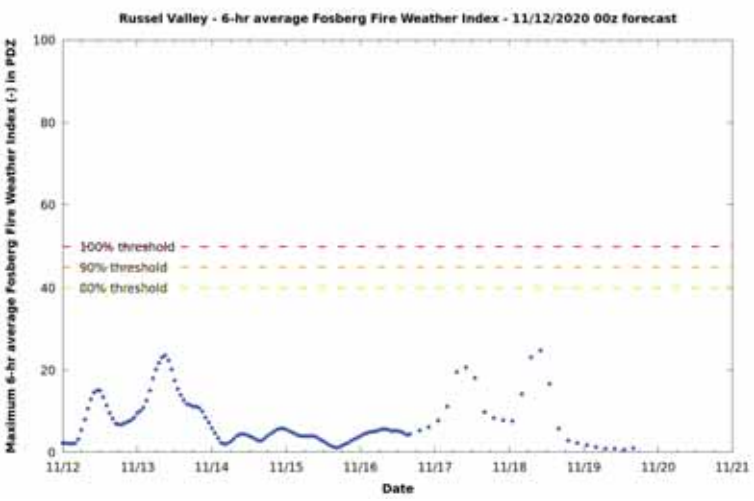


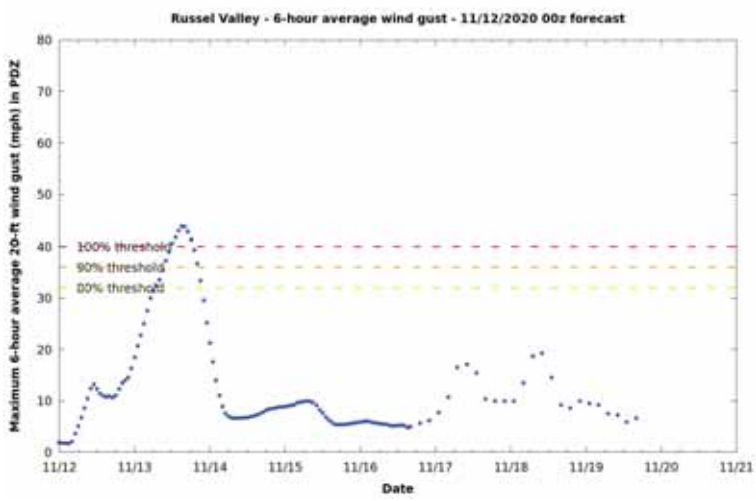
Stampede



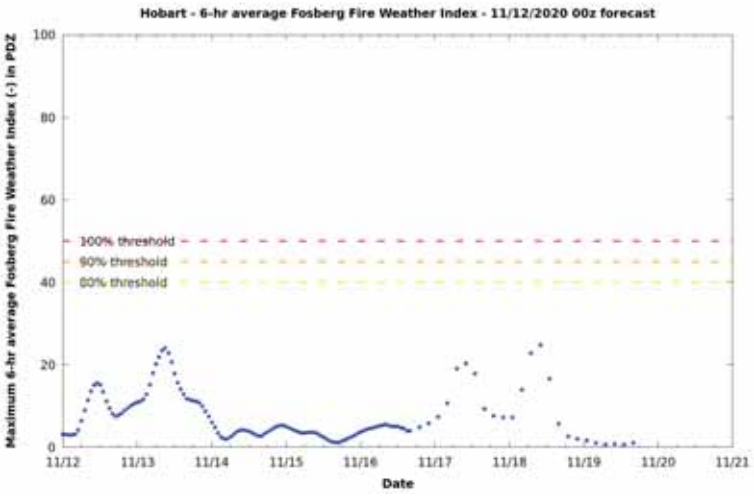


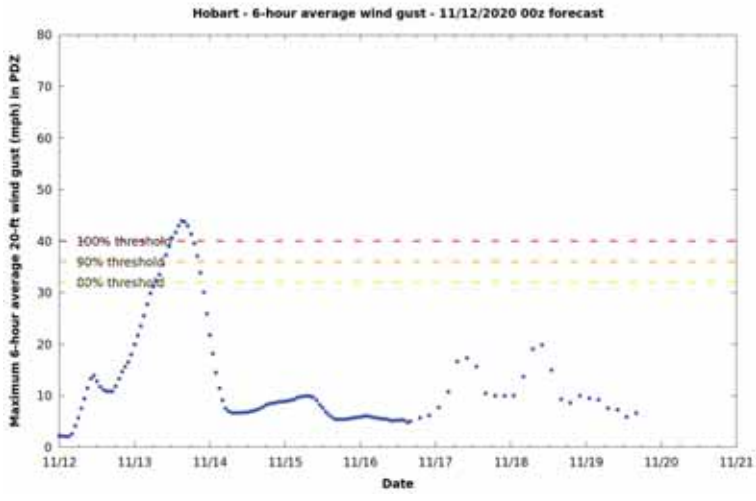
Russell Valley



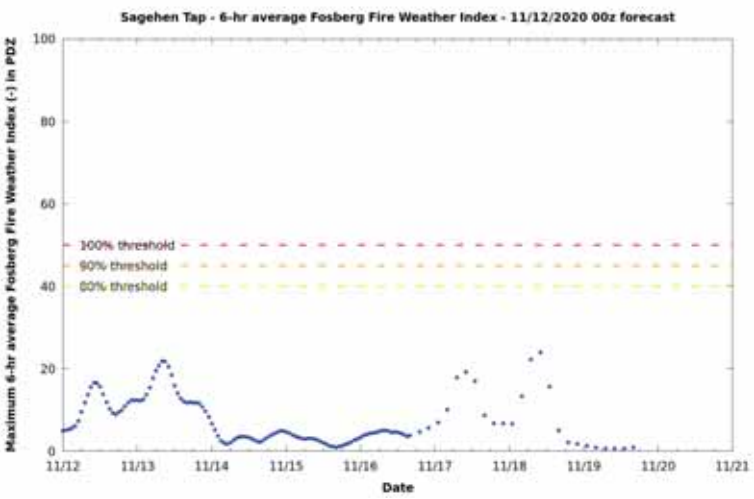


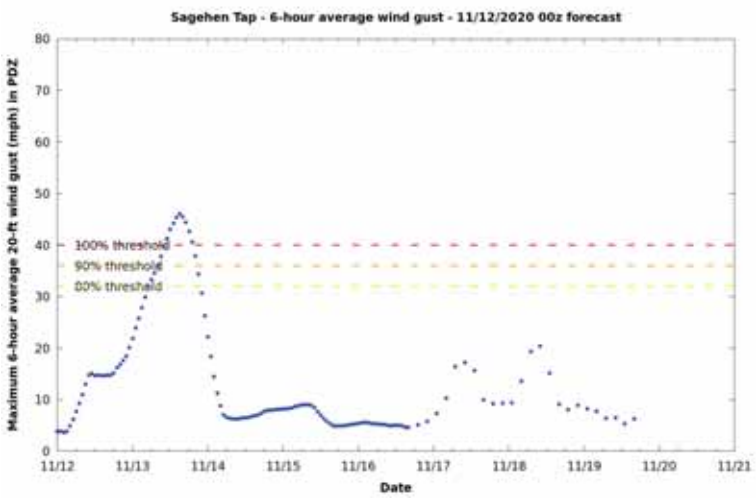
Hobart



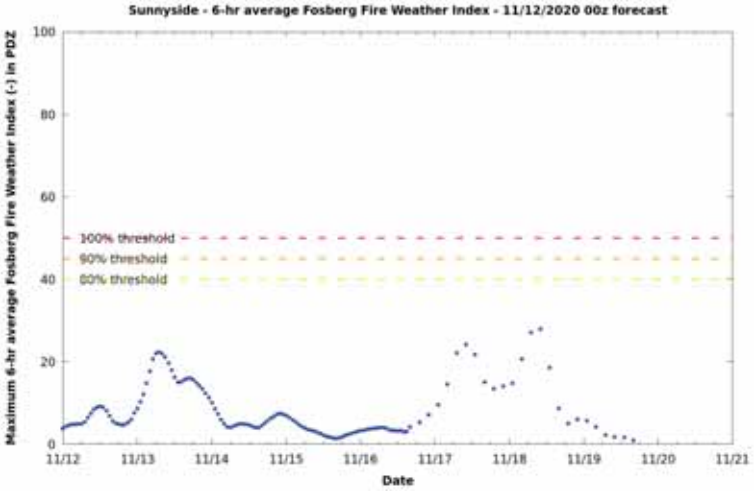


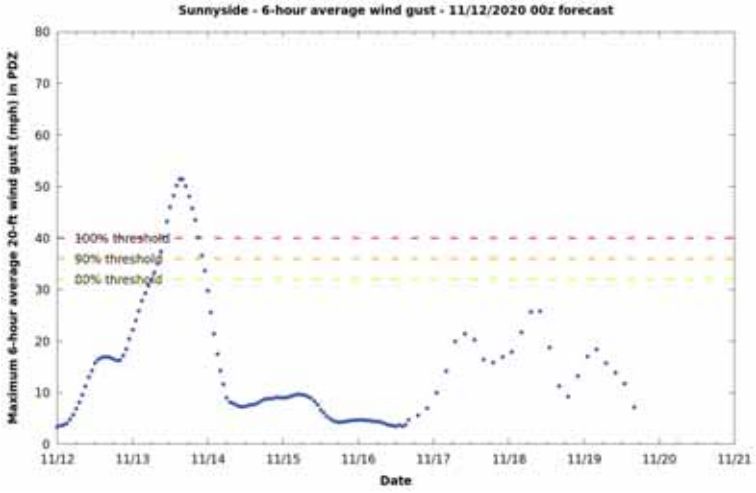
Sagehen tap



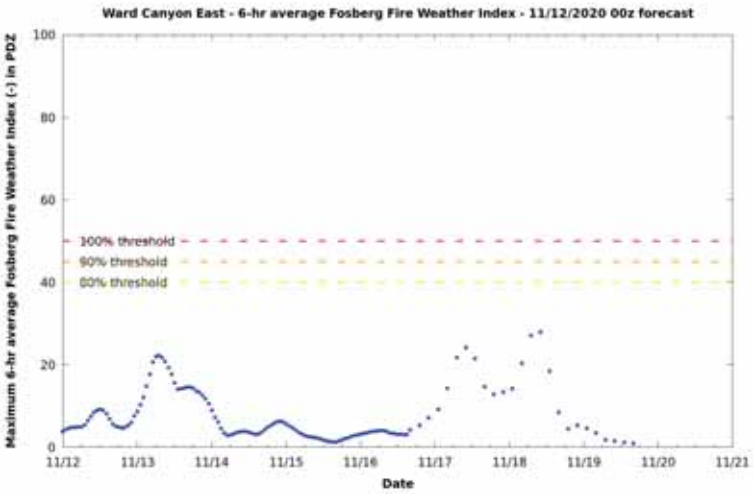


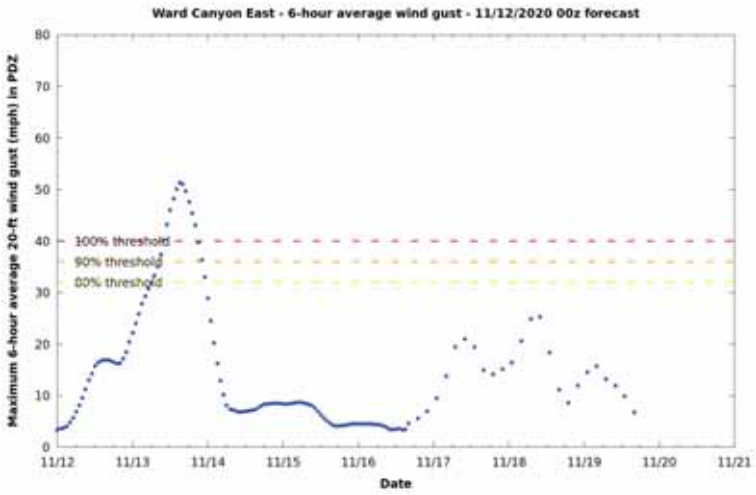
Sunnyside



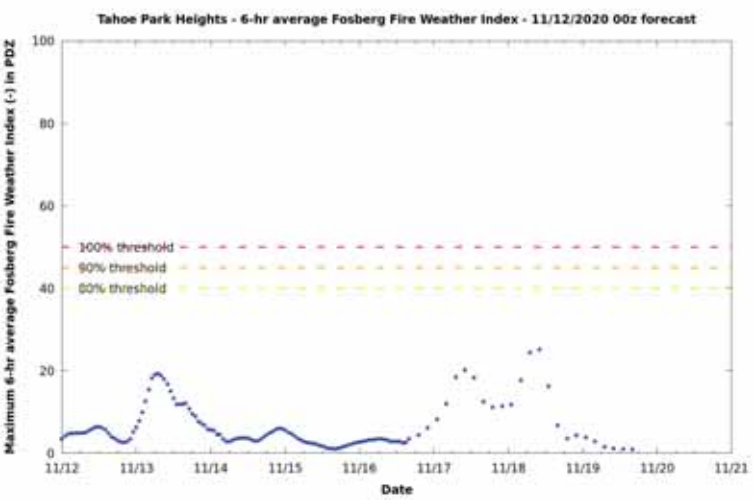


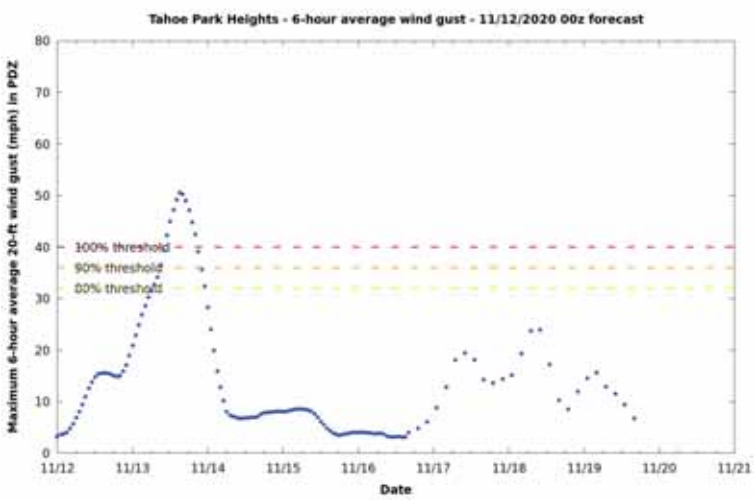
Ward Canyon East



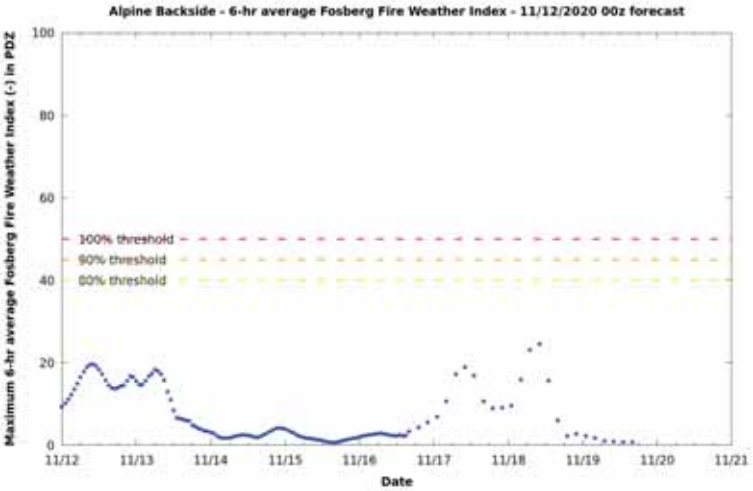


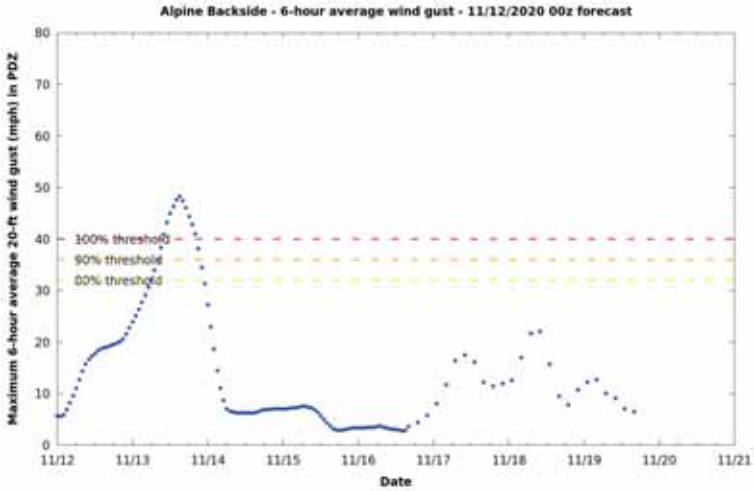
Tahoe Park Heights



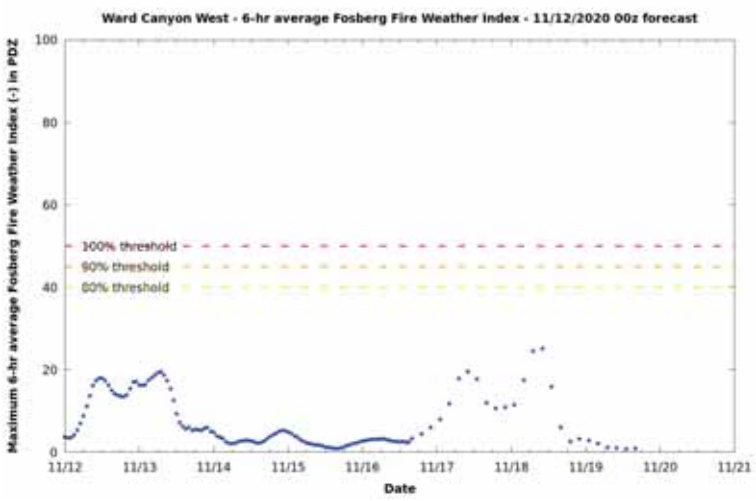


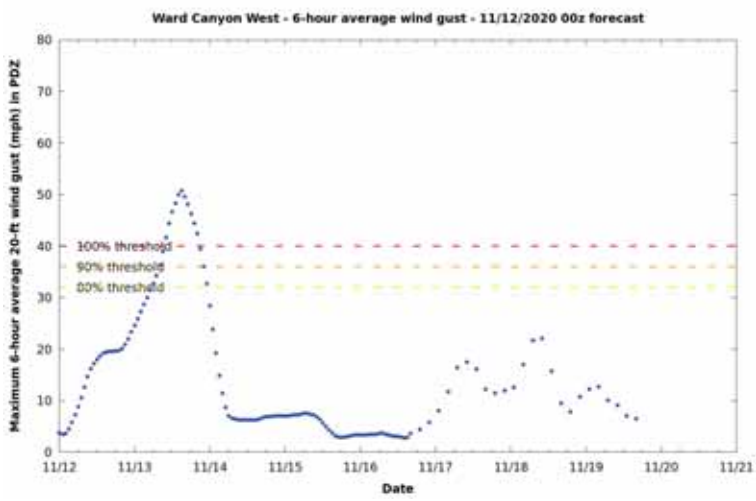
Alpine Backside



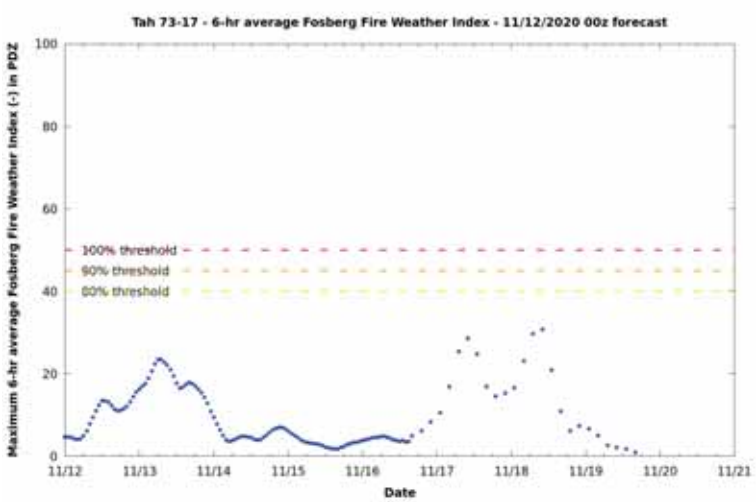


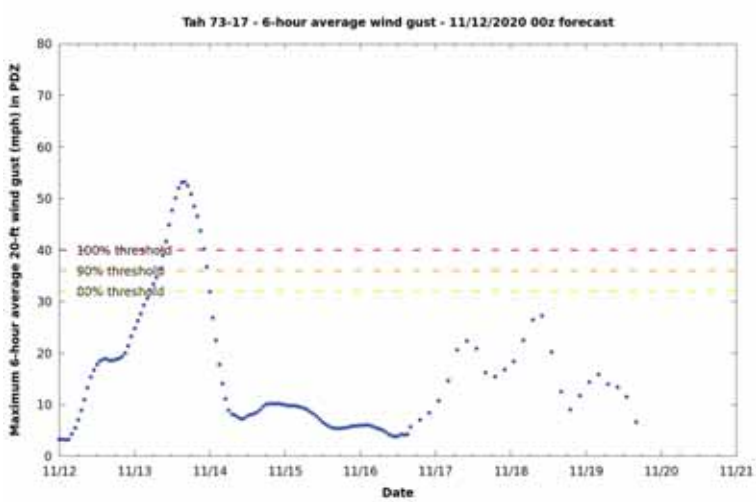
Ward Canyon West



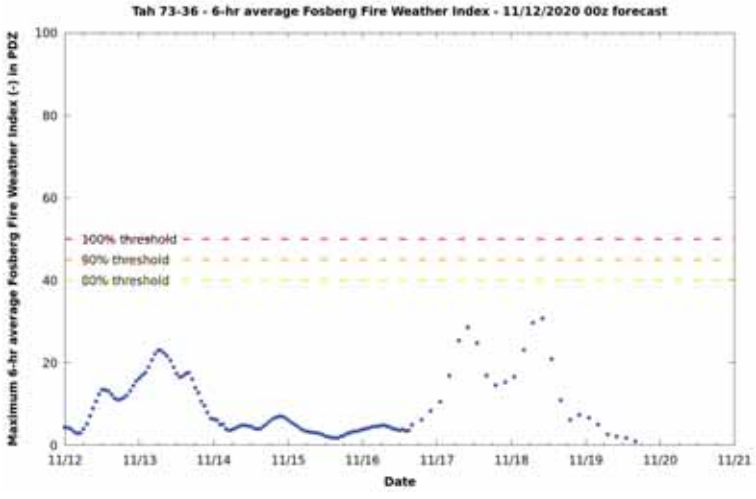


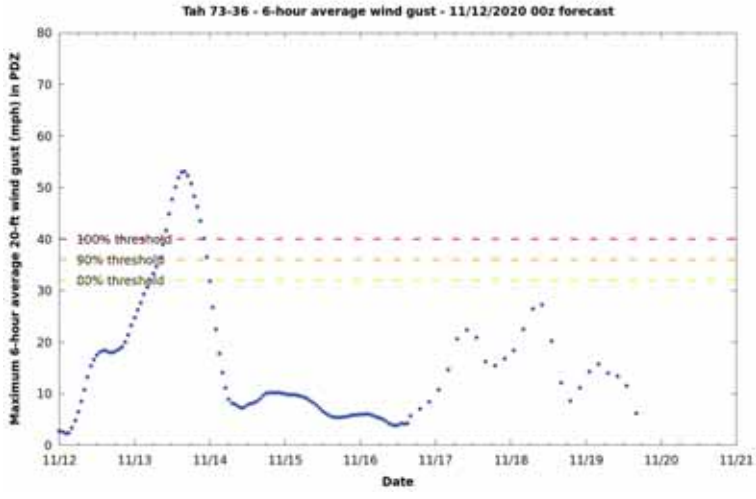
Tah 73-17



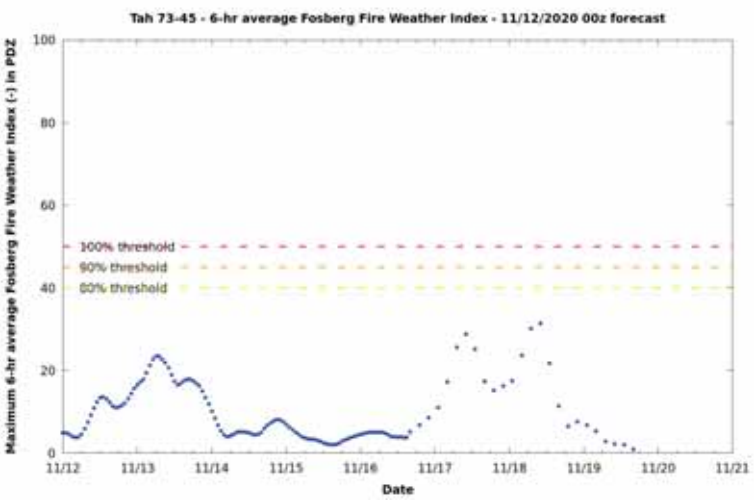


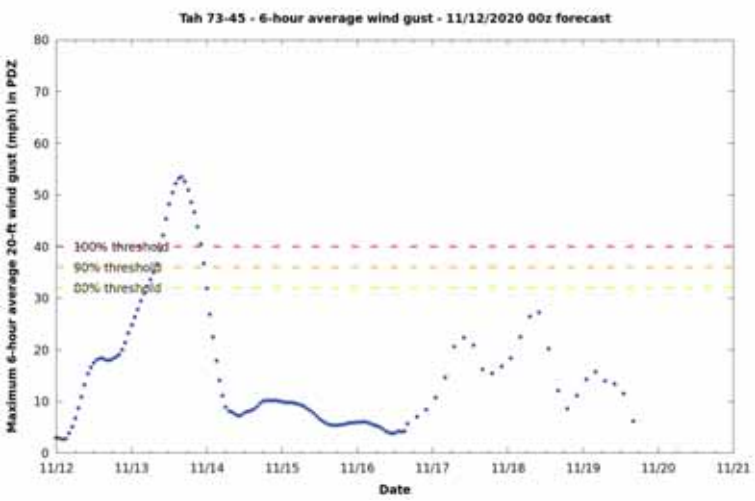
Tah 73-36



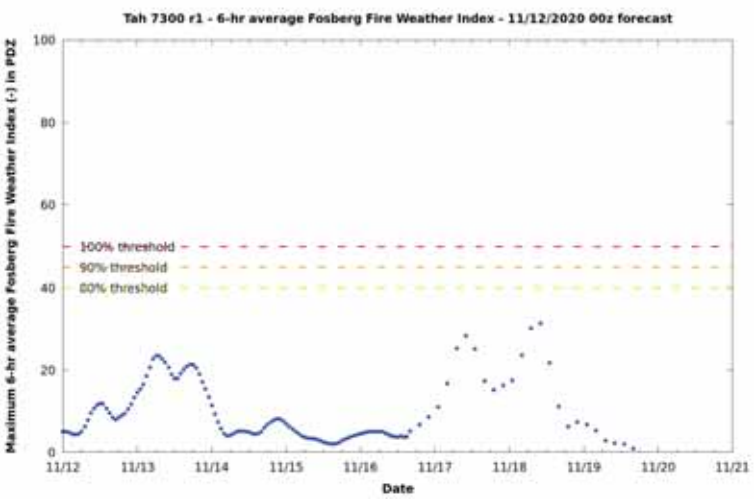


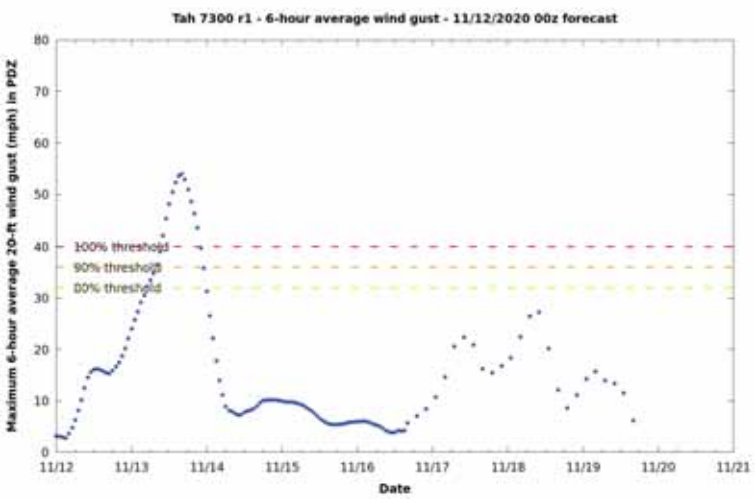
Tah 73-45



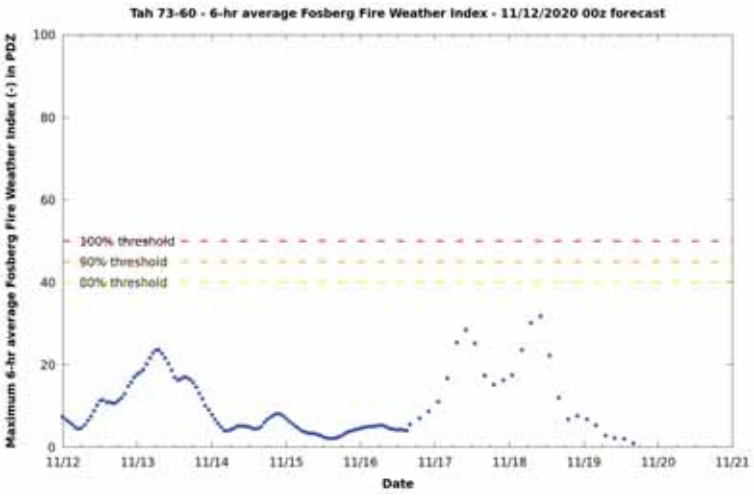


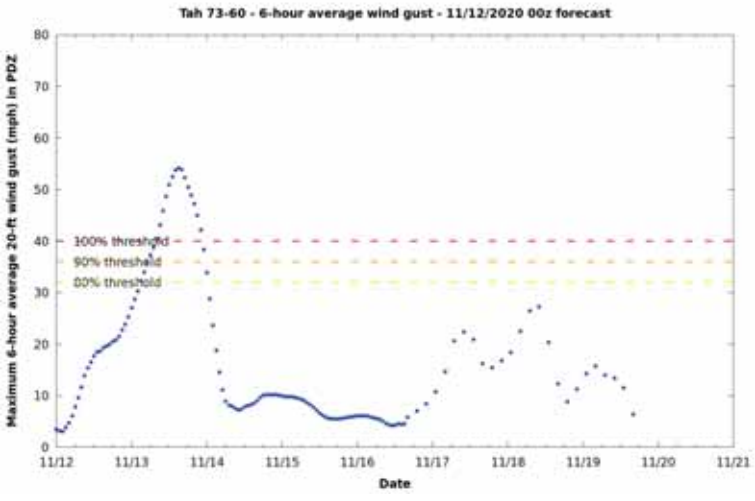
Tah 7300 r1



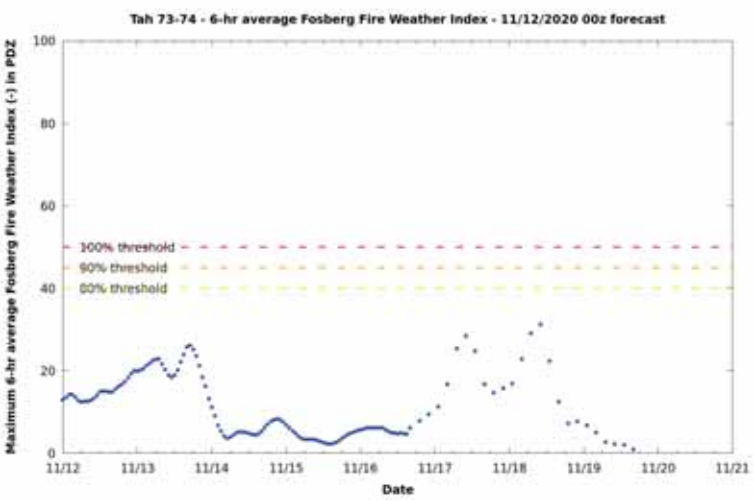


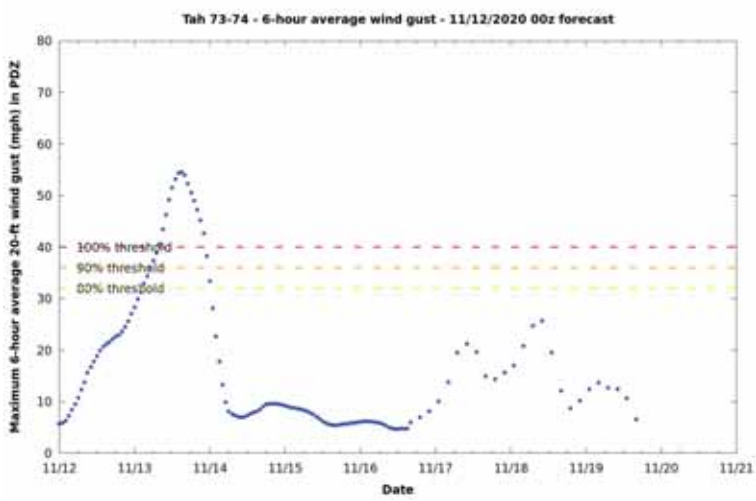
Tah 73-60



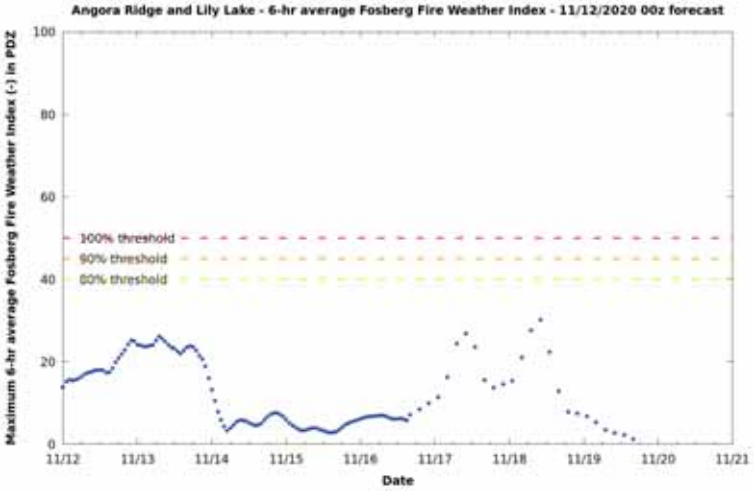


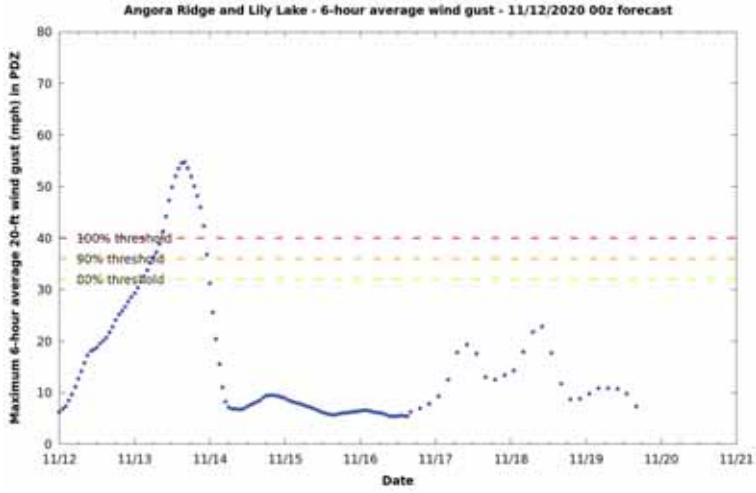
Tah 73-74



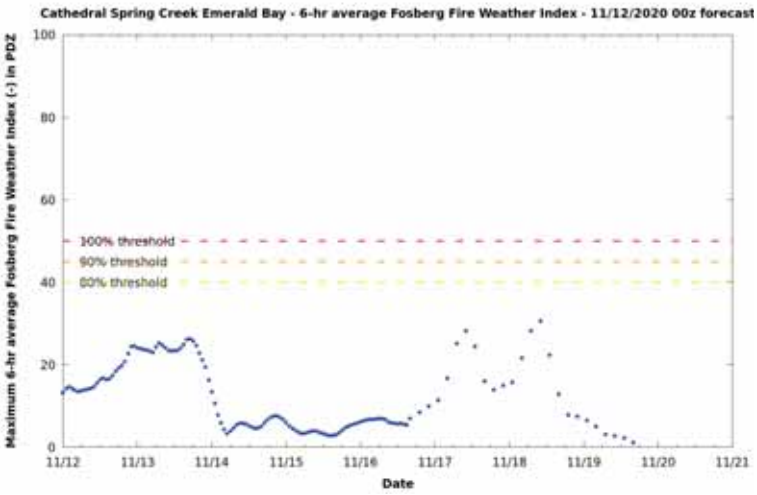


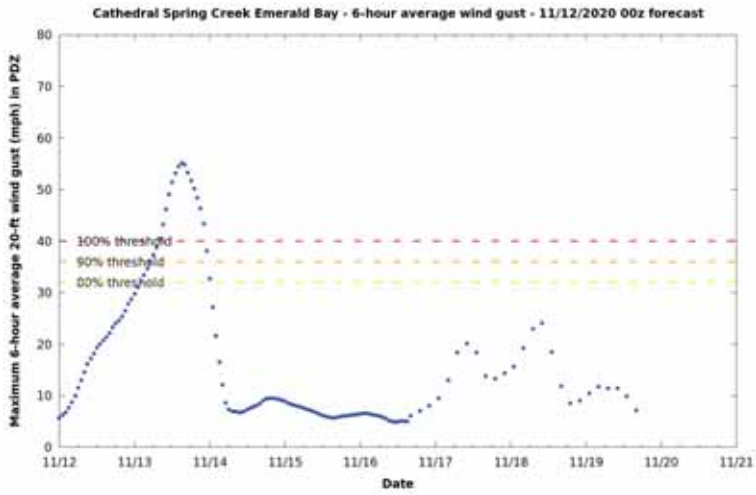
Angora Ridge and Lily Lake



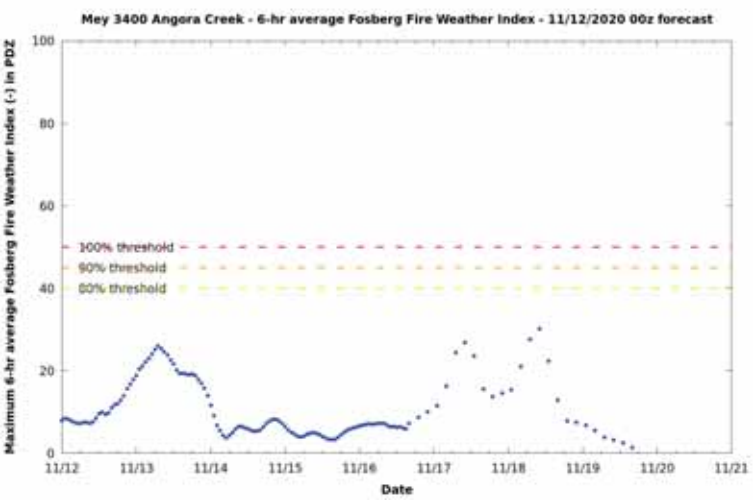


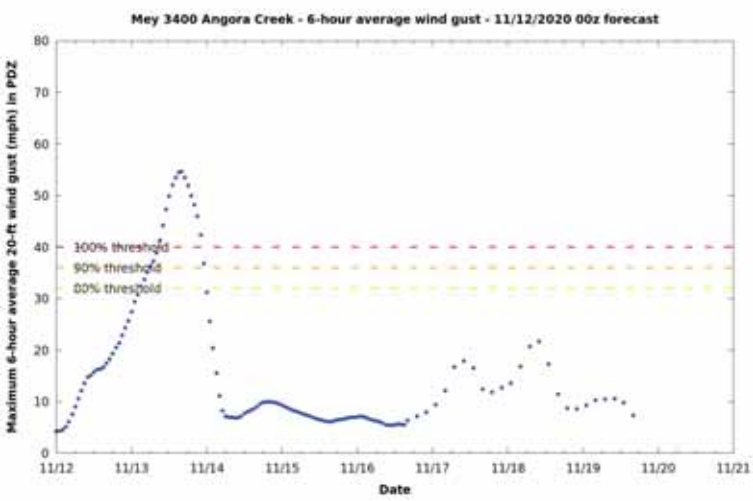
Cathedral Spring Creek Emerald Bay



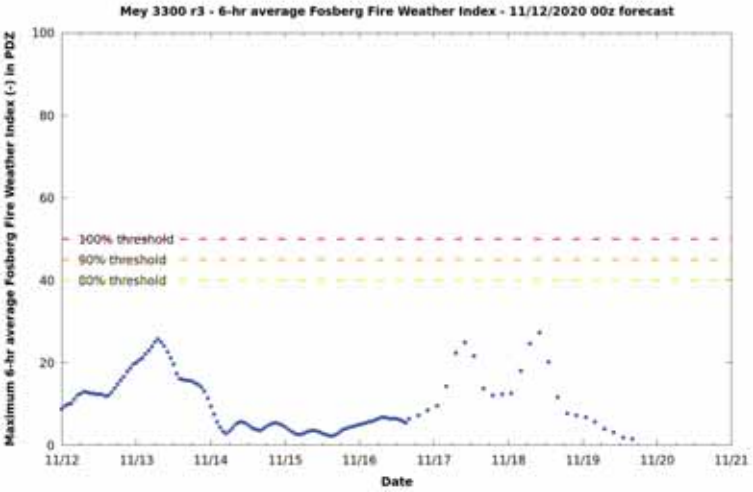


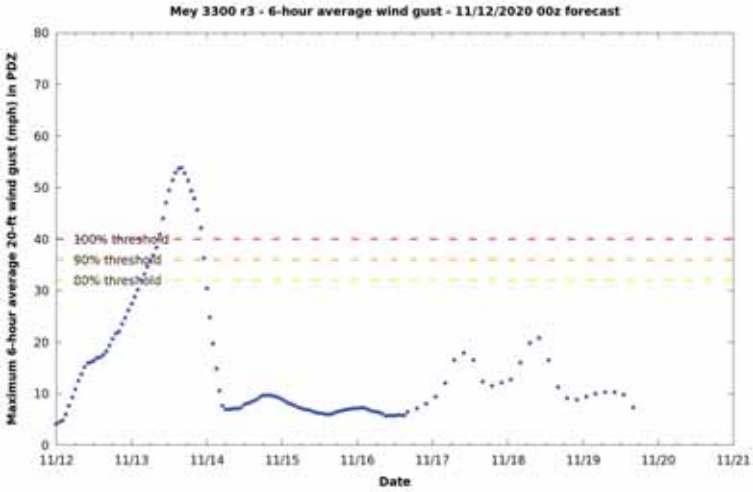
Mey 3400 Angora Creek



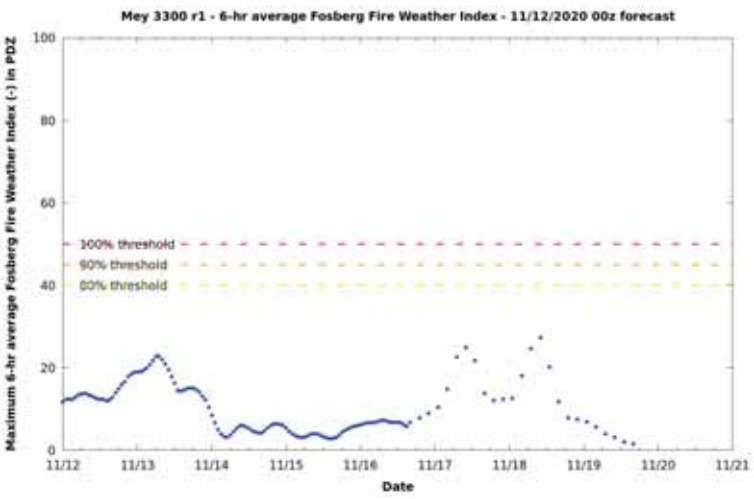


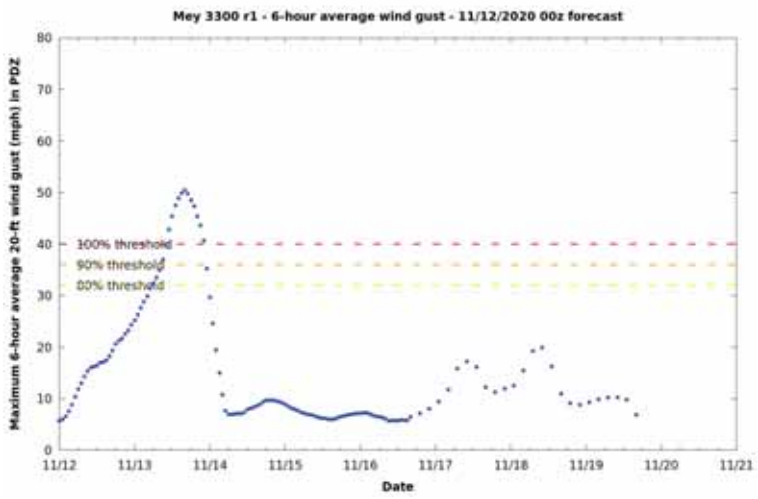
Mey 3300 r3



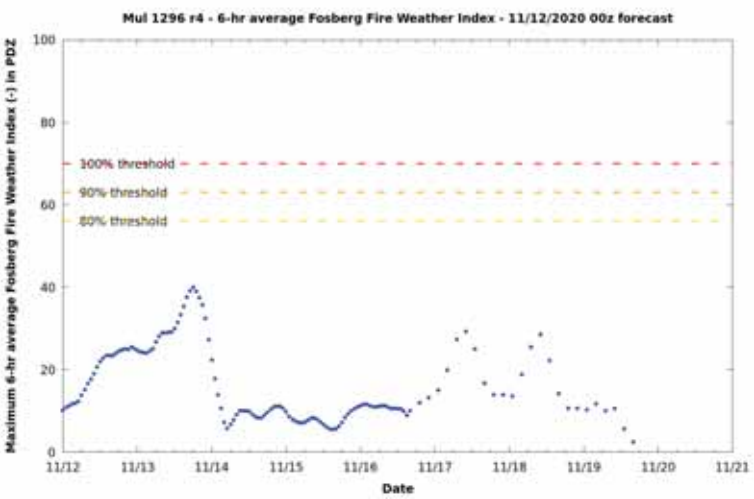


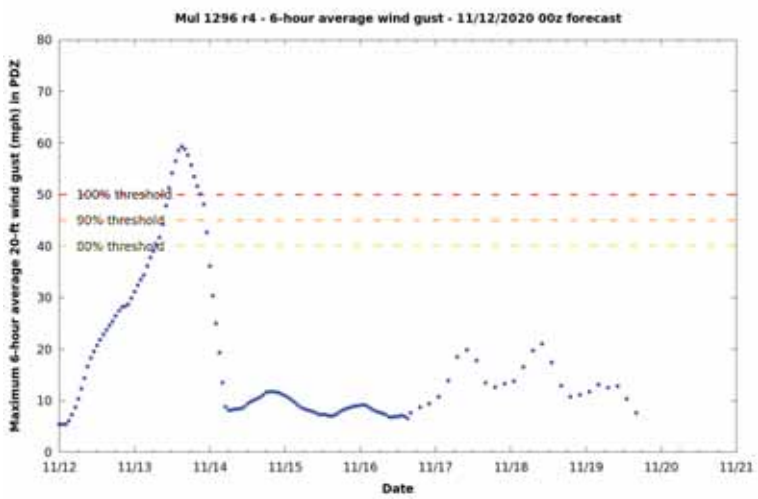
Mey 3300 r1





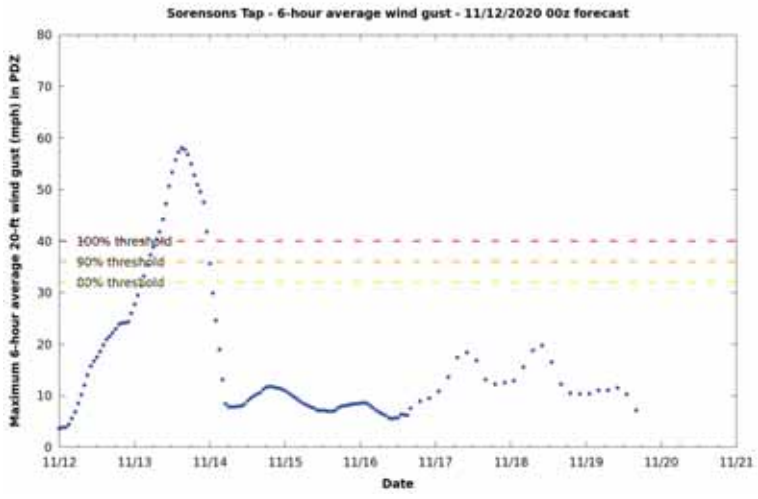
Mul 1296 r4



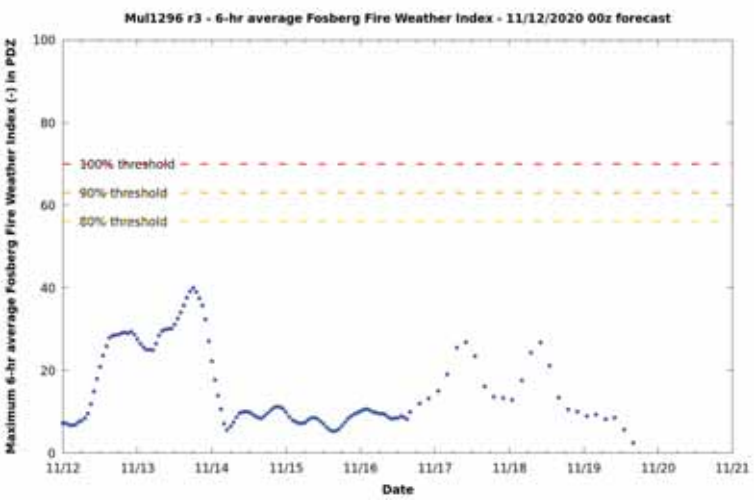


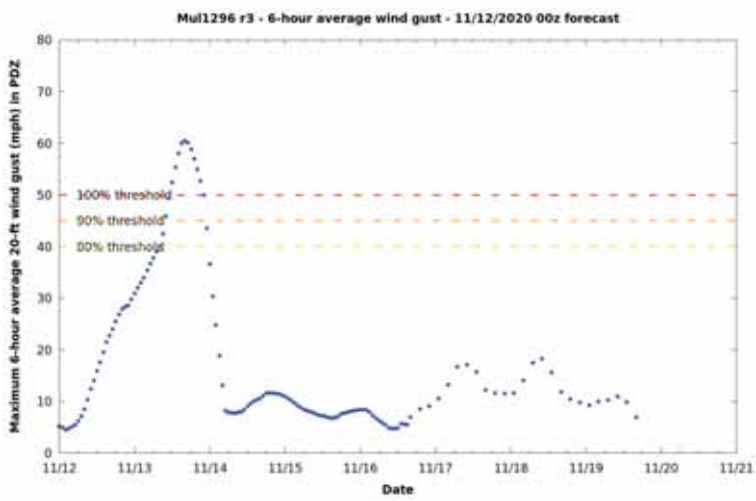
Sorensons Tap



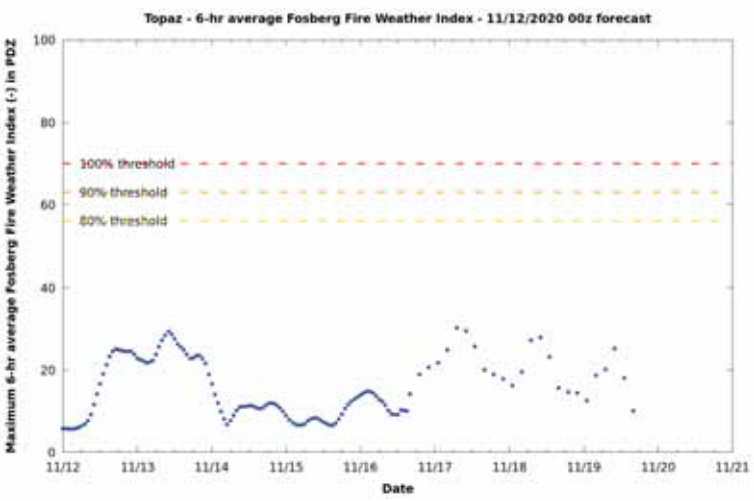


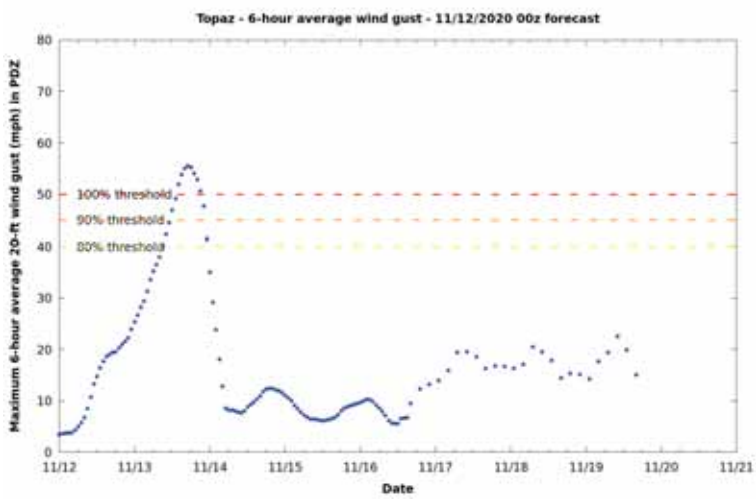
Mul 1296 r3



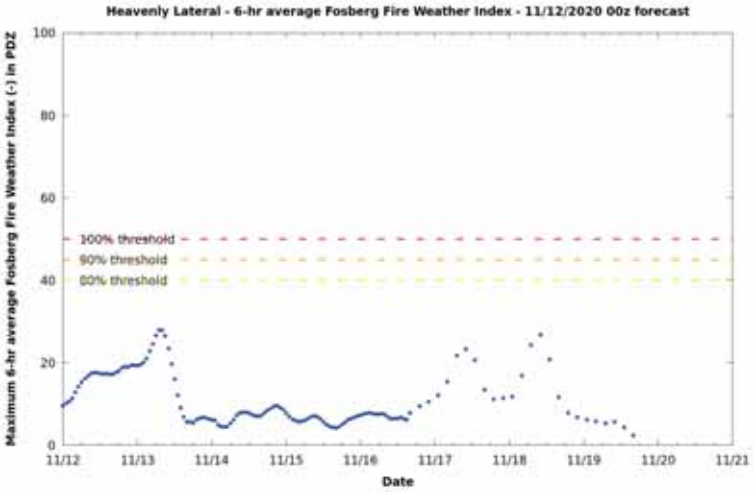


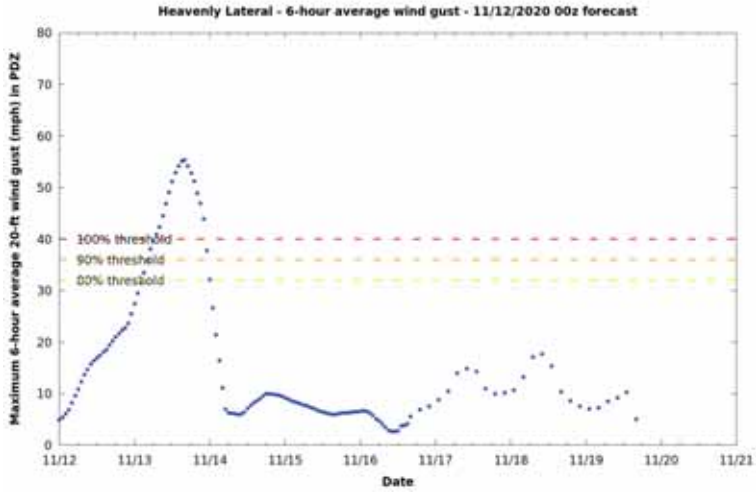
Topaz



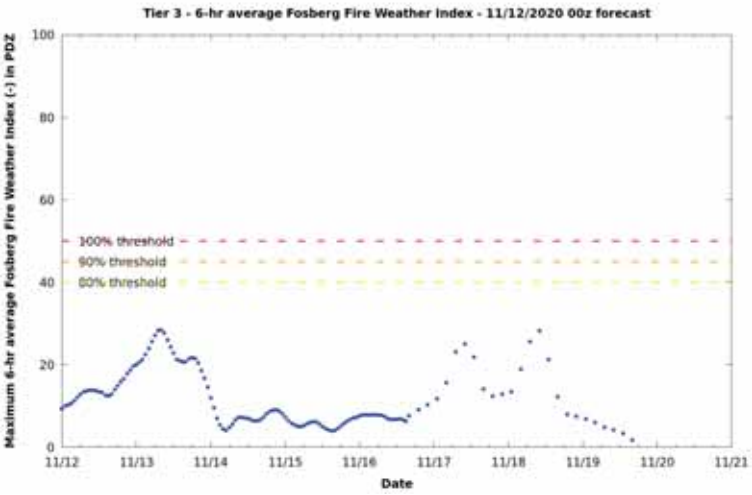


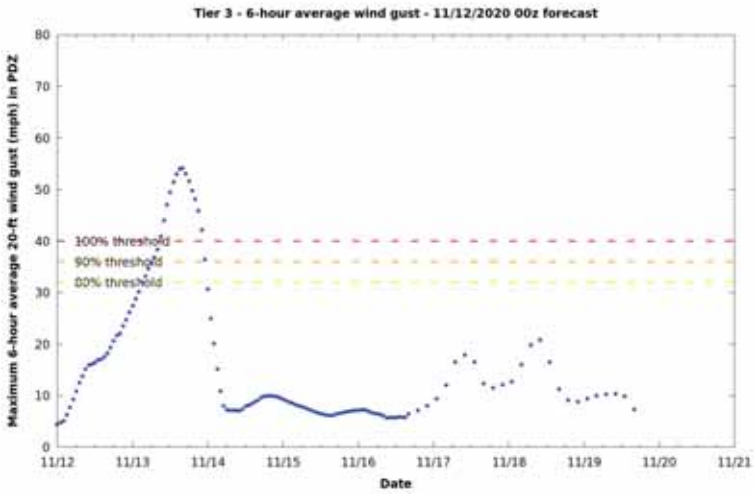
Heavenly Lateral



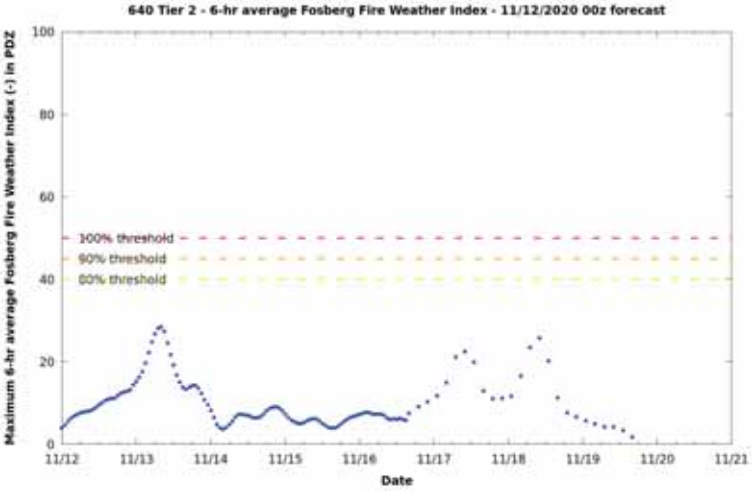


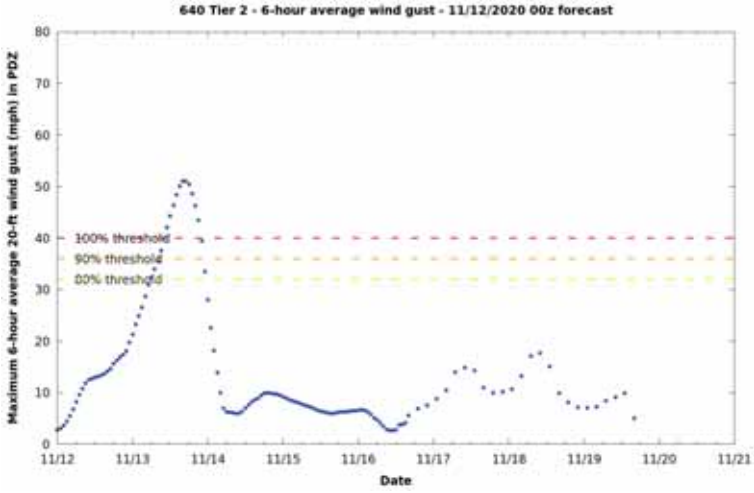
Tier 3



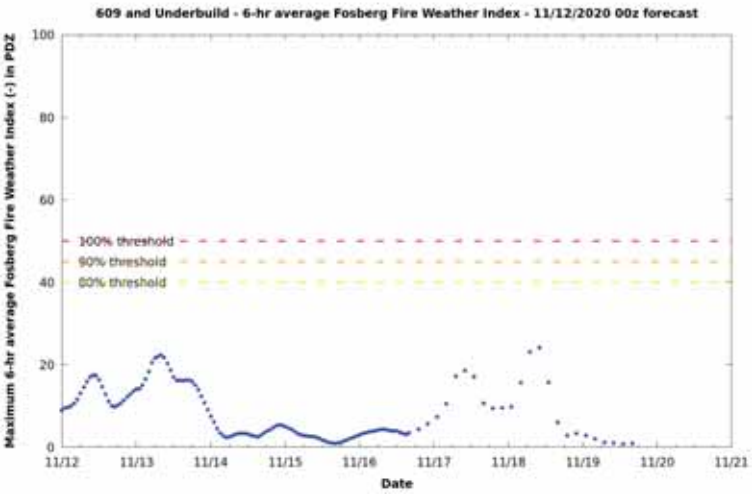


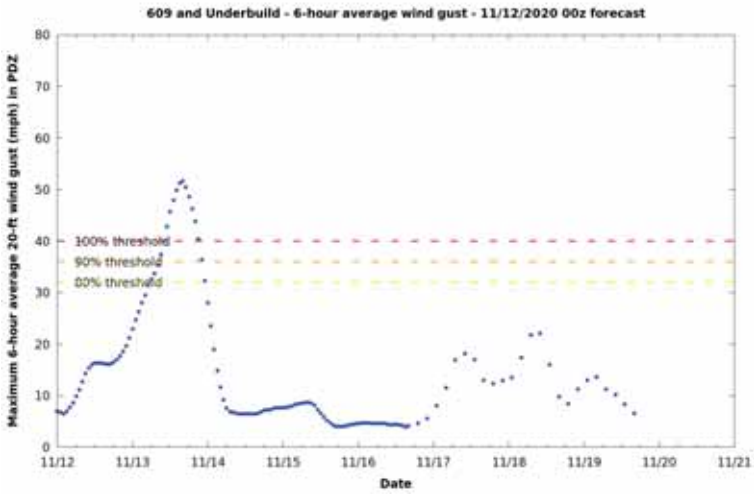
640 Tier 2



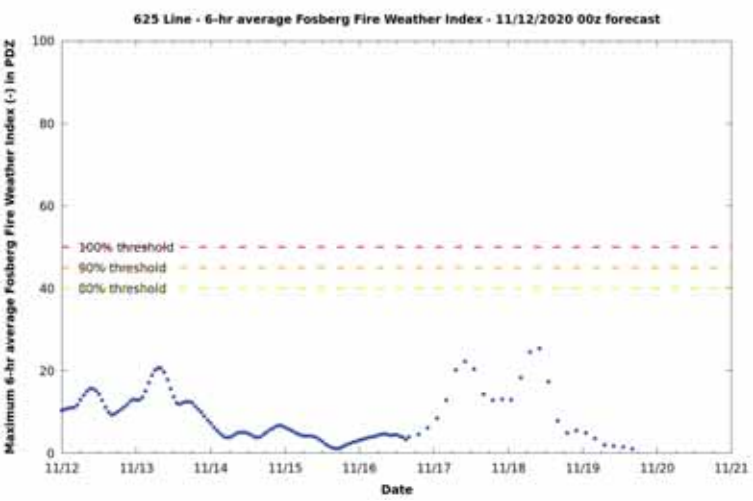


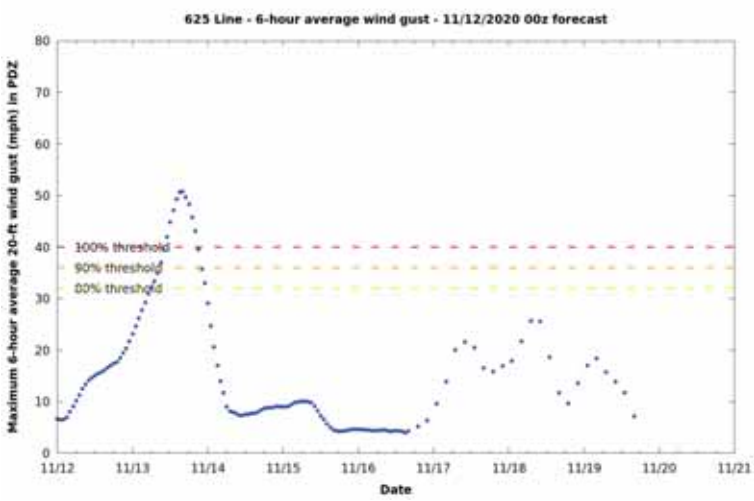
609 and Underbuild



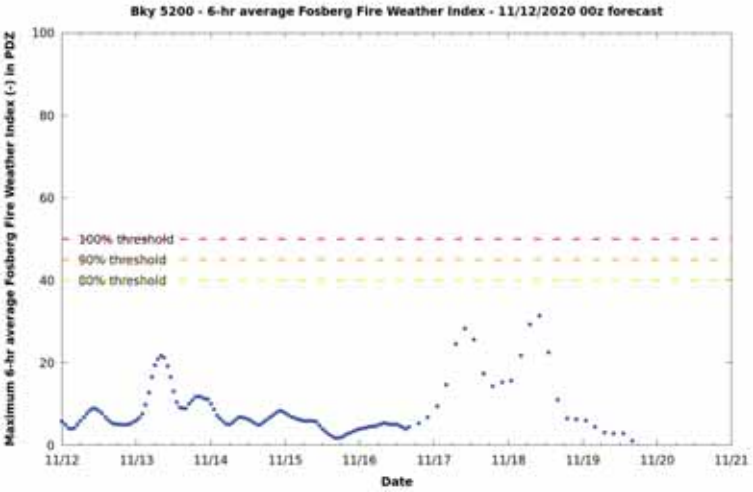


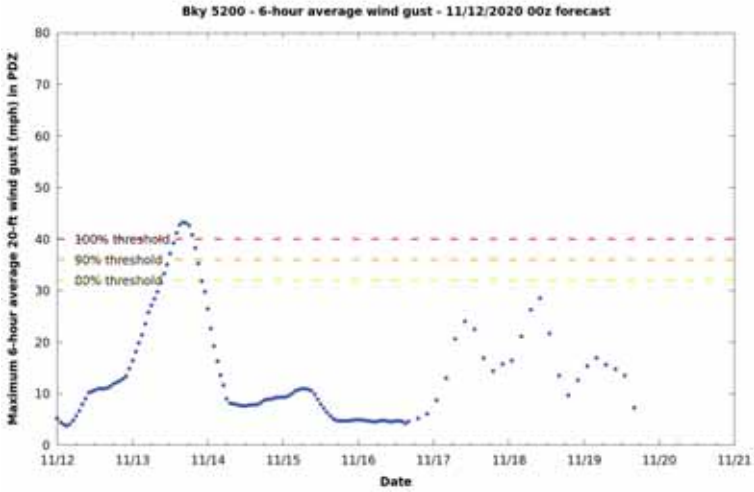
625 Line



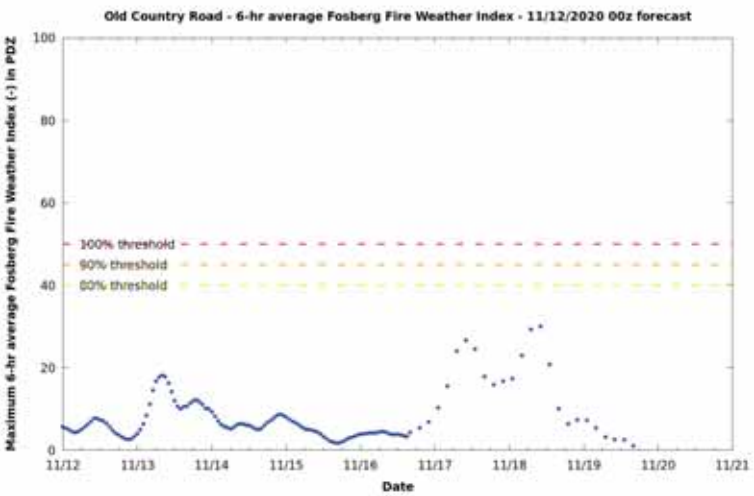


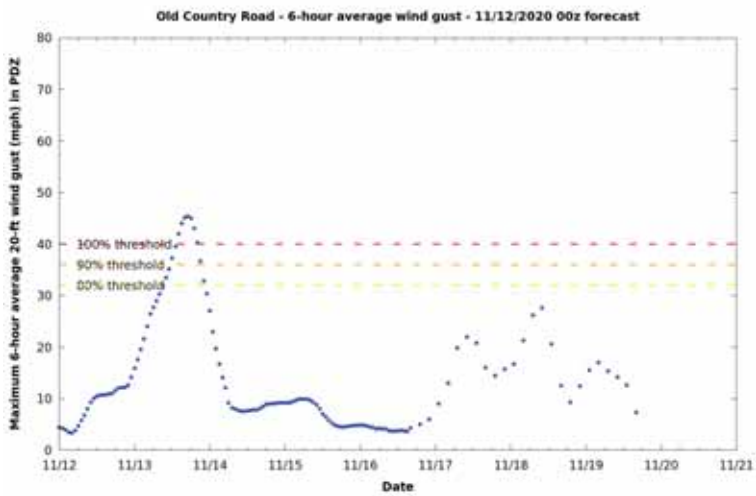
Bky 5200



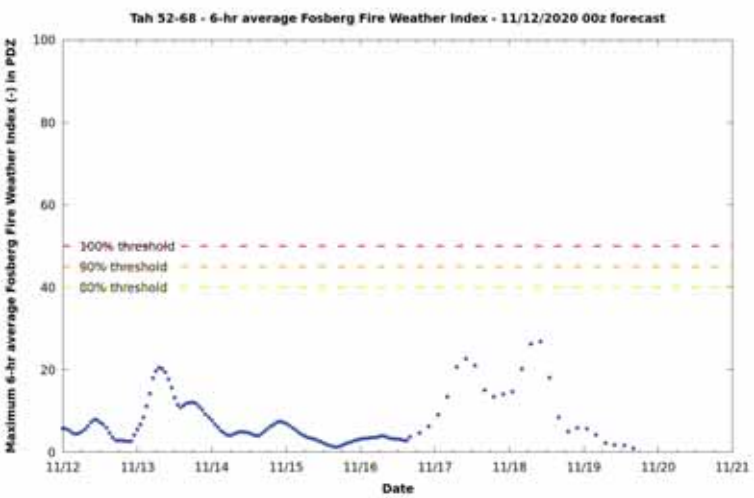


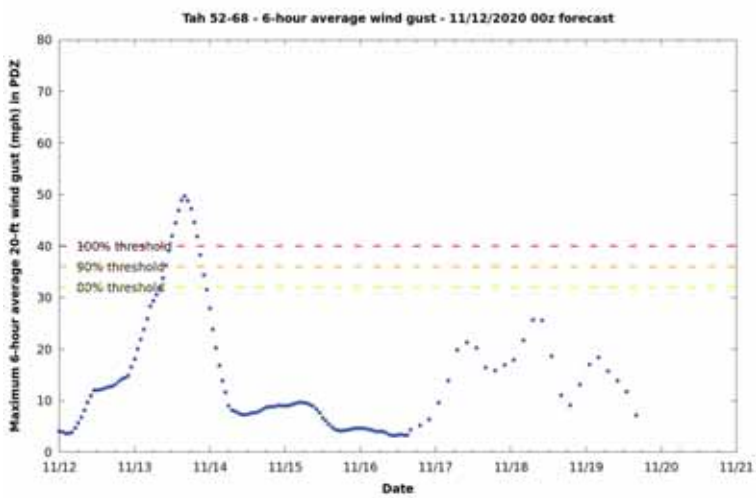
Old Country Road



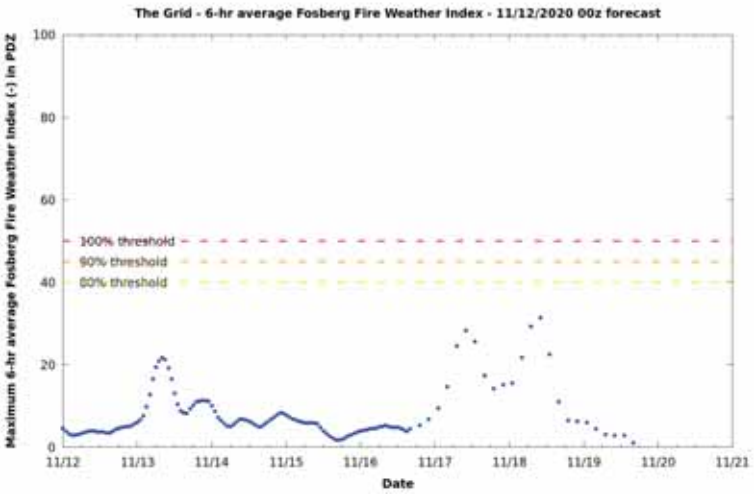


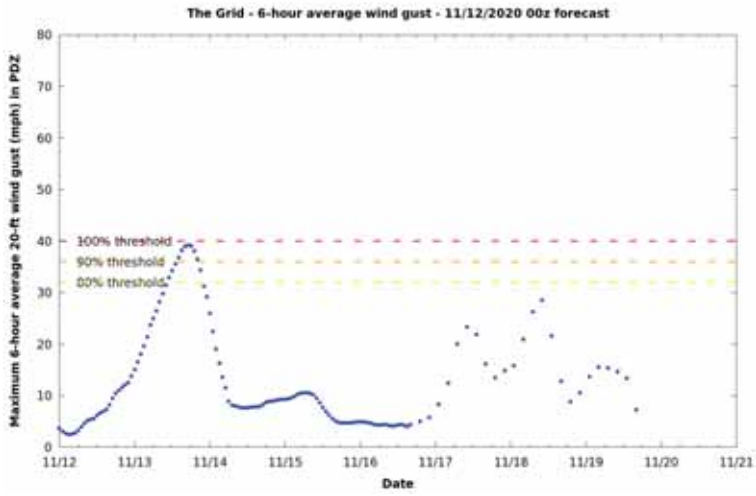
Tah 52-68



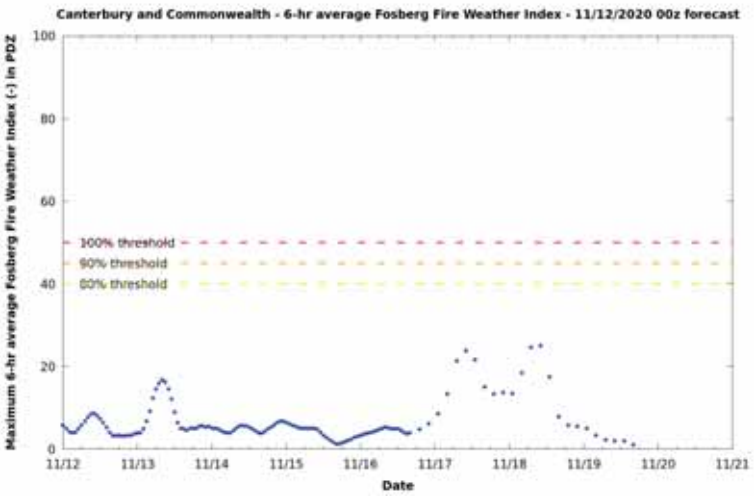


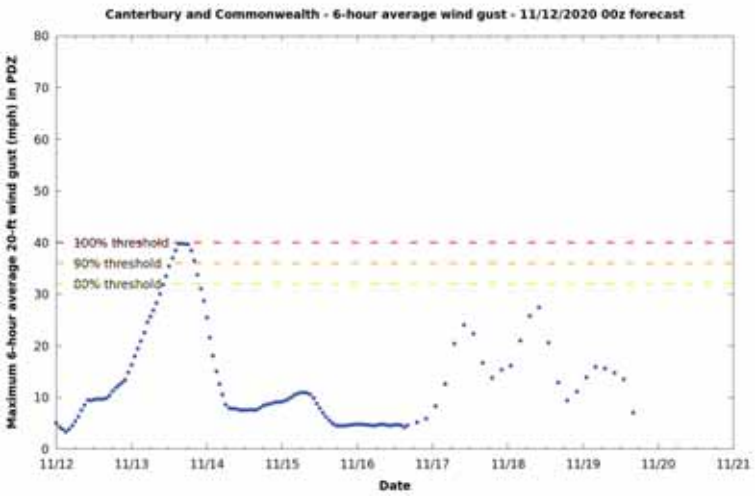
The Grid



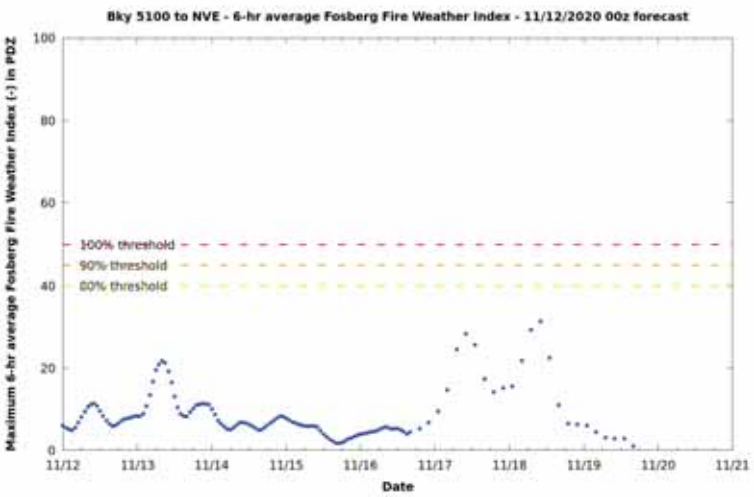


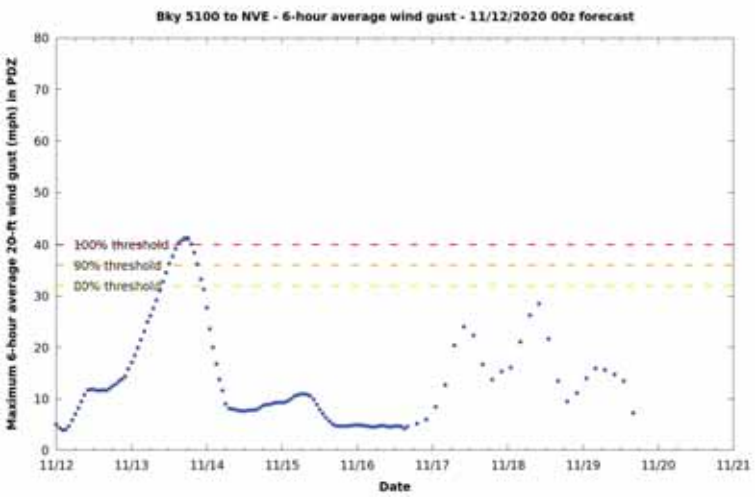
Canterbuy and Commonwealth



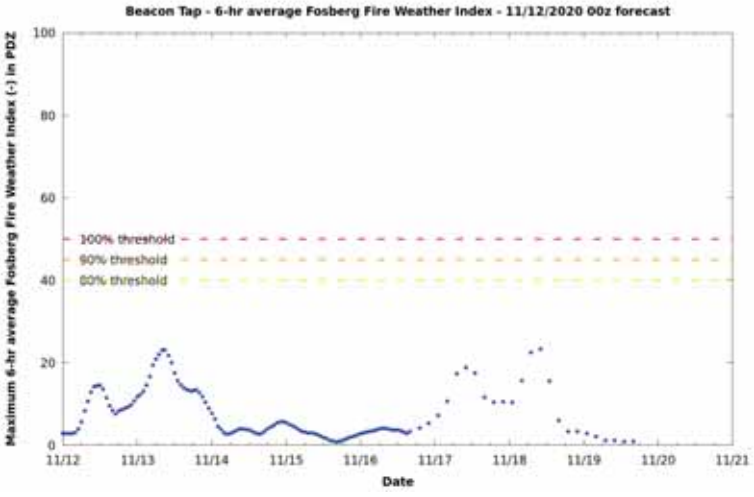


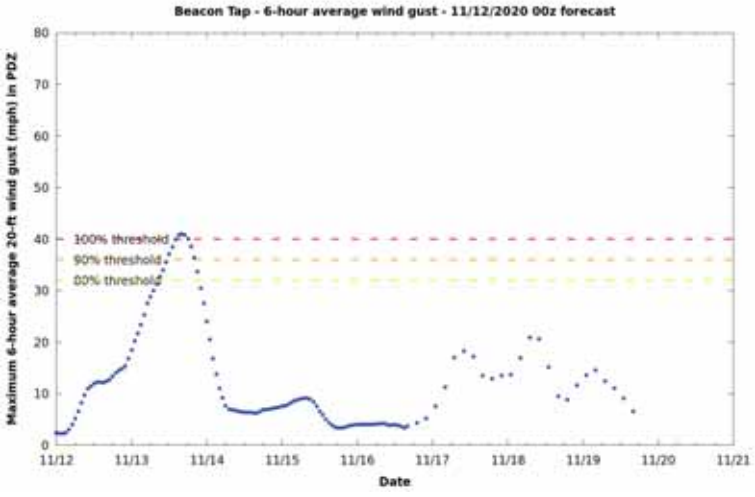
Bky 5100 to NVE



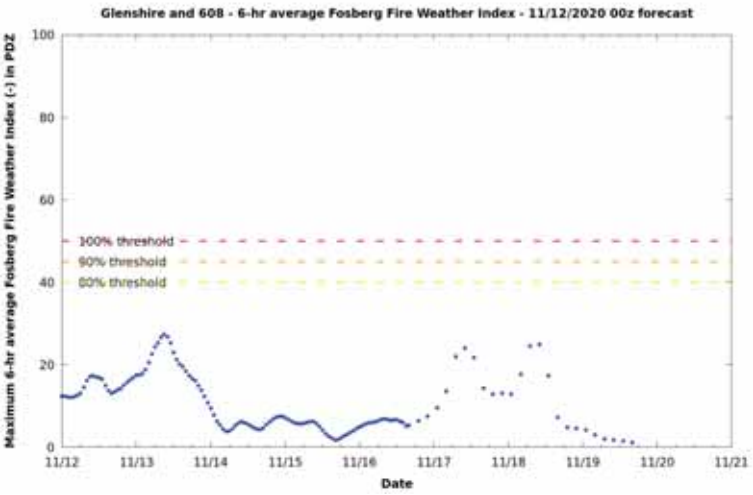


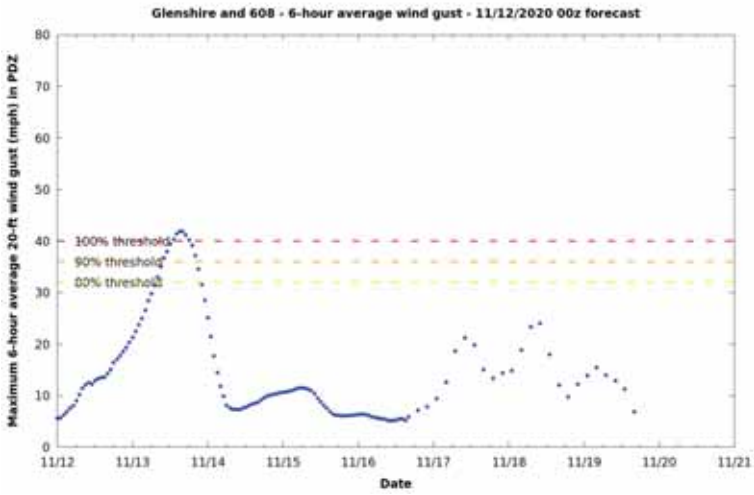
Beacon Tap



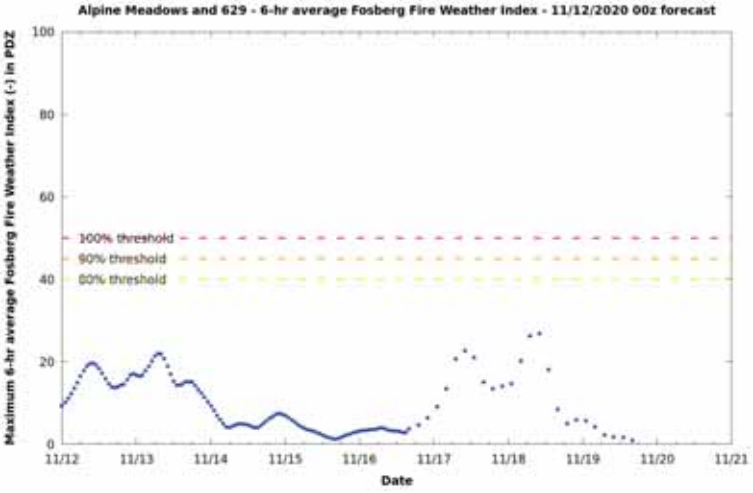


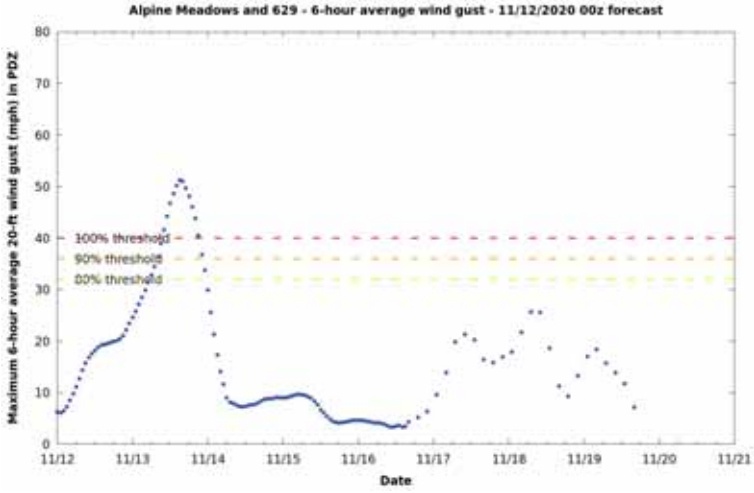
Glenshire and 608



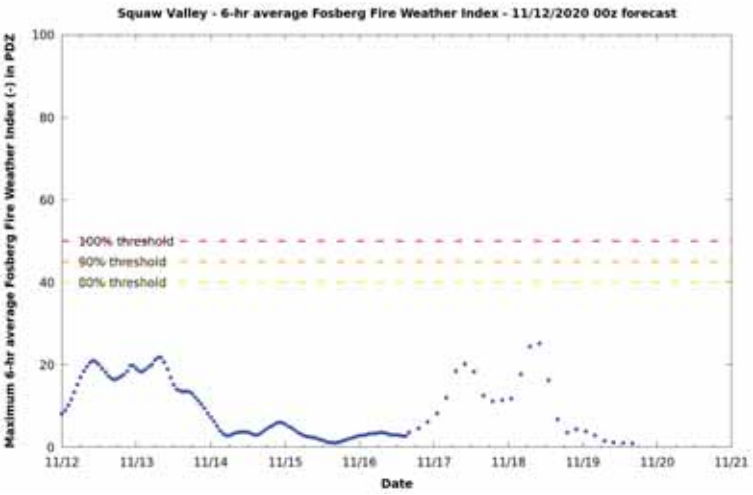


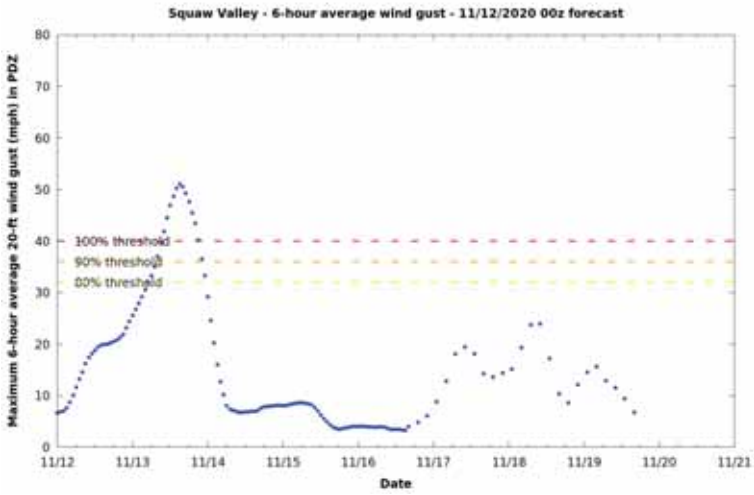
Alpine Meadows and 629



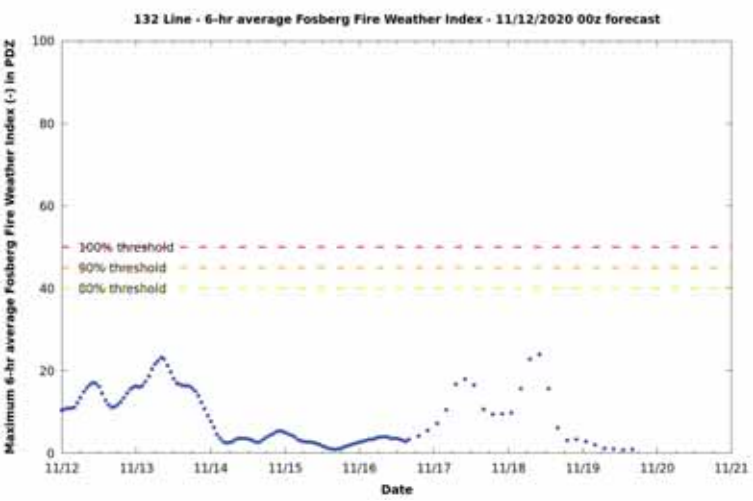


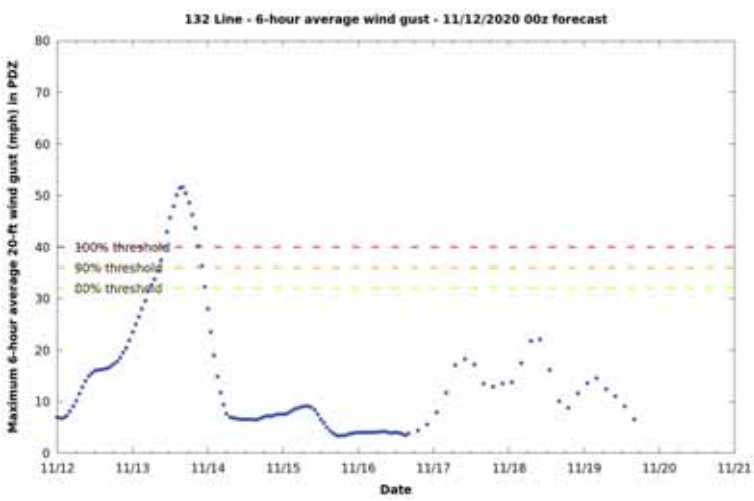
Squaw Valley



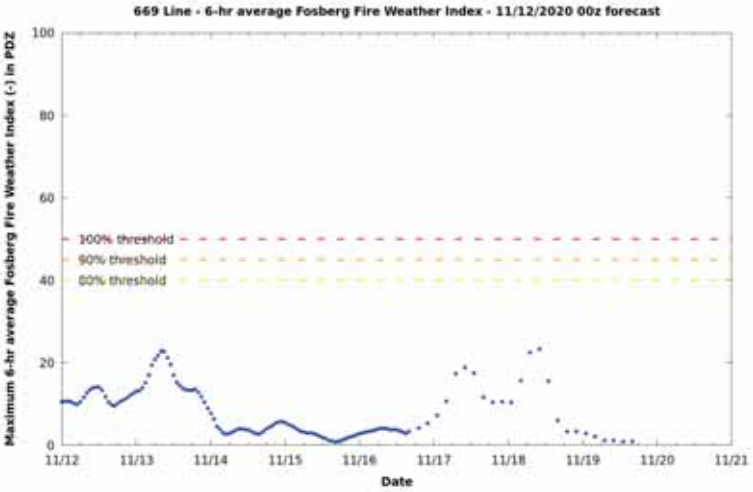


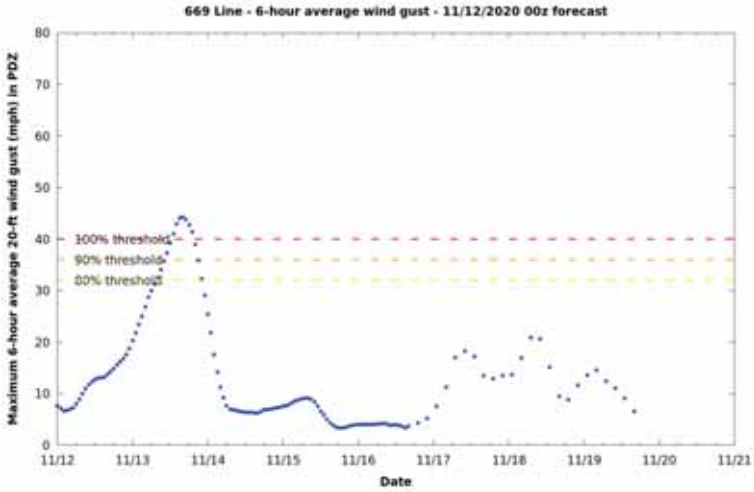
132 Line



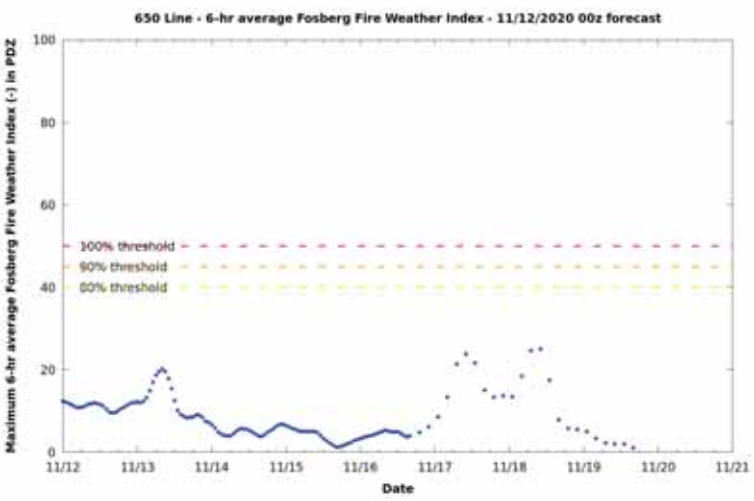


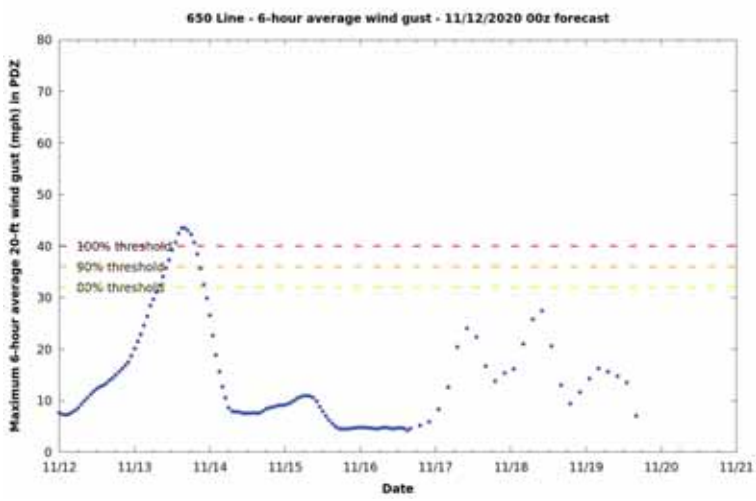
669 Line



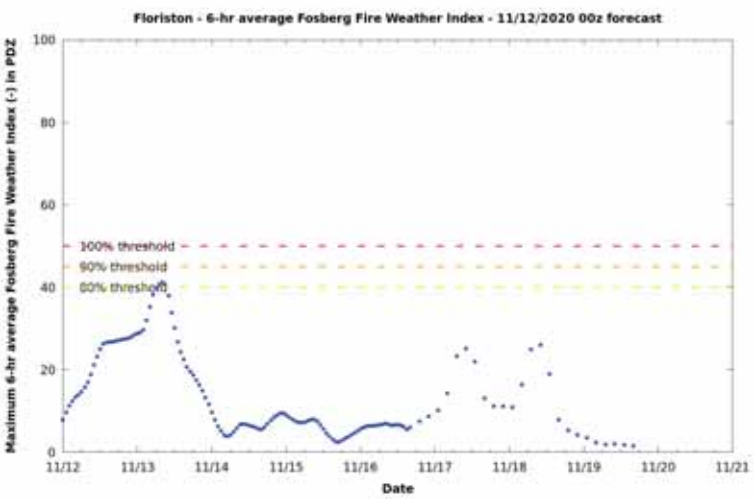


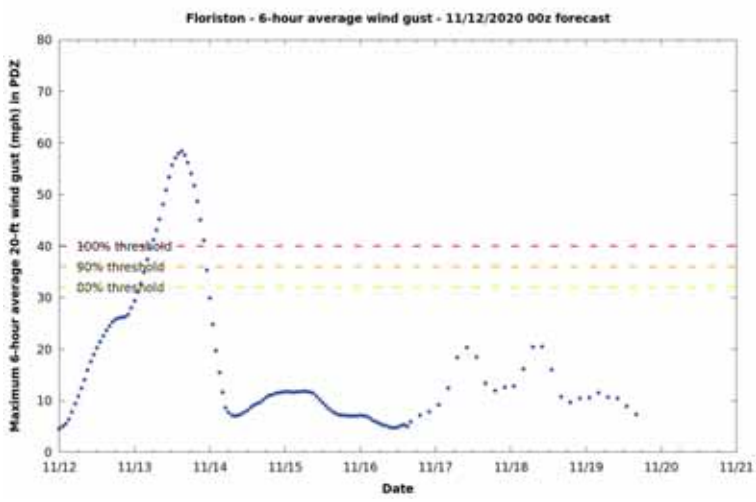
650 Line



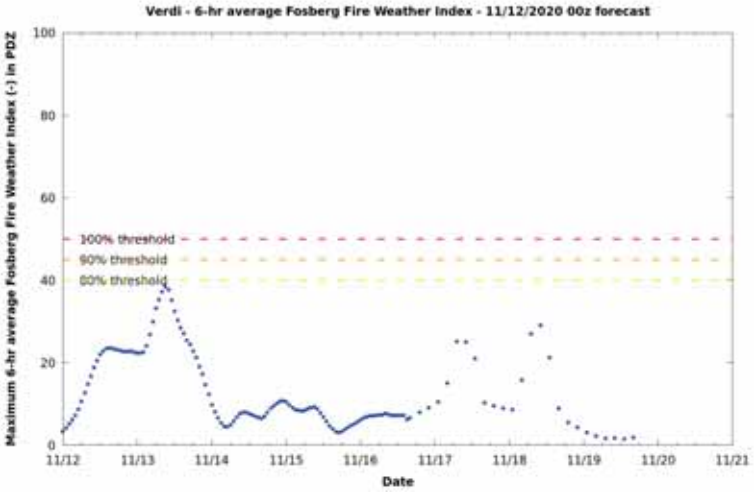


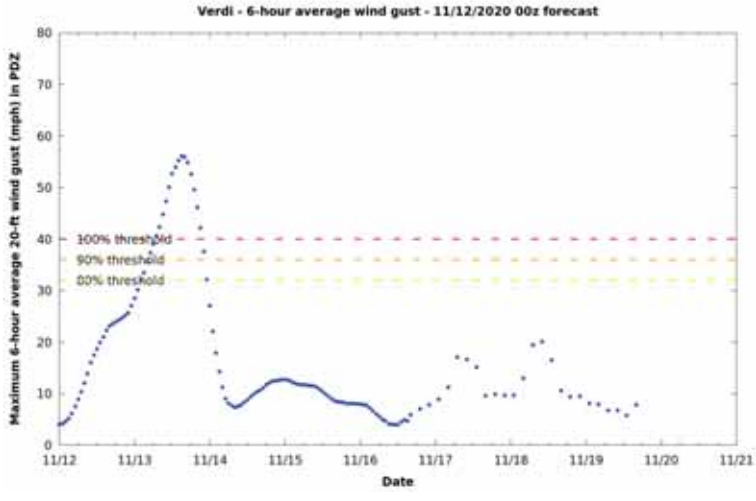
Floriston



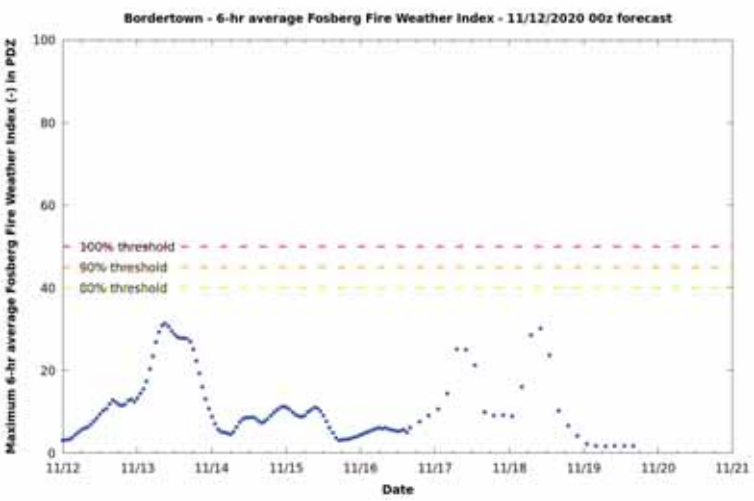


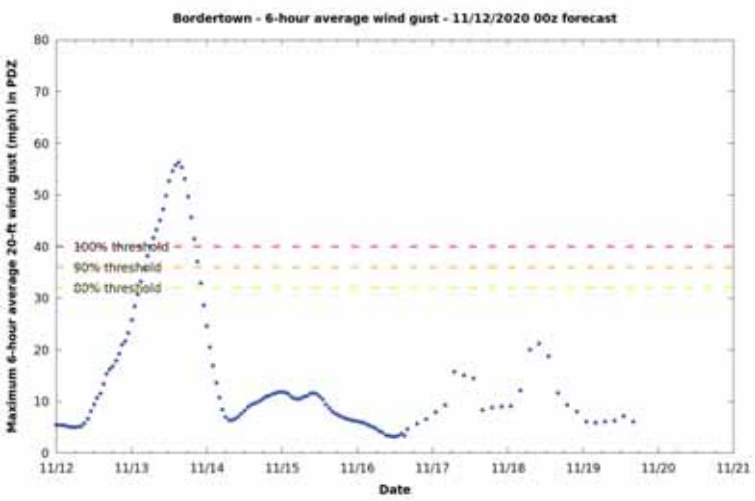
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/12/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21


Bordertown - 6-hour average wind gust - 11/12/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21

Liberty Utilities Fire Potential Index Forecast for 11/12/20 - 11/18/20

Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

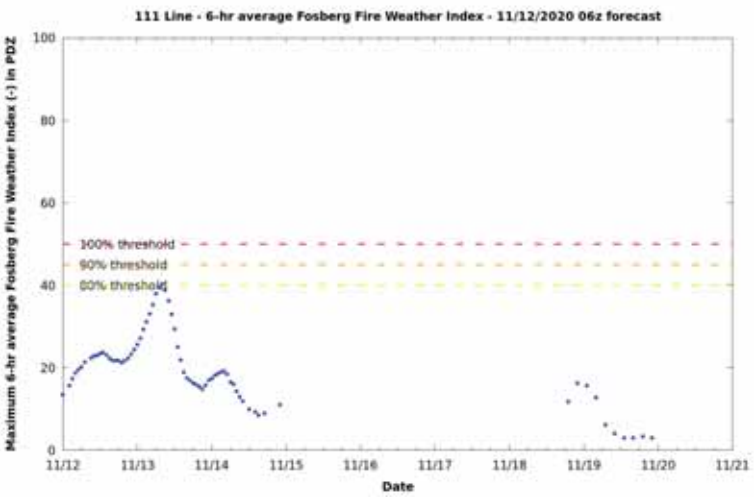
Liberty Utilities Energy Release Component Forecast for 11/12/20 - 11/18/20

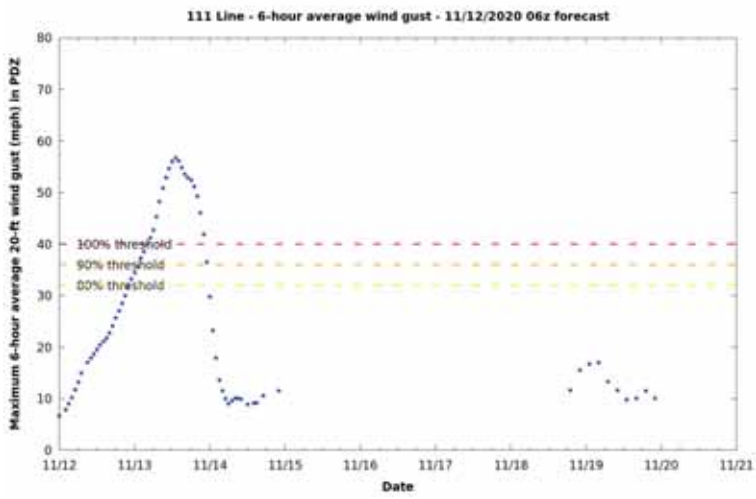
Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	42.0	39.0	33.0	34.0	31.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

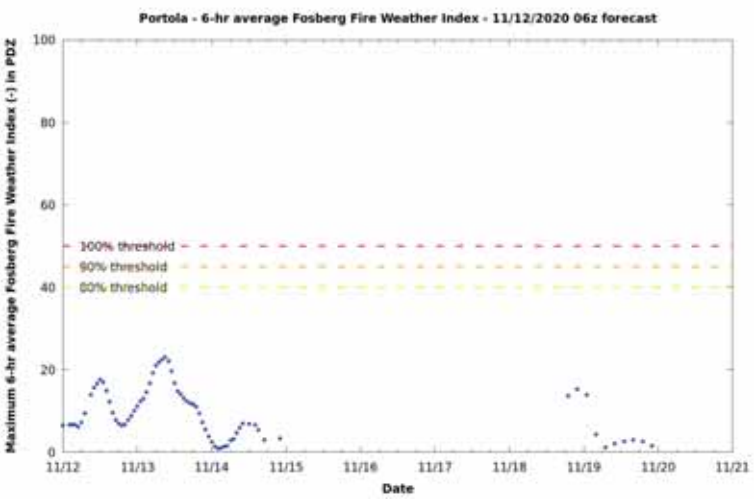
Liberty Utilities Fire Weather Summary Plots - 11/12/2020 06z forecast

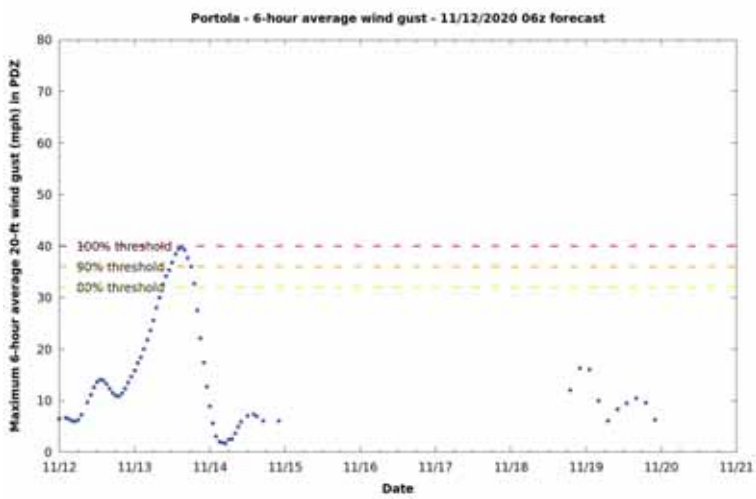
111 Line



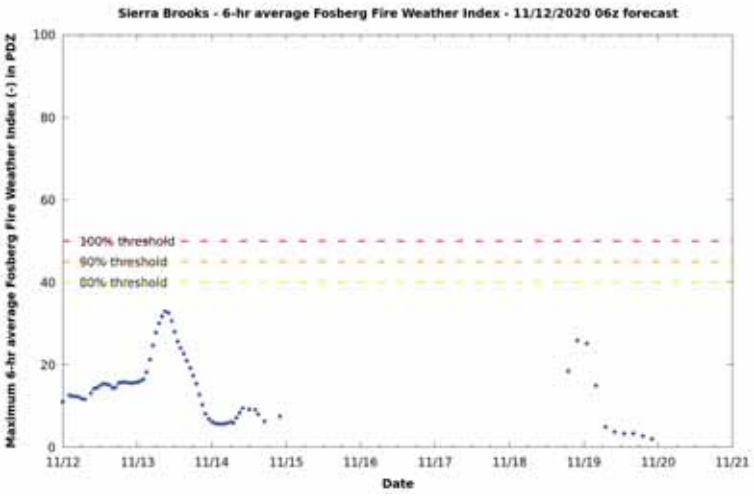


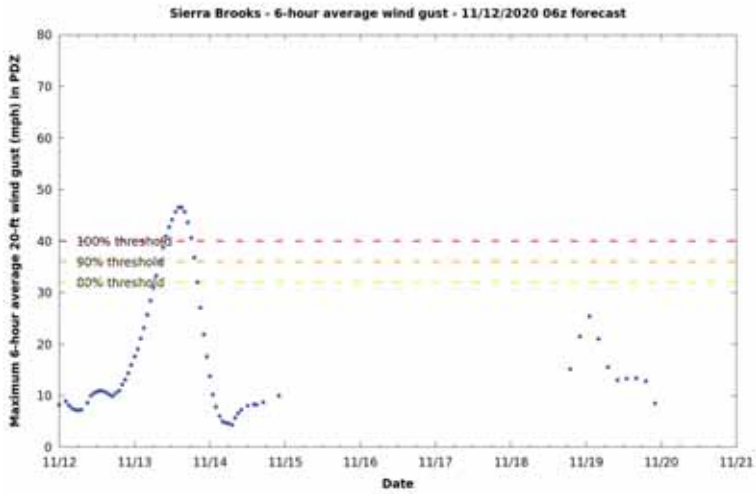
Portola



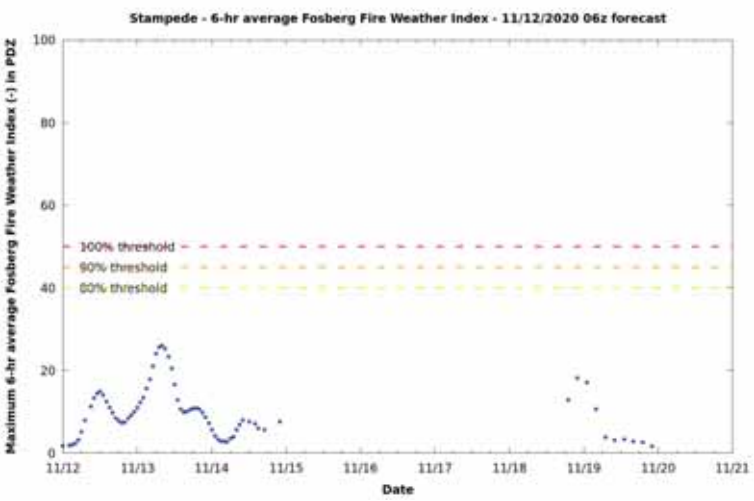


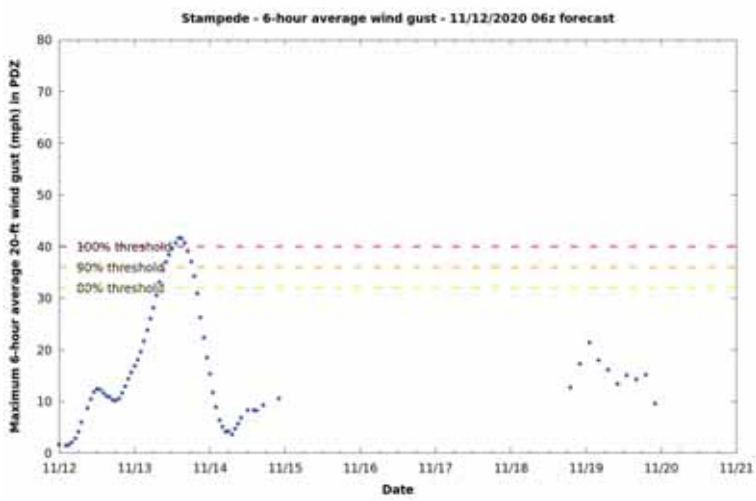
Sierra Brooks



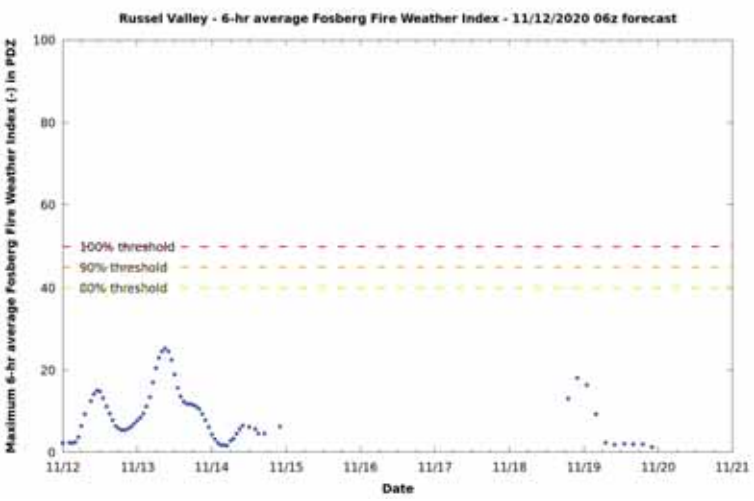


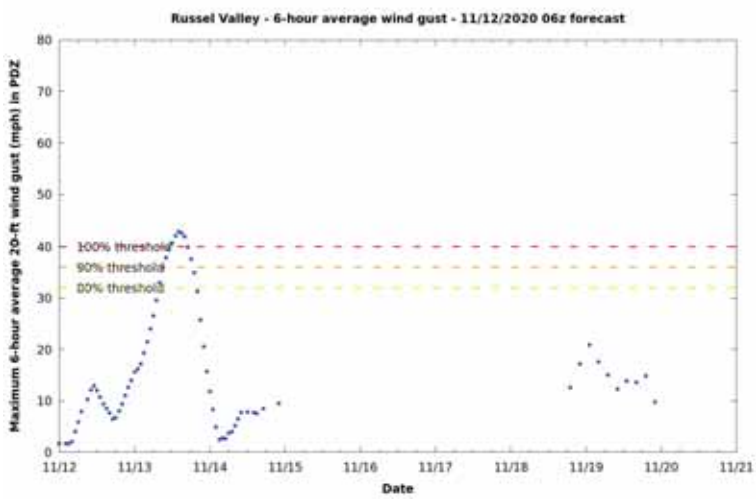
Stampede



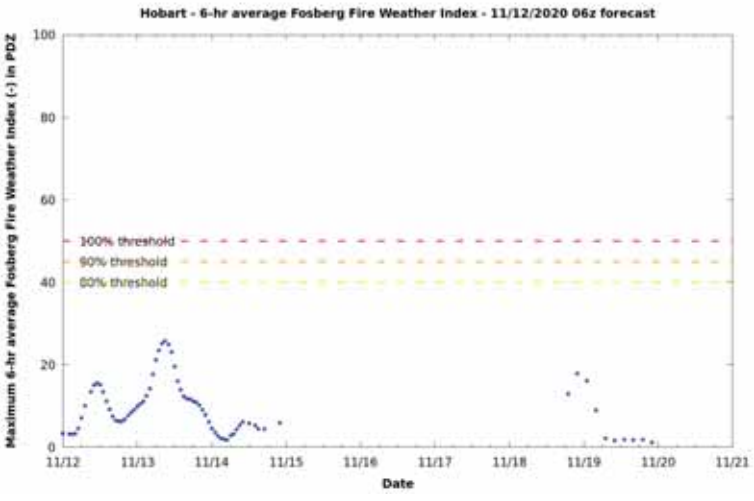


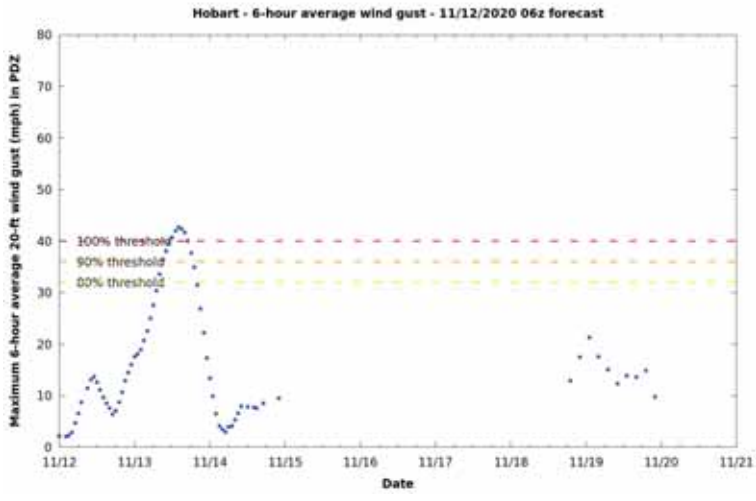
Russell Valley



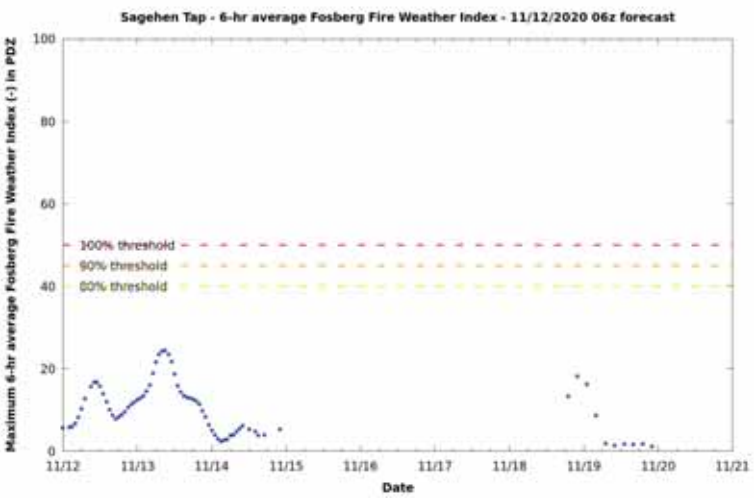


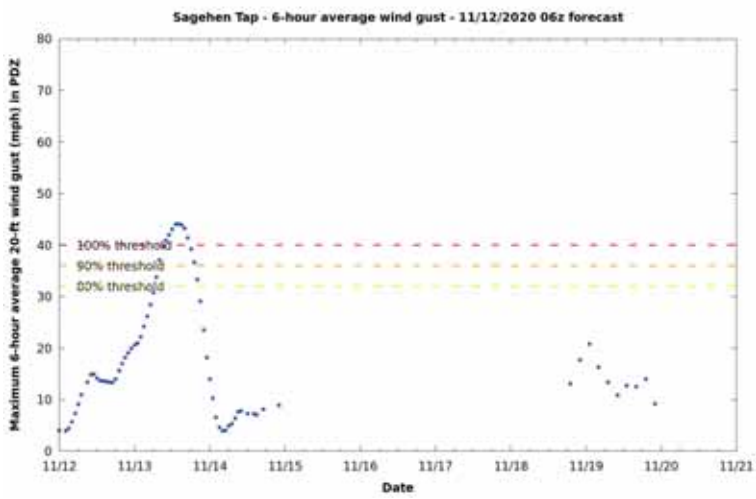
Hobart



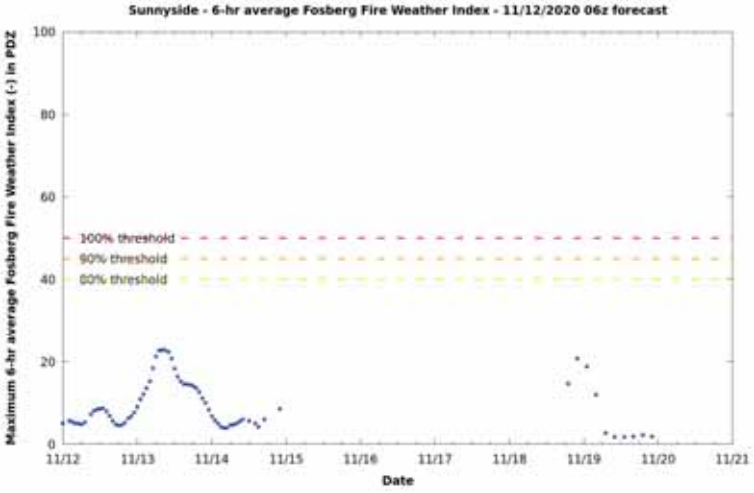


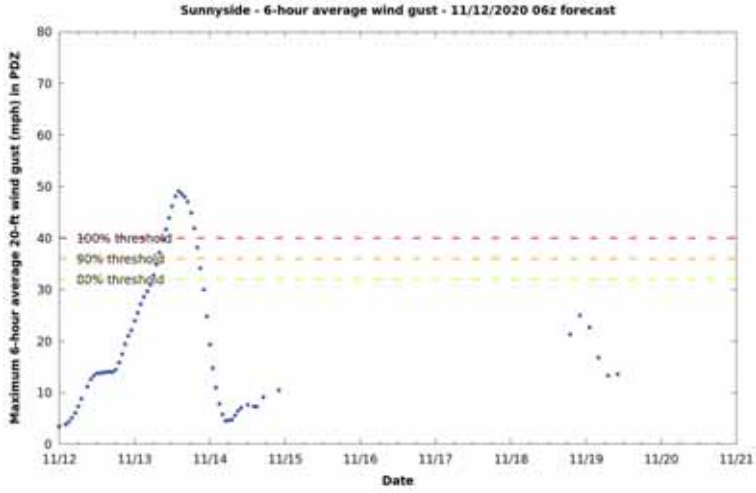
Sagehen tap



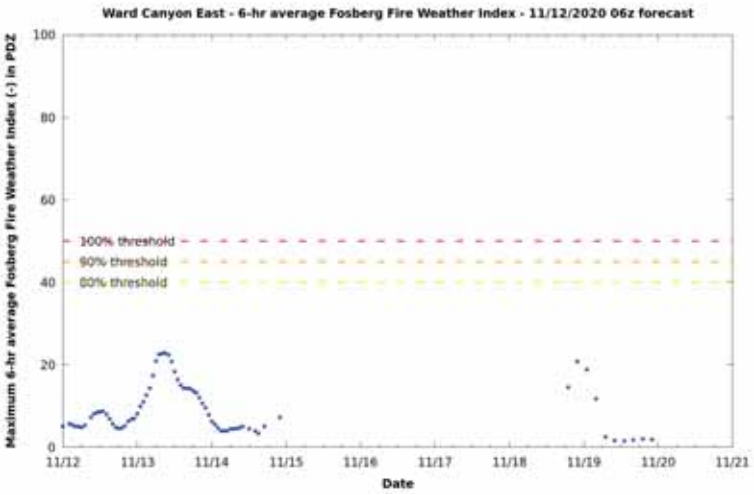


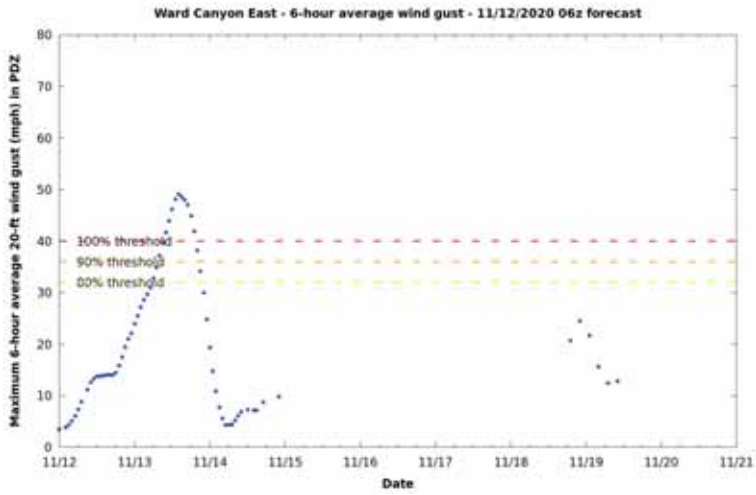
Sunnyside



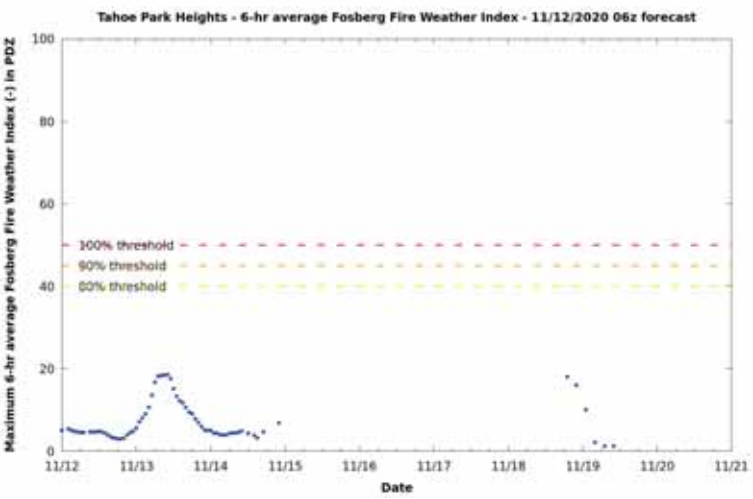


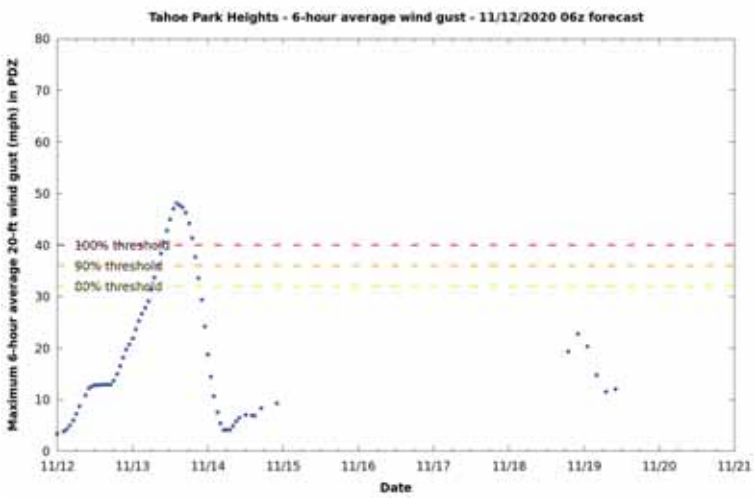
Ward Canyon East



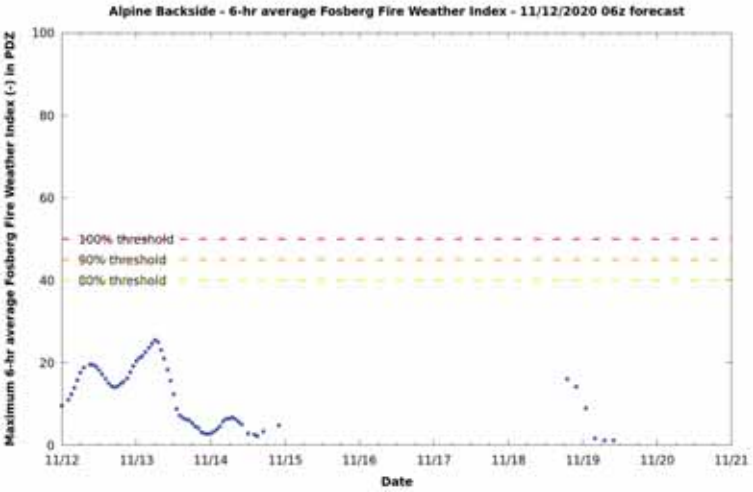


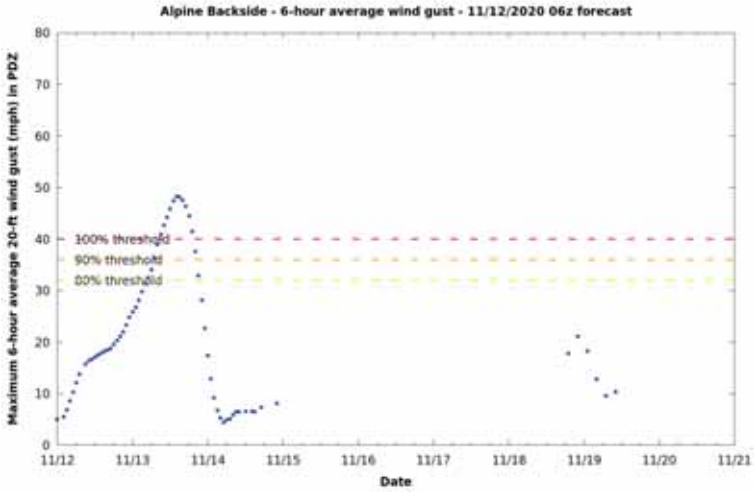
Tahoe Park Heights



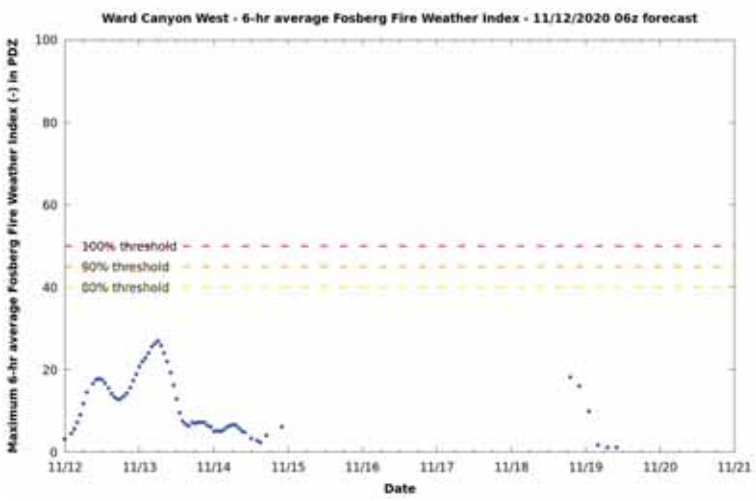


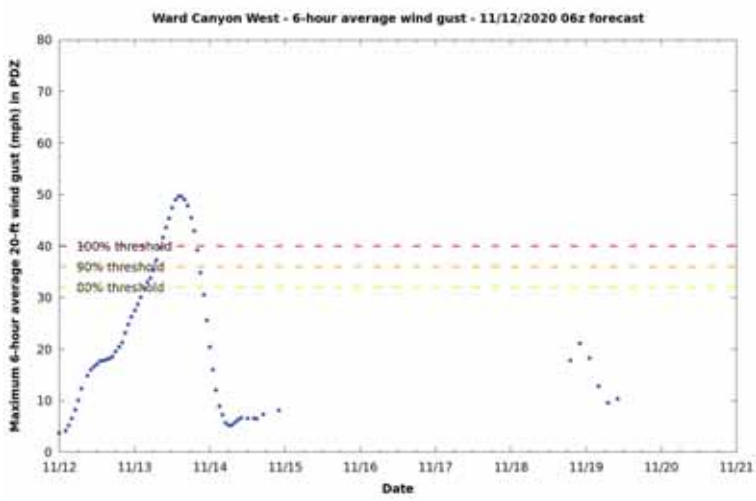
Alpine Backside



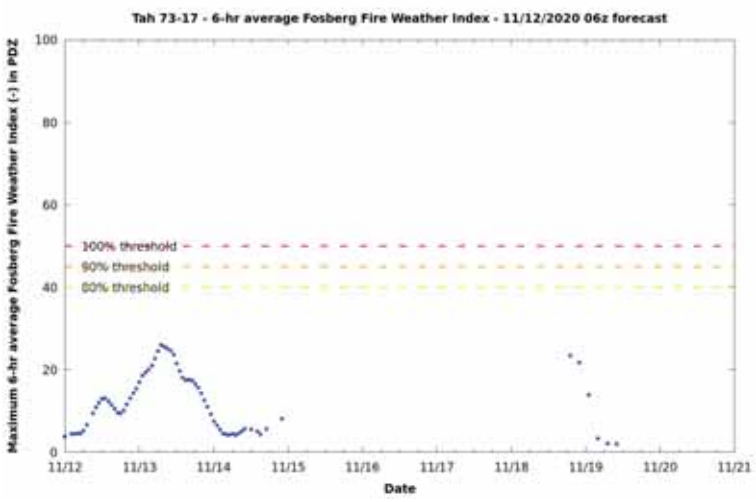


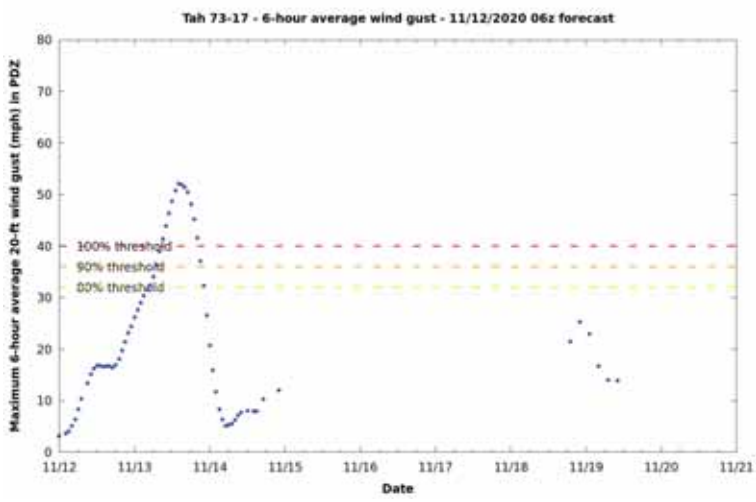
Ward Canyon West



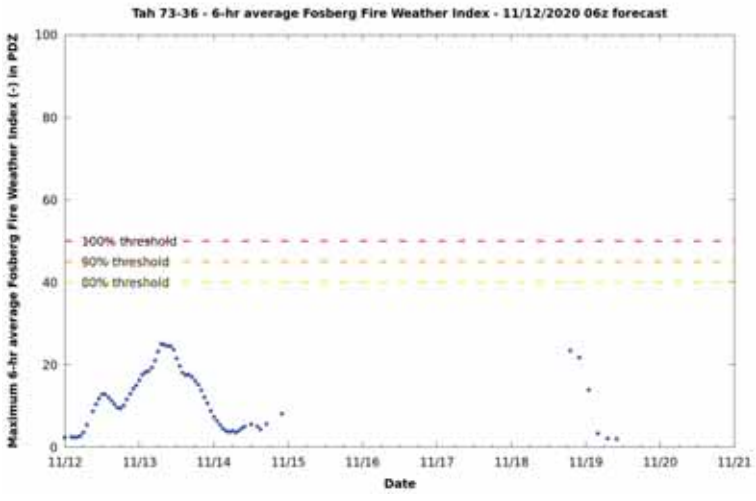


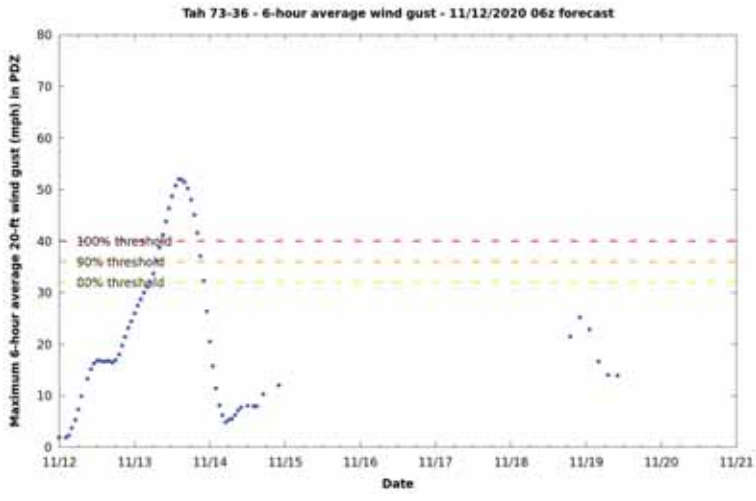
Tah 73-17



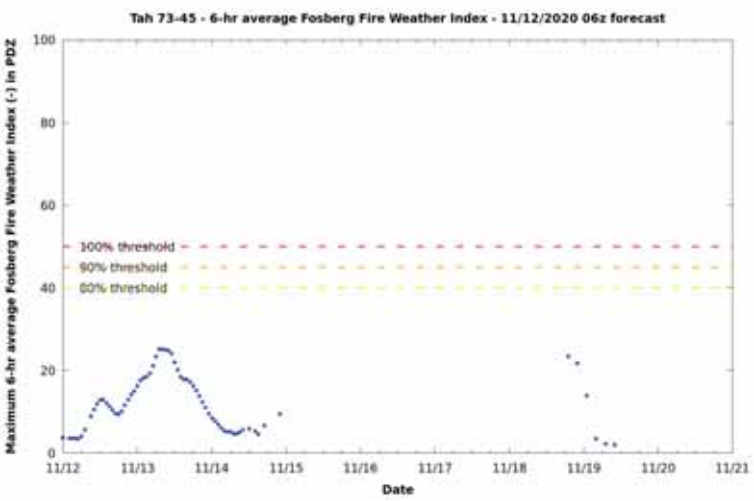


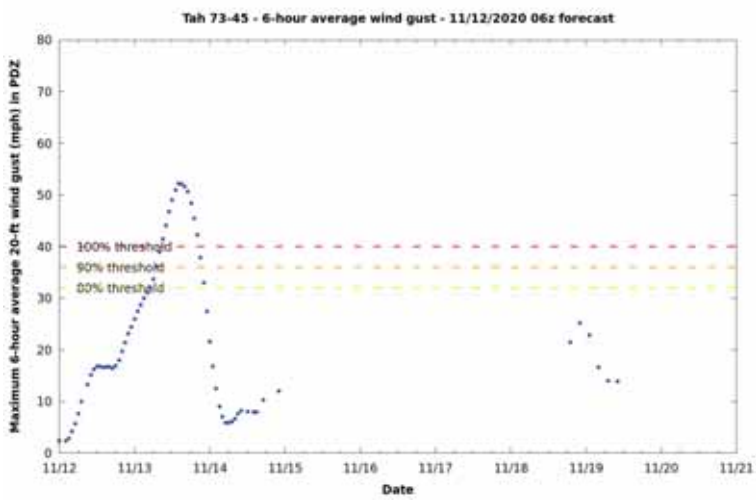
Tah 73-36



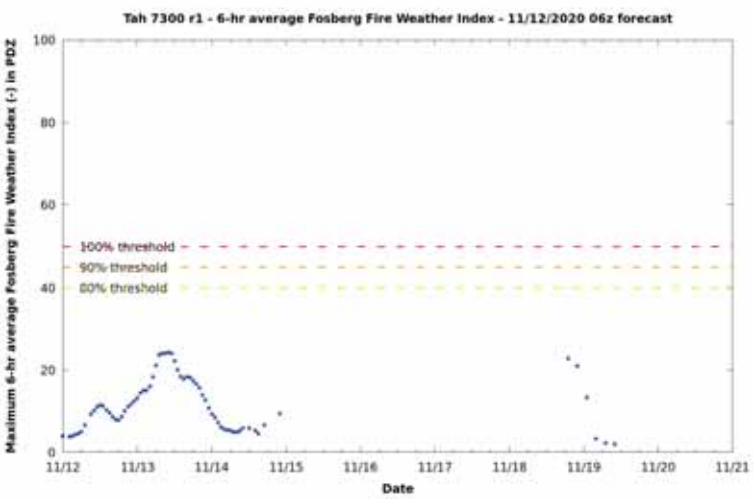


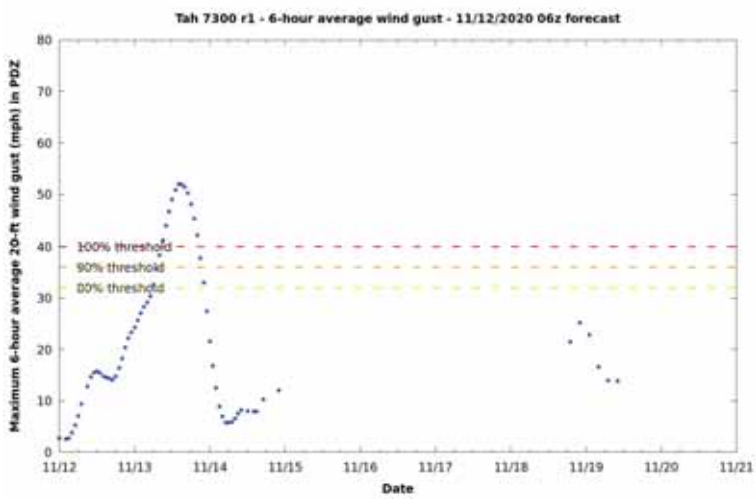
Tah 73-45



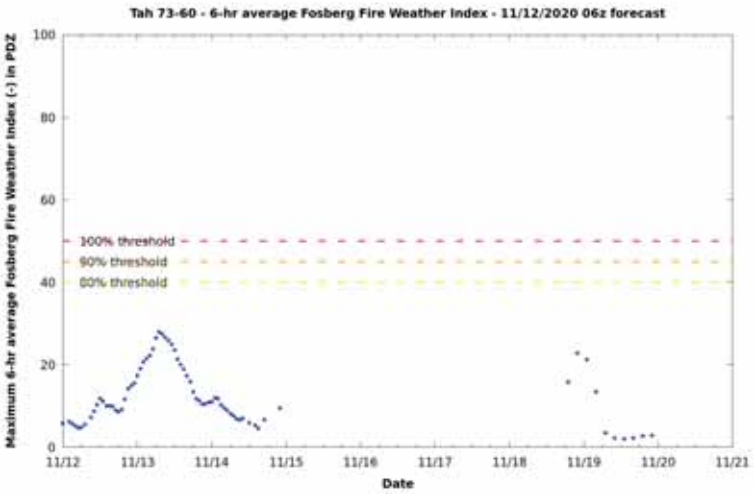


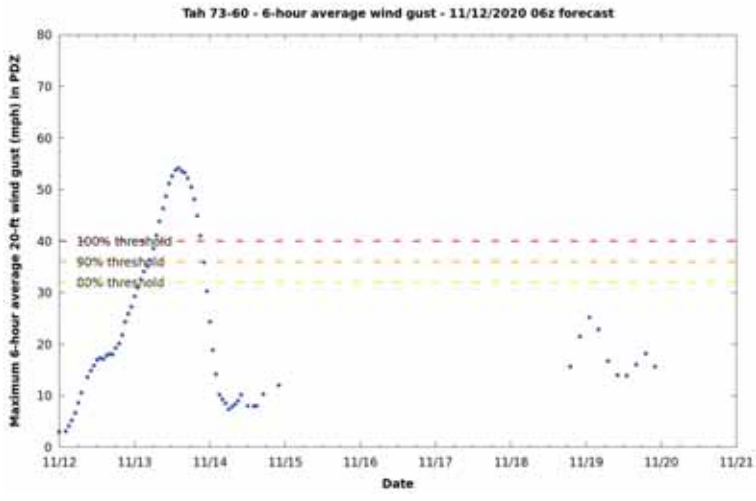
Tah 7300 r1



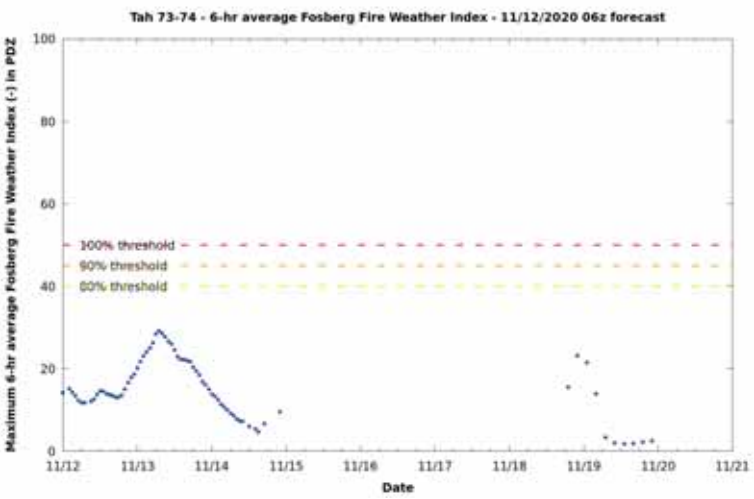


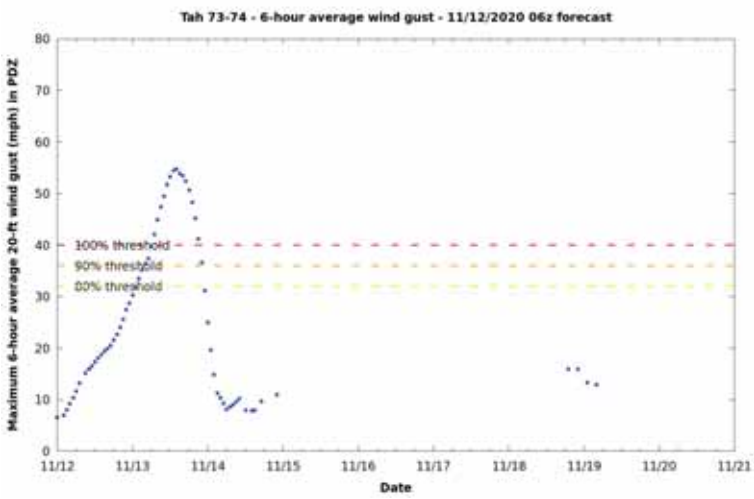
Tah 73-60



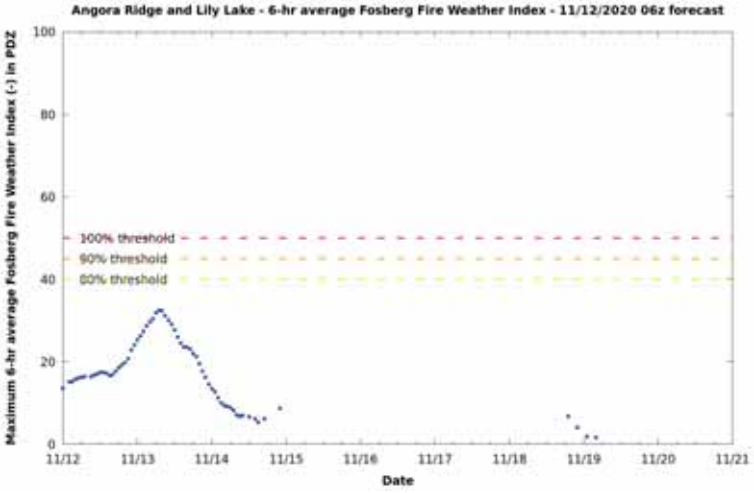


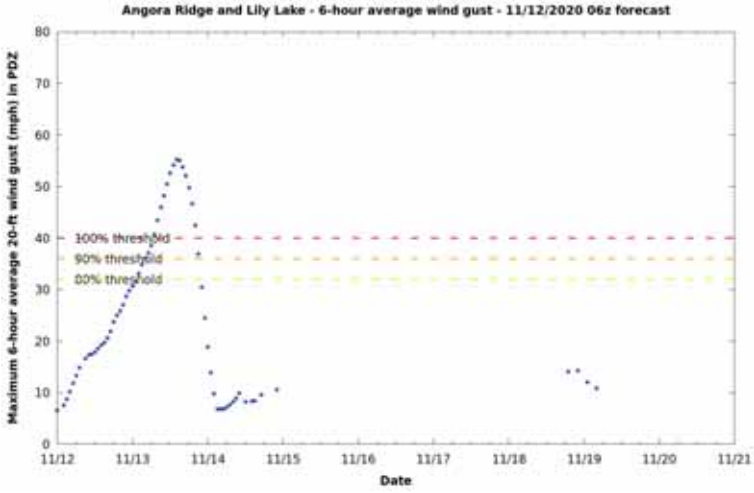
Tah 73-74



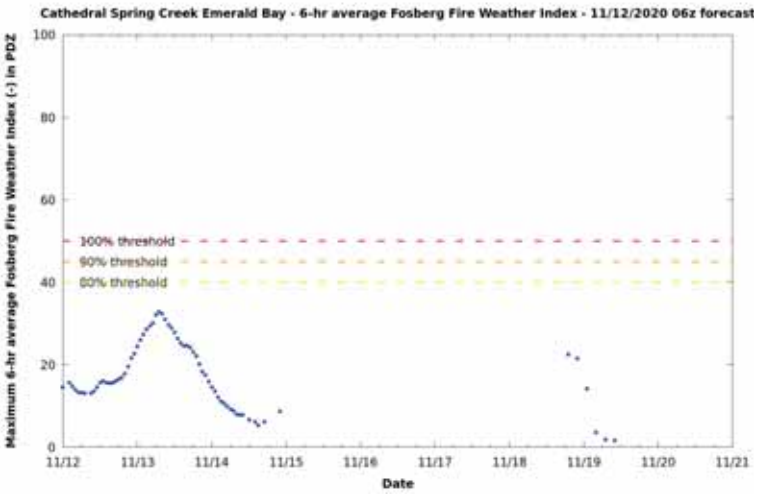


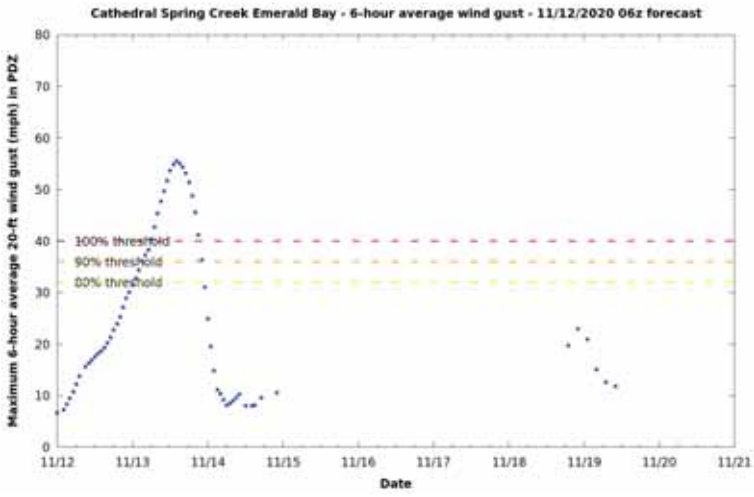
Angora Ridge and Lily Lake



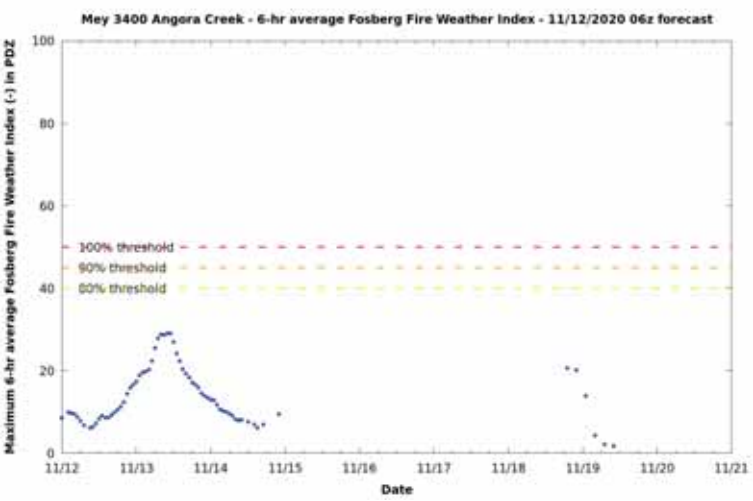


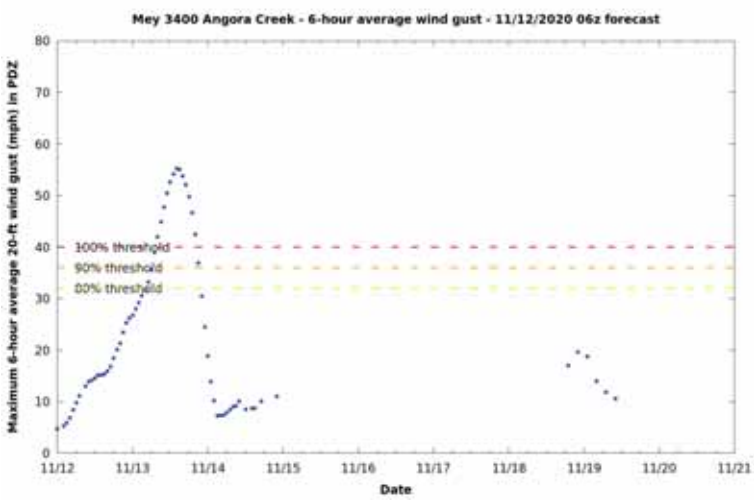
Cathedral Spring Creek Emerald Bay



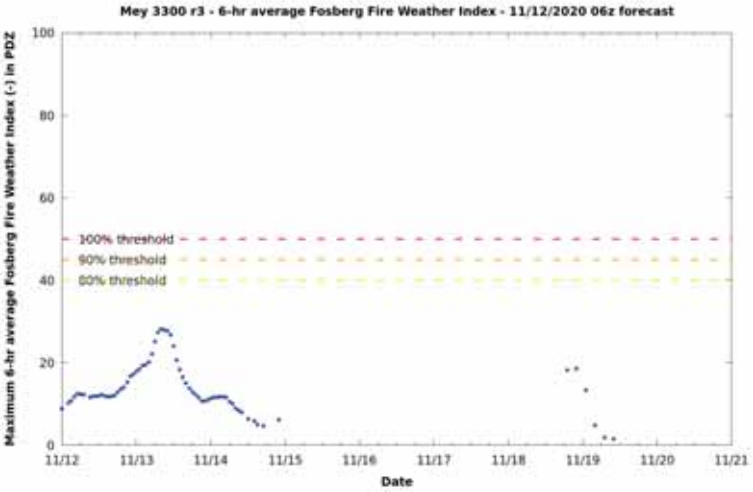


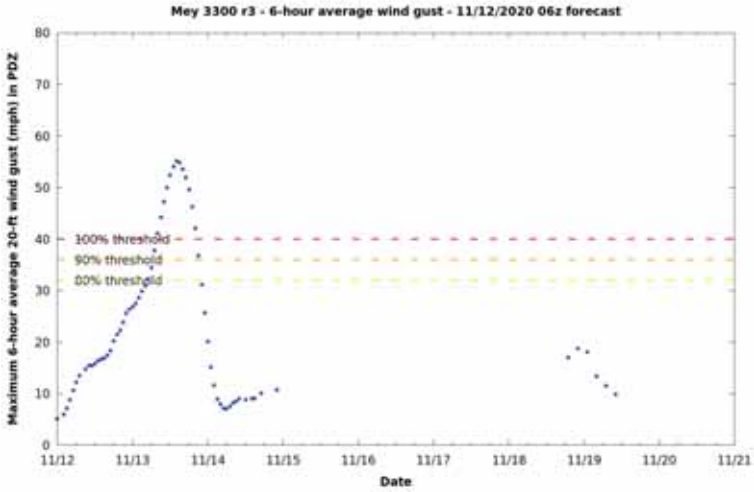
Mey 3400 Angora Creek



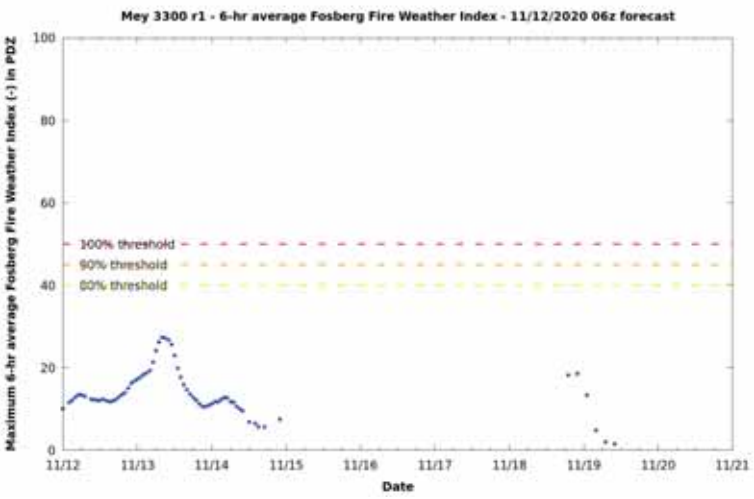


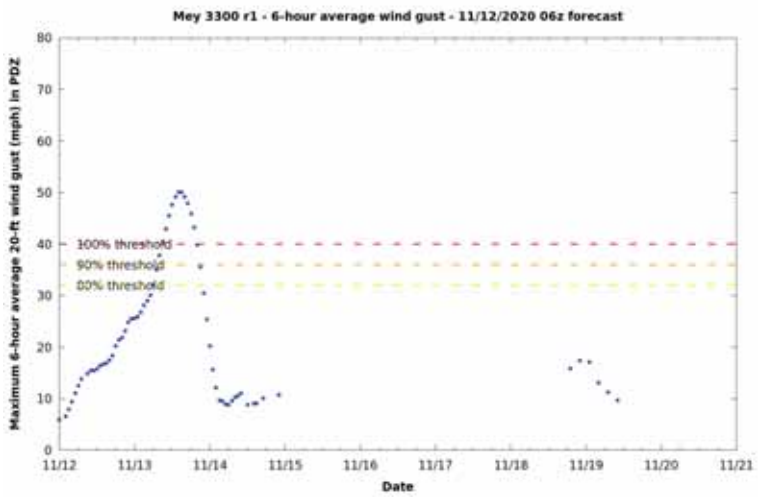
Mey 3300 r3



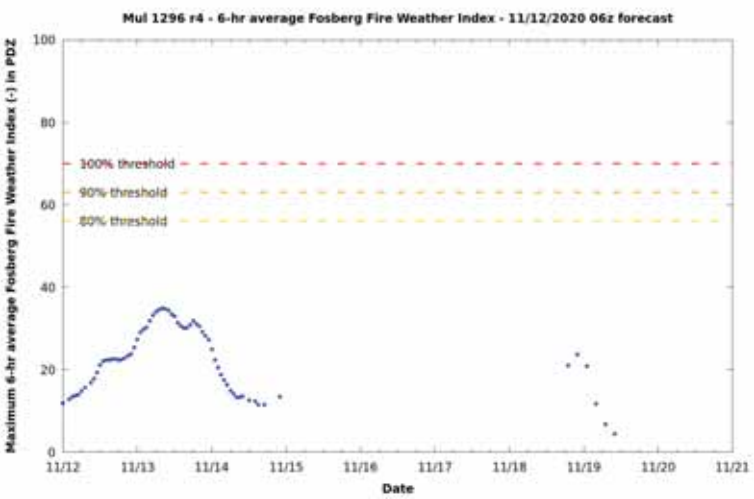


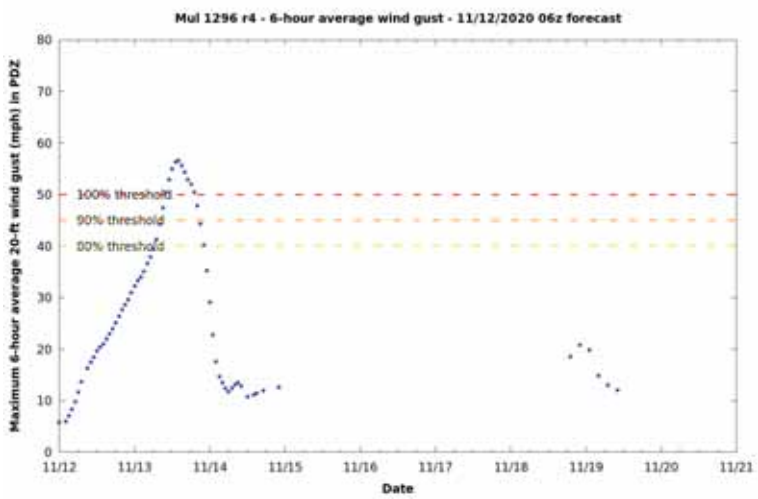
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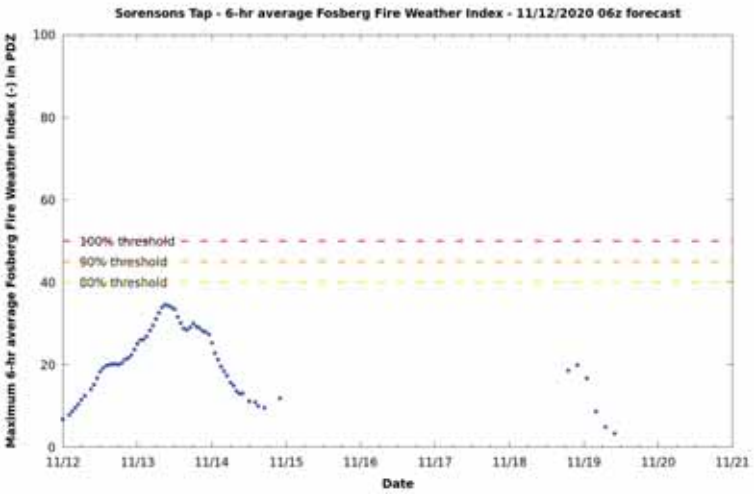


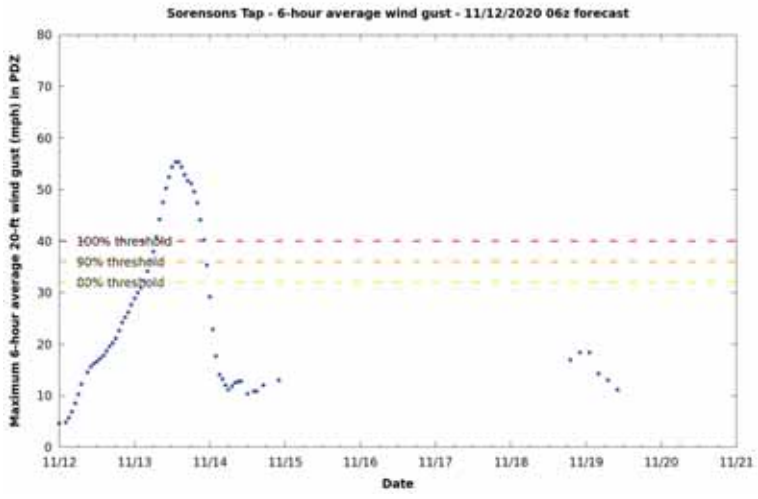
Mul 1296 r4



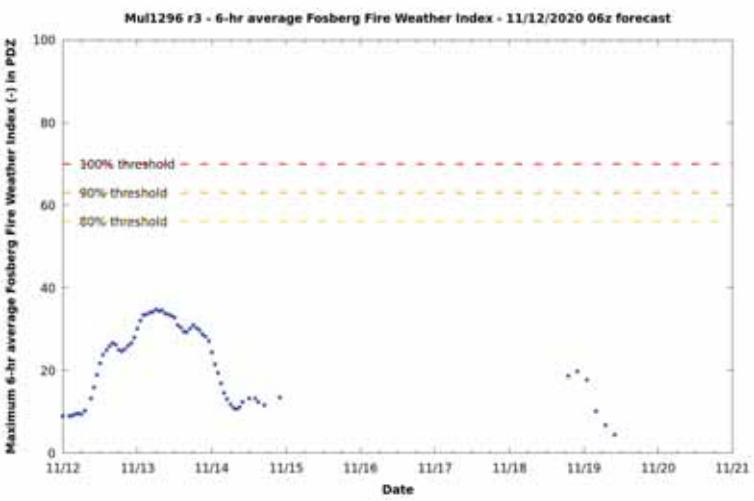


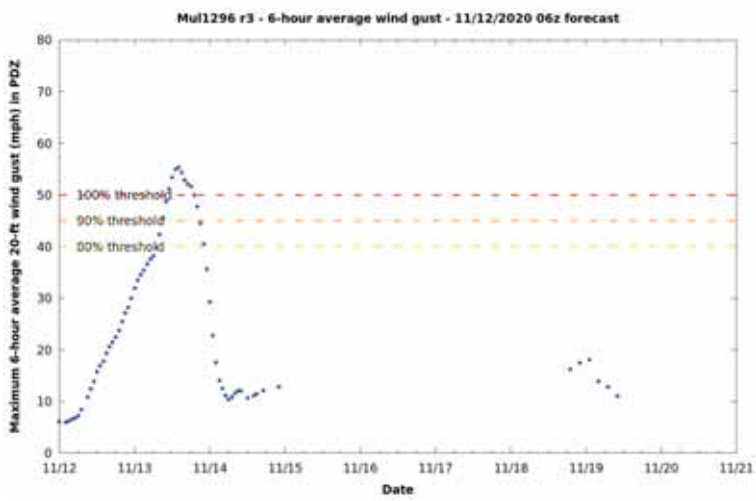
Sorensons Tap



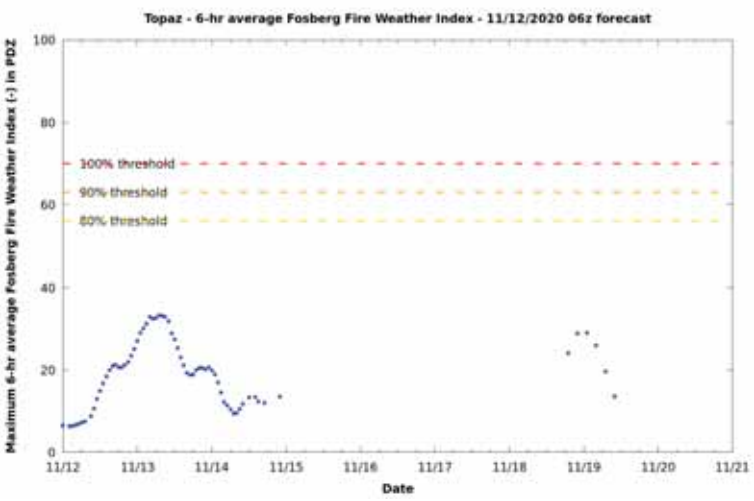


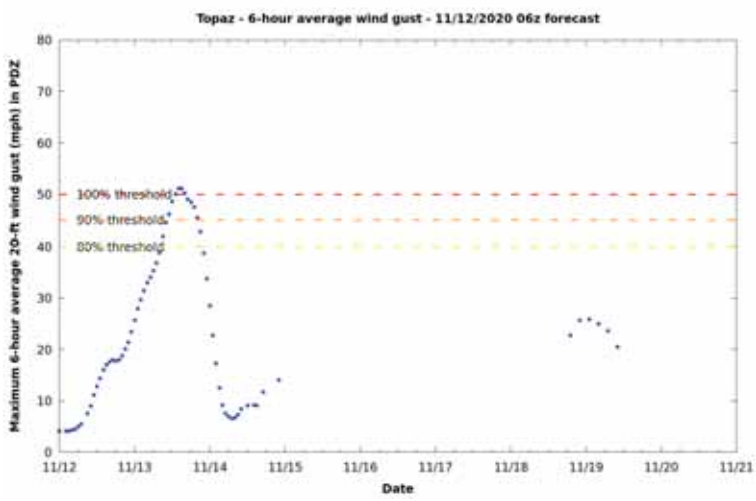
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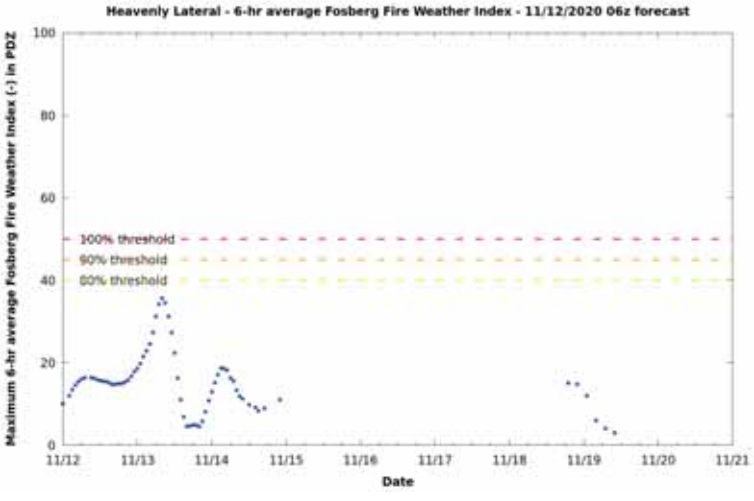


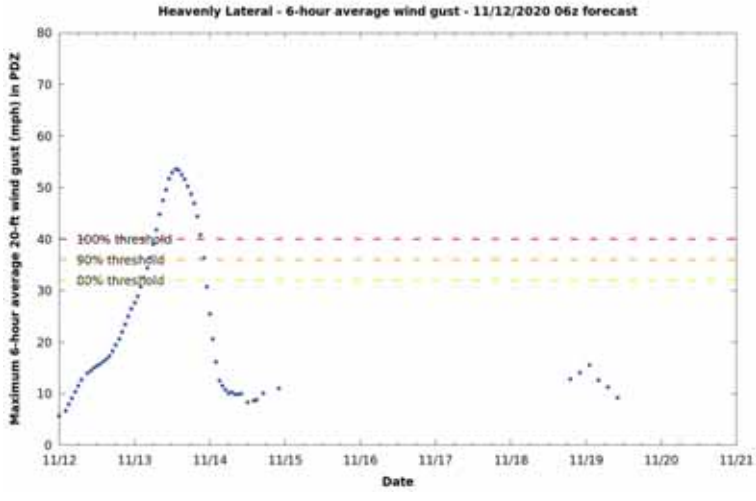
Topaz



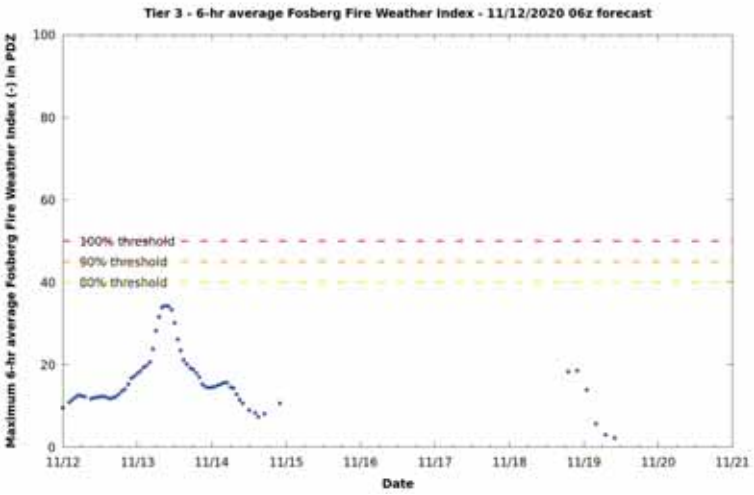


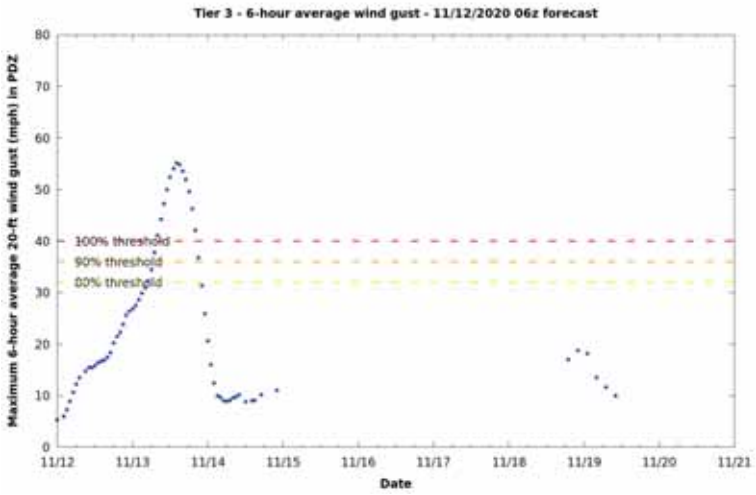
Heavenly Lateral



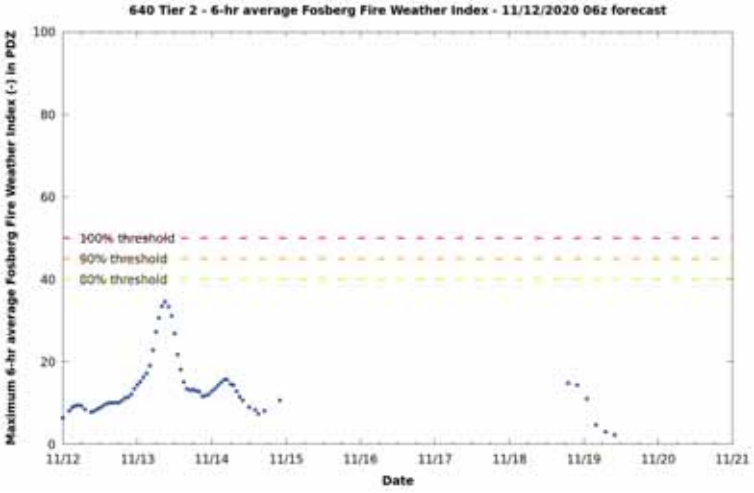


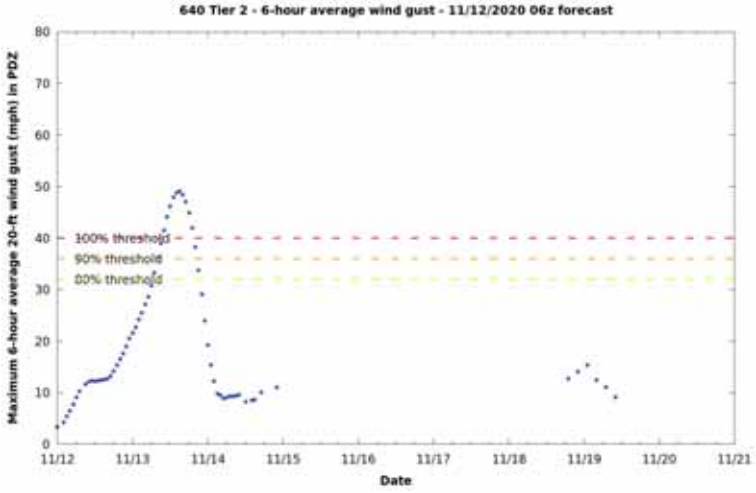
Tier 3



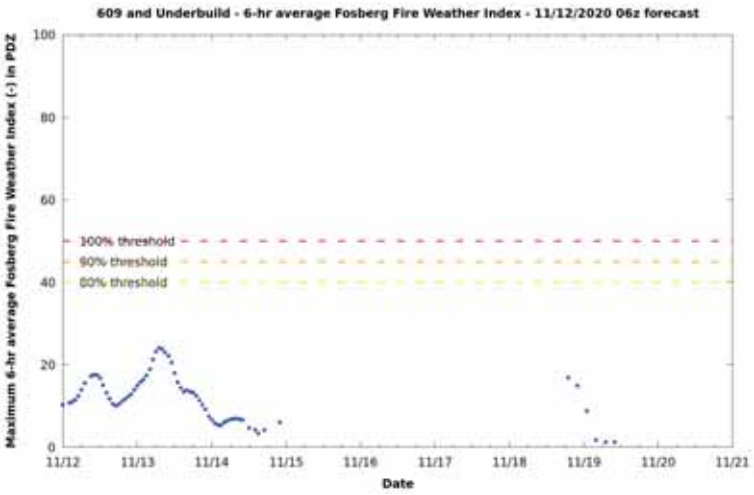


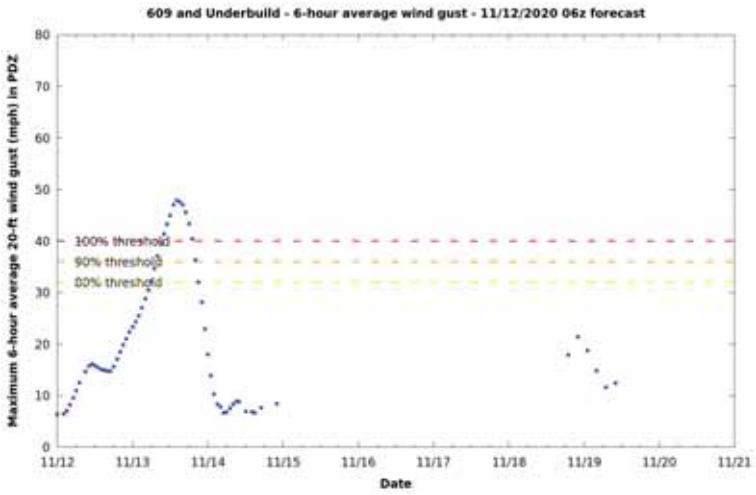
640 Tier 2



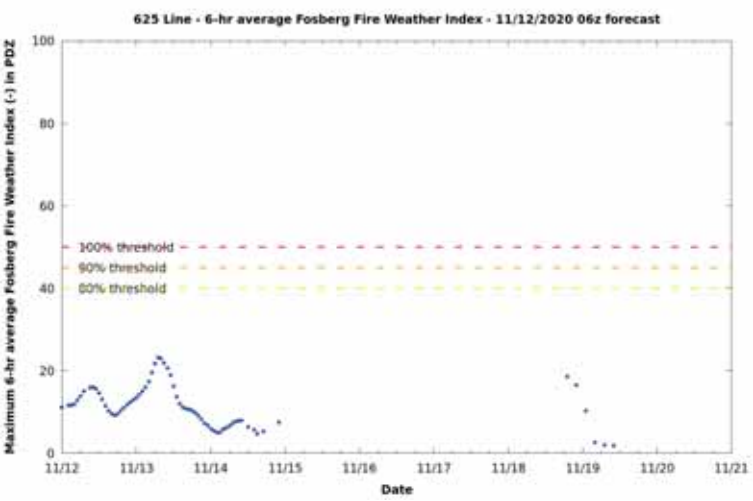


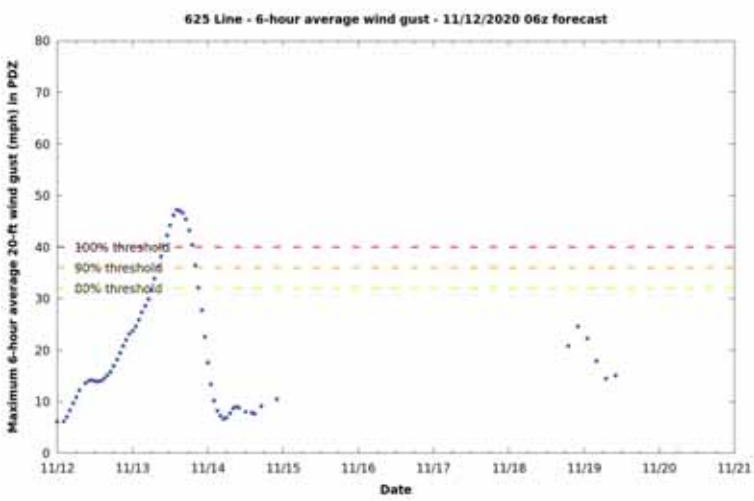
609 and Underbuild



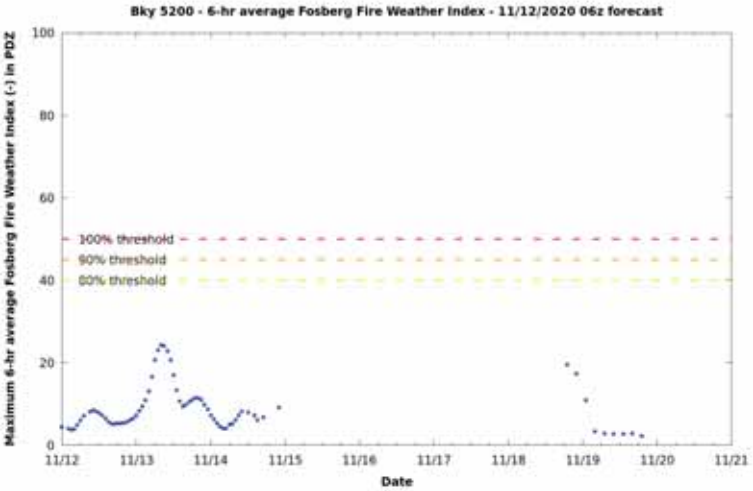


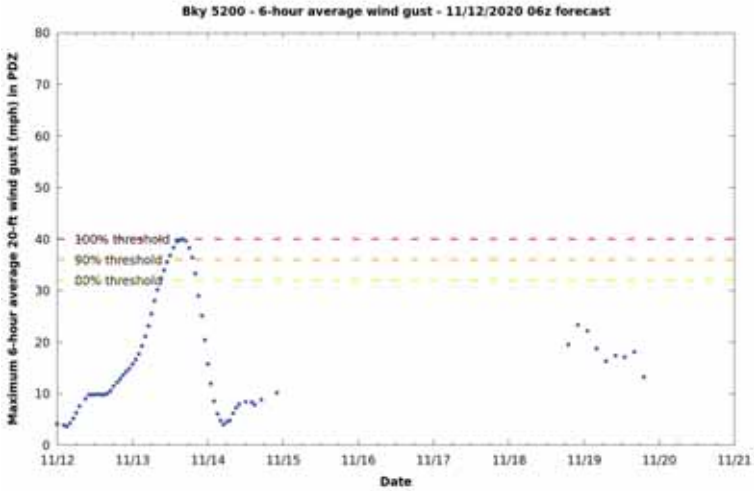
625 Line



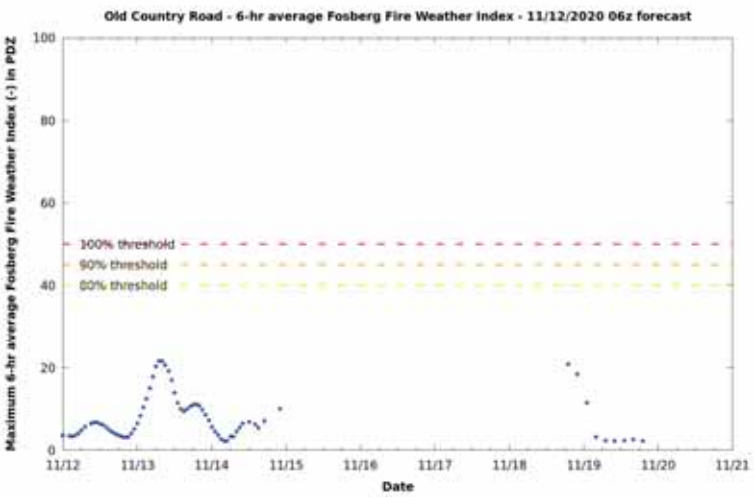


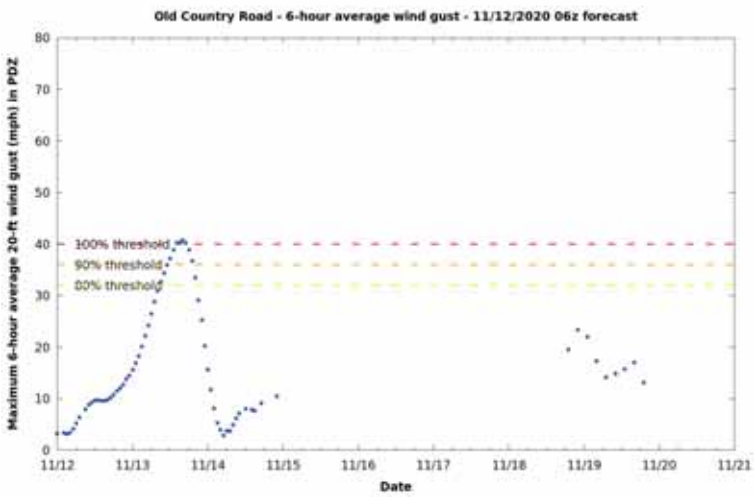
Bky 5200



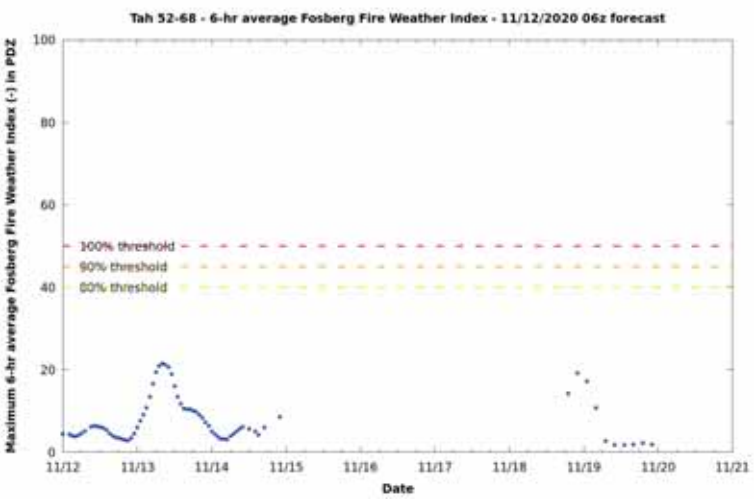


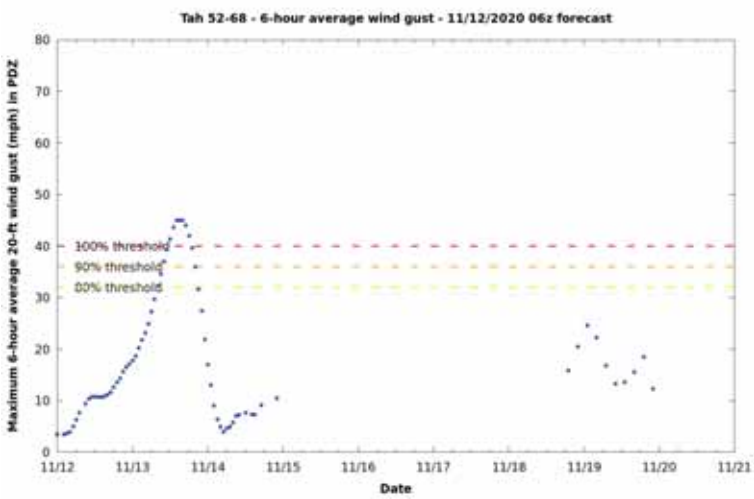
Old Country Road



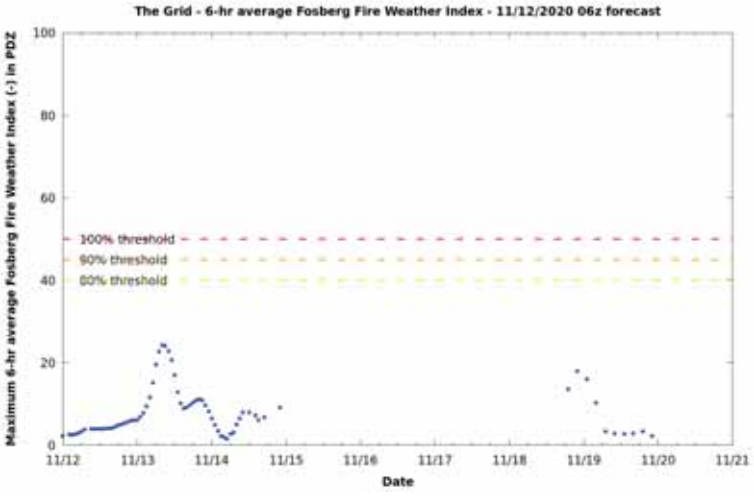


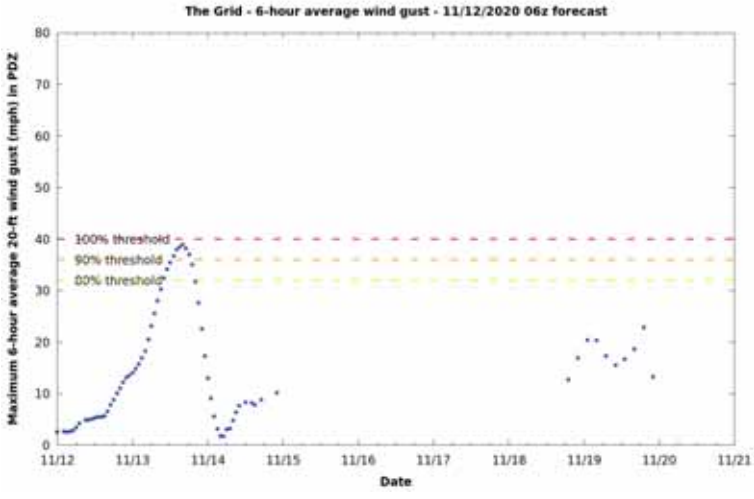
Tah 52-68



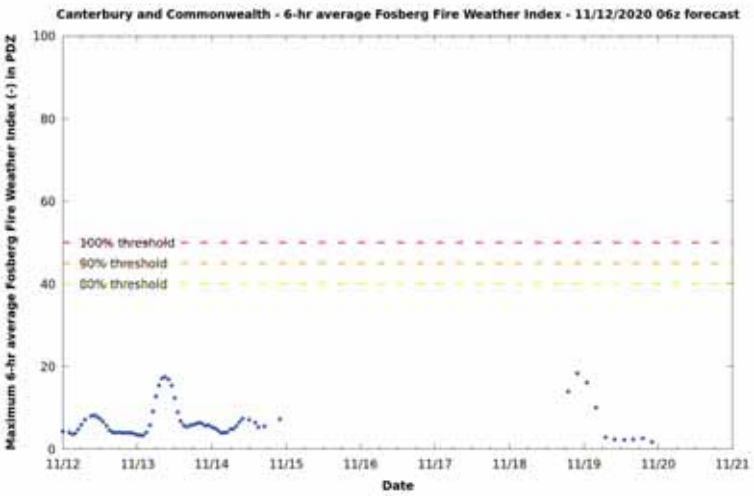


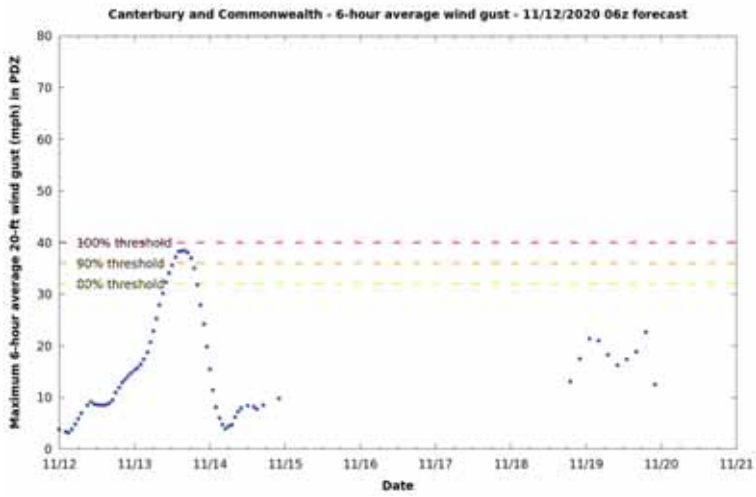
The Grid



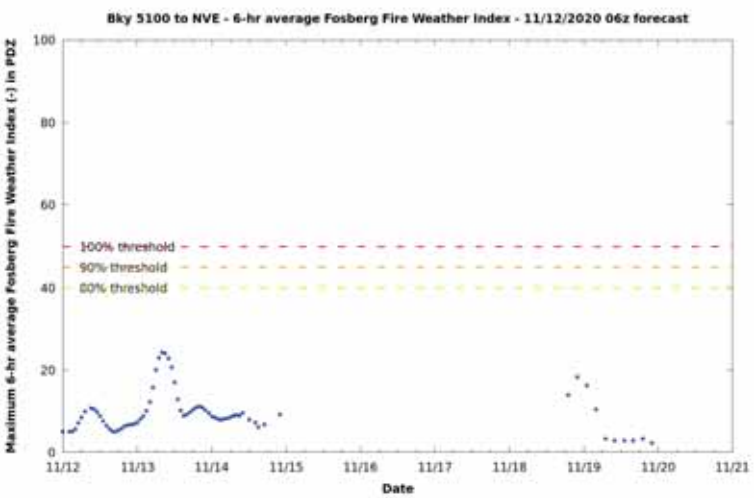


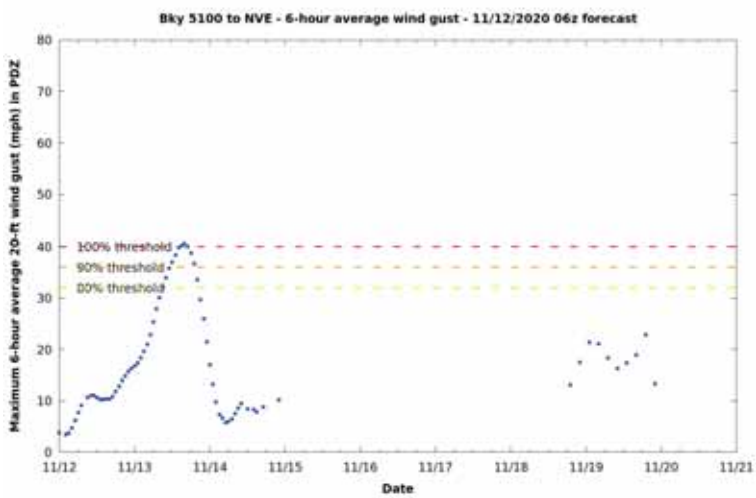
Canterbuy and Commonwealth



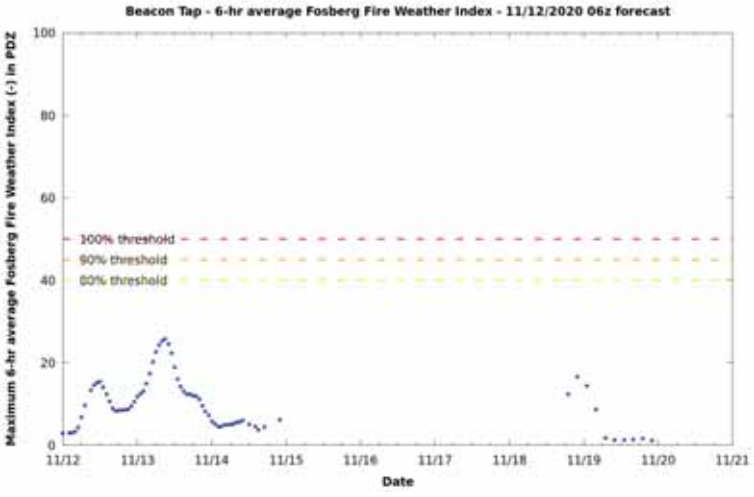


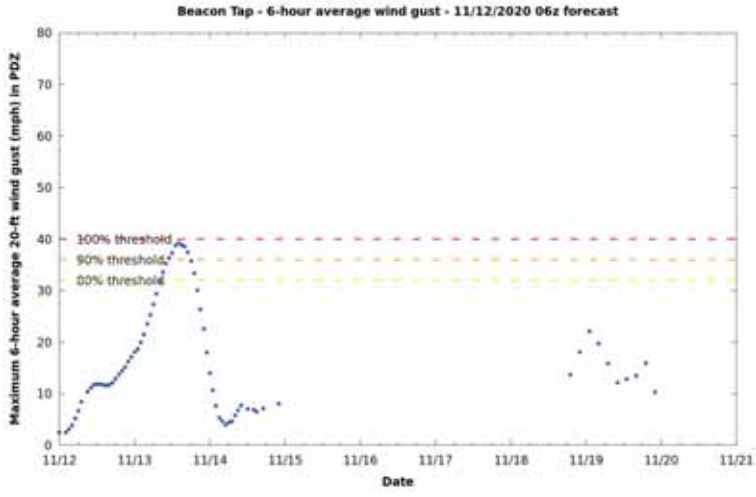
Bky 5100 to NVE



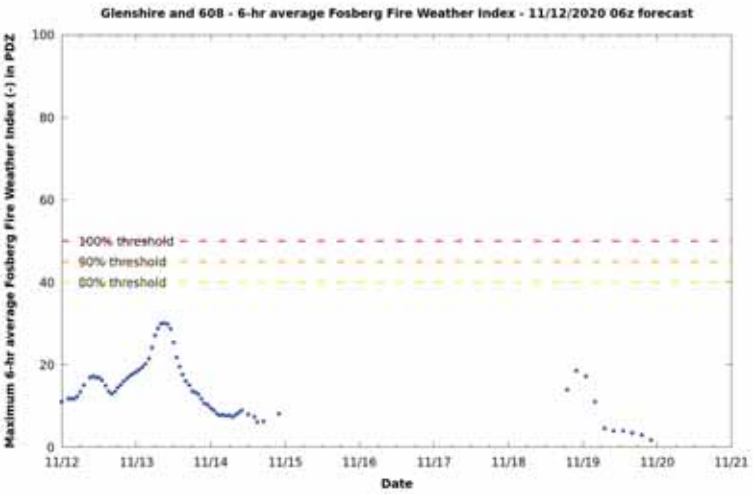


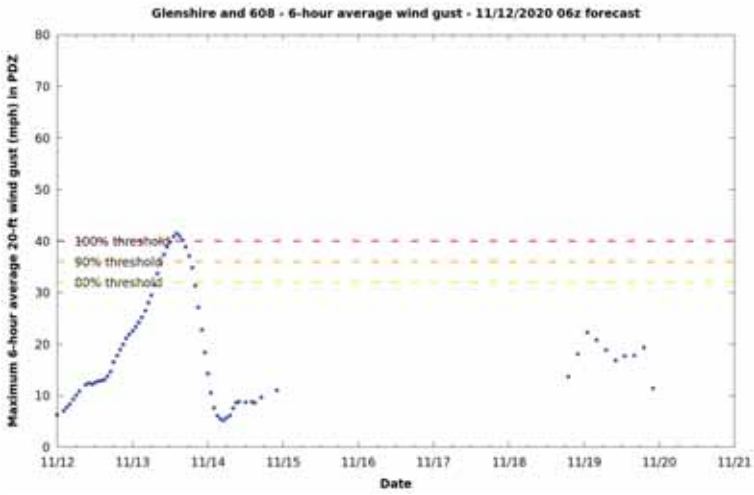
Beacon Tap



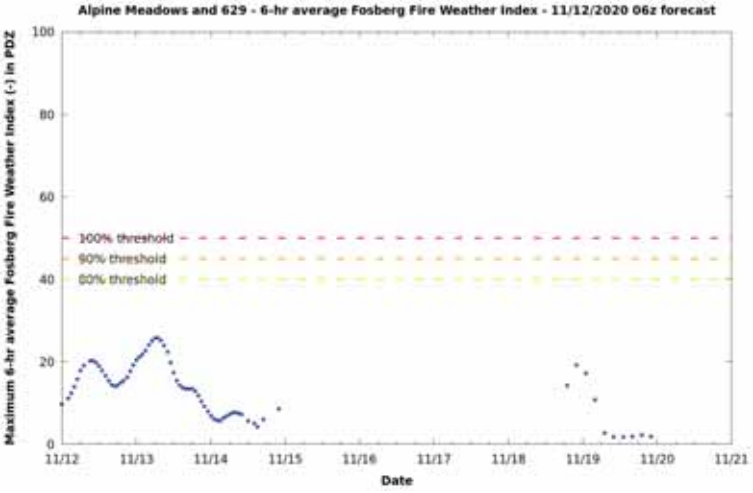


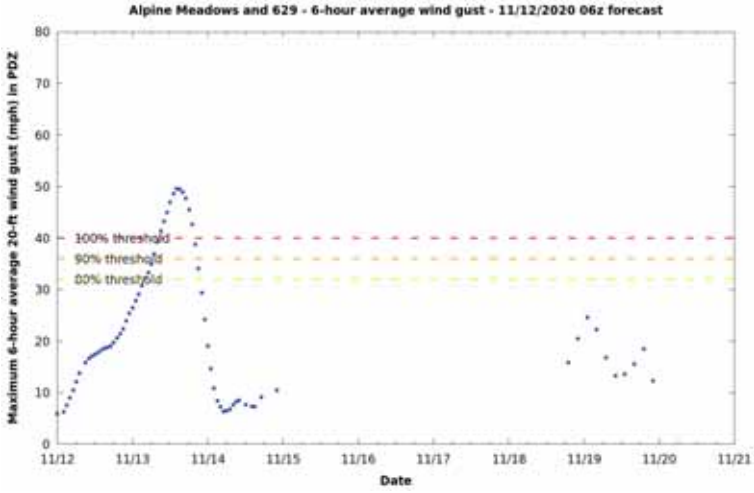
Glenshire and 608



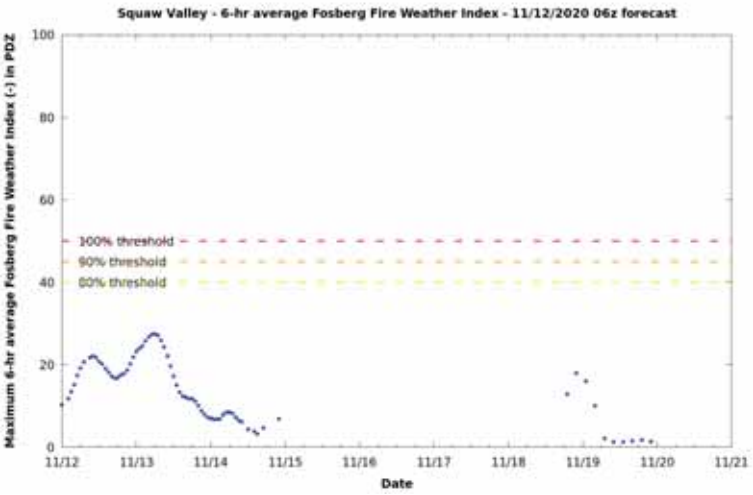


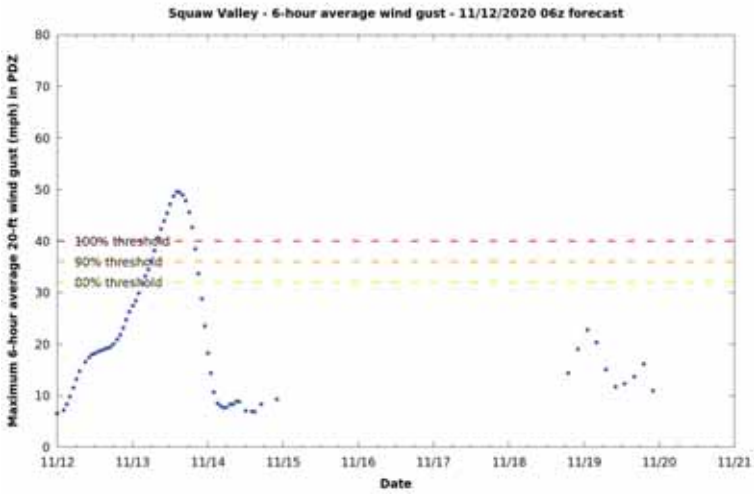
Alpine Meadows and 629



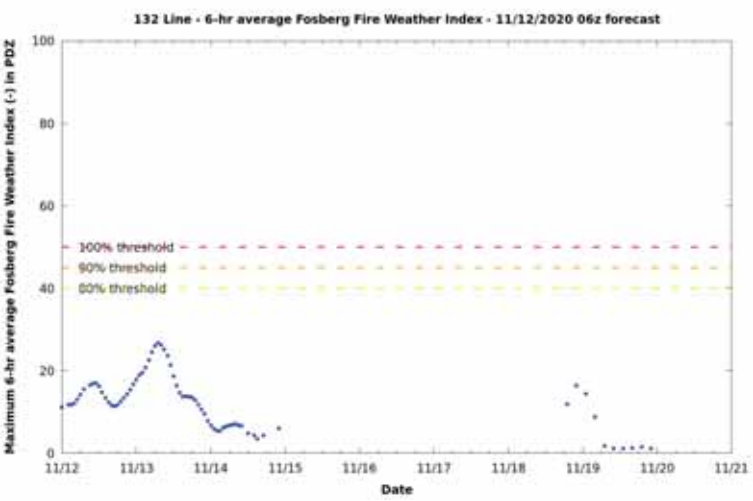


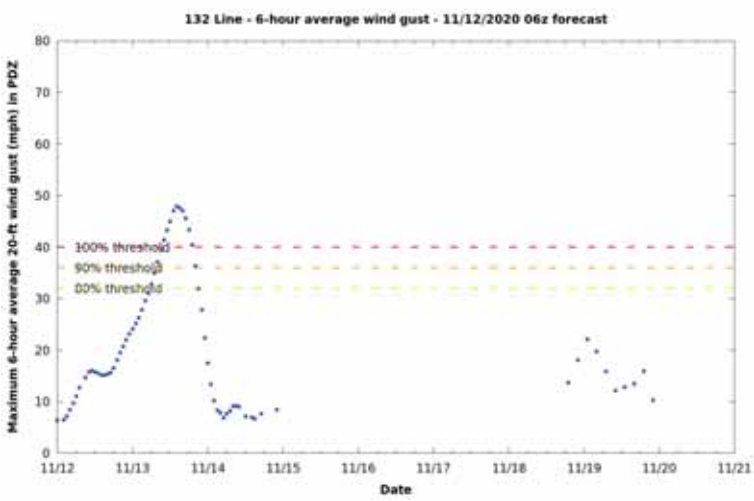
Squaw Valley



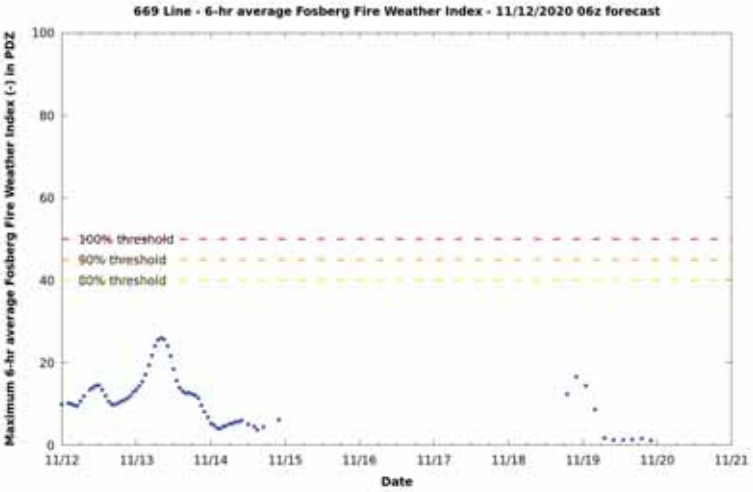


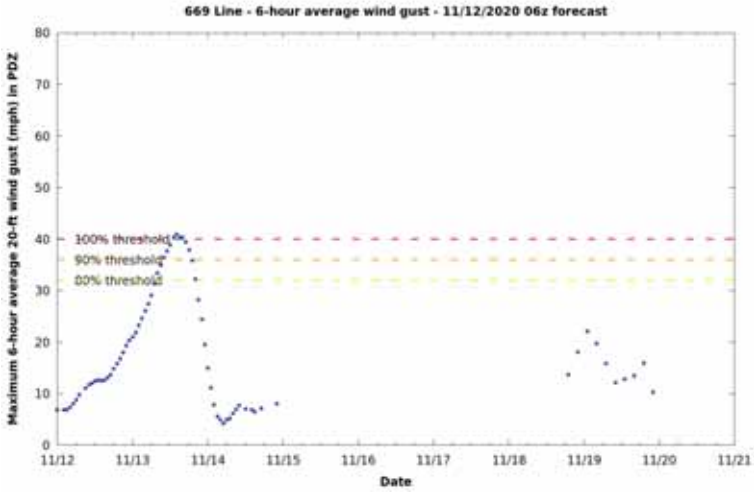
132 Line



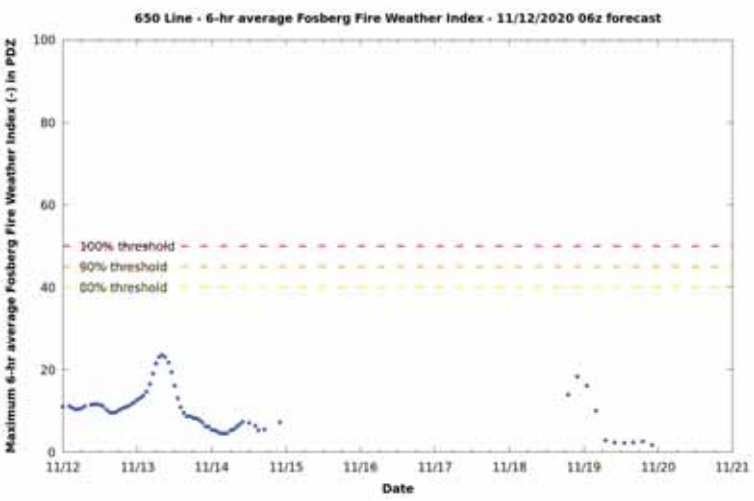


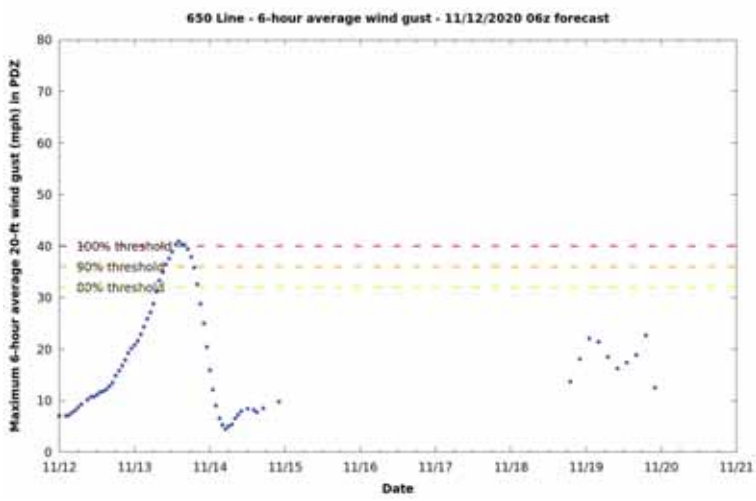
669 Line



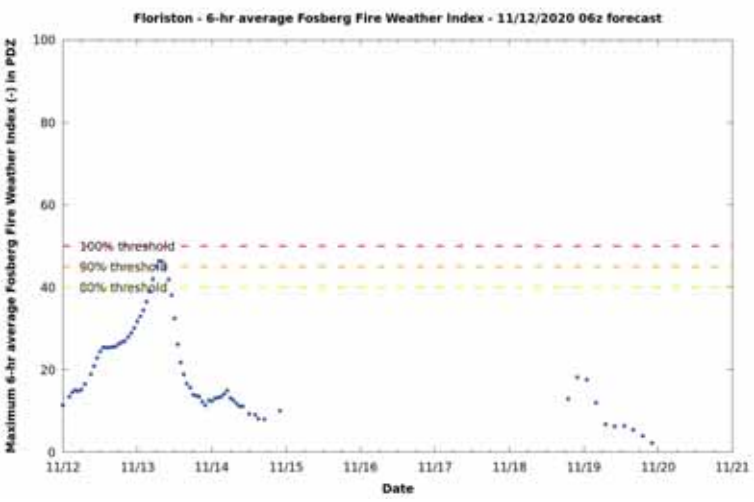


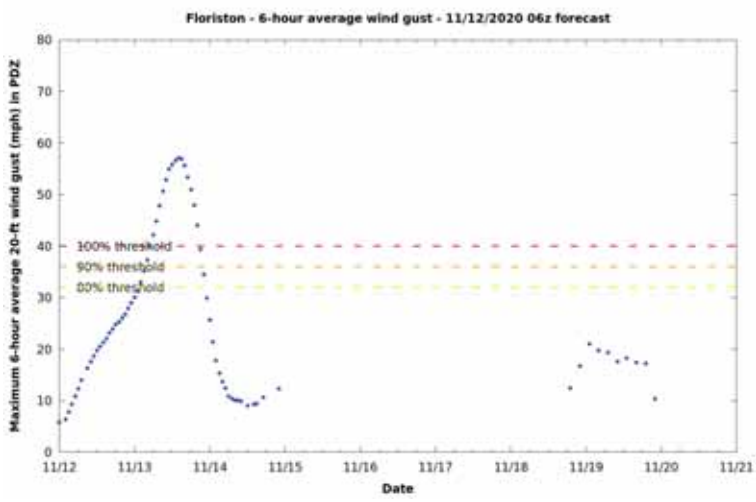
650 Line



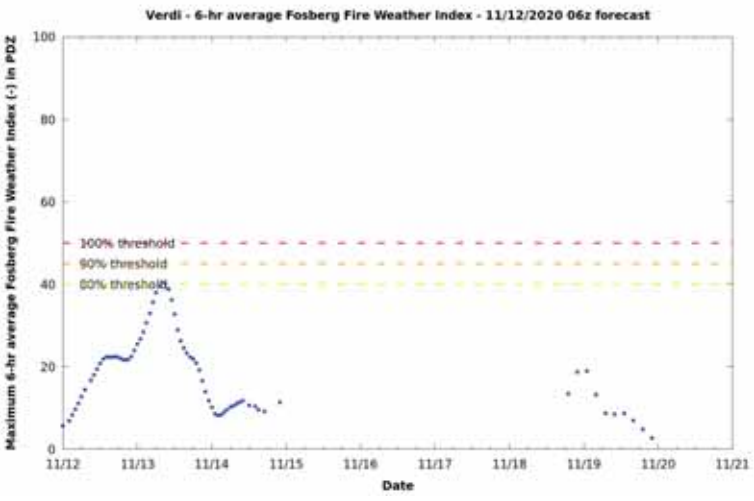


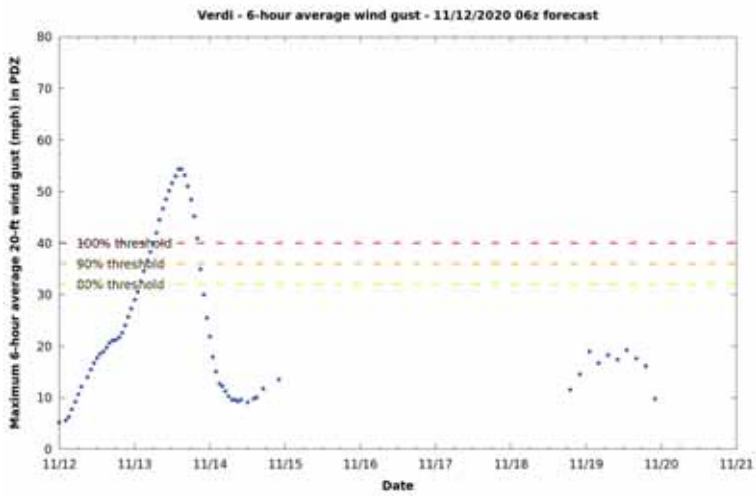
Floriston



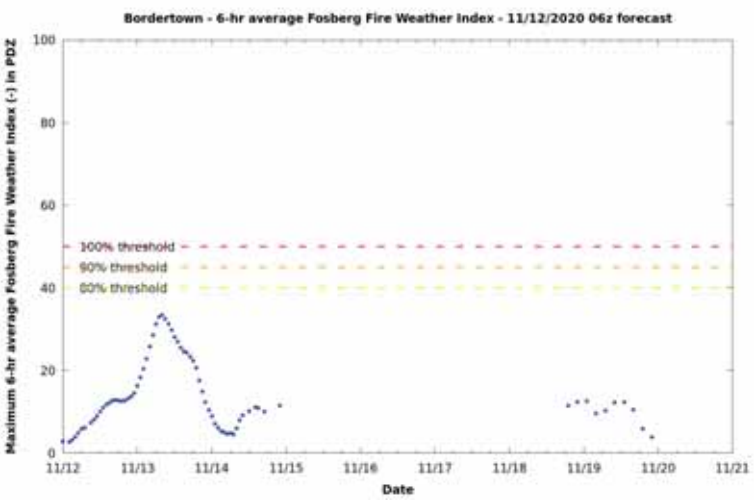


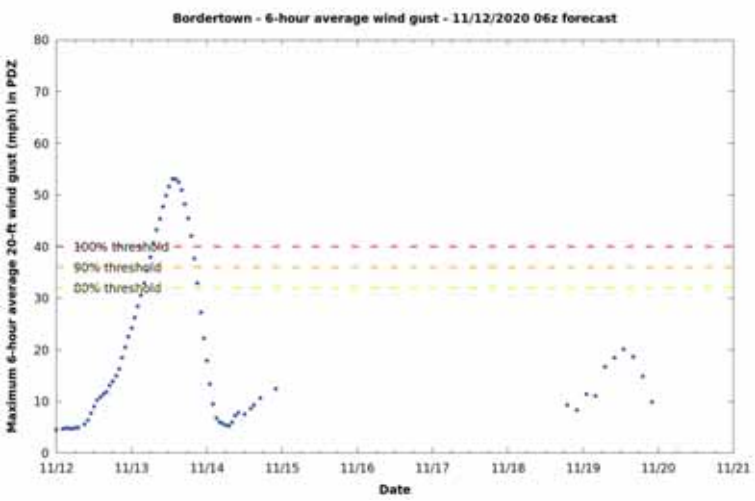
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/12/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/12/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/12/20 - 11/18/20

Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	moderate	moderate	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	moderate	low	low	low	low	low

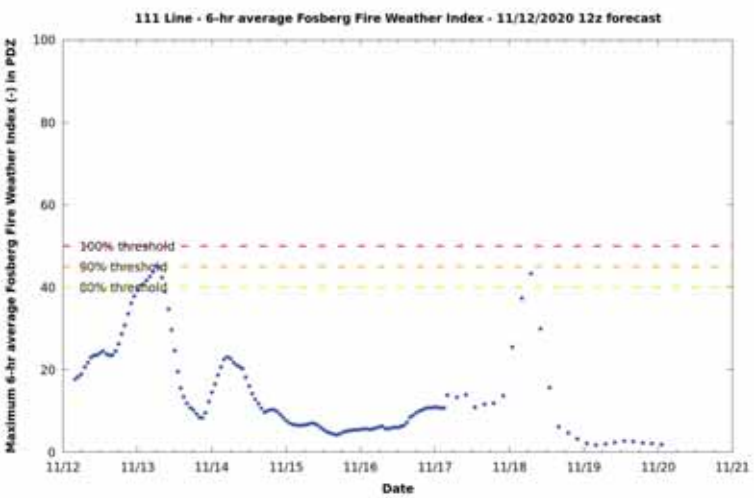
Liberty Utilities Energy Release Component Forecast for 11/12/20 - 11/18/20

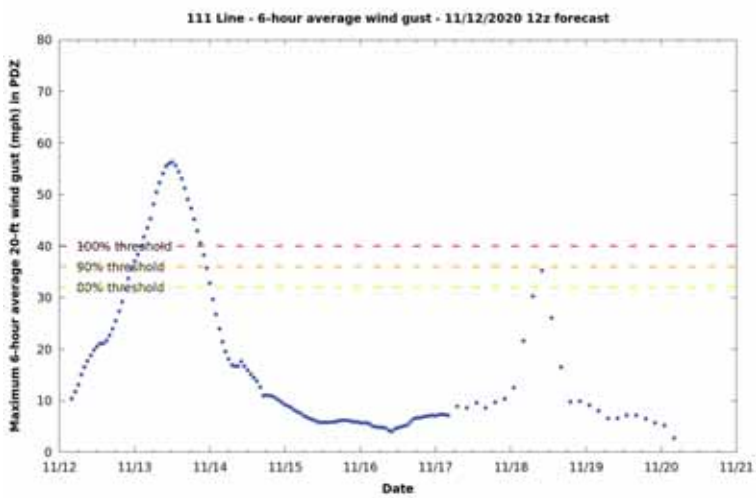
Zone	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	66.0	60.0	55.0	51.0	52.0	56.0	54.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	62.0	48.0	43.0	38.0	36.0	39.0	34.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	58.0	58.0	54.0	50.0	54.0	56.0	56.0

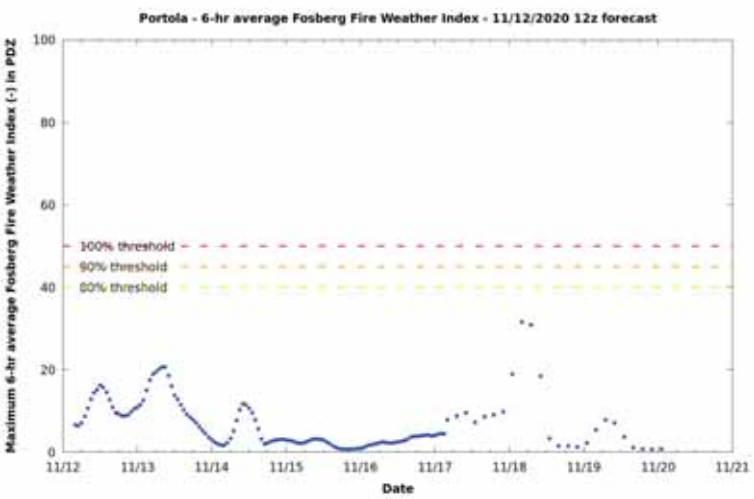
Liberty Utilities Fire Weather Summary Plots - 11/12/2020 12z forecast

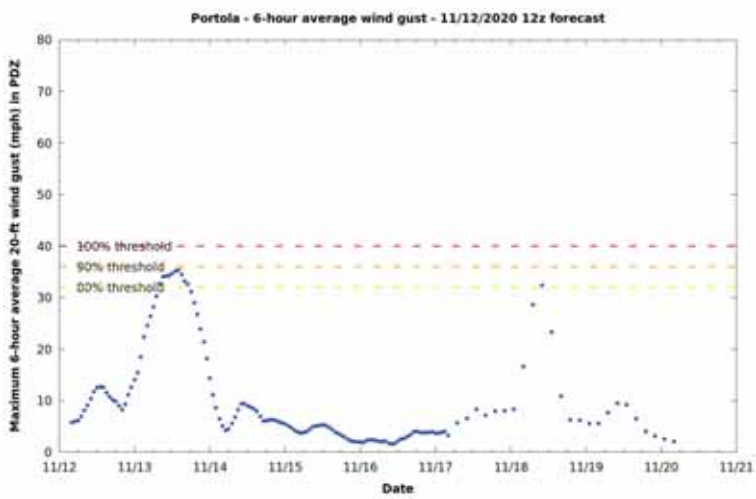
111 Line



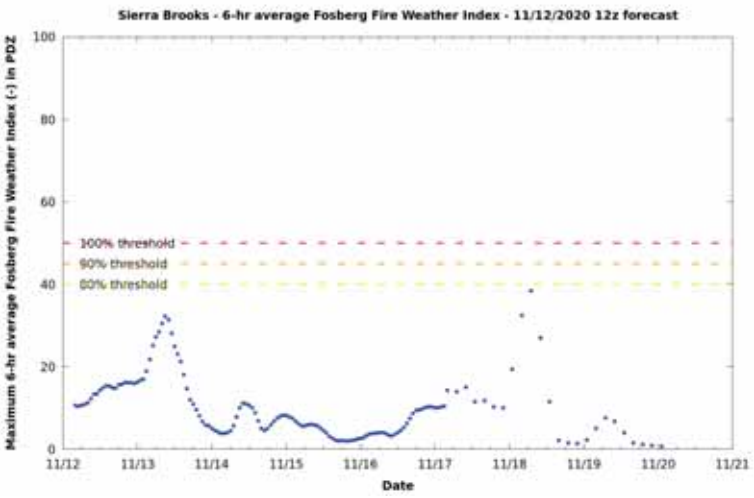


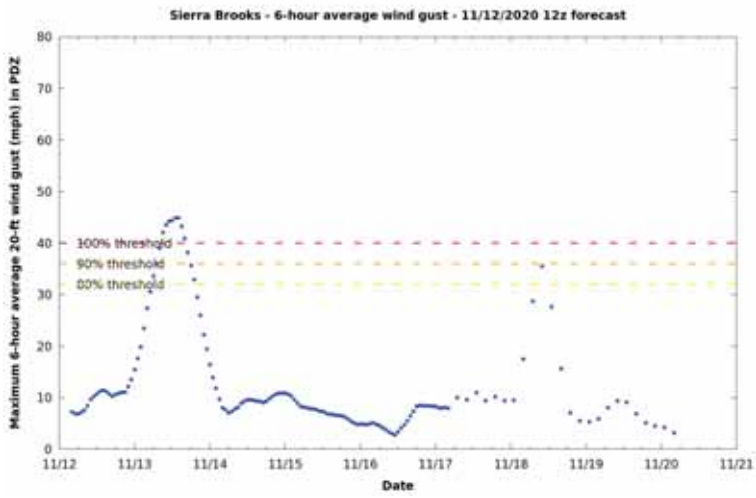
Portola



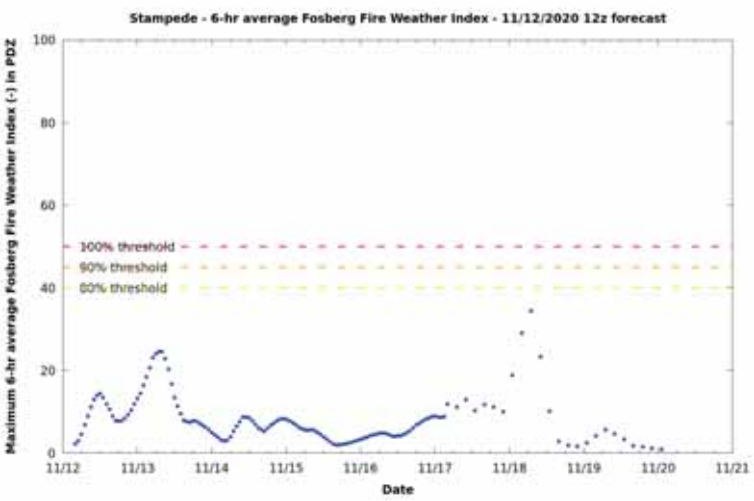


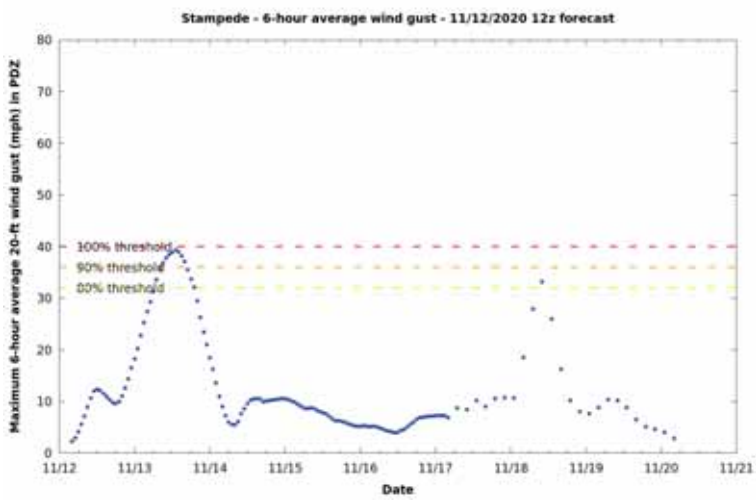
Sierra Brooks



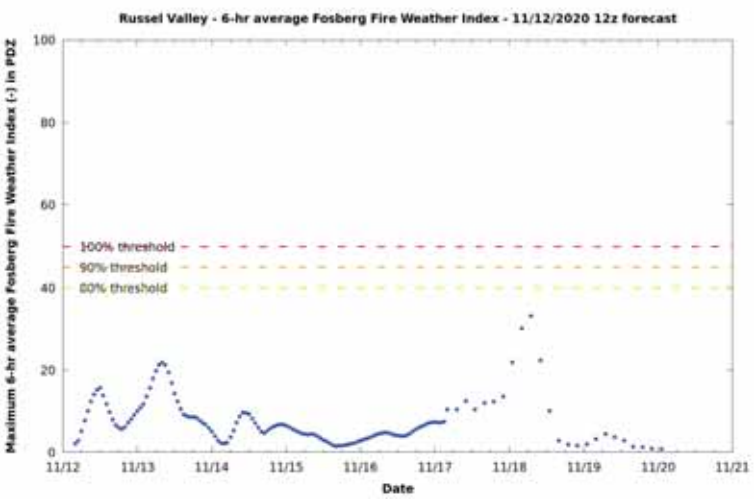


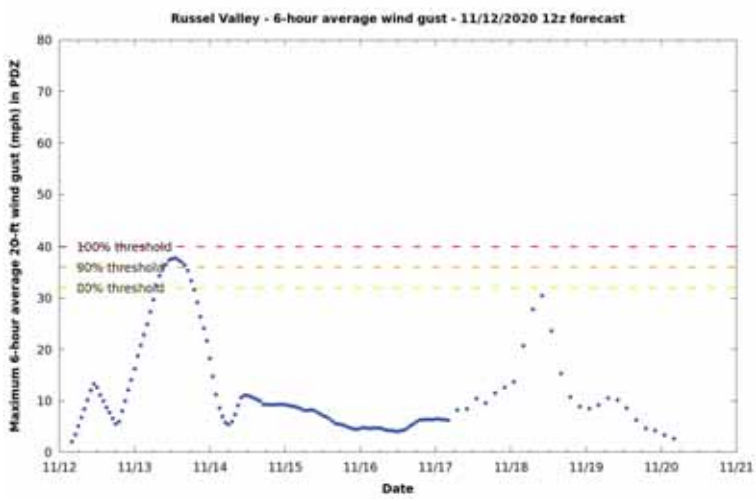
Stampede



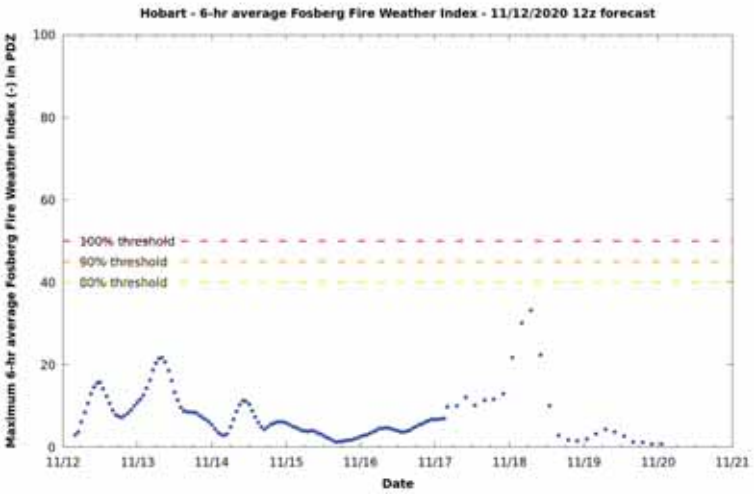


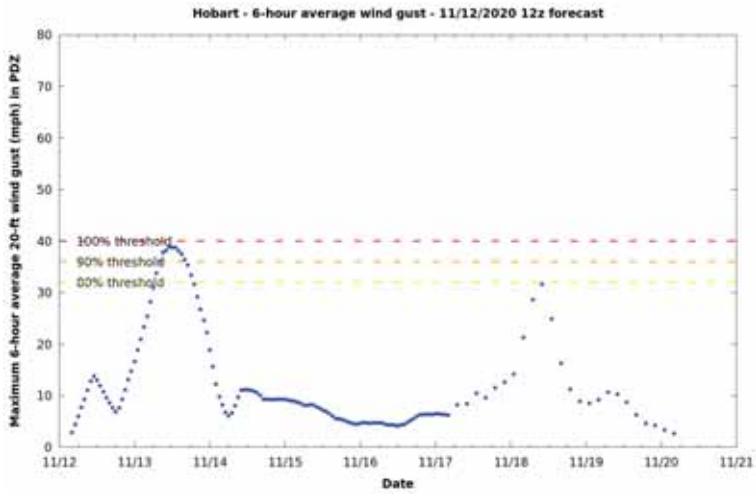
Russell Valley



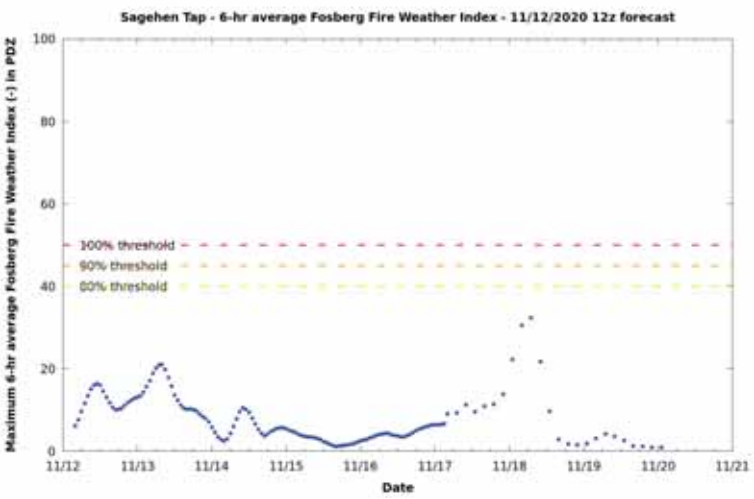


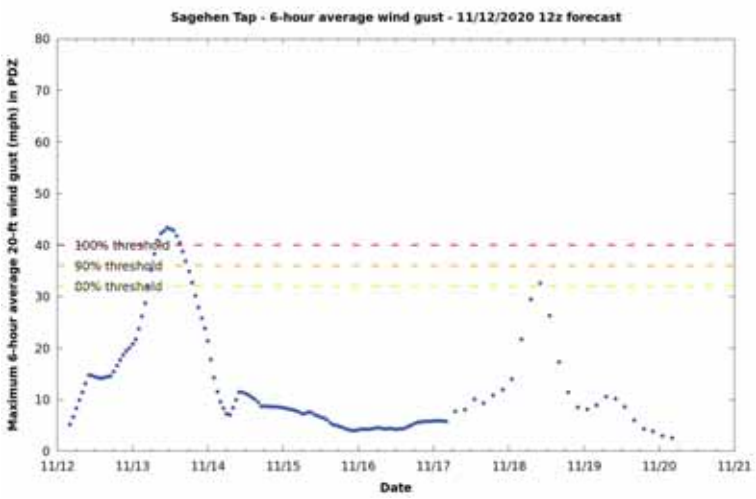
Hobart



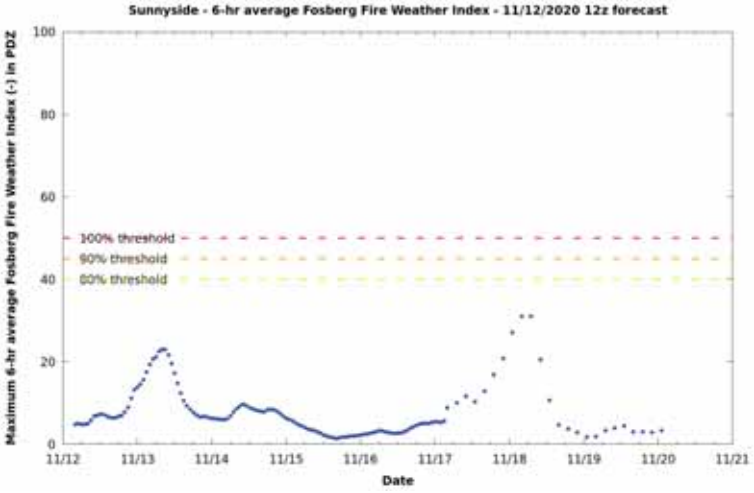


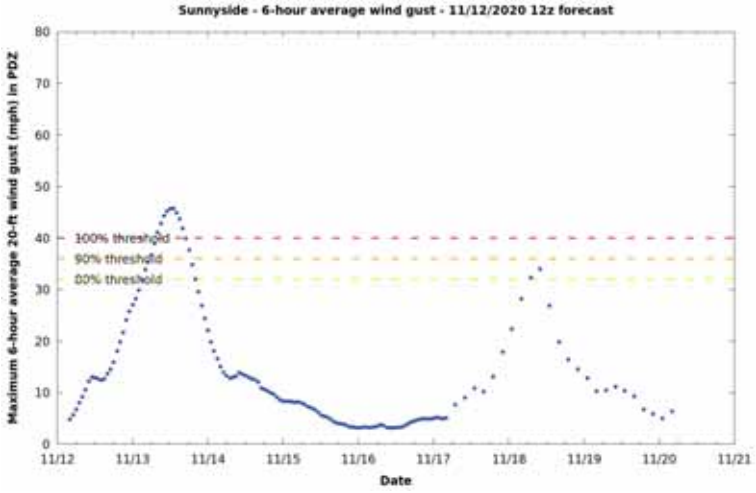
Sagehen tap



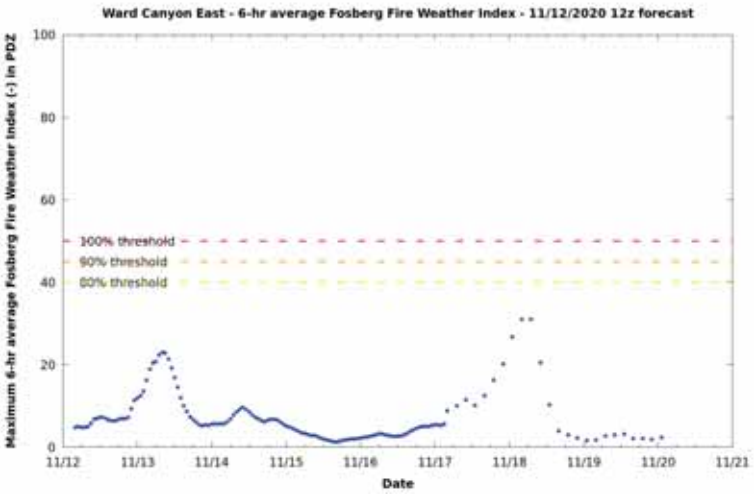


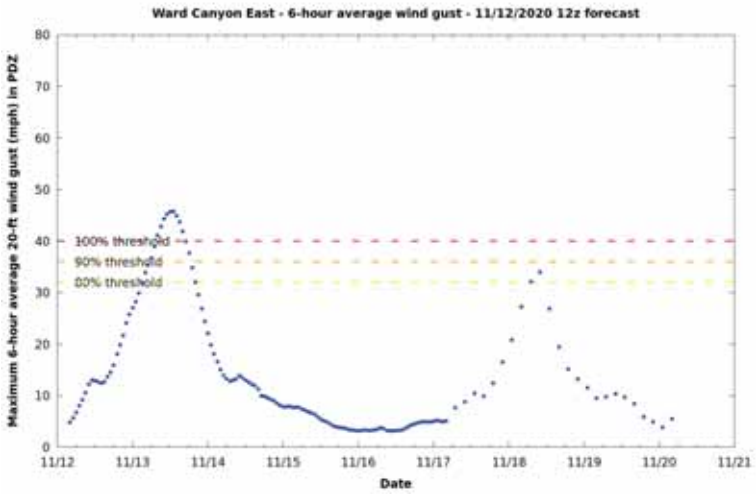
Sunnyside



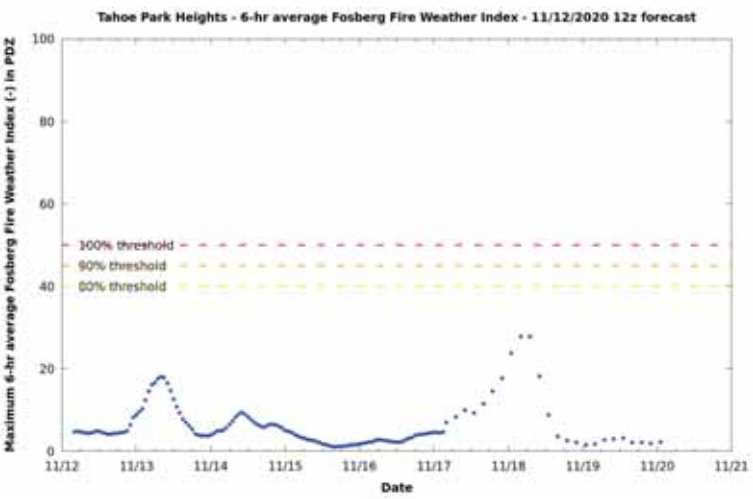


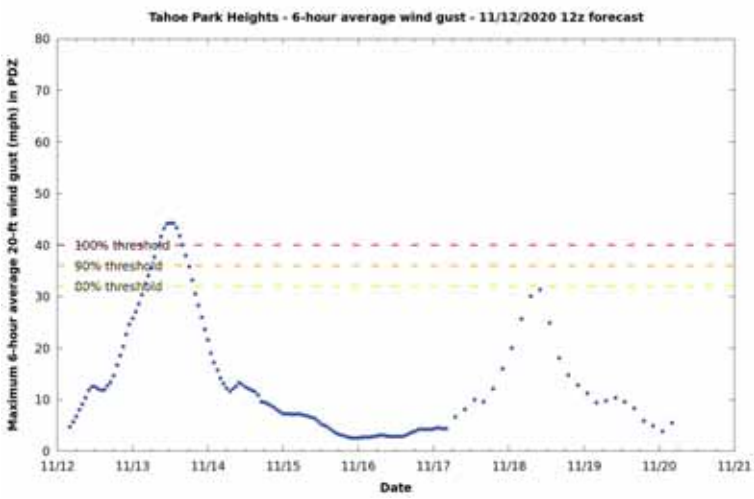
Ward Canyon East



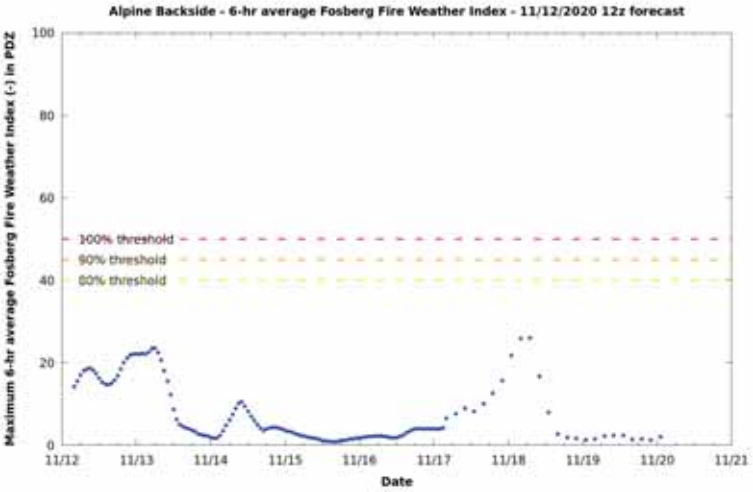


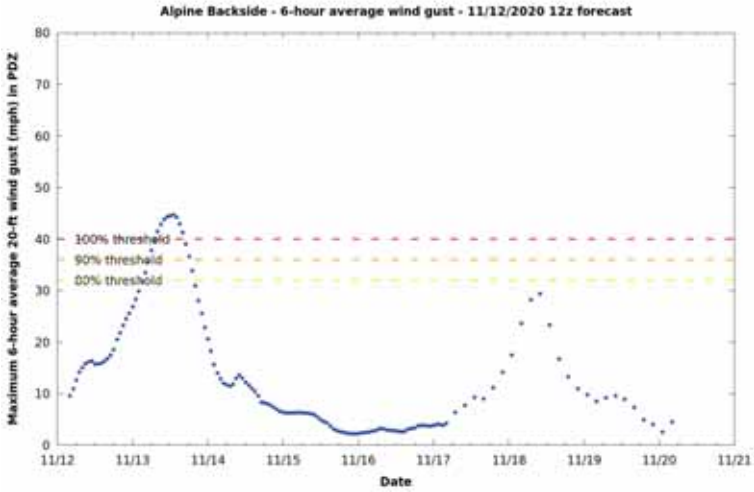
Tahoe Park Heights



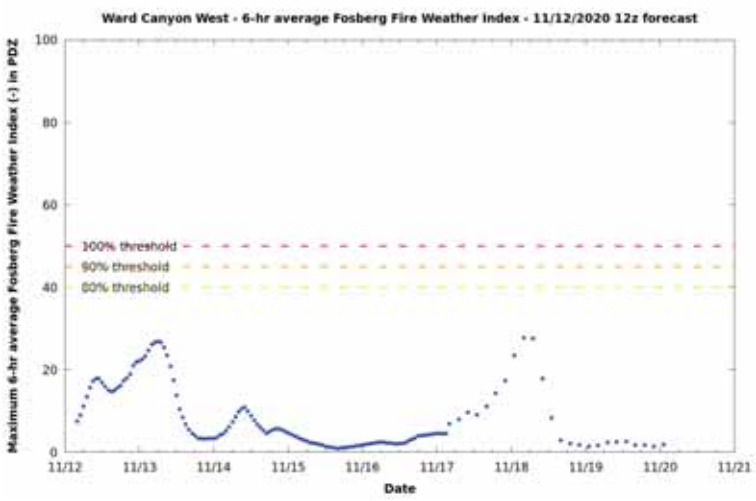


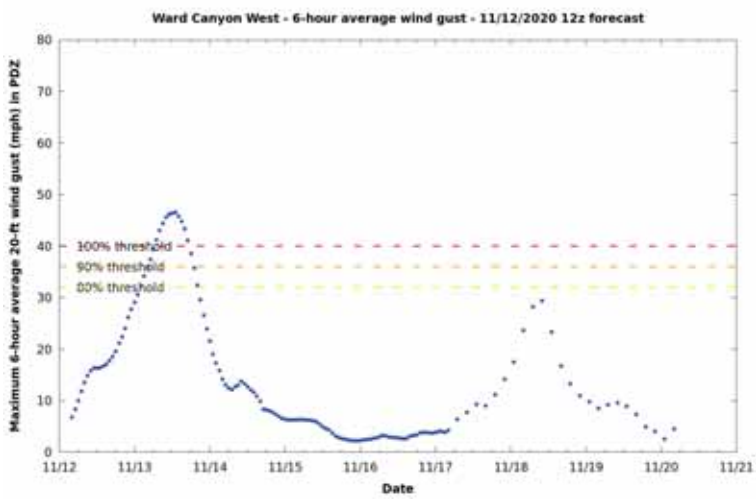
Alpine Backside



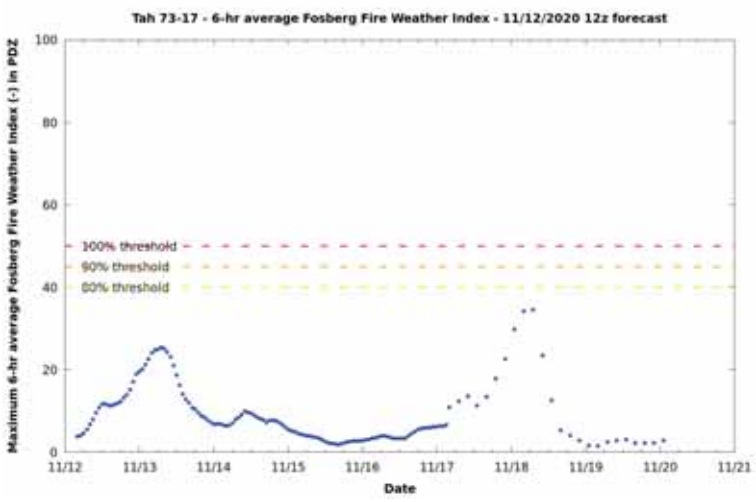


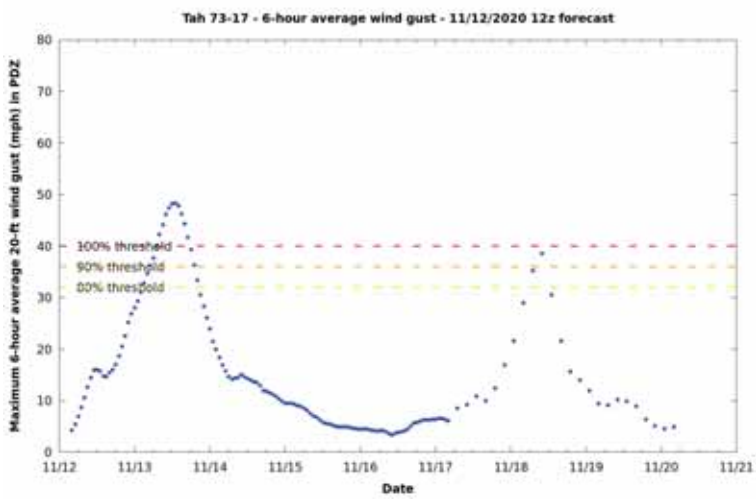
Ward Canyon West



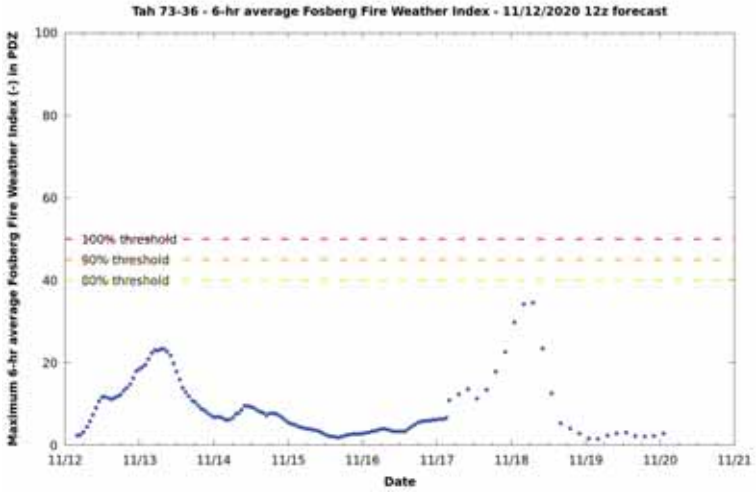


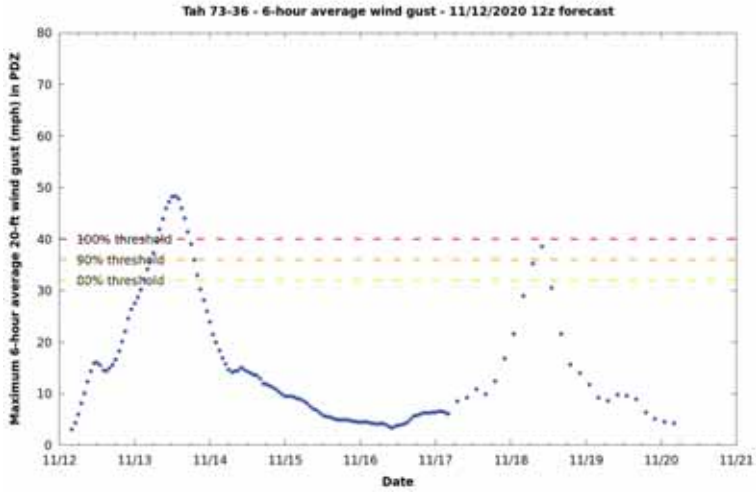
Tah 73-17



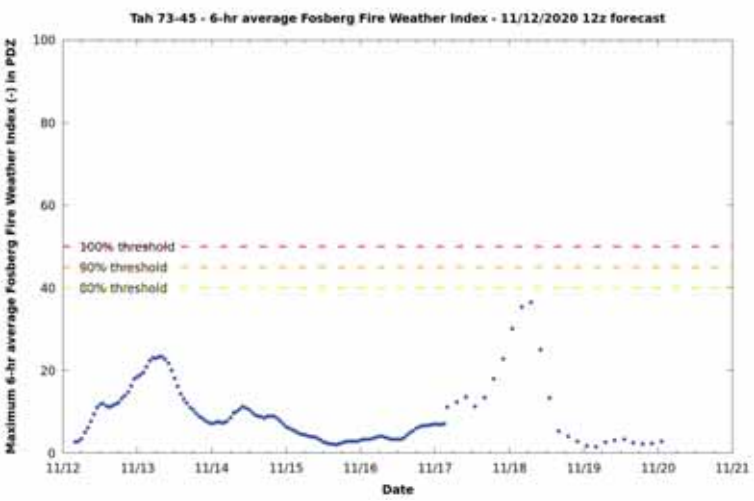


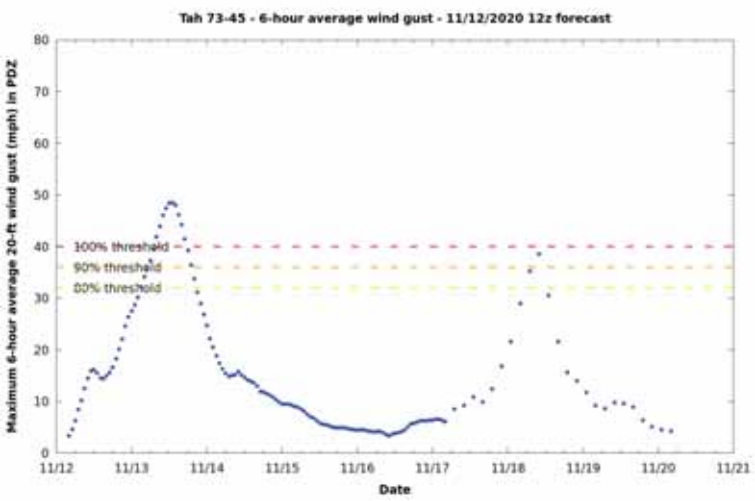
Tah 73-36



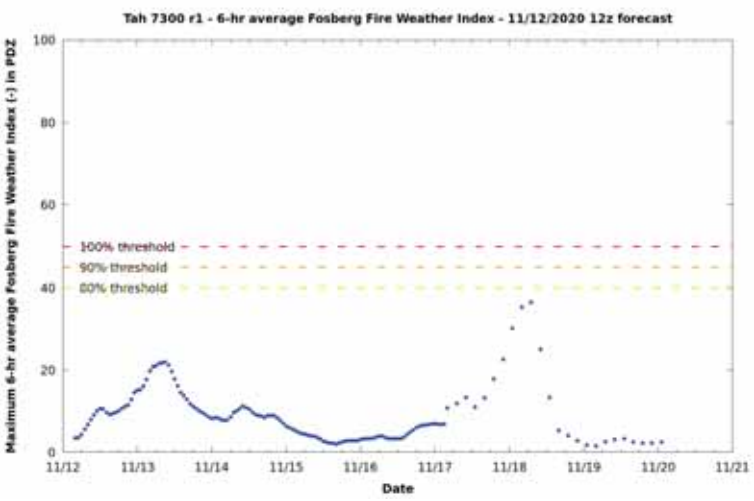


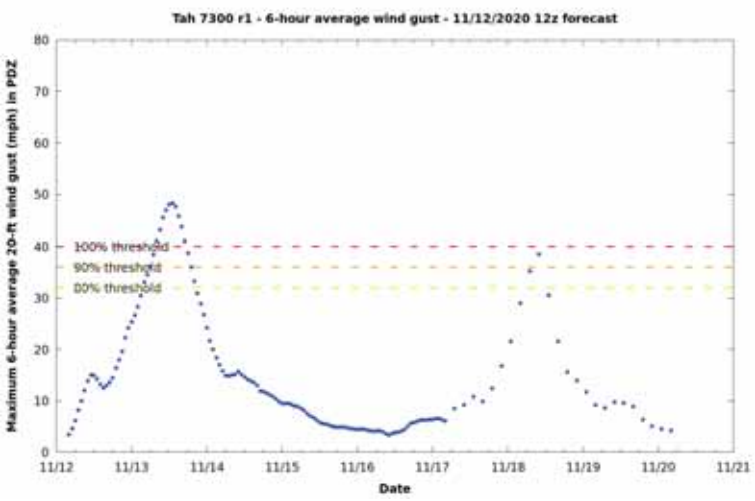
Tah 73-45



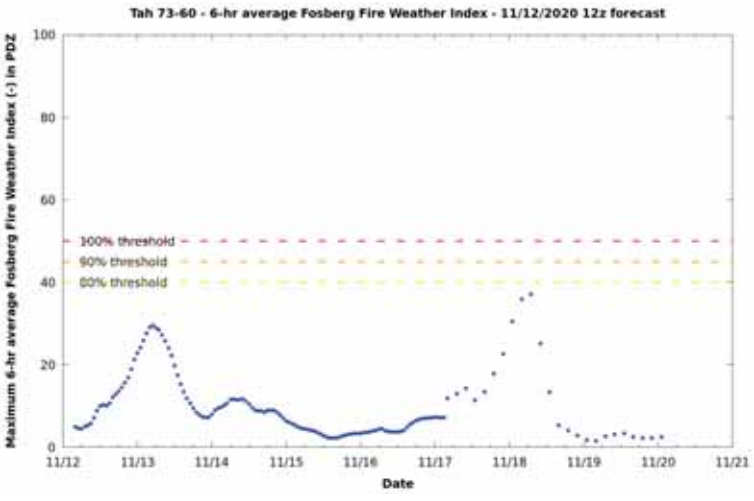


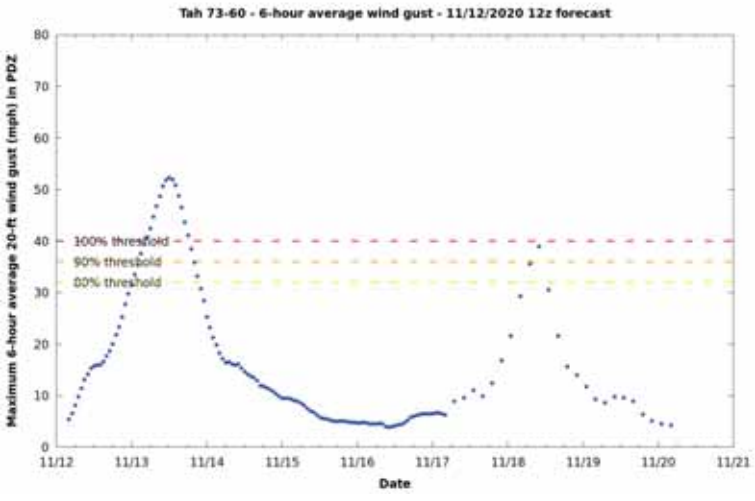
Tah 7300 r1



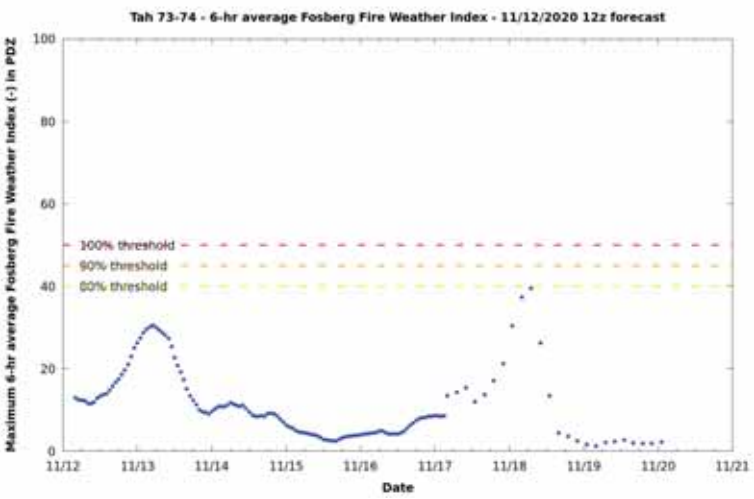


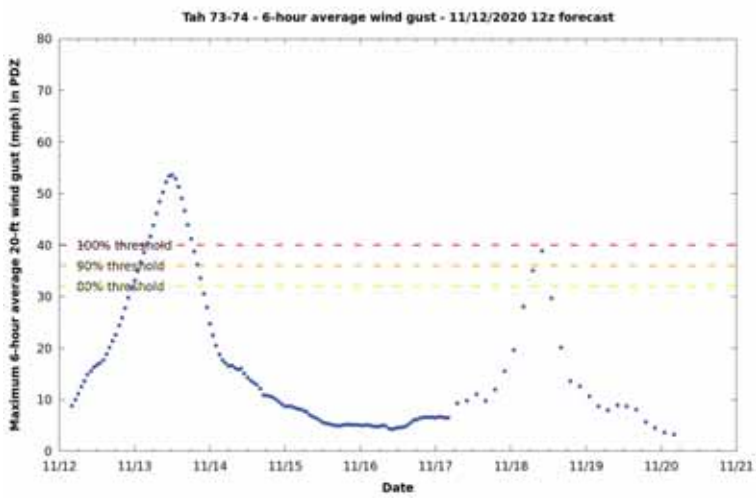
Tah 73-60



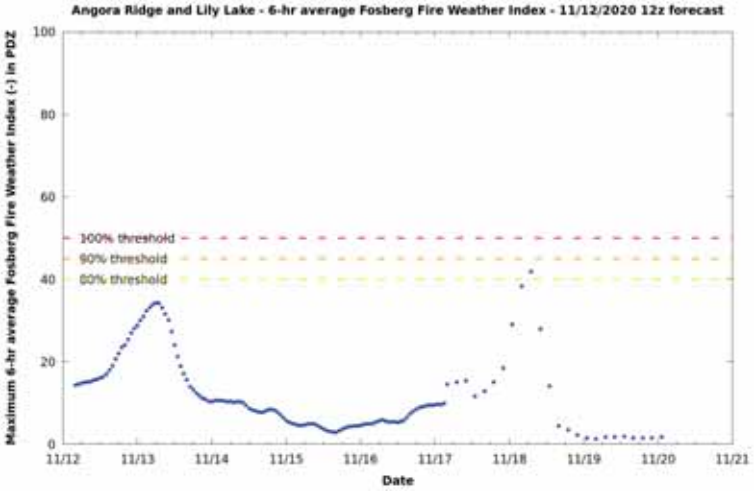


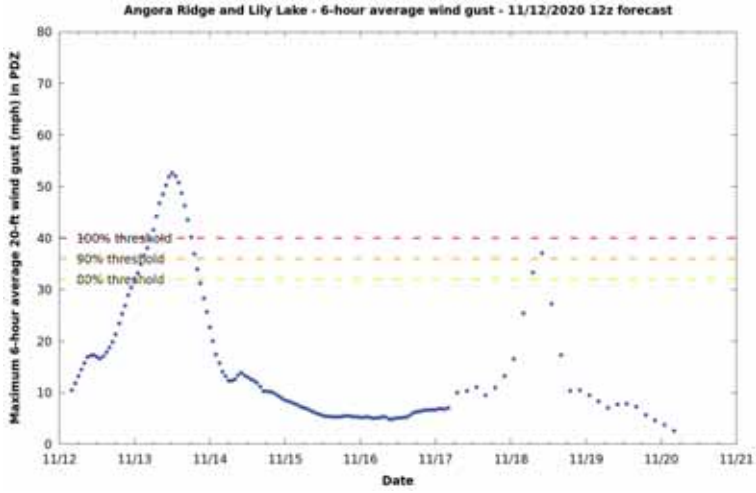
Tah 73-74



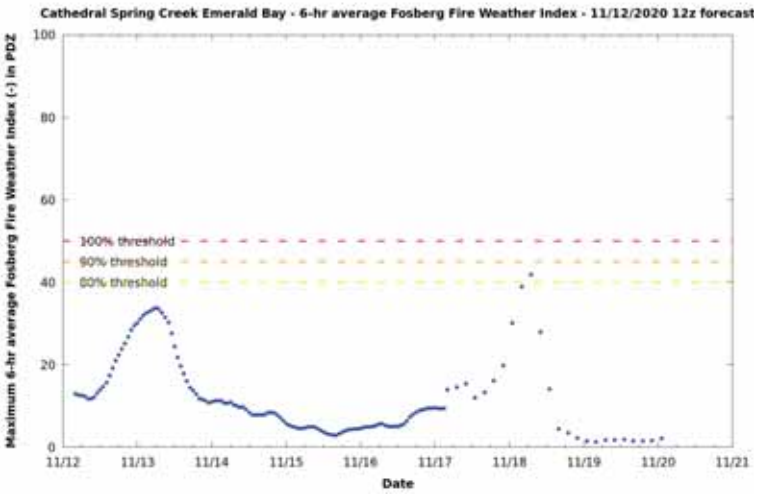


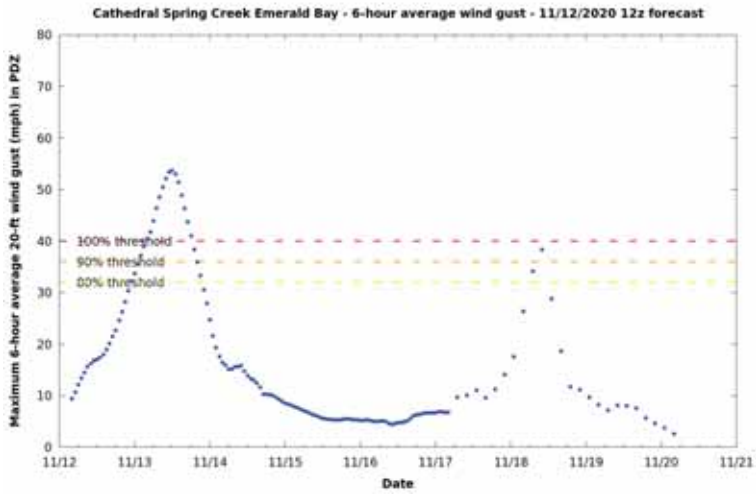
Angora Ridge and Lily Lake



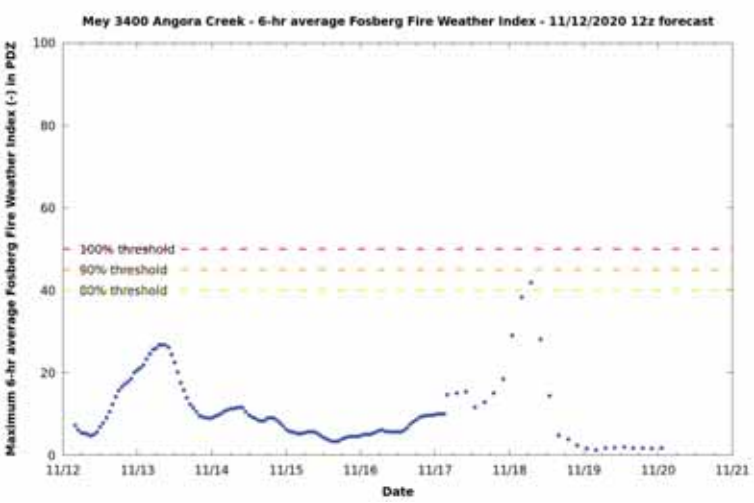


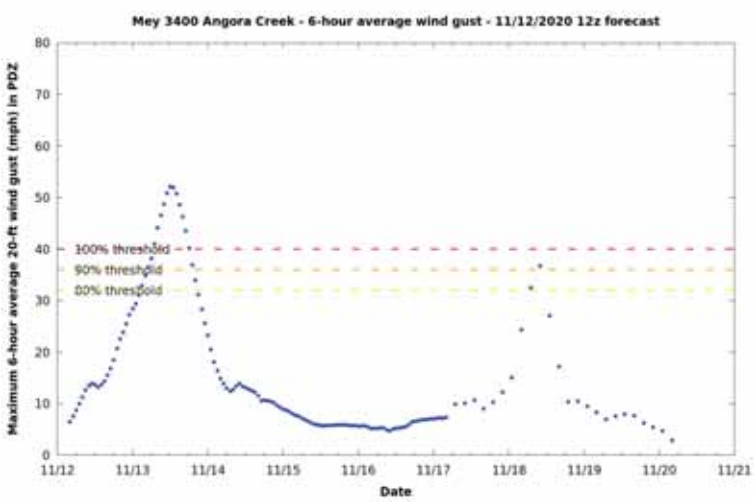
Cathedral Spring Creek Emerald Bay



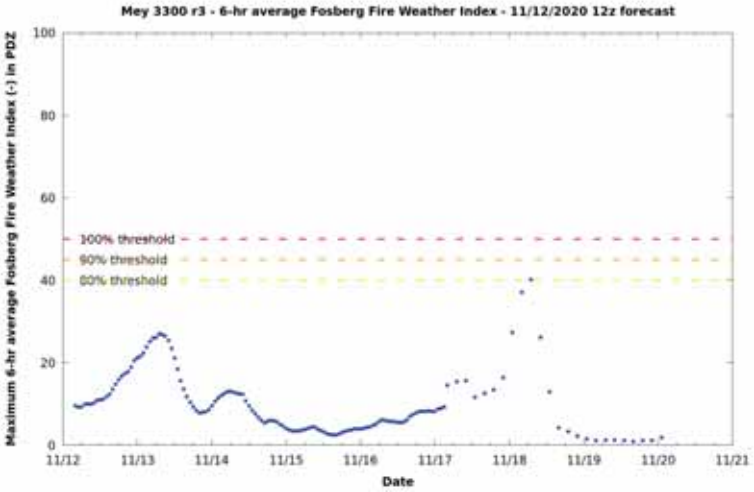


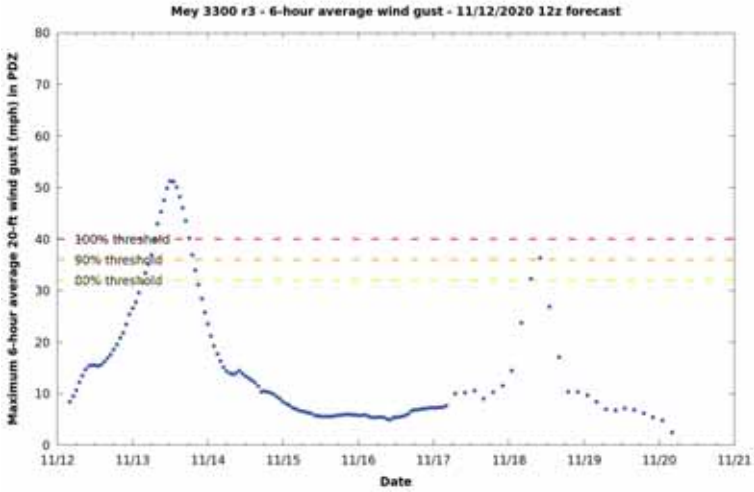
Mey 3400 Angora Creek



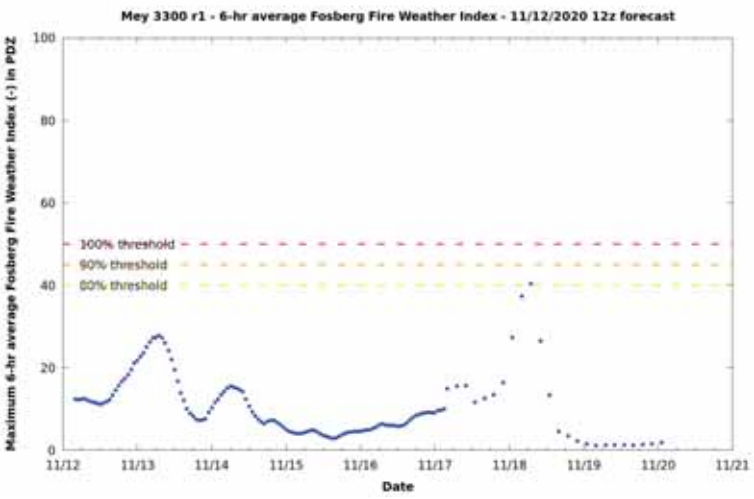


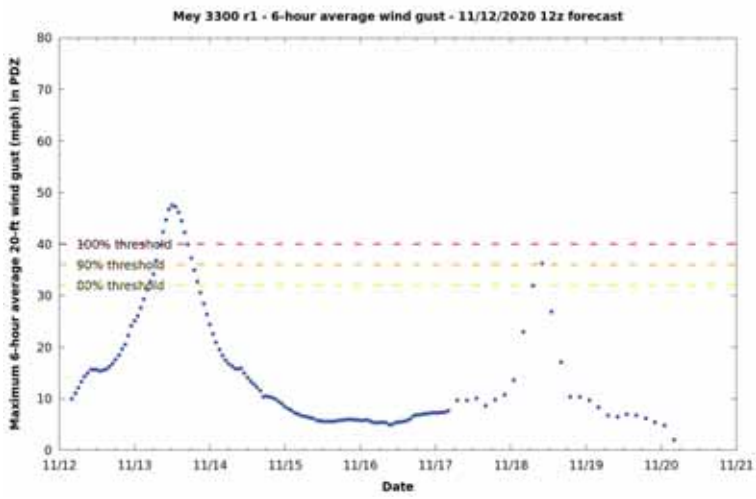
Mey 3300 r3



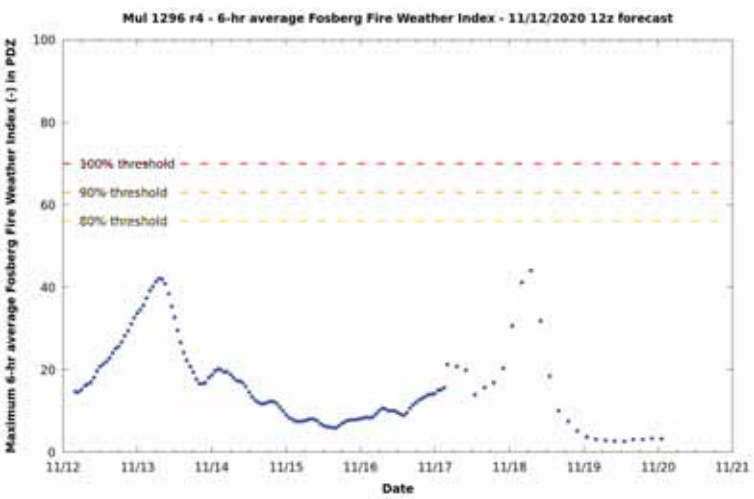


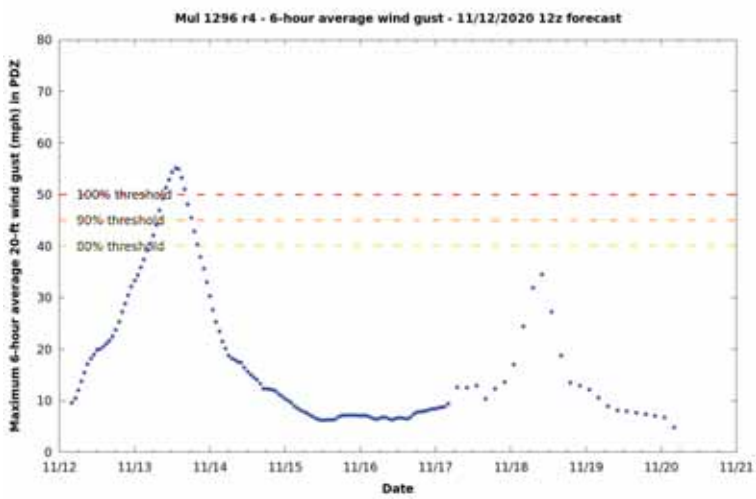
Mey 3300 r1



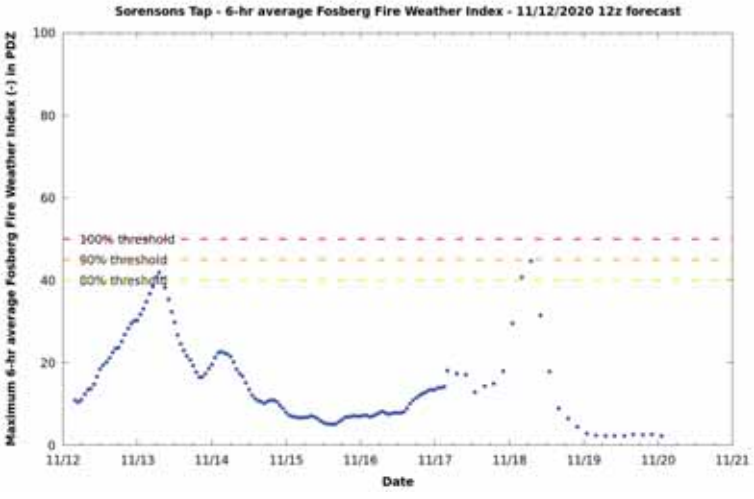


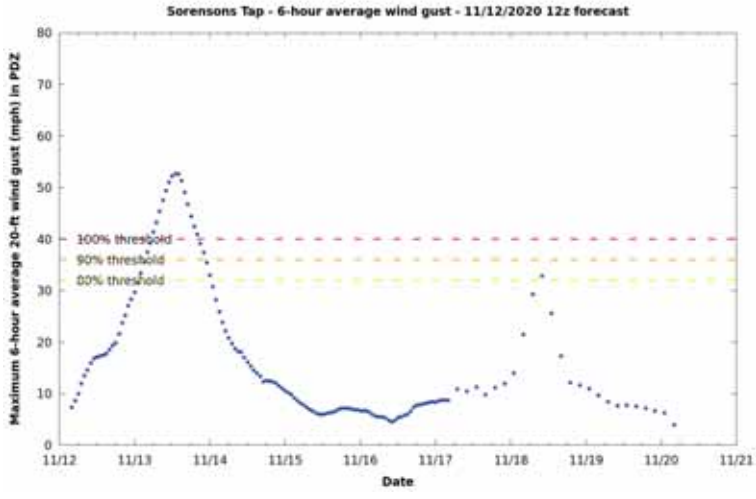
Mul 1296 r4



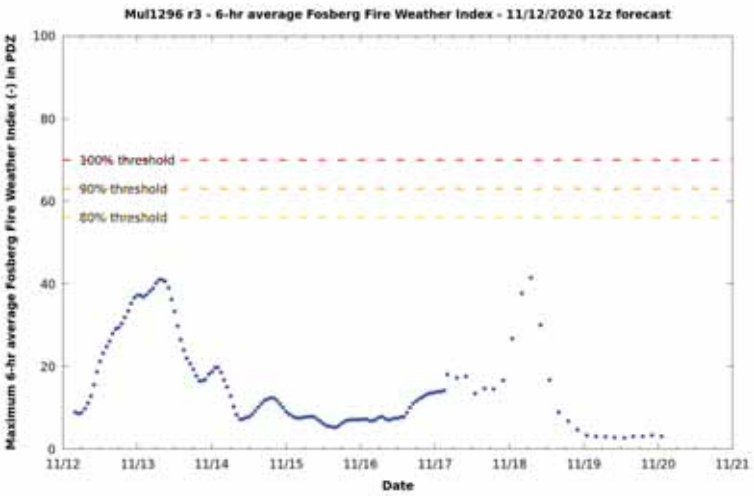


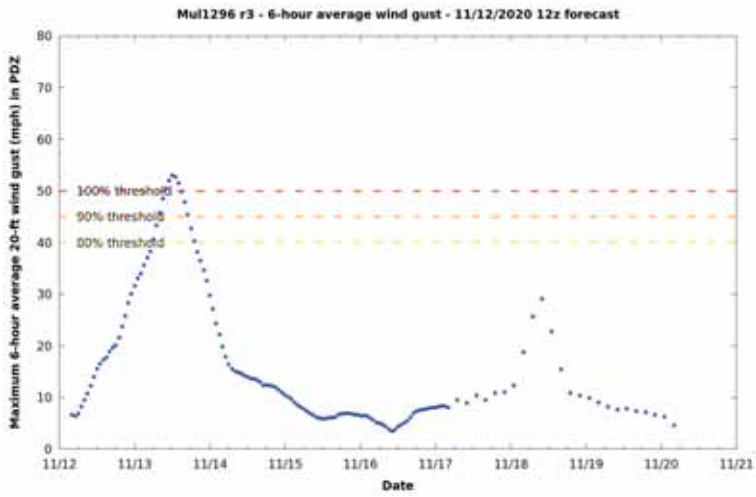
Sorensons Tap



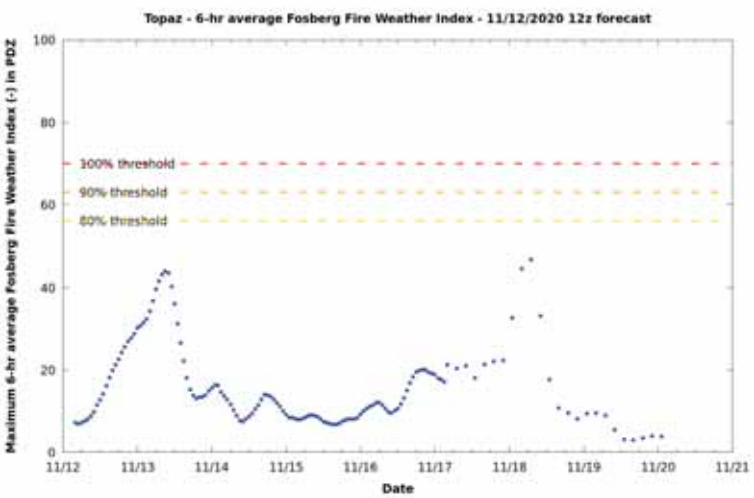


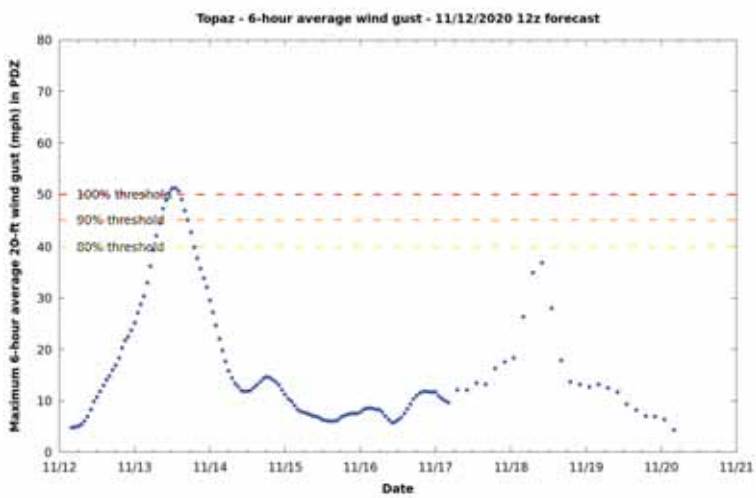
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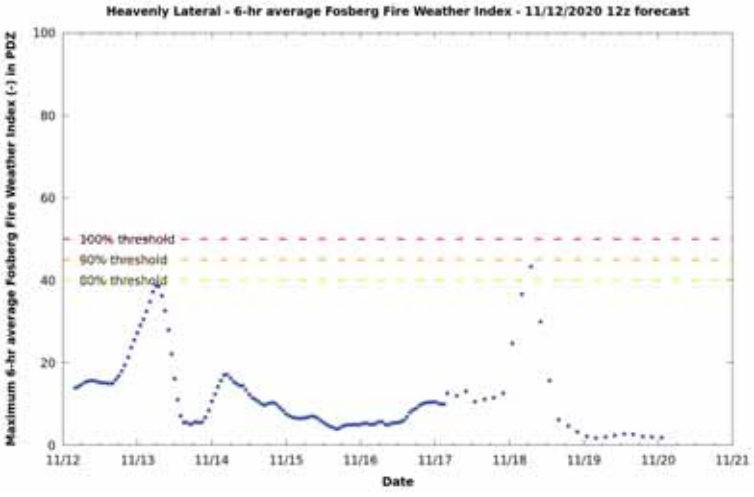


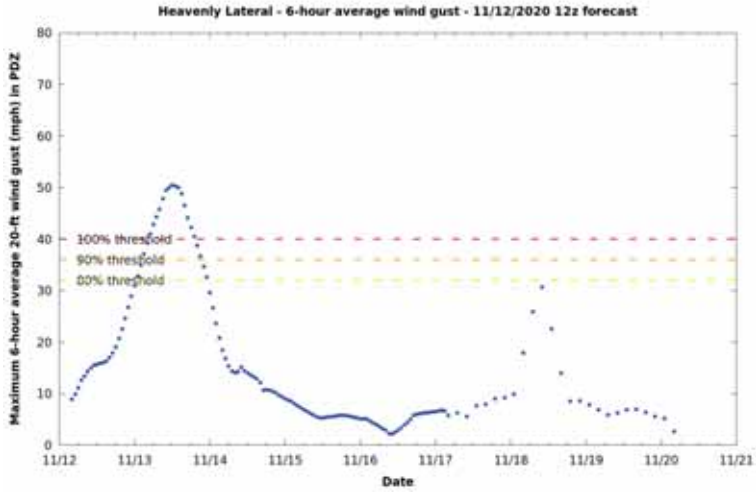
Topaz



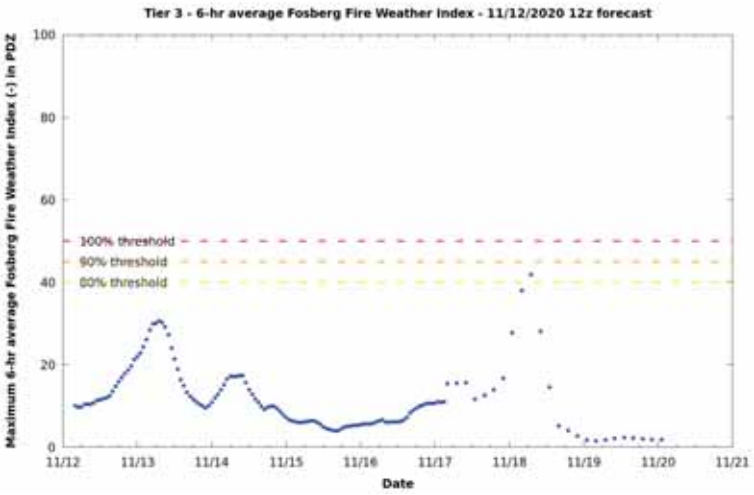


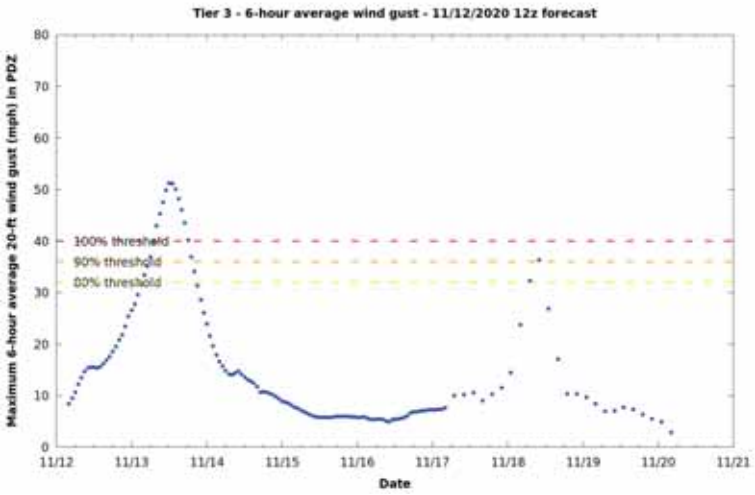
Heavenly Lateral



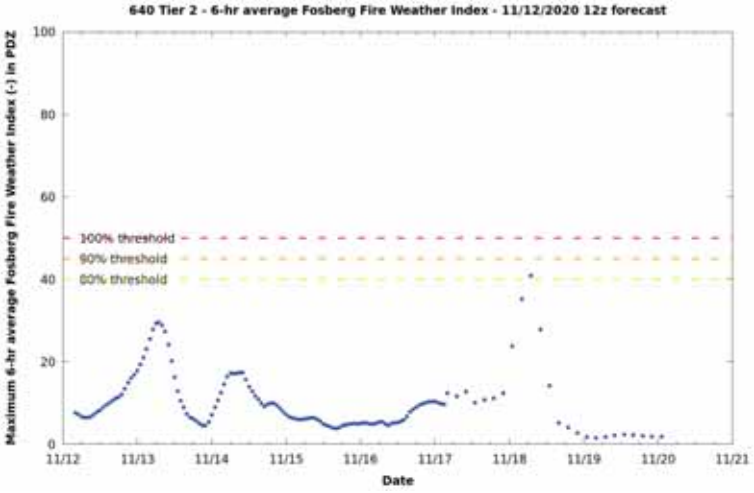


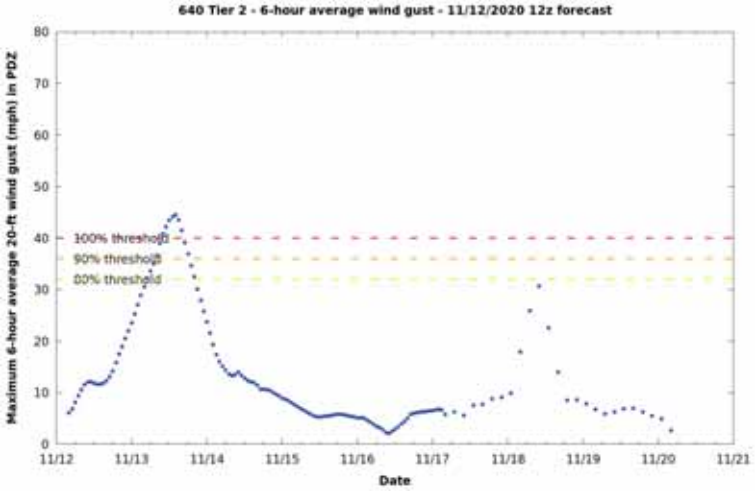
Tier 3



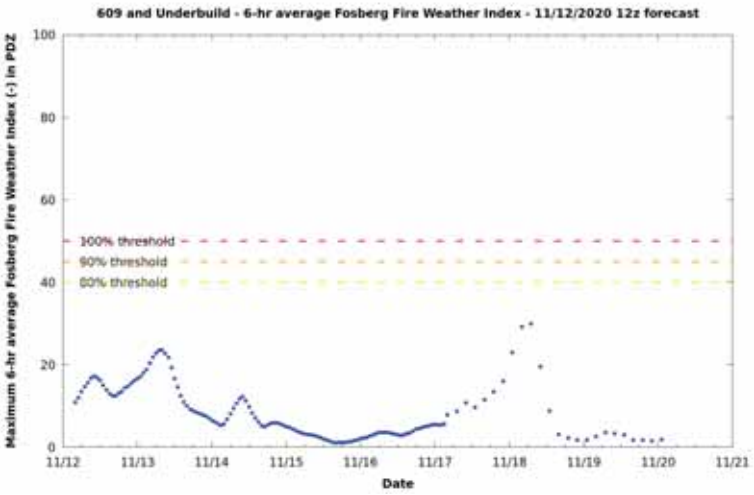


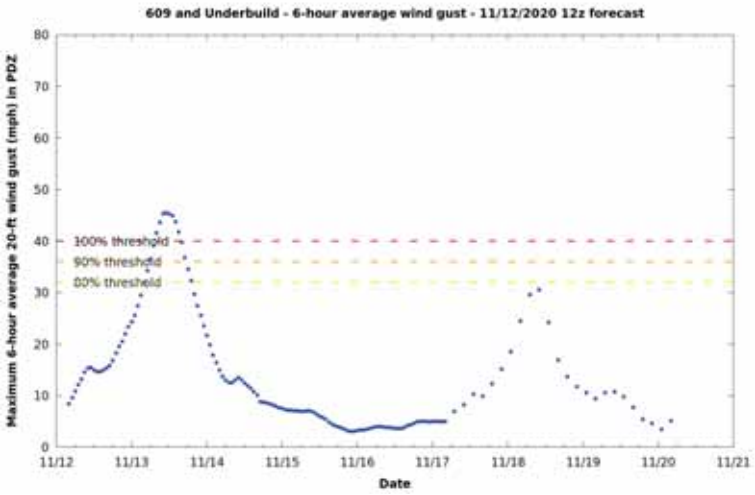
640 Tier 2



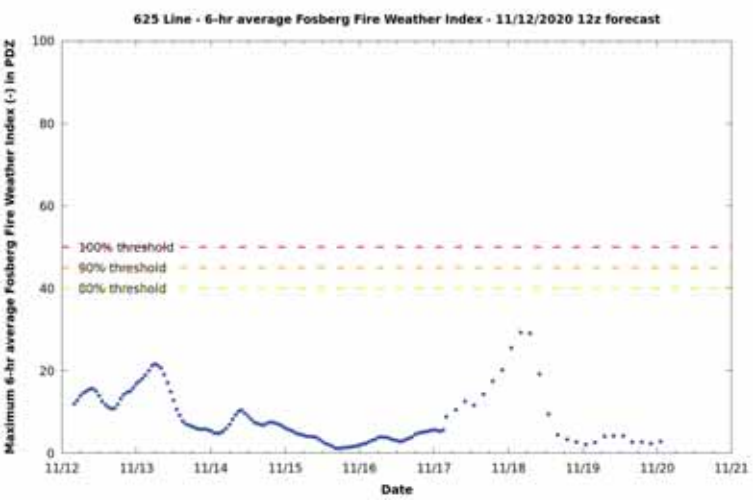


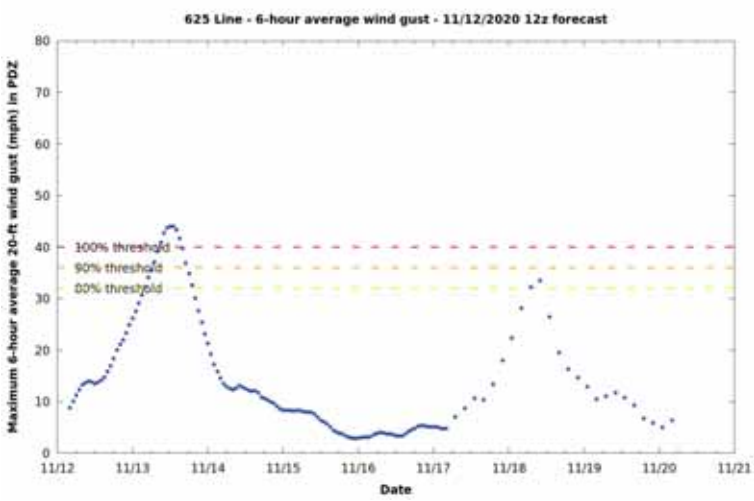
609 and Underbuild



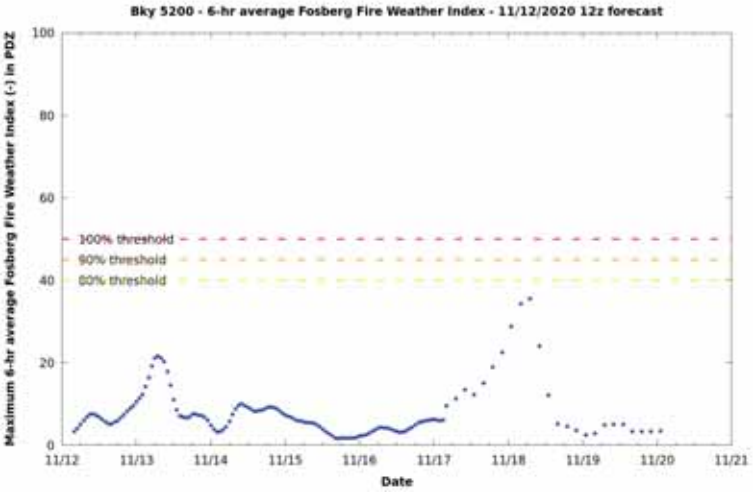


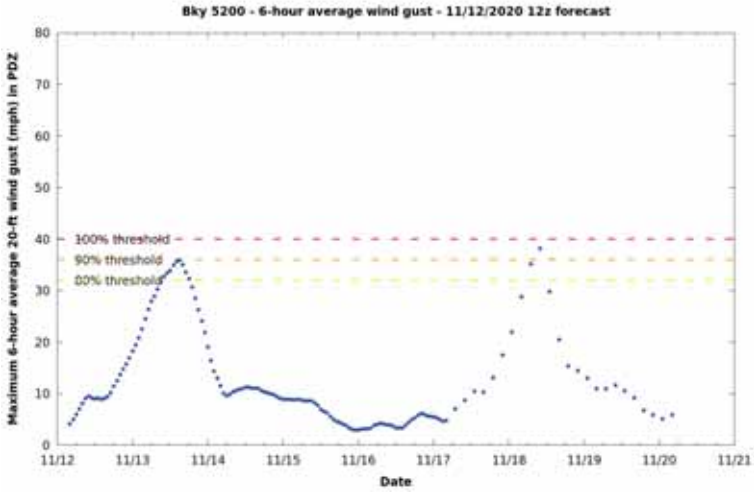
625 Line



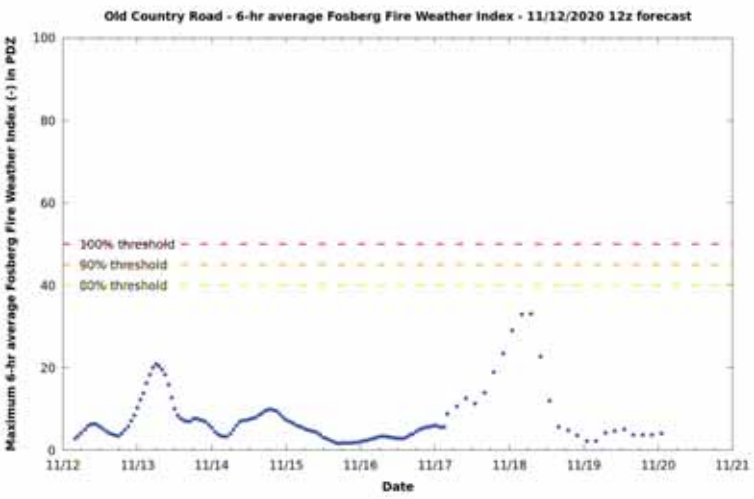


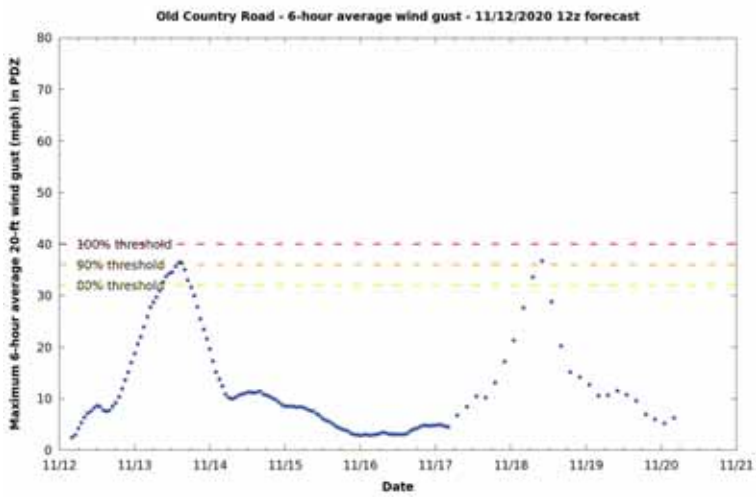
Bky 5200



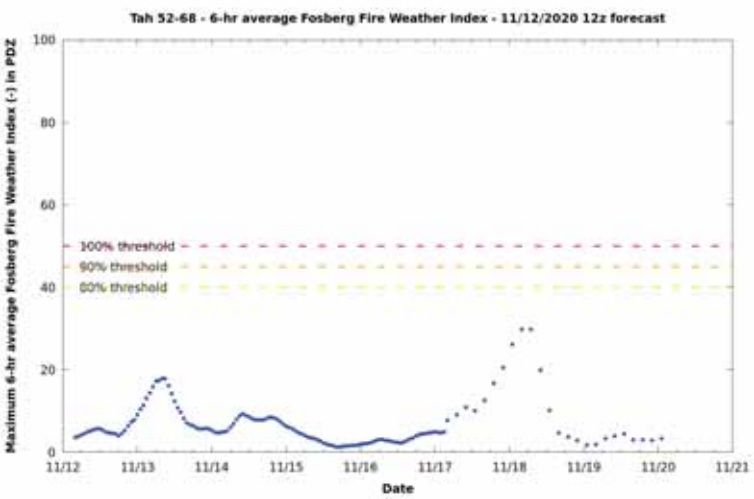


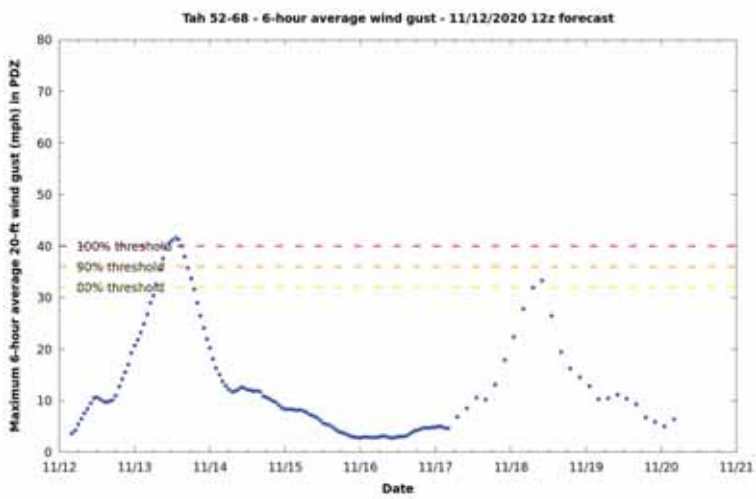
Old Country Road



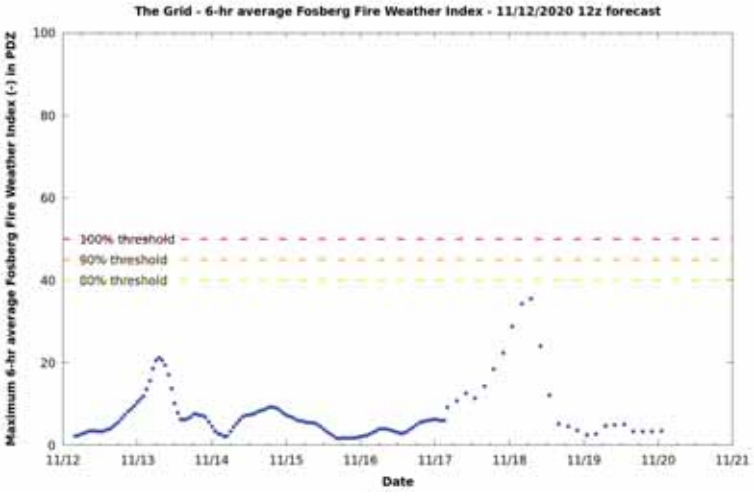


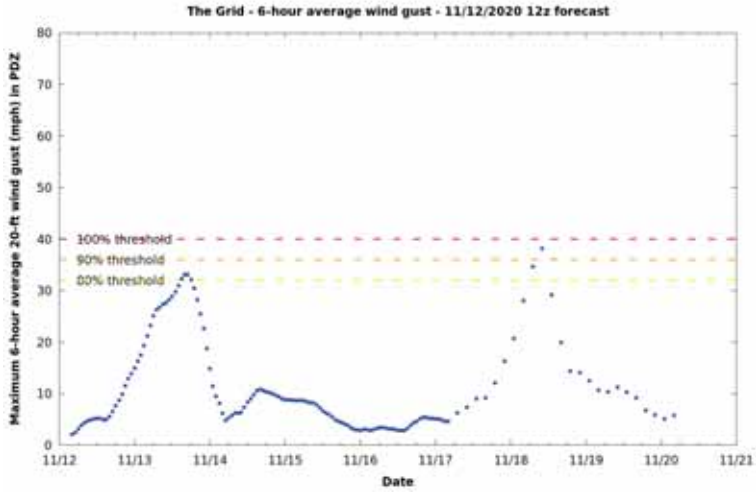
Tah 52-68



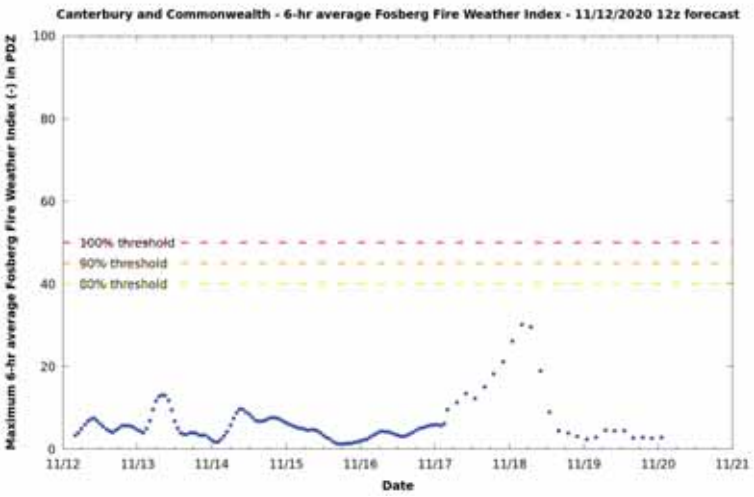


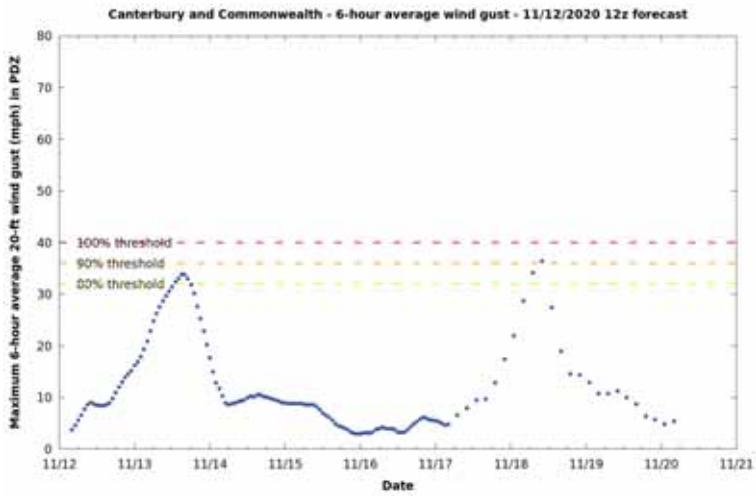
The Grid



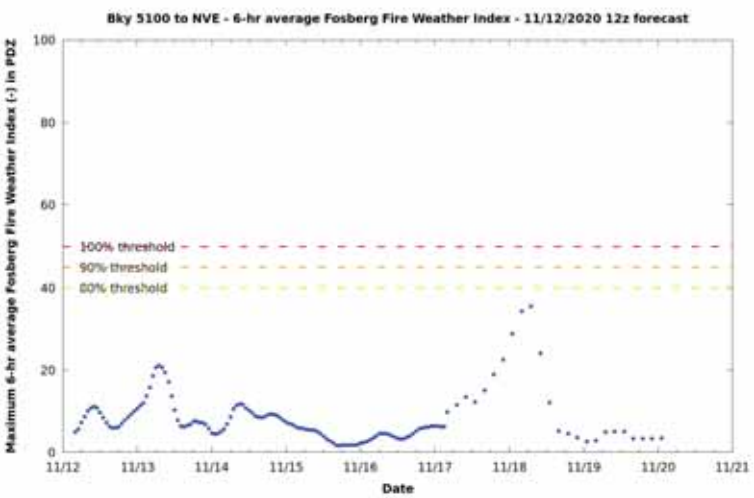


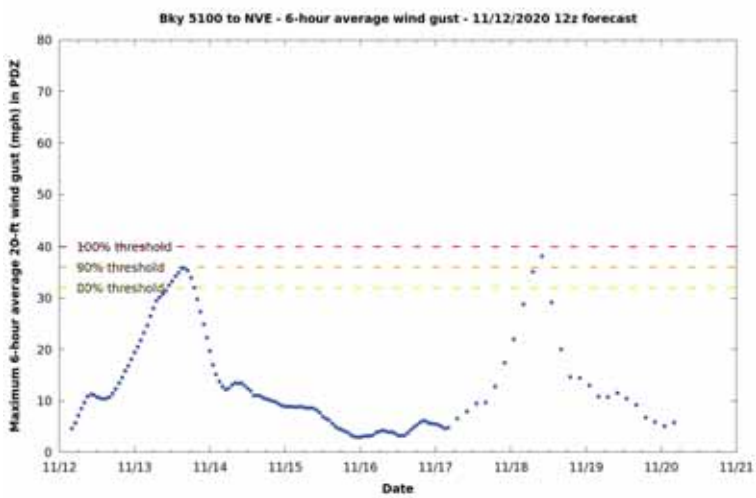
Canterbuy and Commonwealth



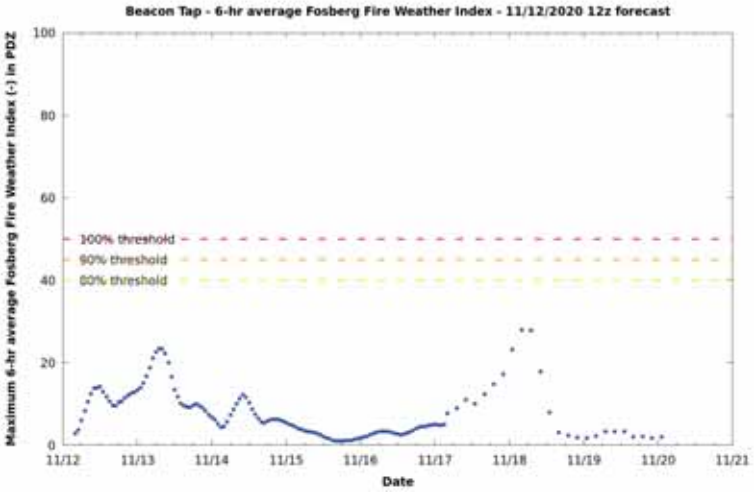


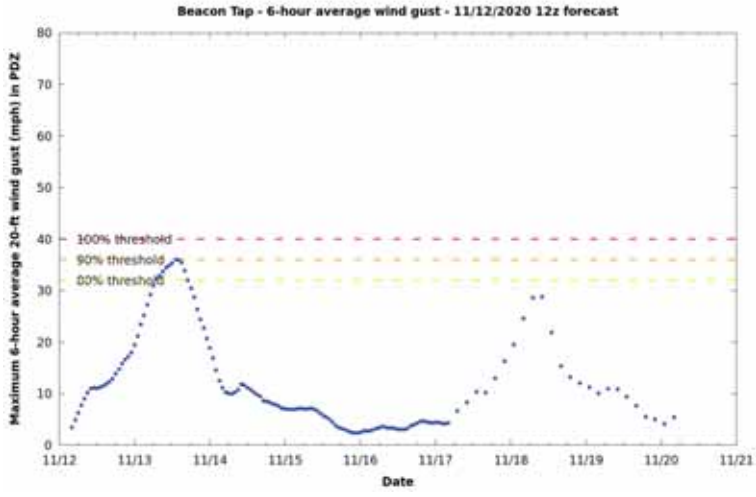
Bky 5100 to NVE



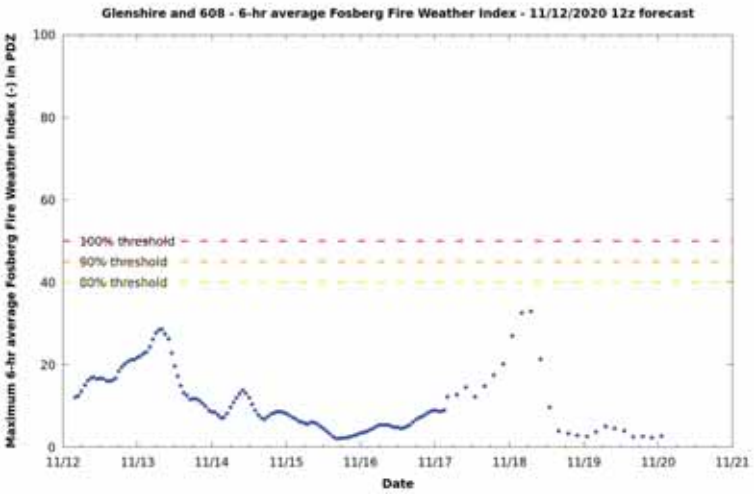


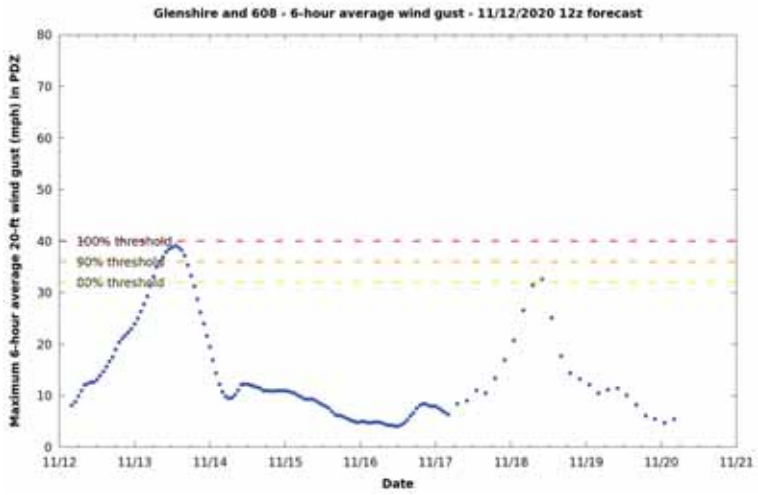
Beacon Tap



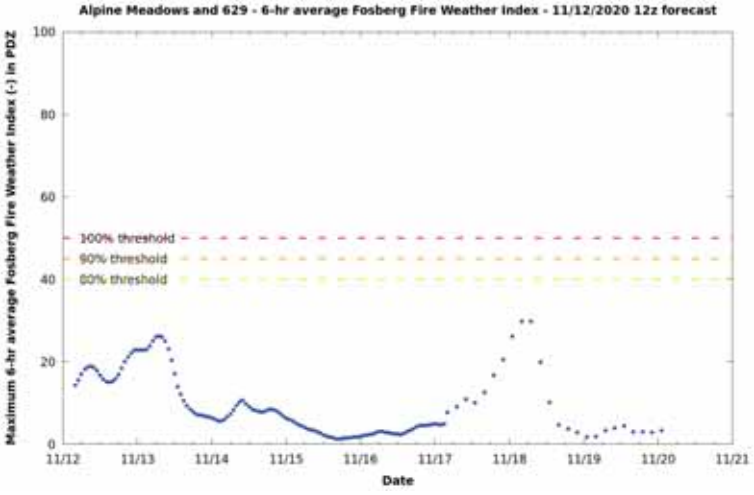


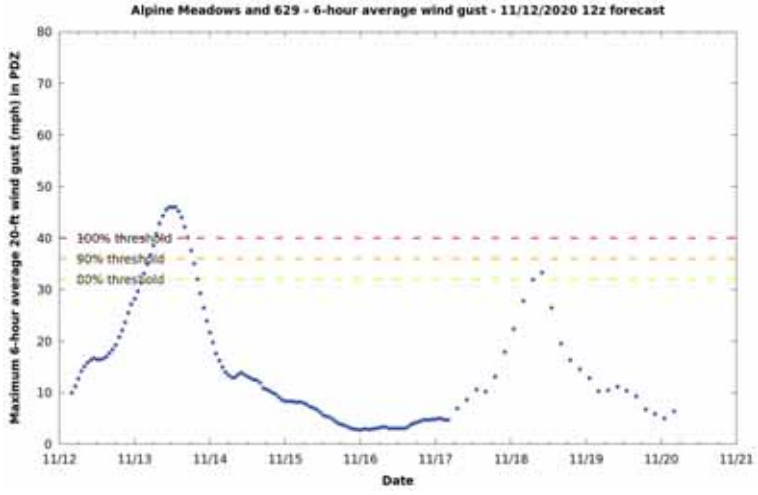
Glenshire and 608



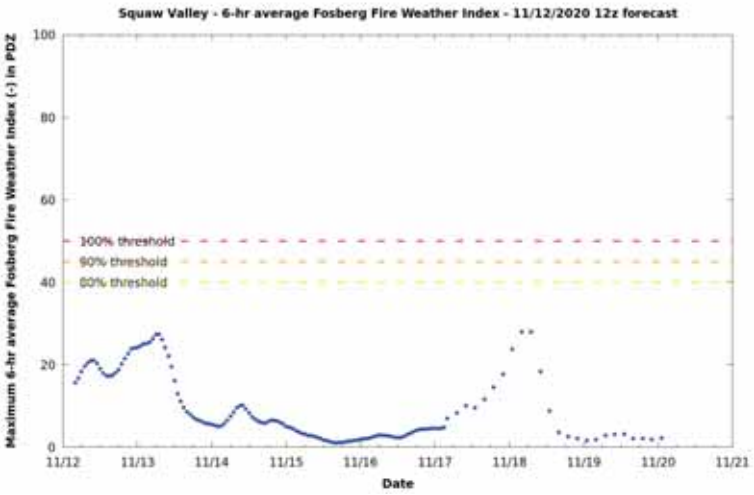


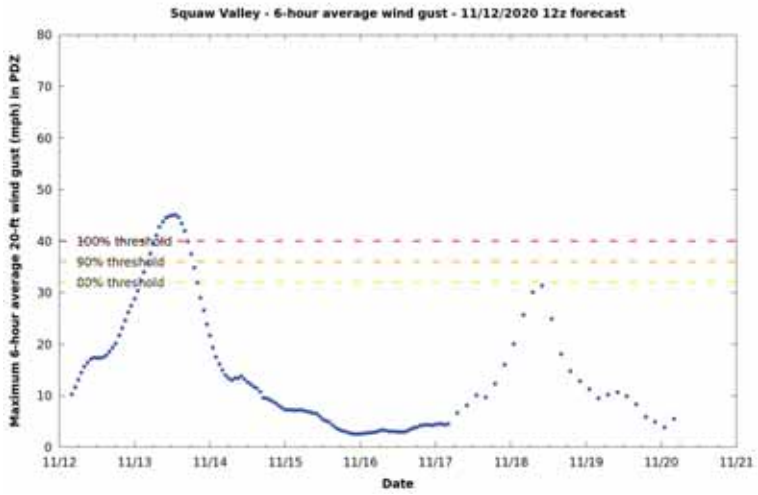
Alpine Meadows and 629



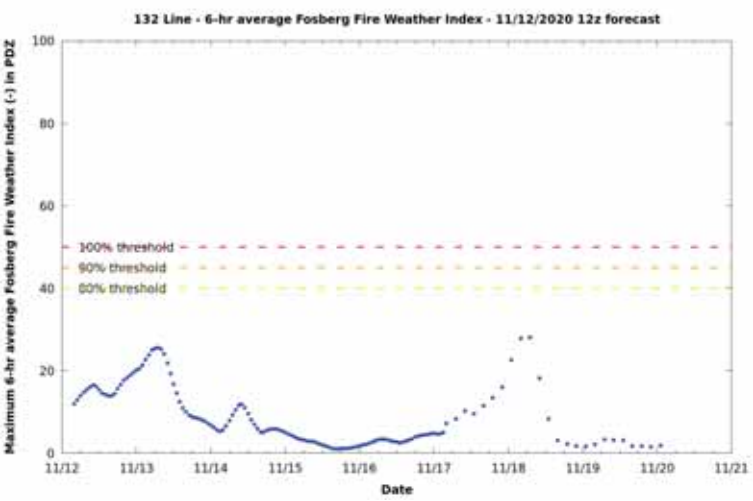


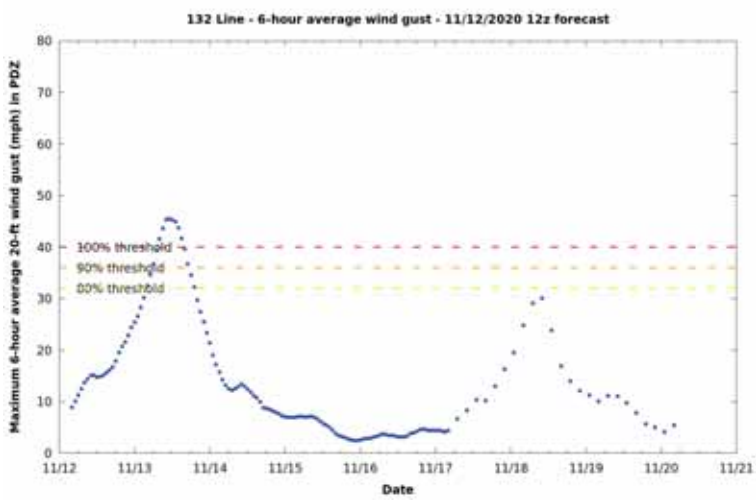
Squaw Valley



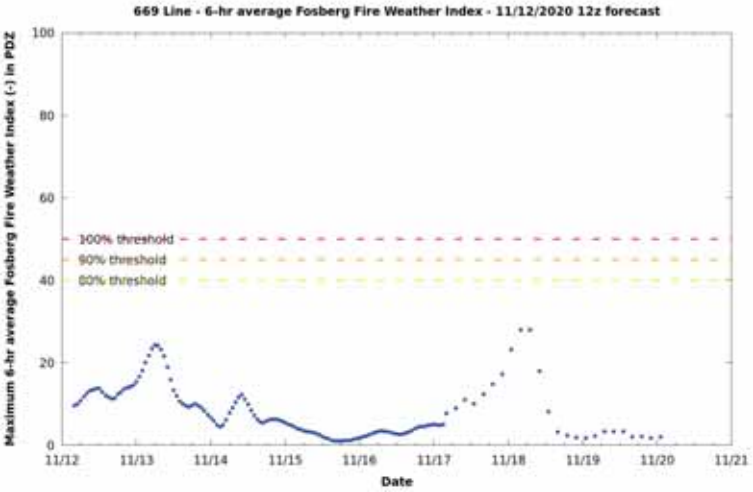


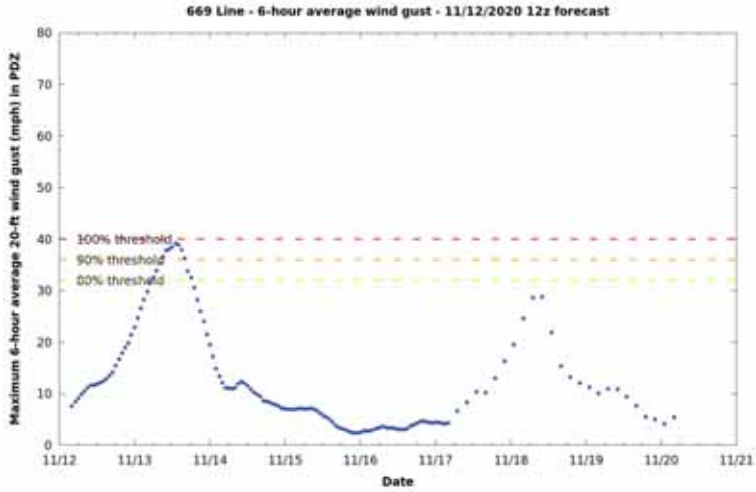
132 Line



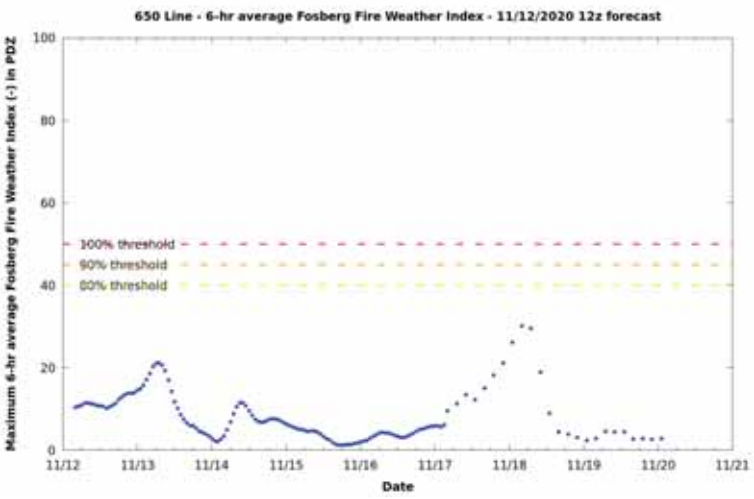


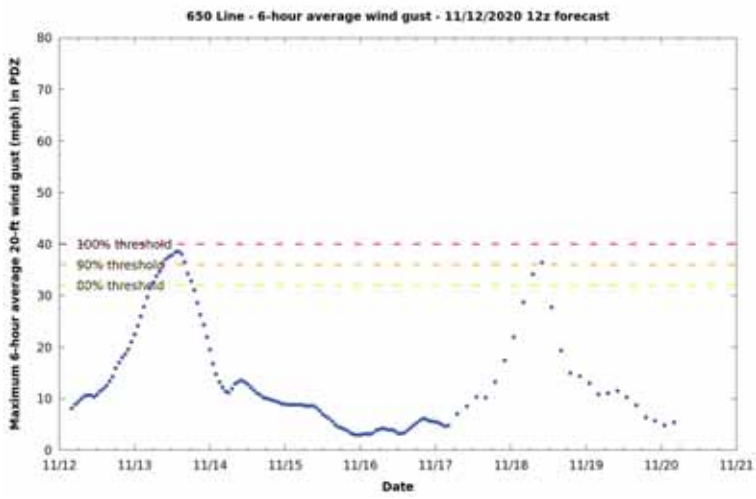
669 Line



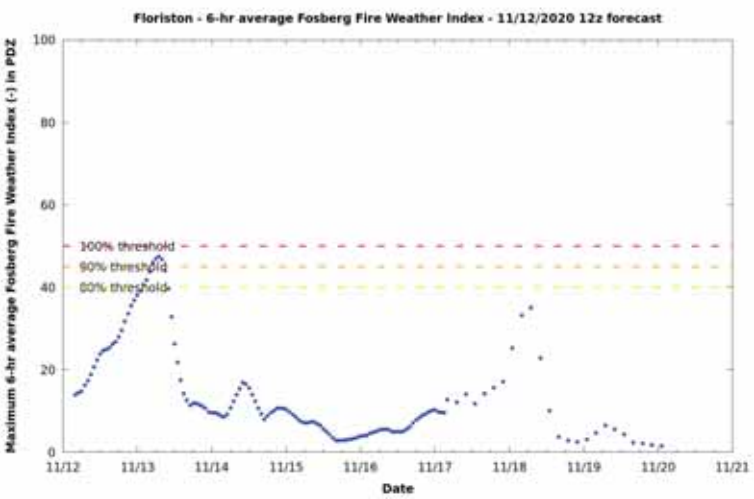


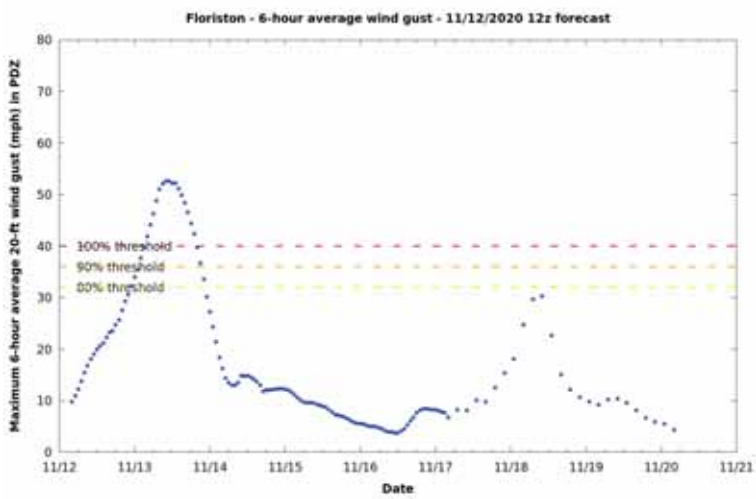
650 Line



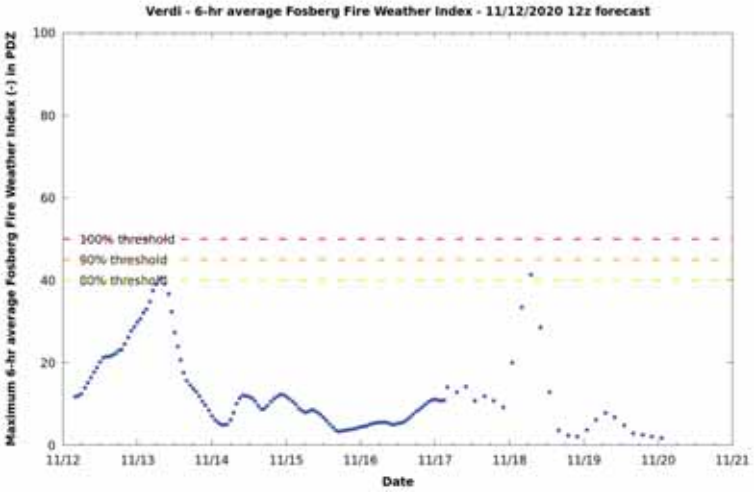


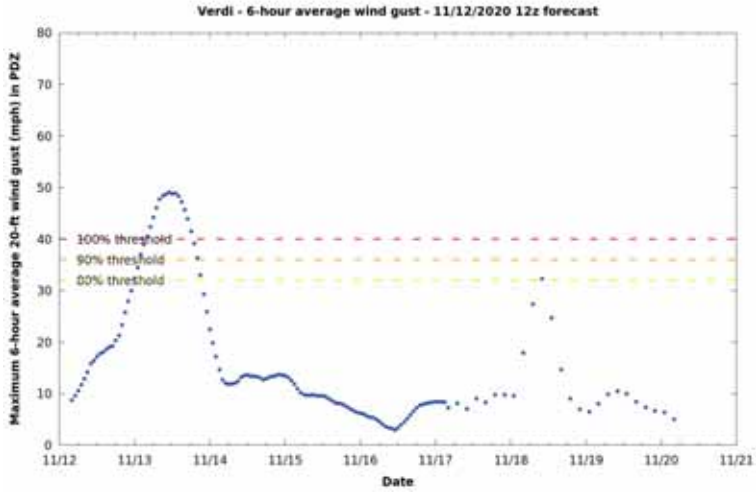
Floriston



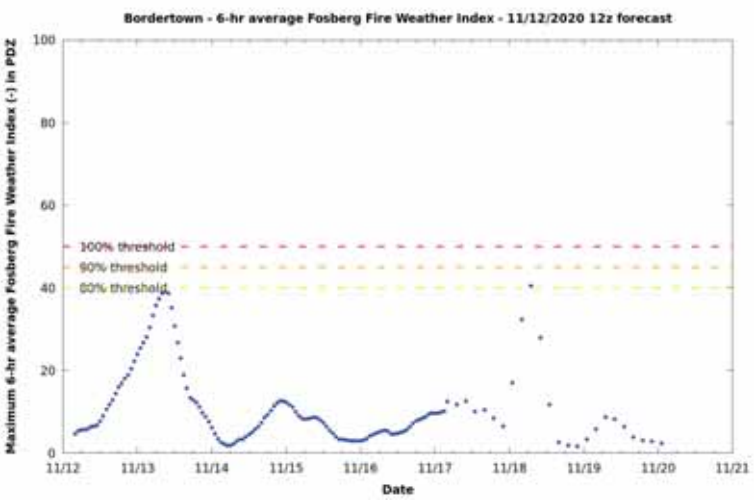


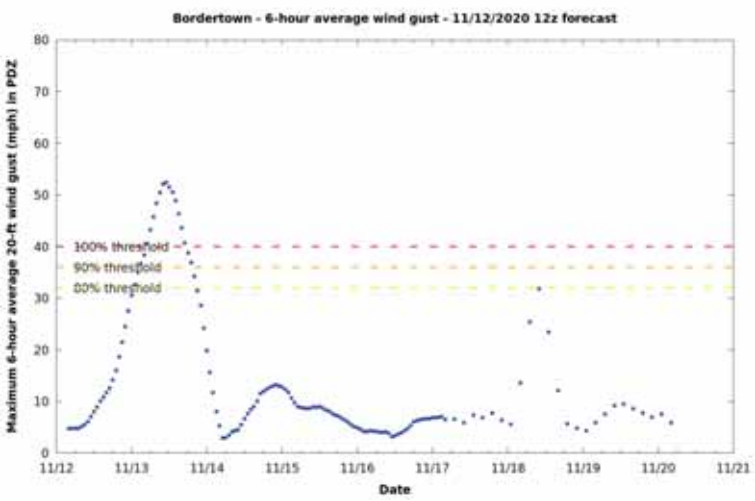
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/12/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21


Bordertown - 6-hour average wind gust - 11/12/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21

Liberty Utilities Fire Potential Index Forecast for 11/13/20 - 11/19/20

Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	moderate	moderate	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	moderate	low	low	low	low	low

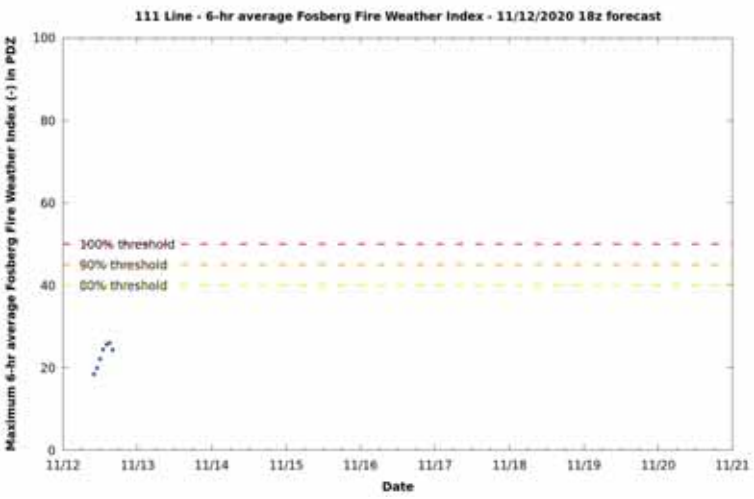
Liberty Utilities Energy Release Component Forecast for 11/13/20 - 11/19/20

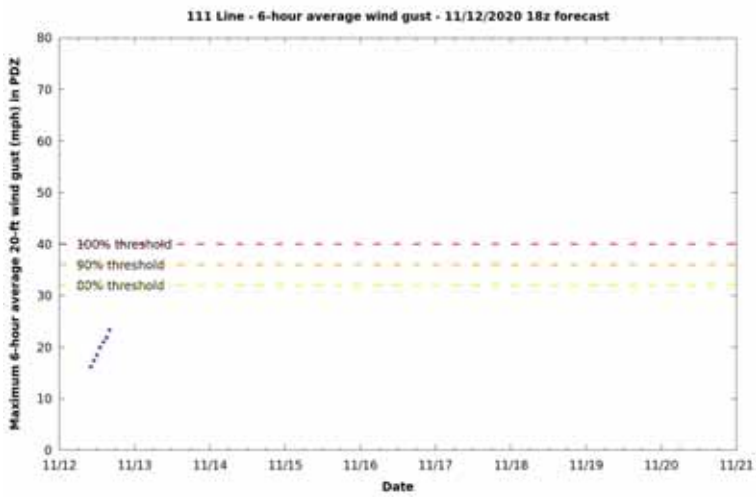
Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	66.0	60.0	55.0	51.0	52.0	56.0	54.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	62.0	48.0	43.0	38.0	36.0	39.0	34.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	58.0	58.0	54.0	50.0	54.0	56.0	56.0

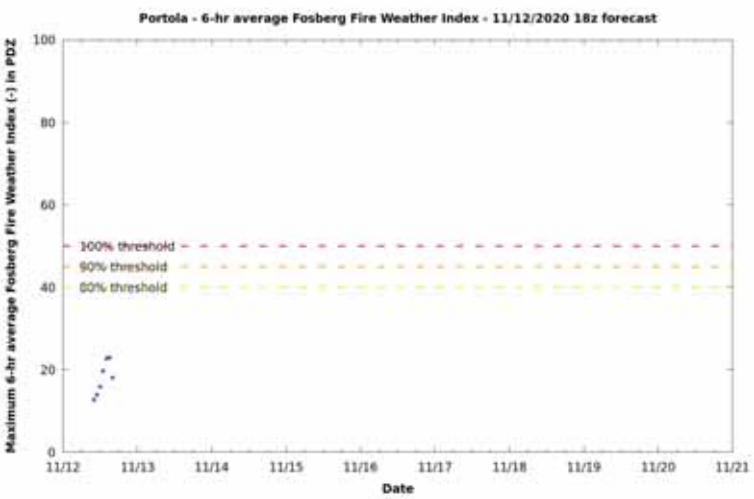
Liberty Utilities Fire Weather Summary Plots - 11/12/2020 18z forecast

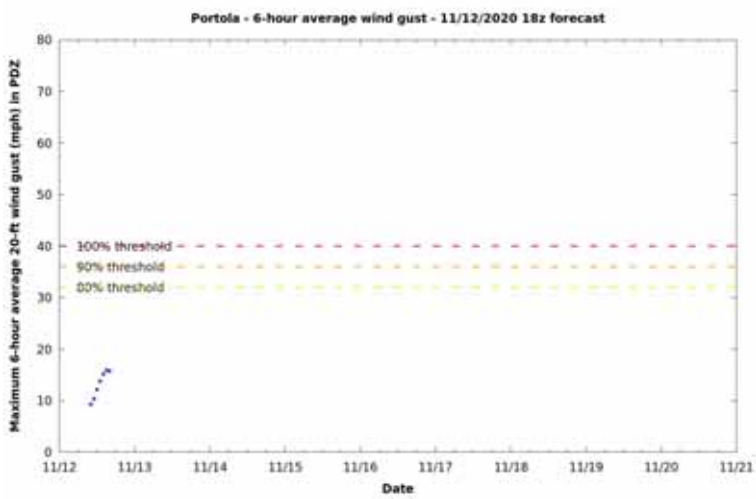
111 Line



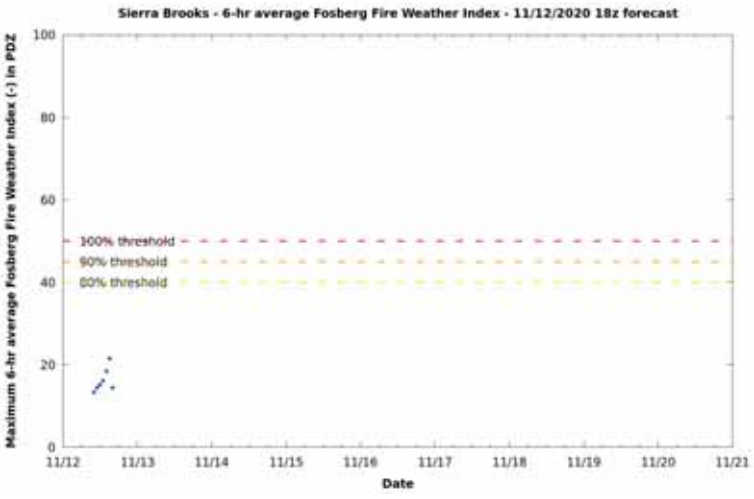


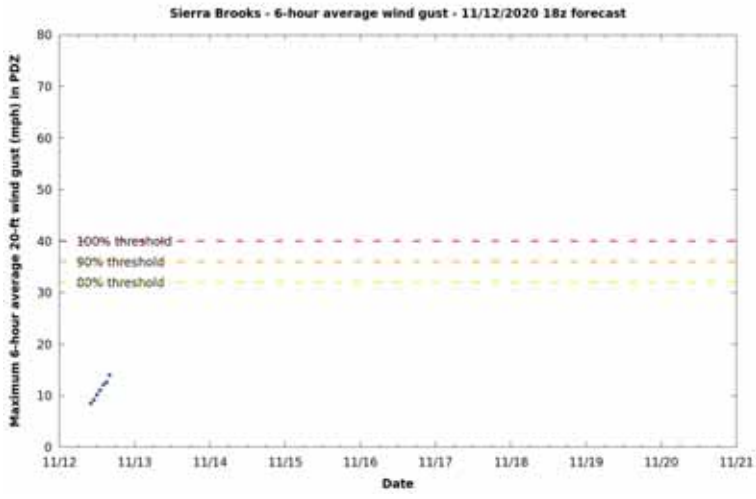
Portola



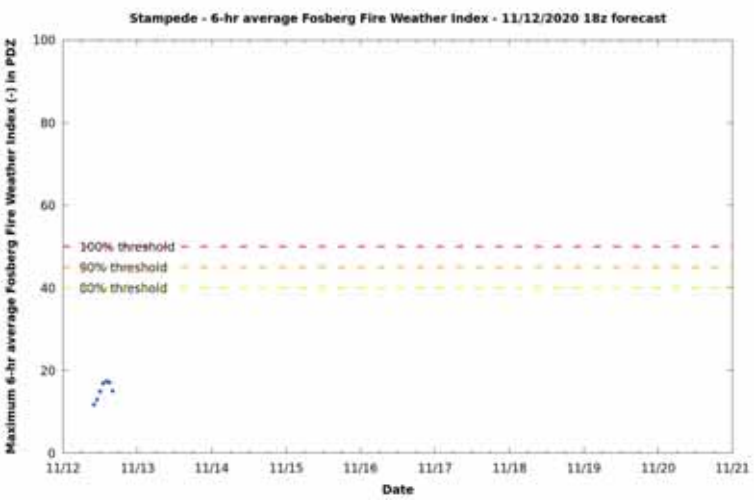


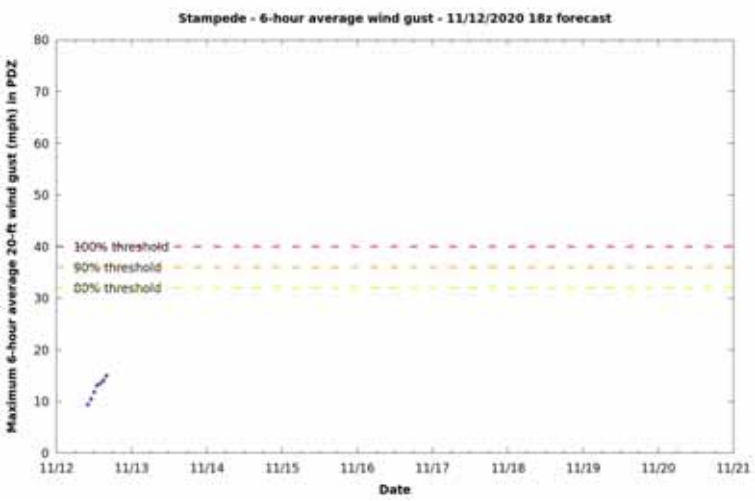
Sierra Brooks



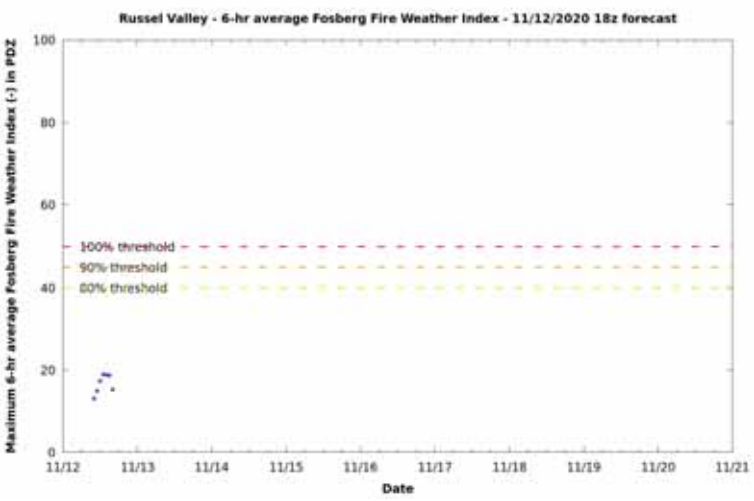


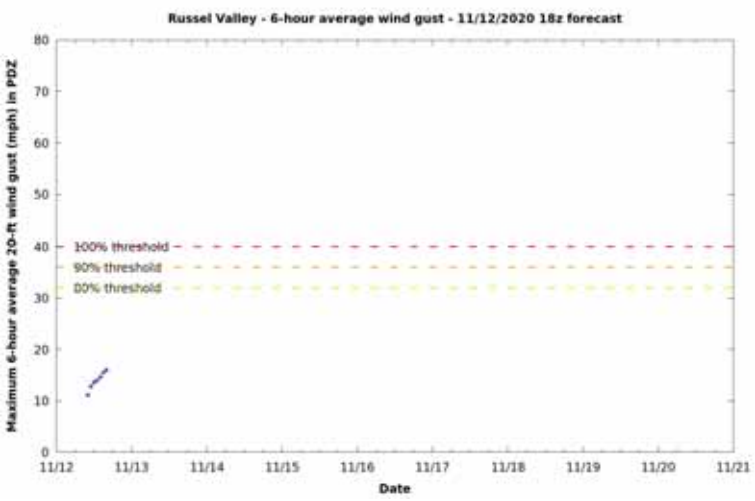
Stampede



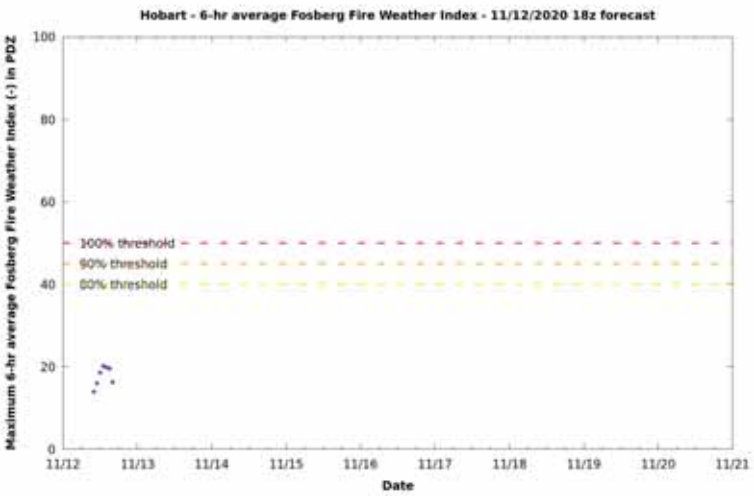


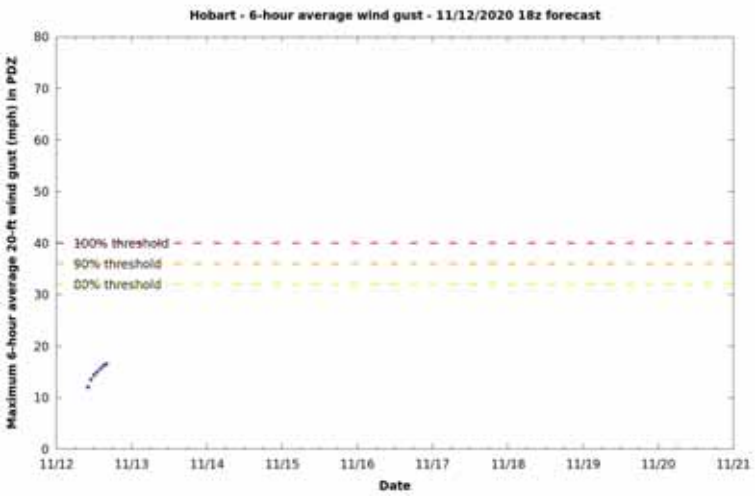
Russell Valley



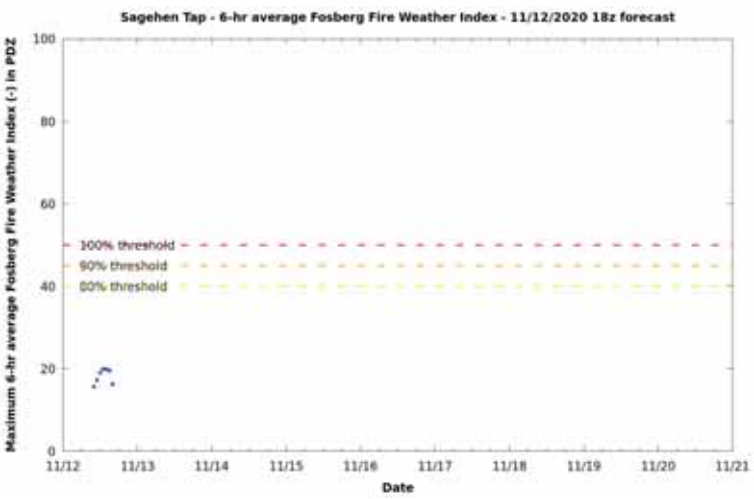


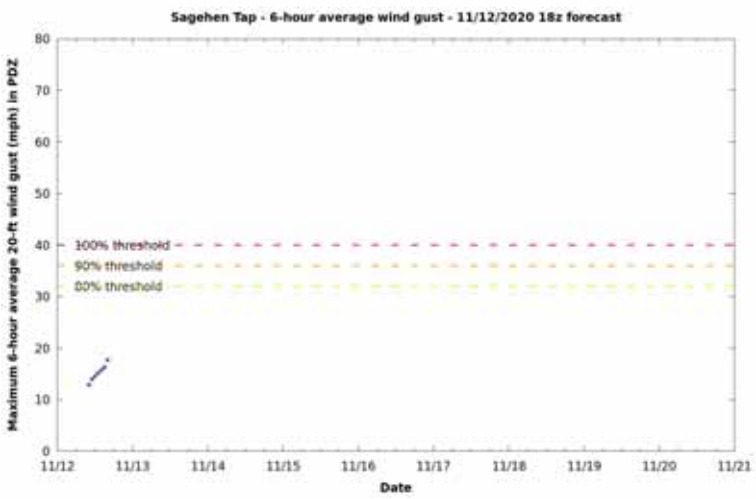
Hobart



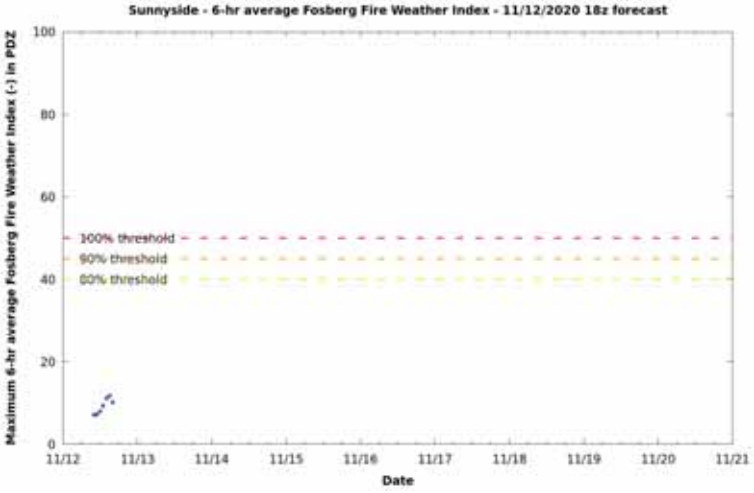


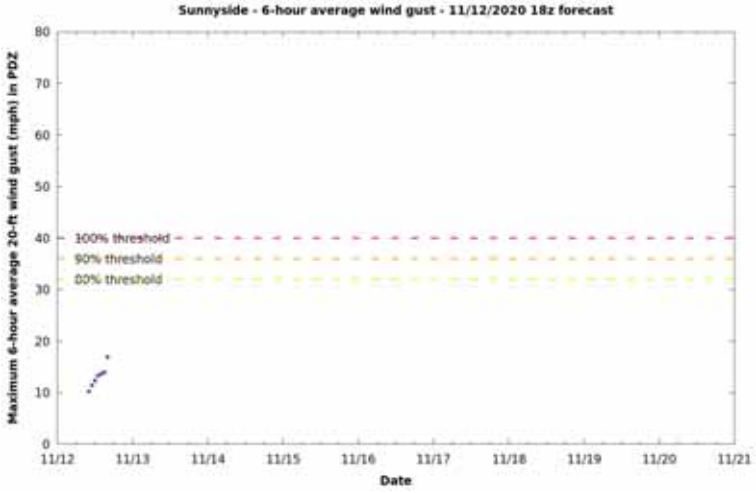
Sagehen tap



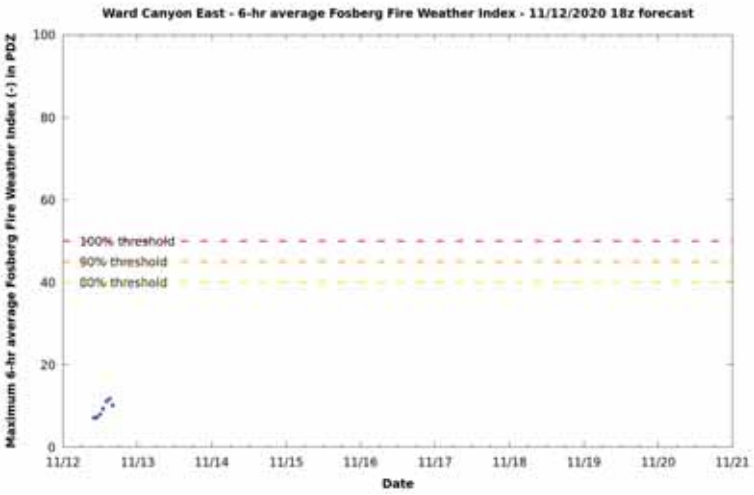


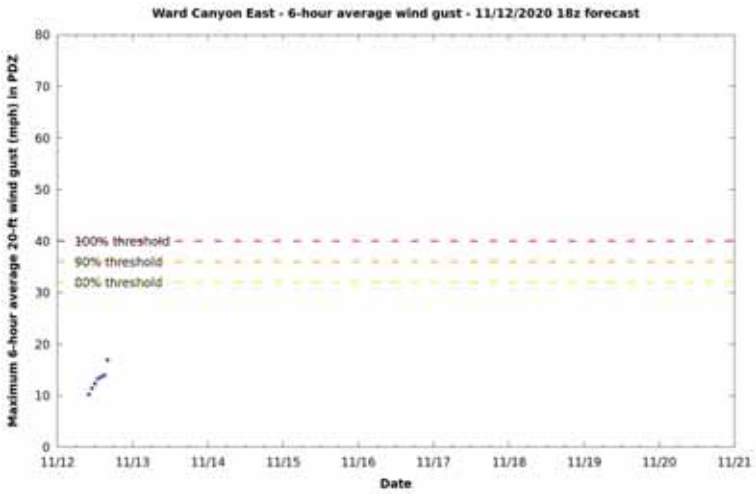
Sunnyside



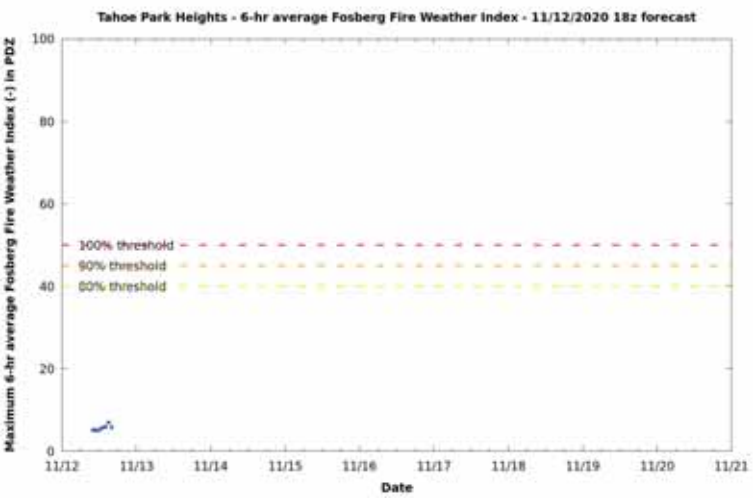


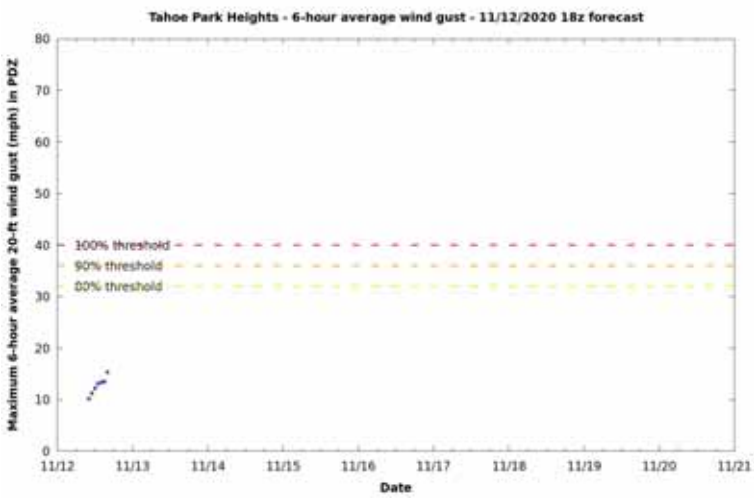
Ward Canyon East



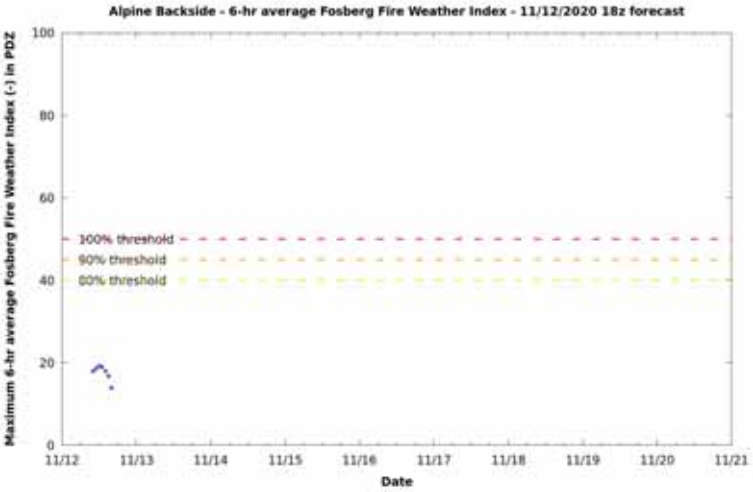


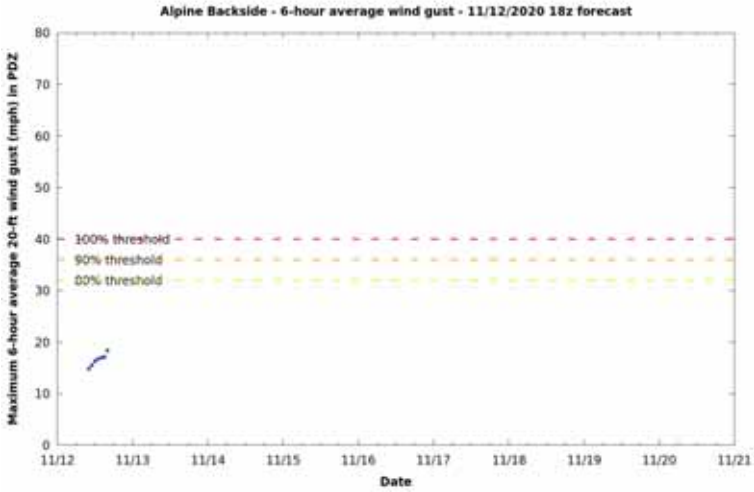
Tahoe Park Heights



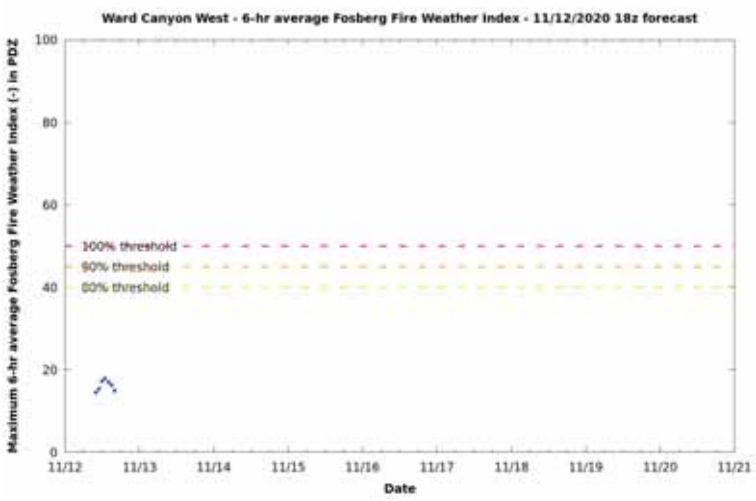


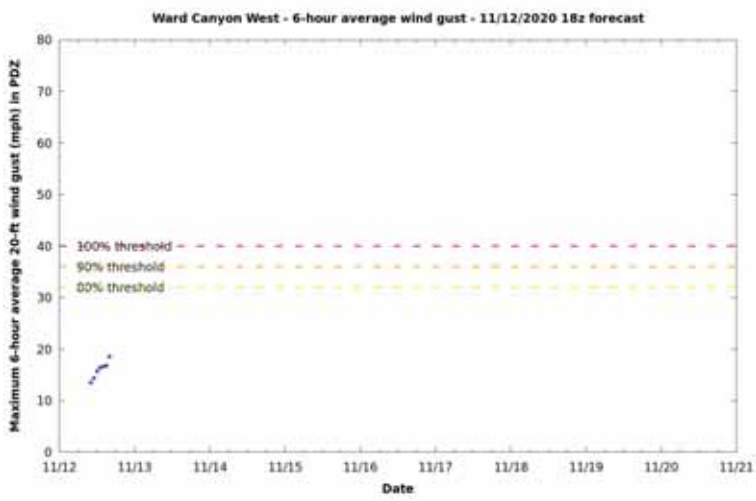
Alpine Backside



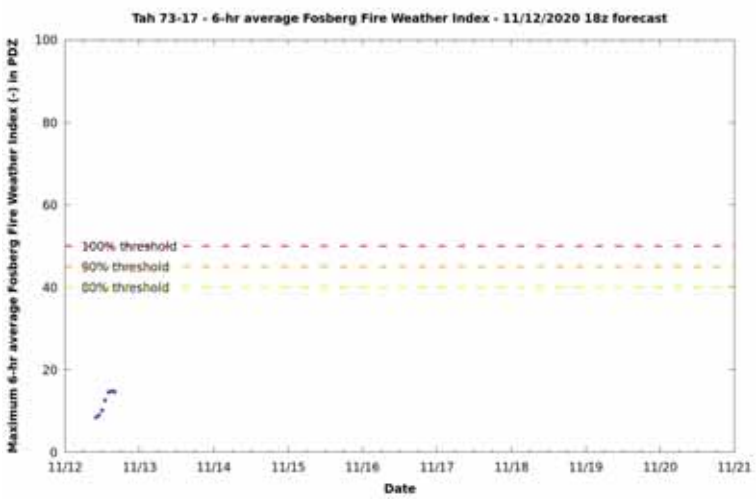


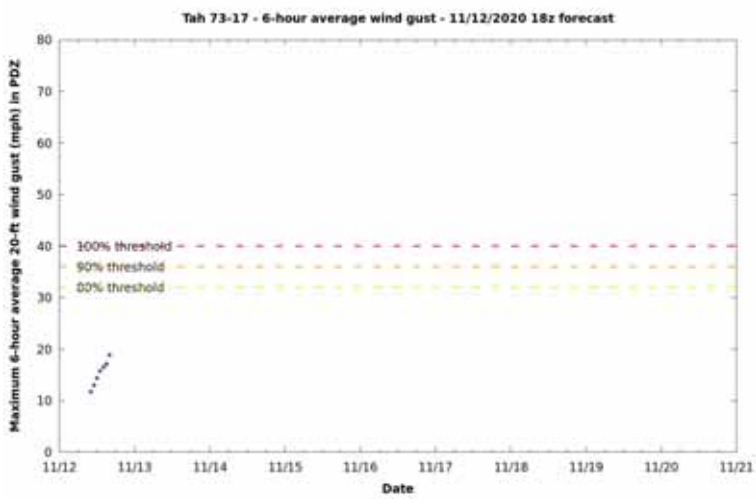
Ward Canyon West



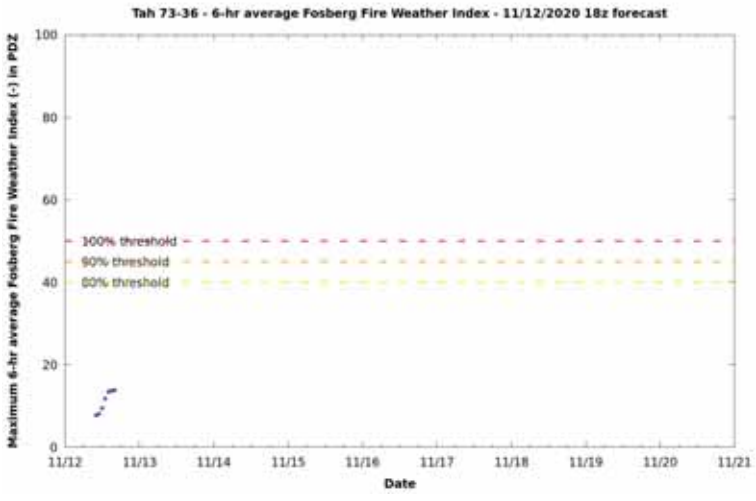


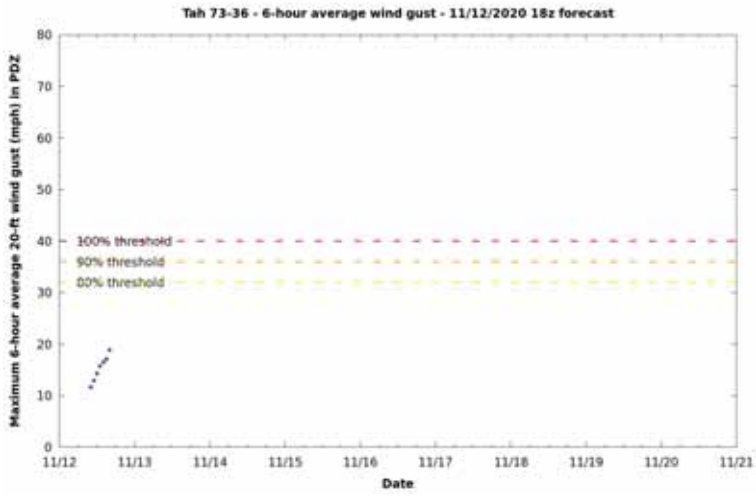
Tah 73-17



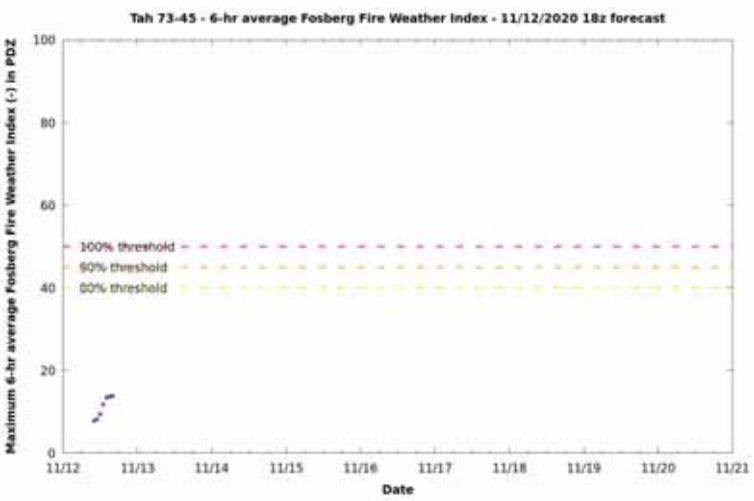


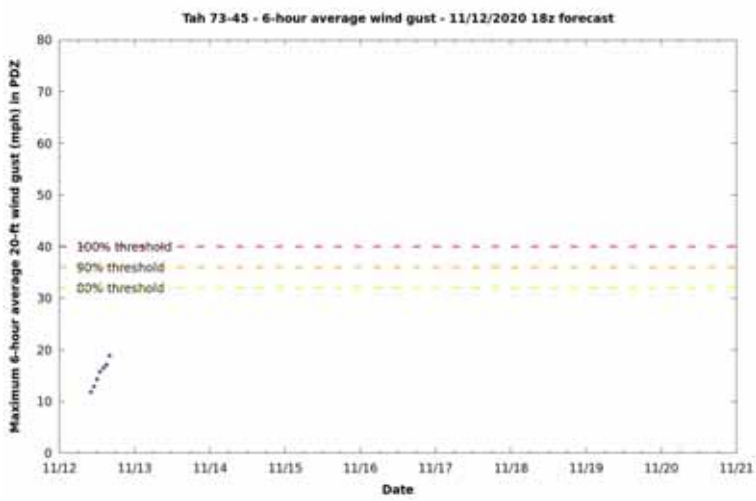
Tah 73-36



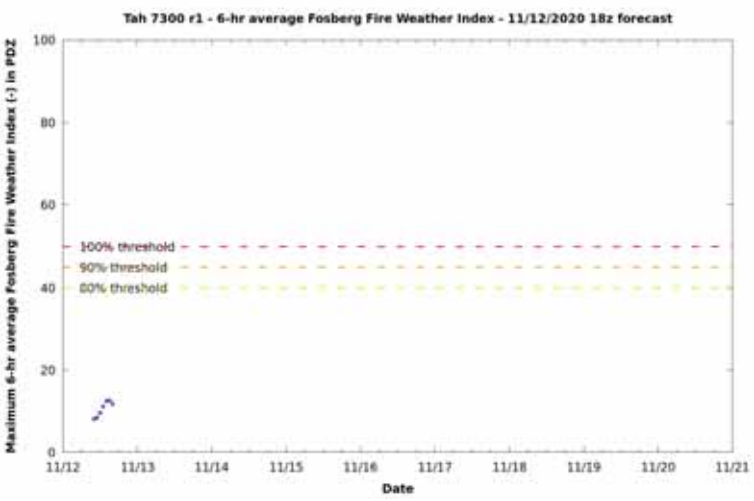


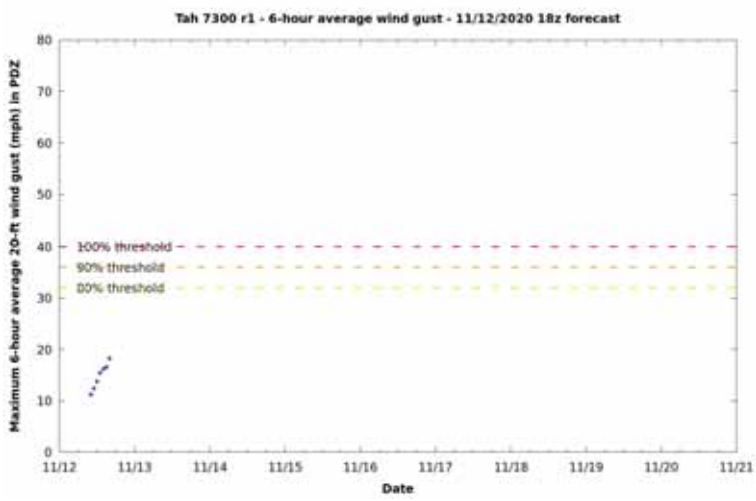
Tah 73-45



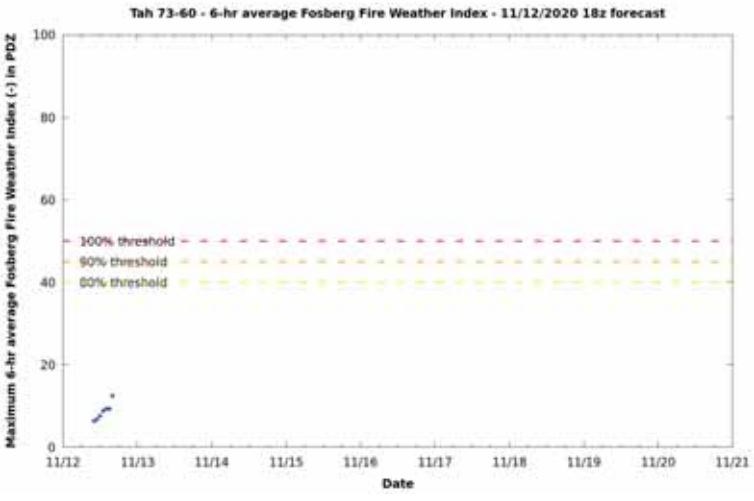


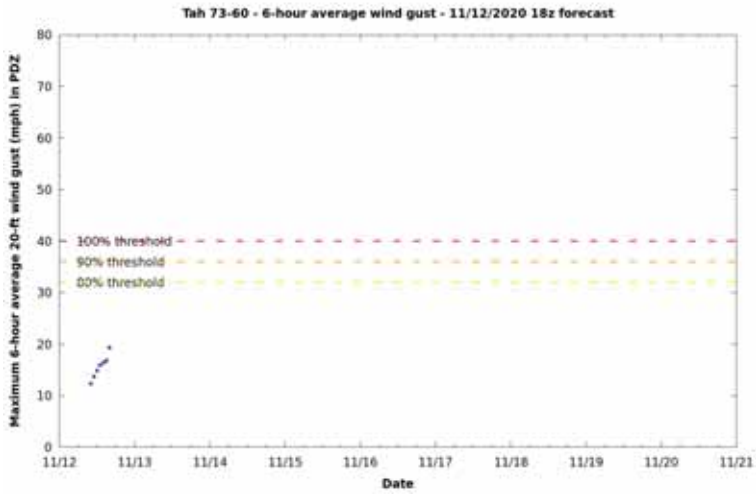
Tah 7300 r1



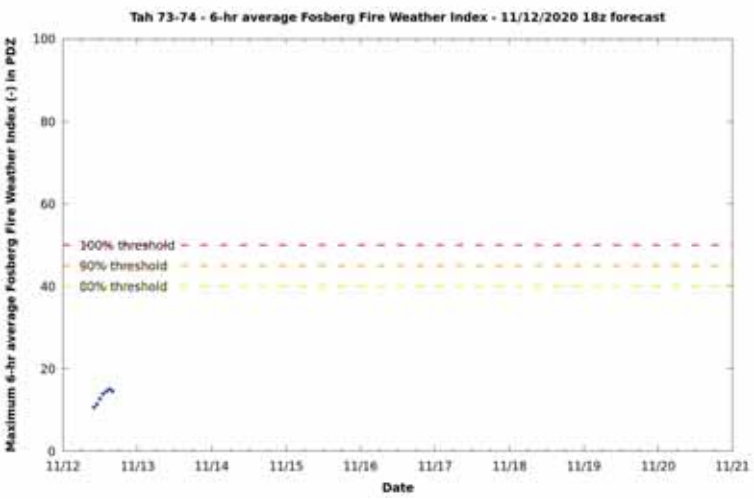


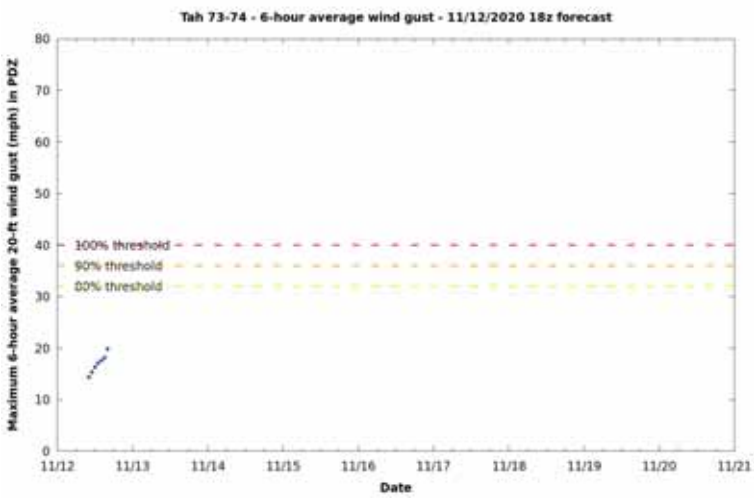
Tah 73-60



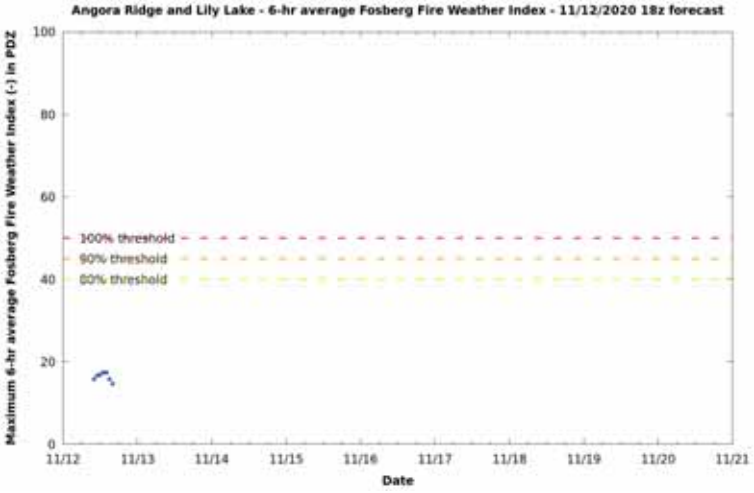


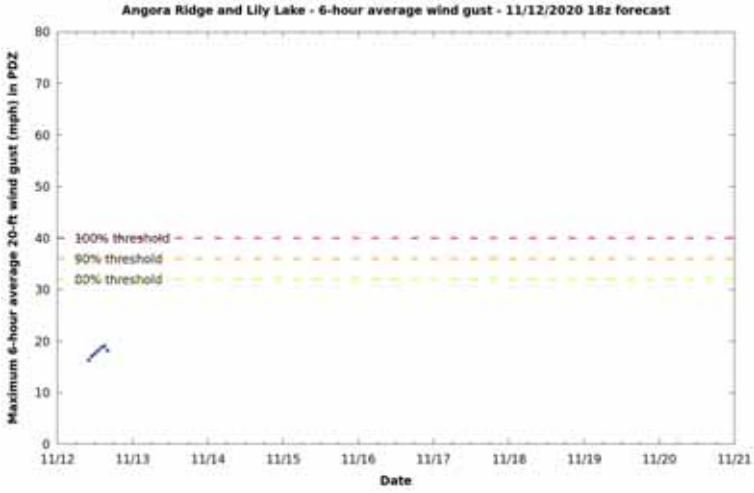
Tah 73-74



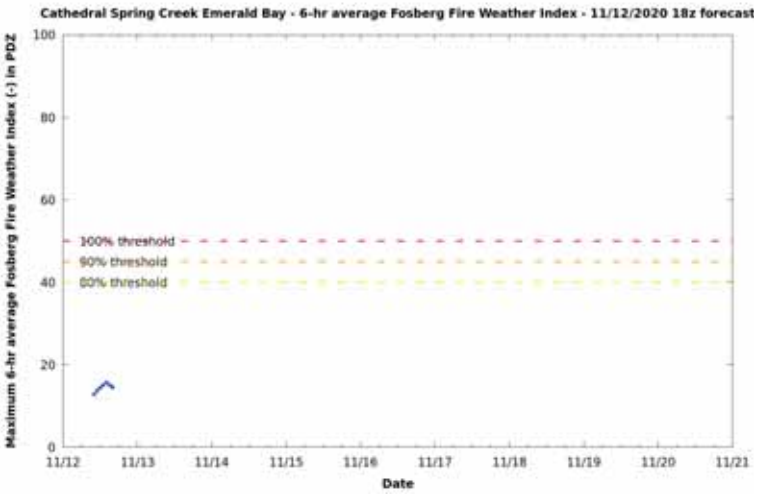


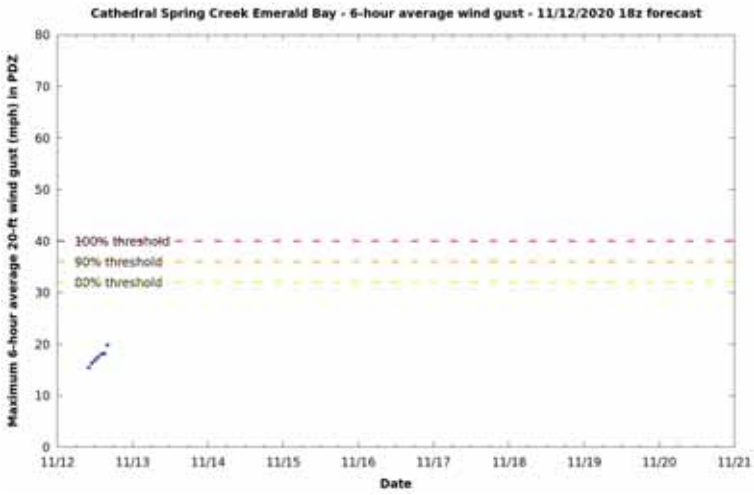
Angora Ridge and Lily Lake



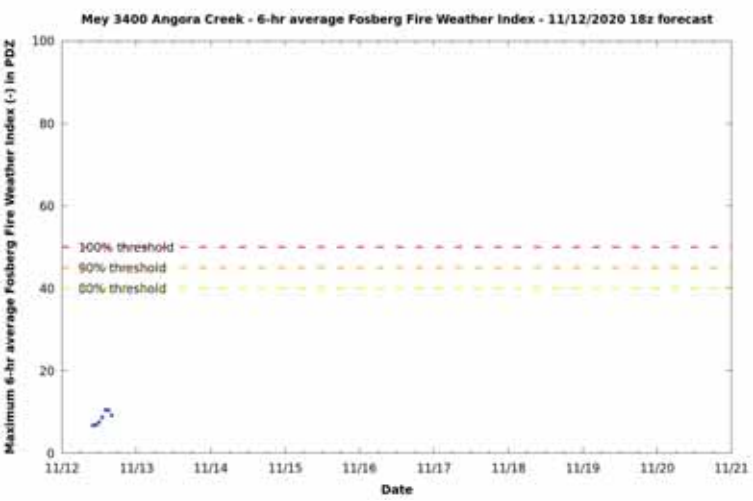


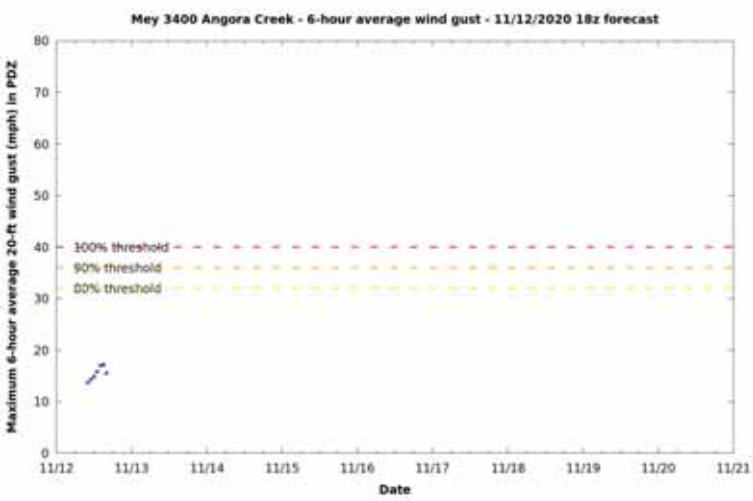
Cathedral Spring Creek Emerald Bay



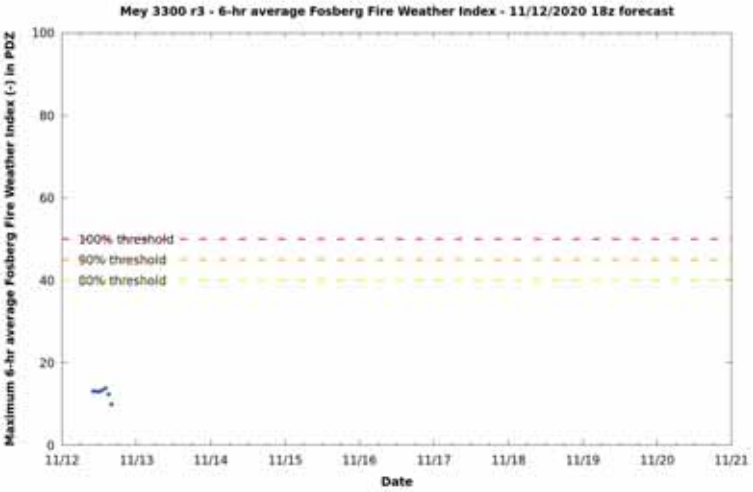


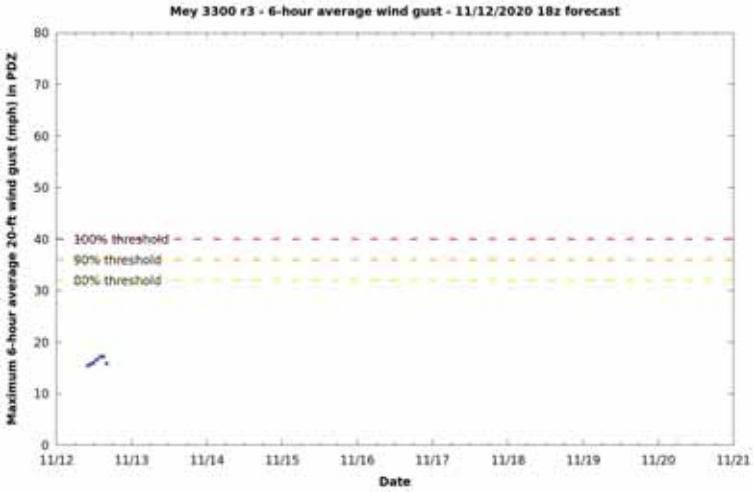
Mey 3400 Angora Creek



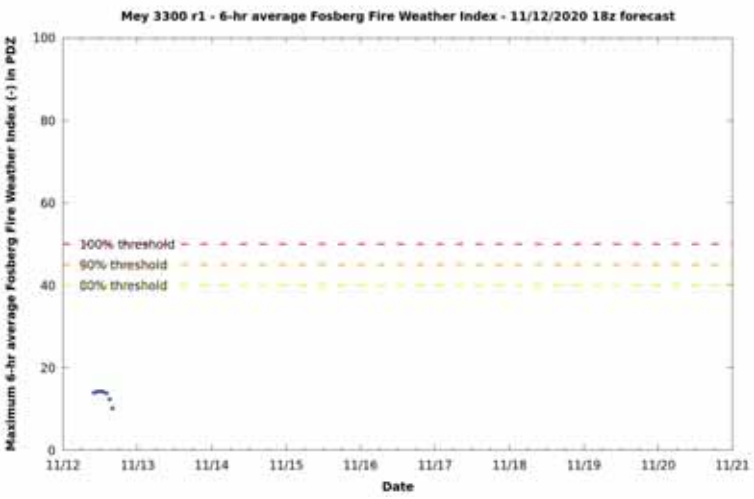


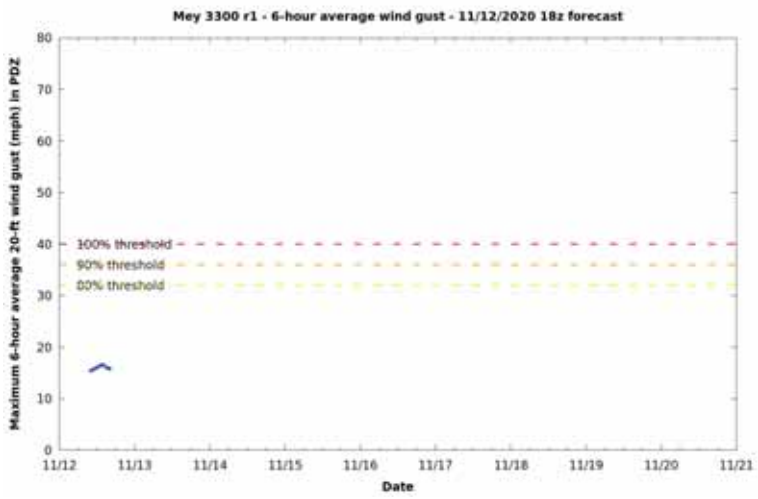
Mey 3300 r3



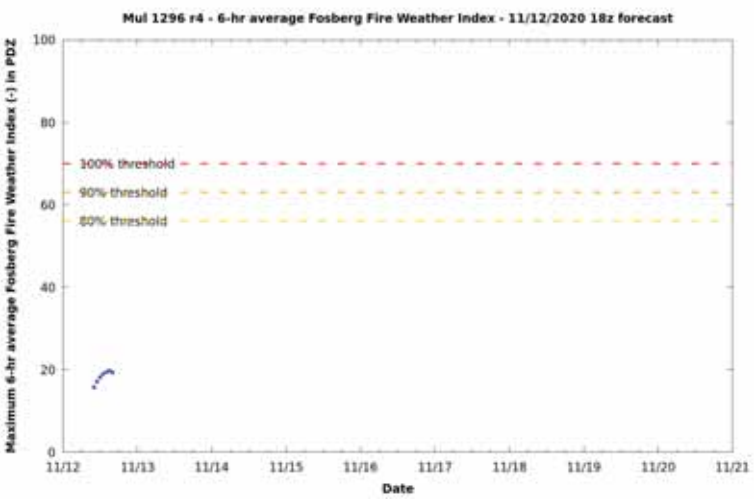


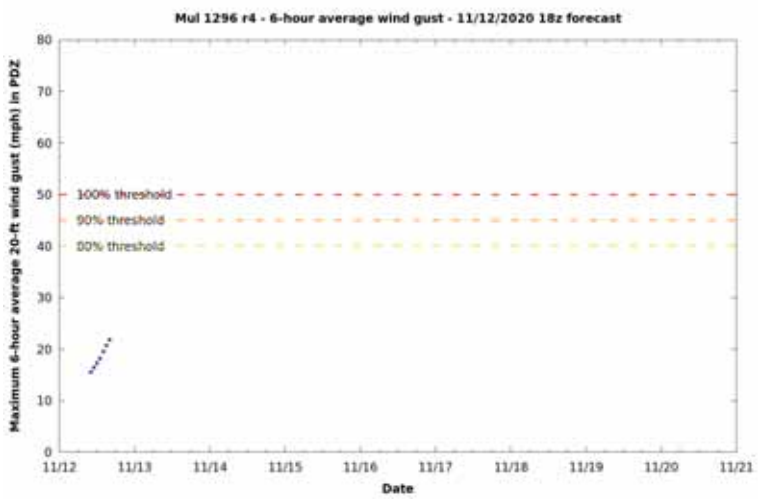
Mey 3300 r1



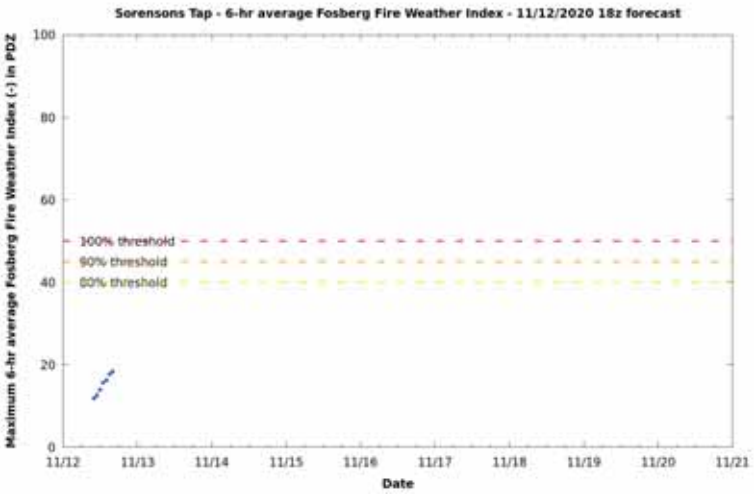


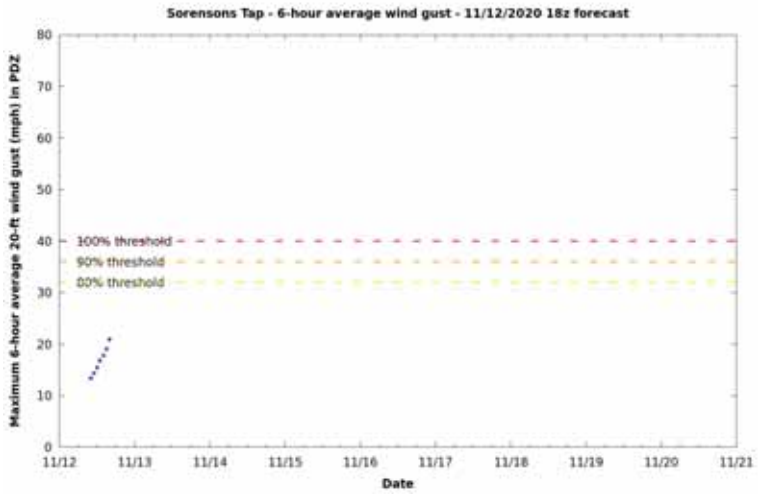
Mul 1296 r4



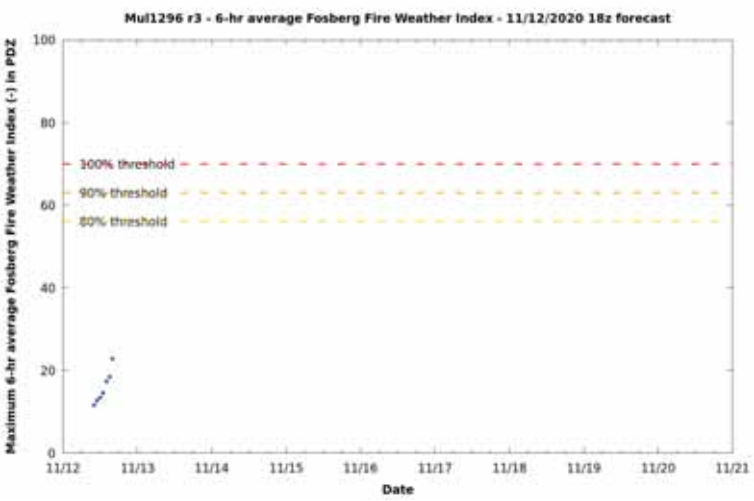


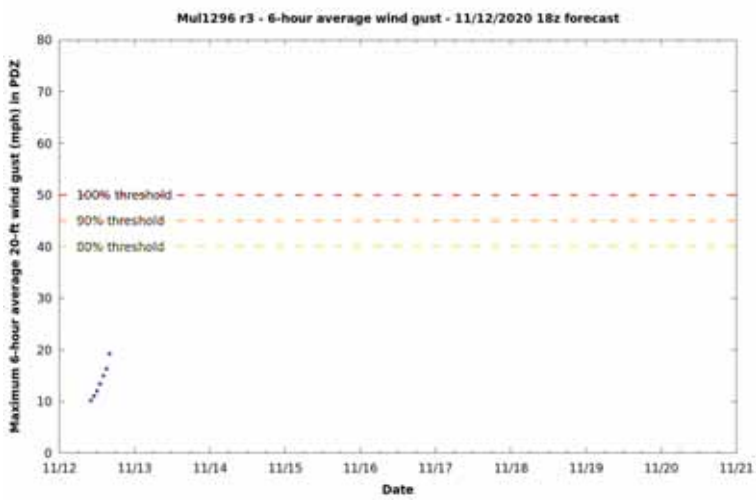
Sorensons Tap



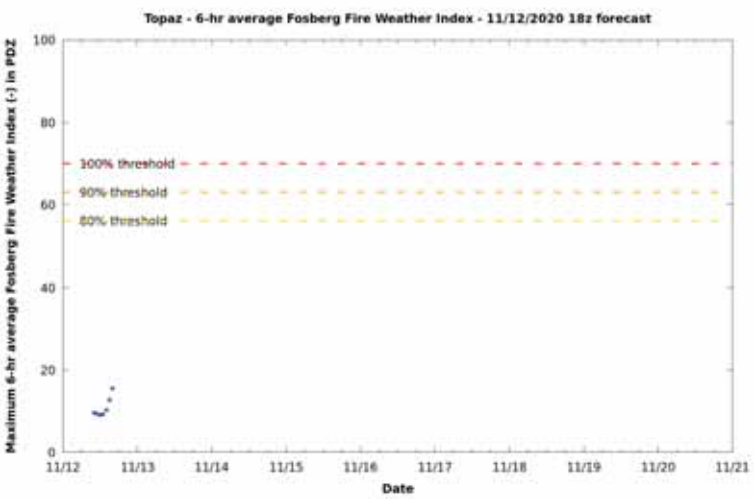


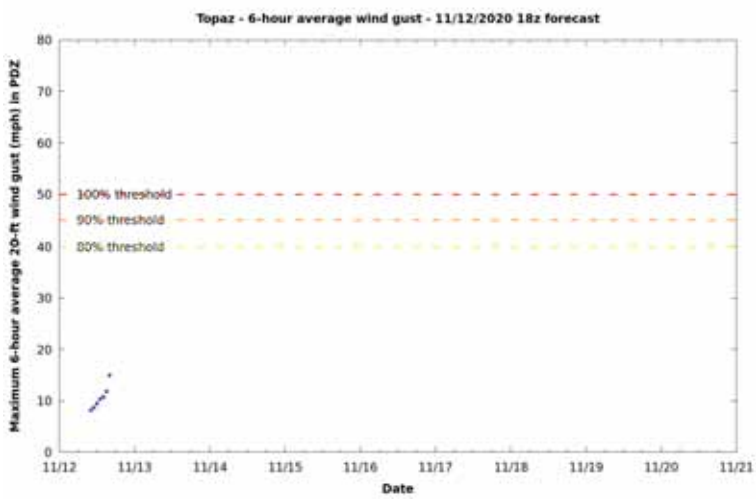
Mul 1296 r3



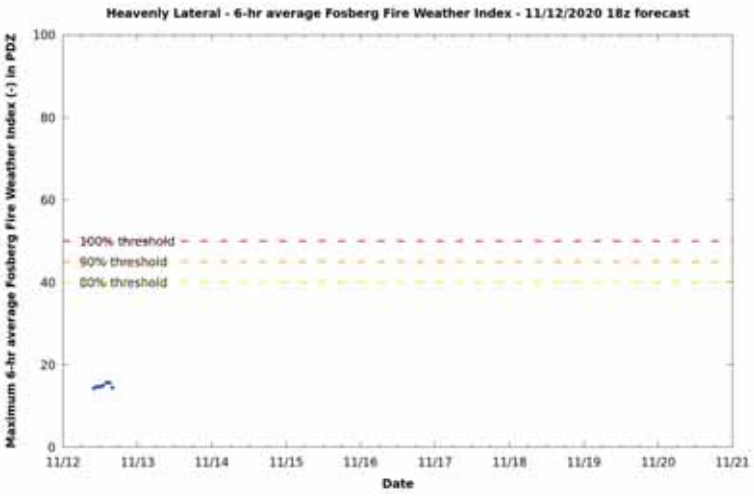


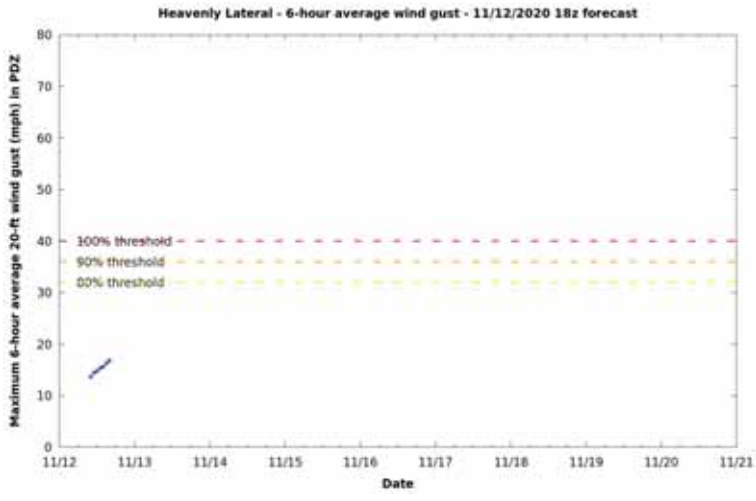
Topaz



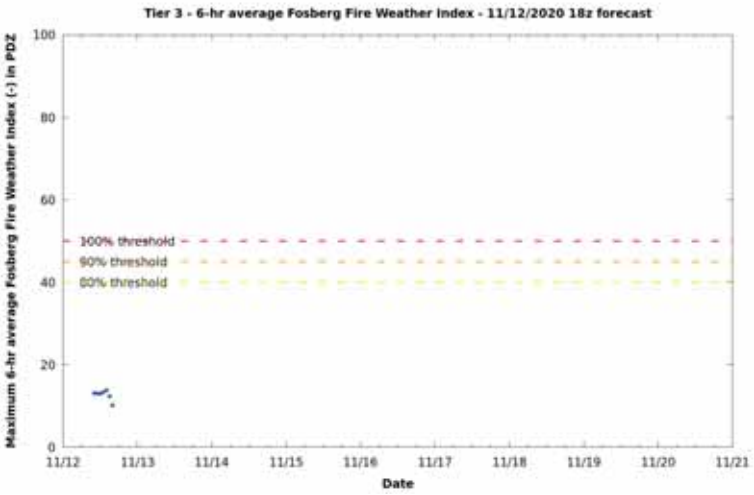


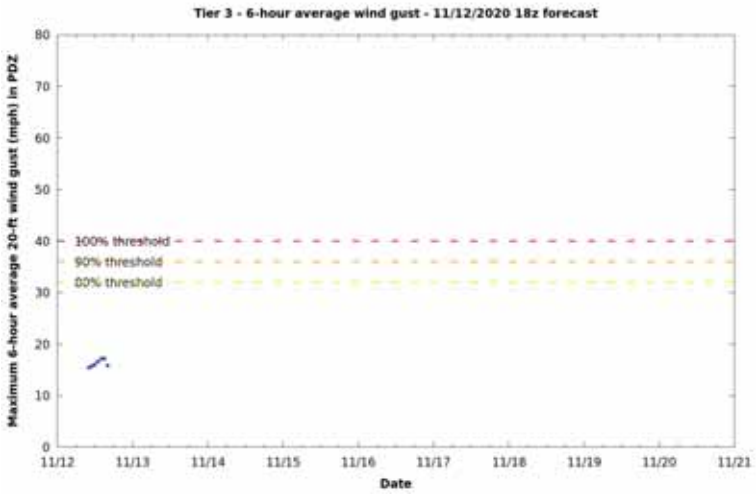
Heavenly Lateral



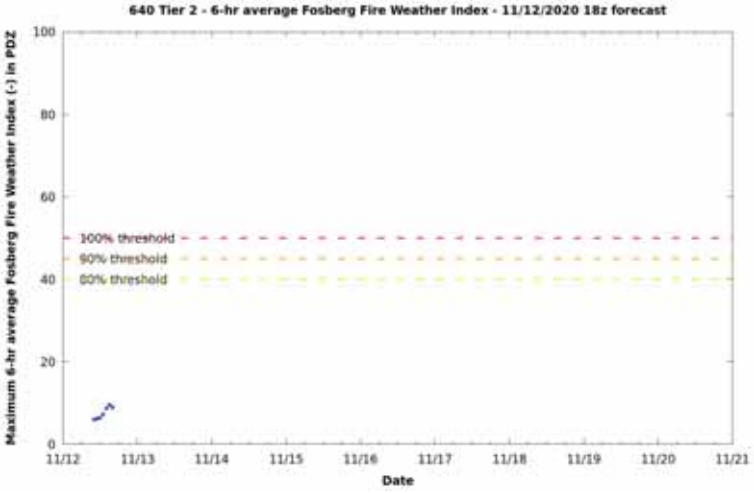


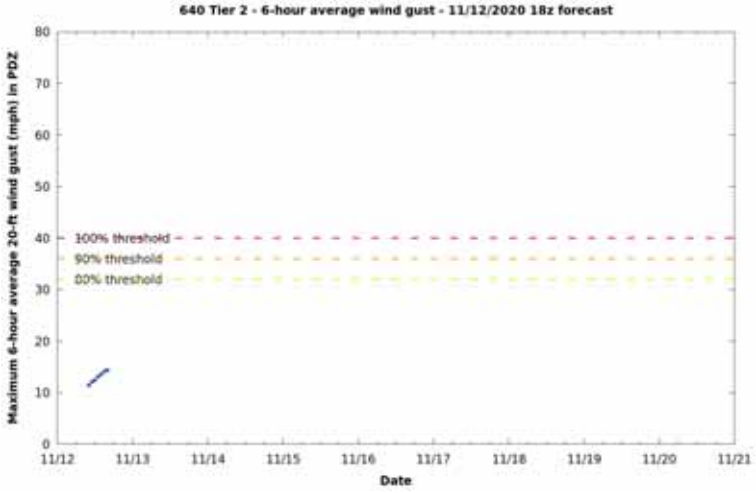
Tier 3



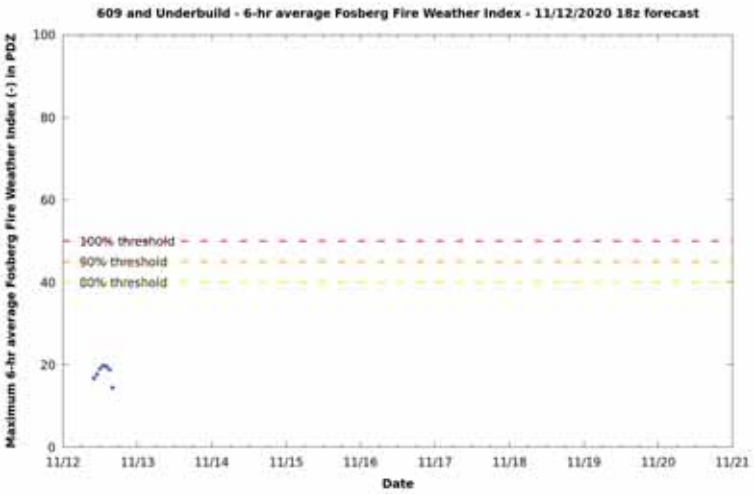


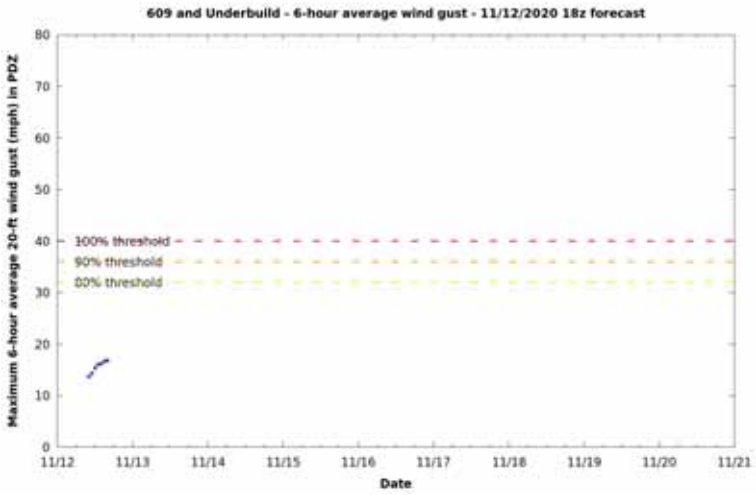
640 Tier 2



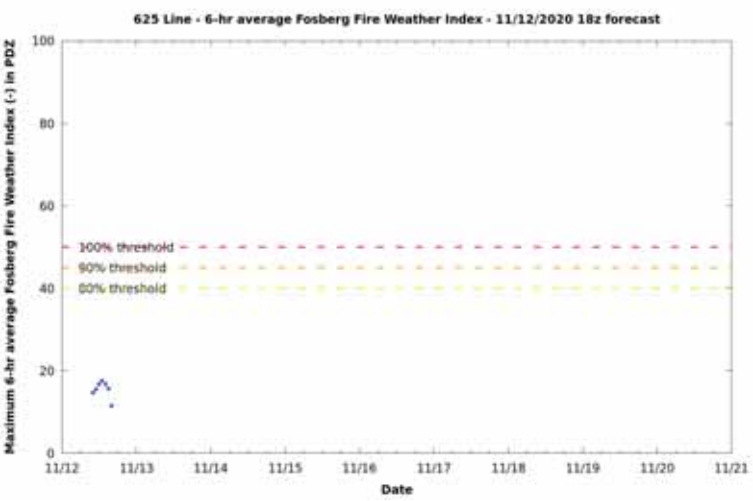


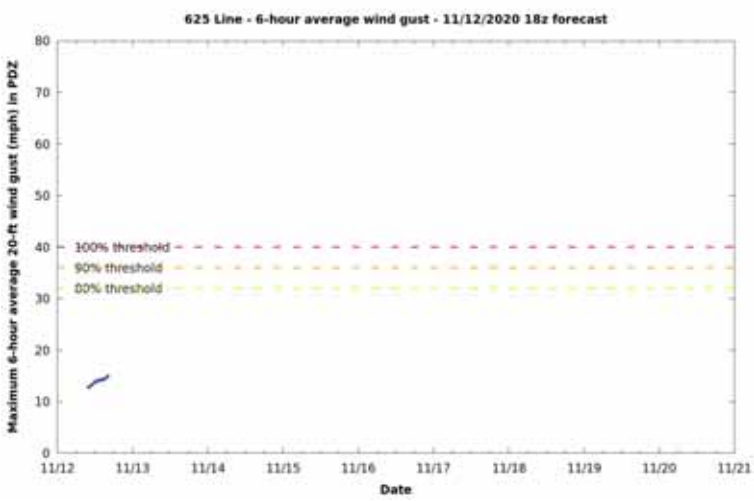
609 and Underbuild



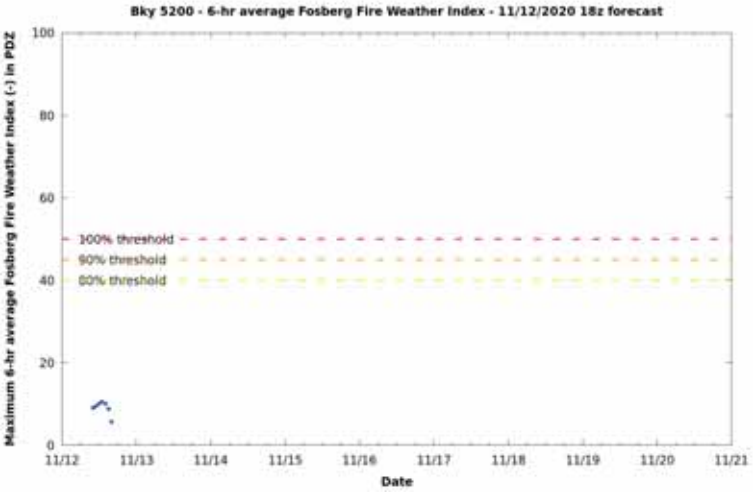


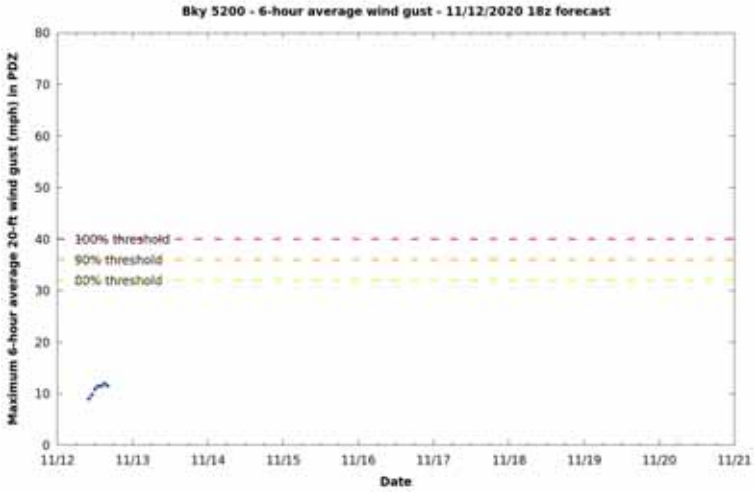
625 Line



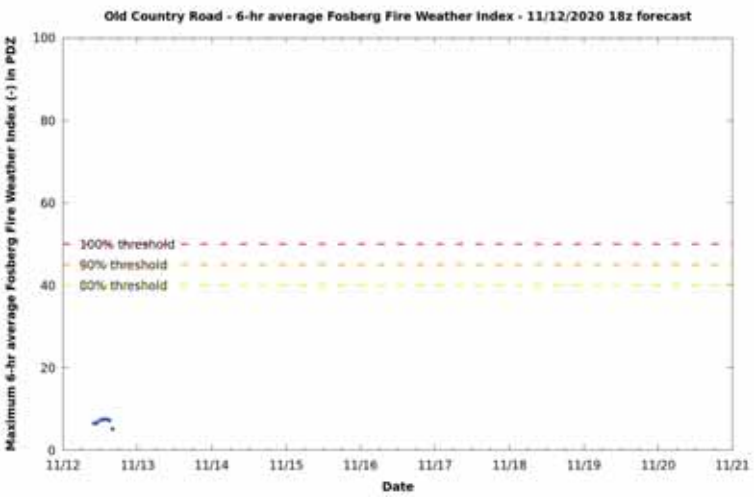


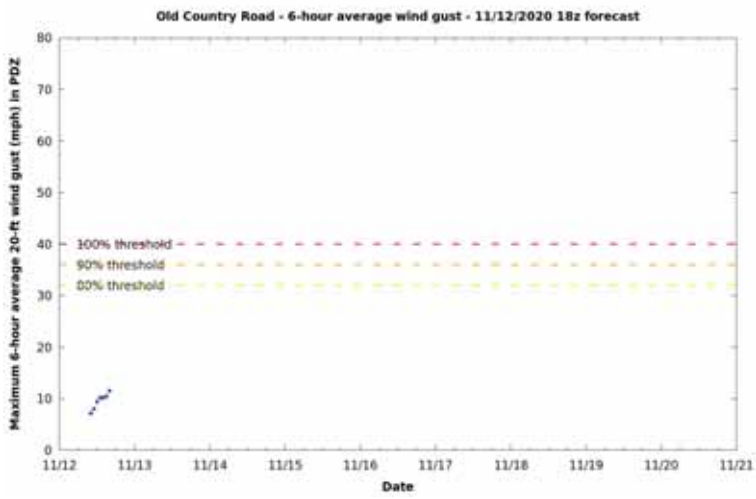
Bky 5200



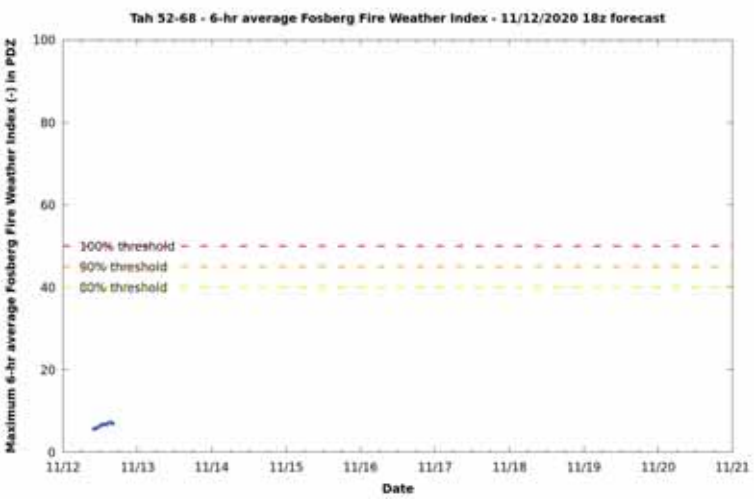


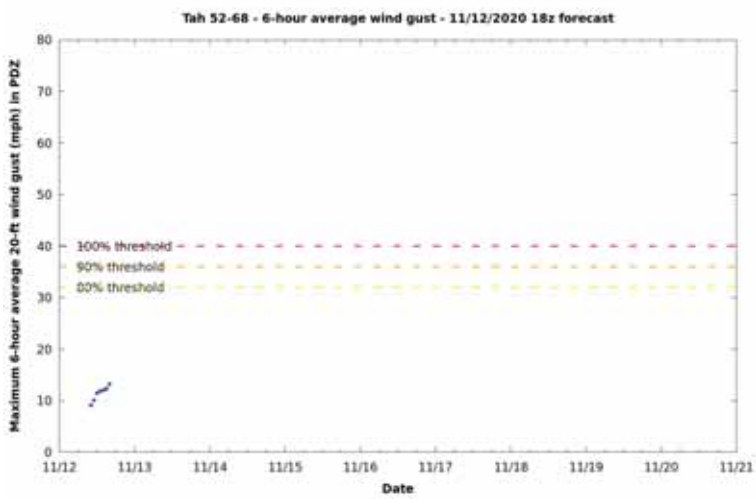
Old Country Road



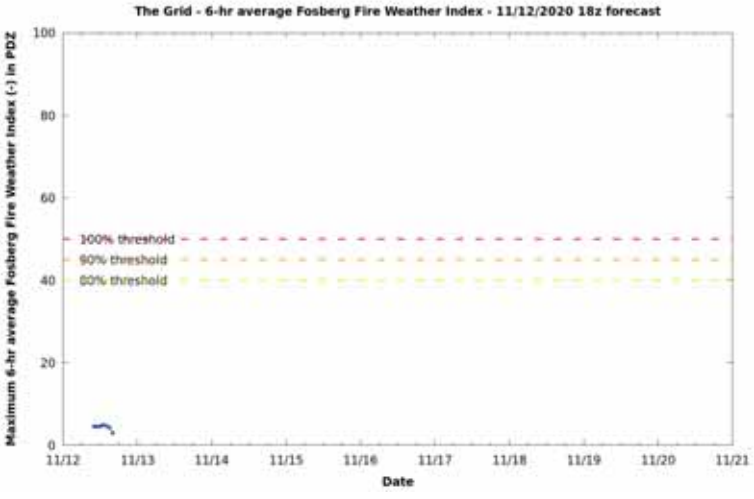


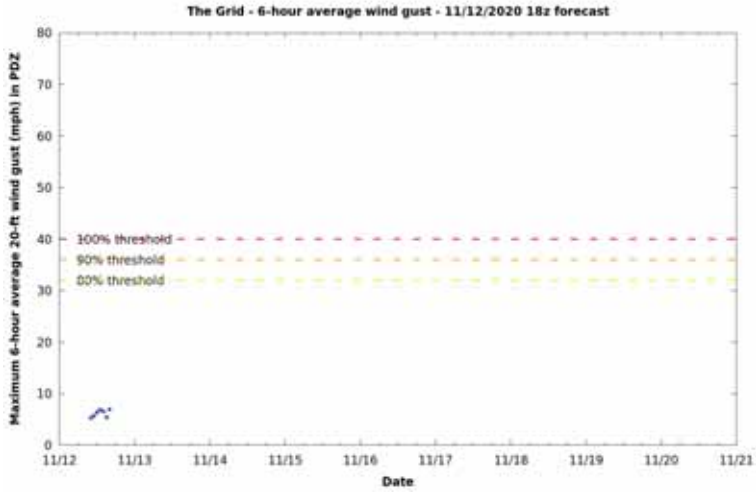
Tah 52-68



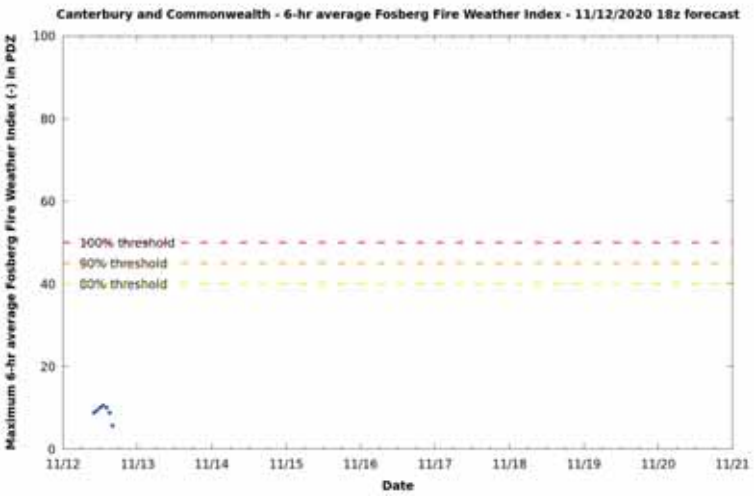


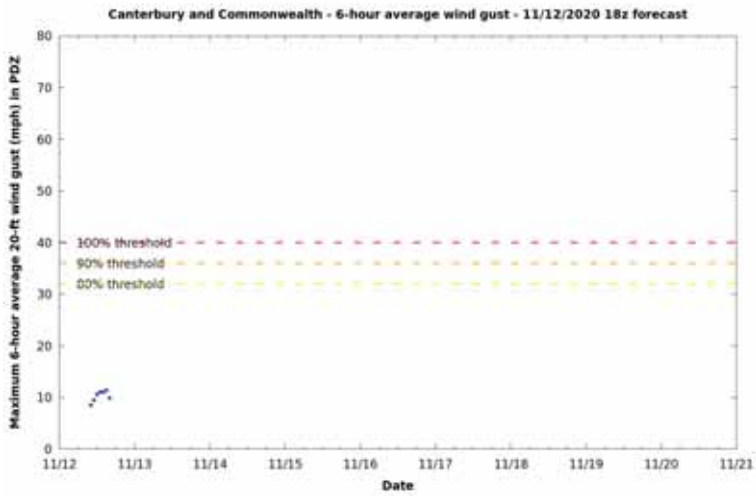
The Grid



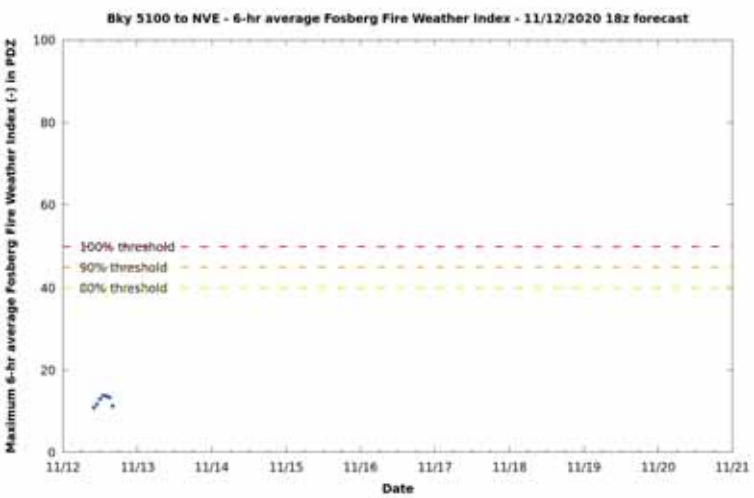


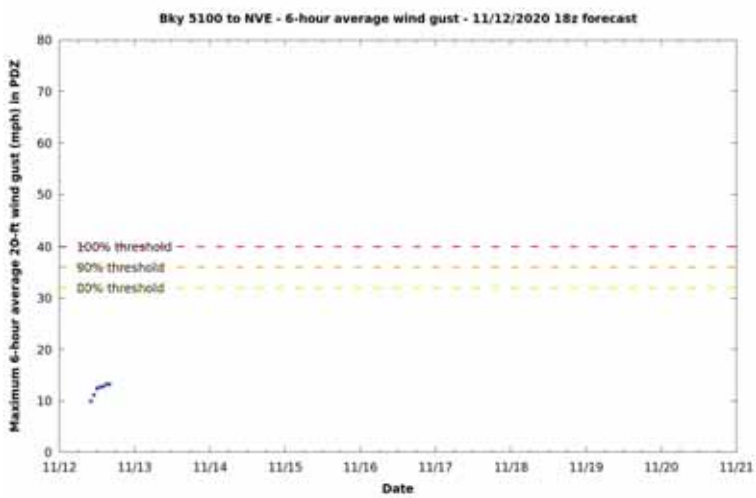
Canterbuy and Commonwealth



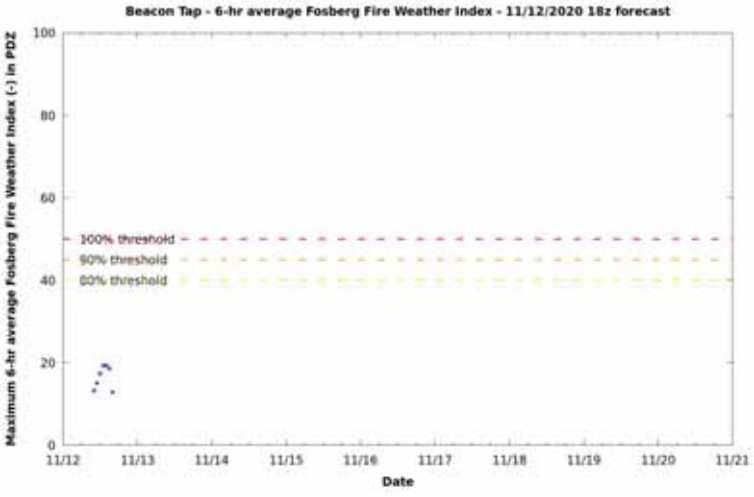


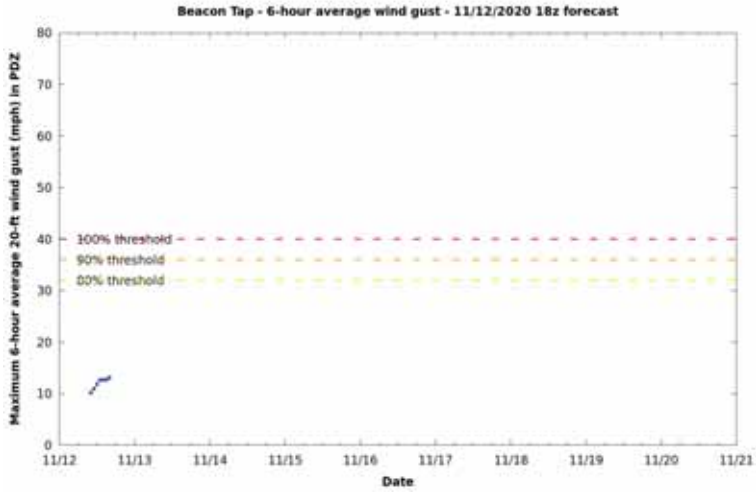
Bky 5100 to NVE



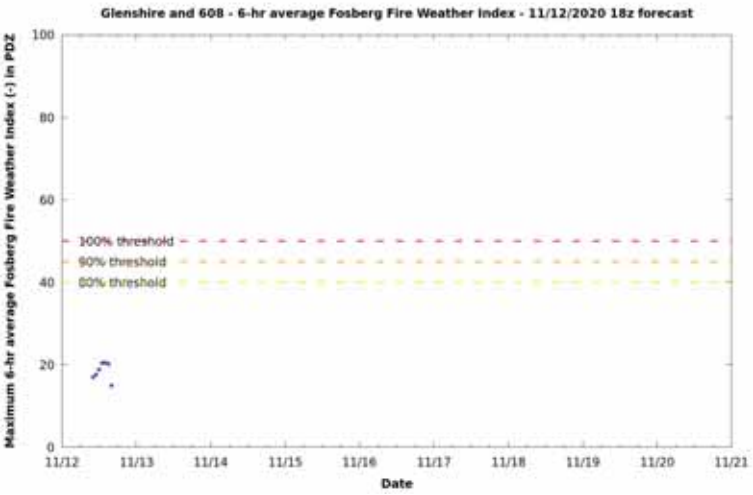


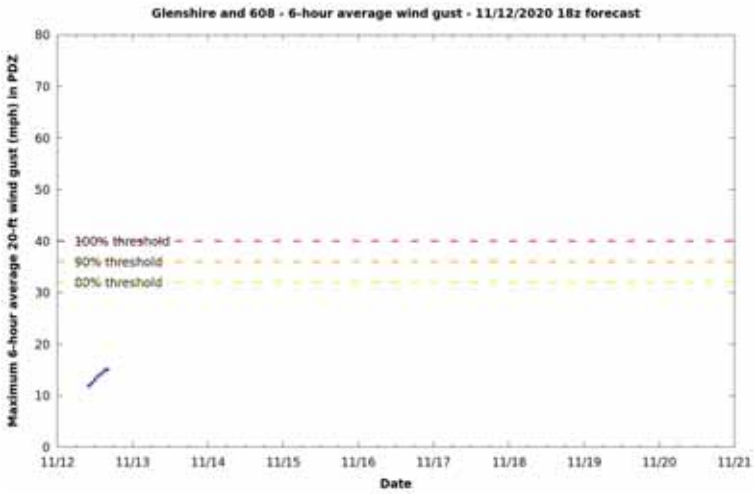
Beacon Tap



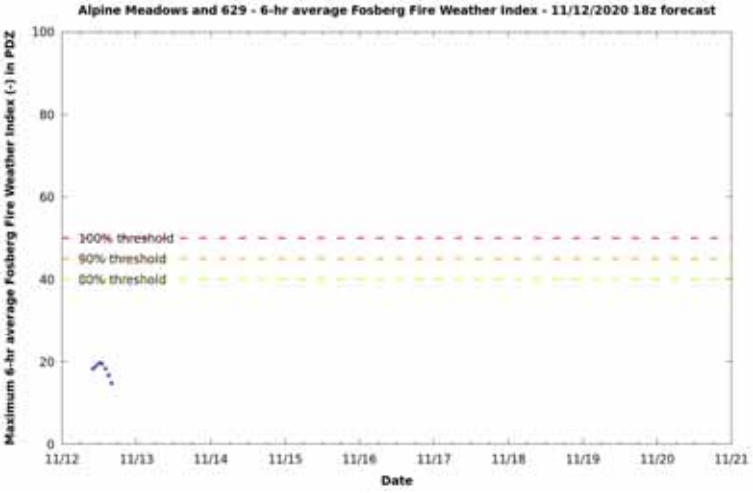


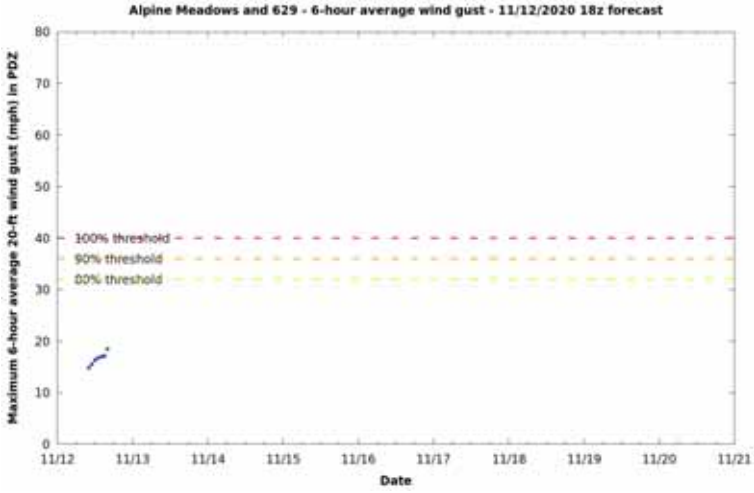
Glenshire and 608



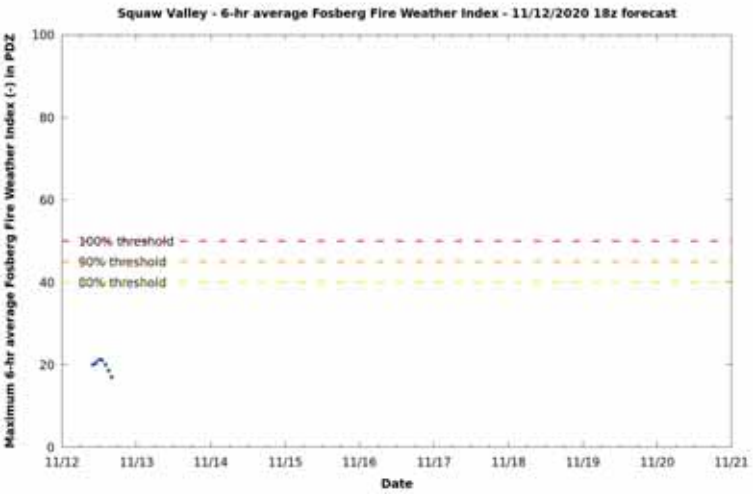


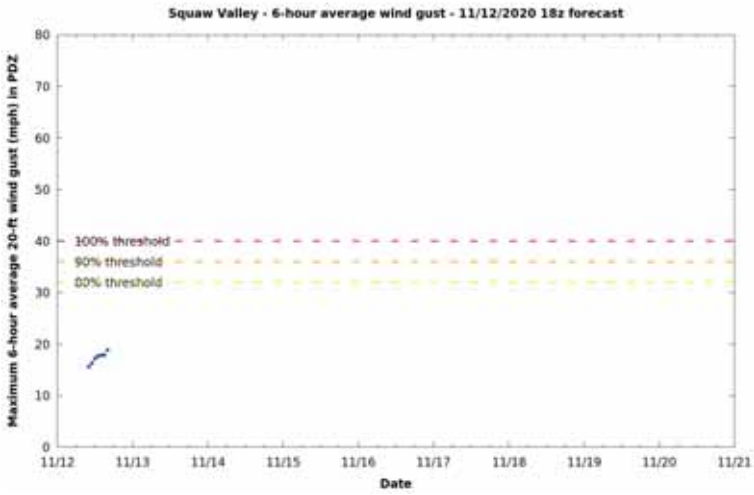
Alpine Meadows and 629



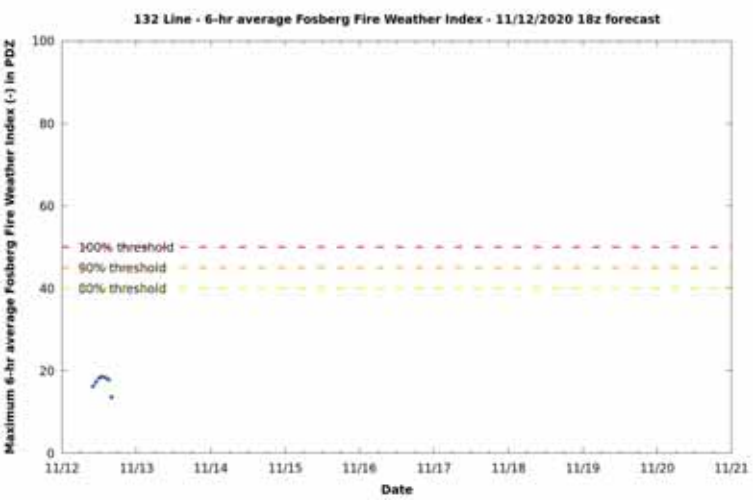


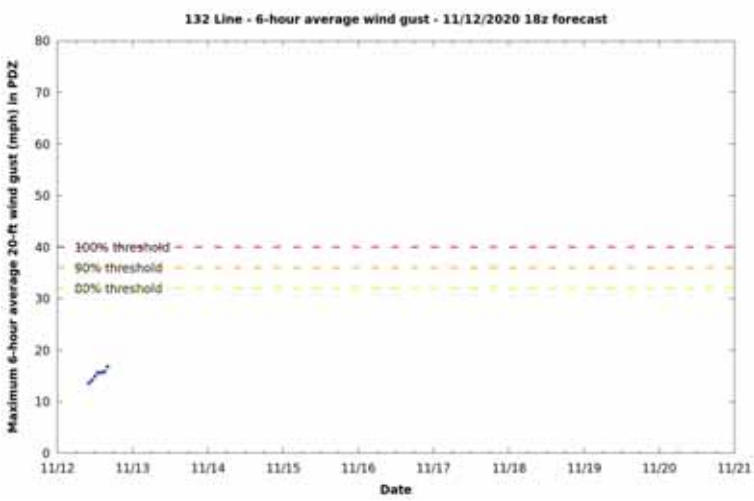
Squaw Valley



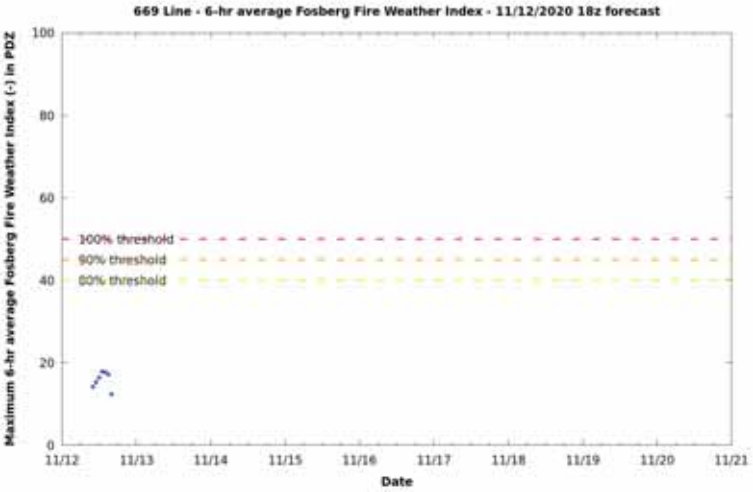


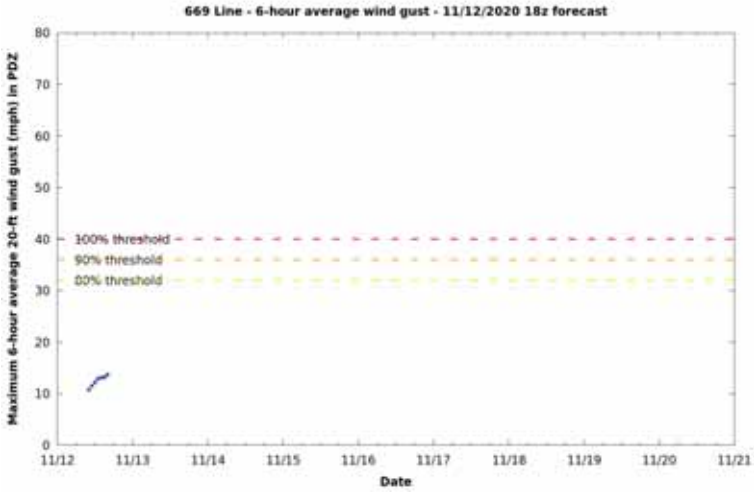
132 Line



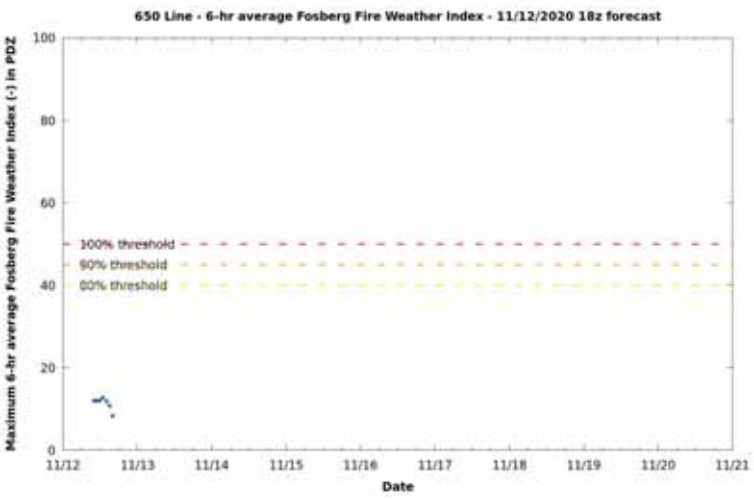


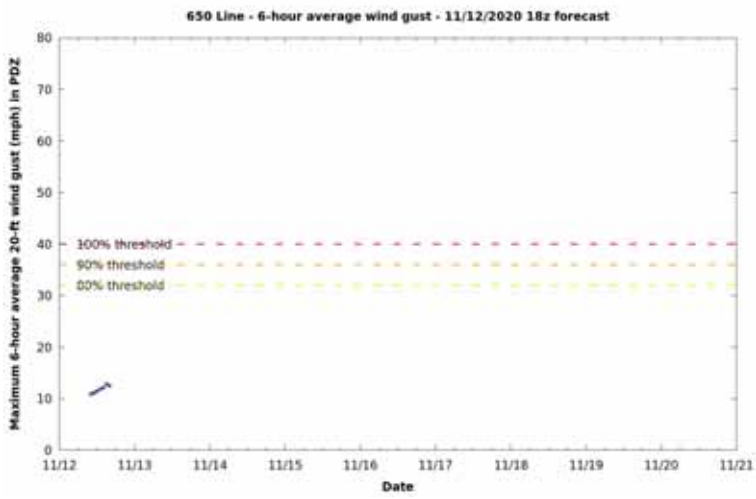
669 Line



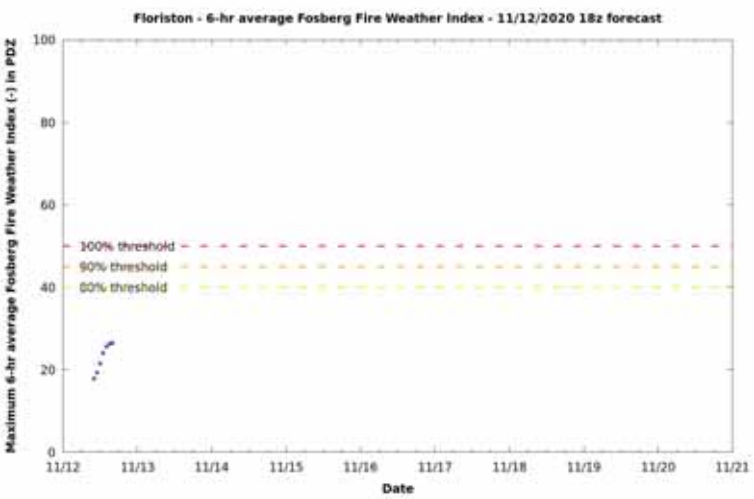


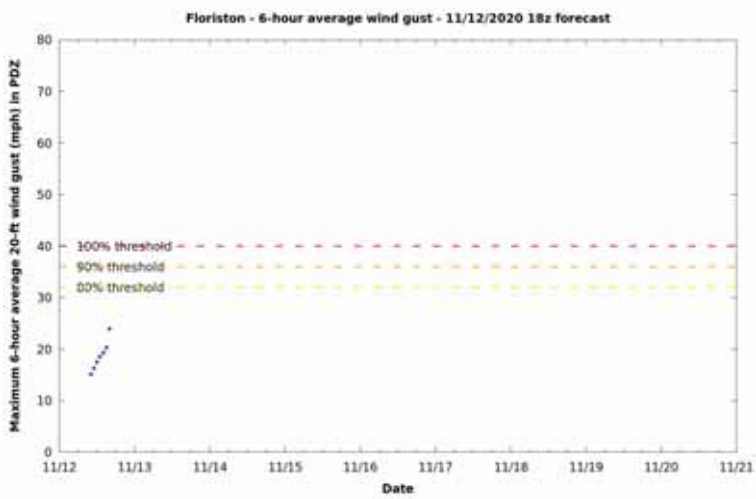
650 Line



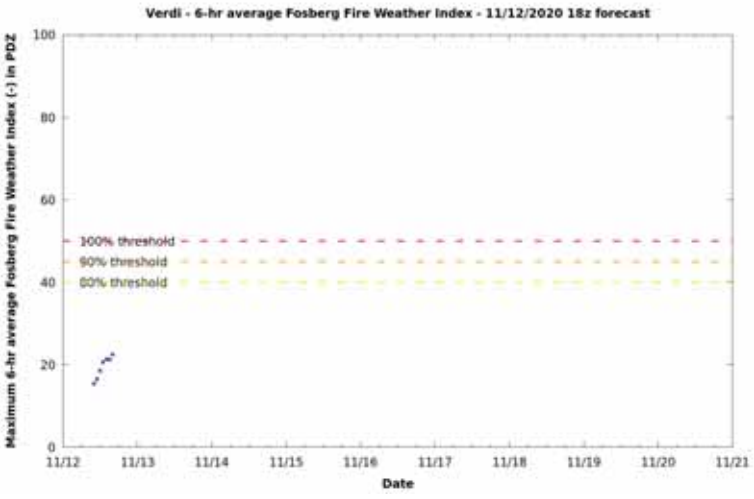


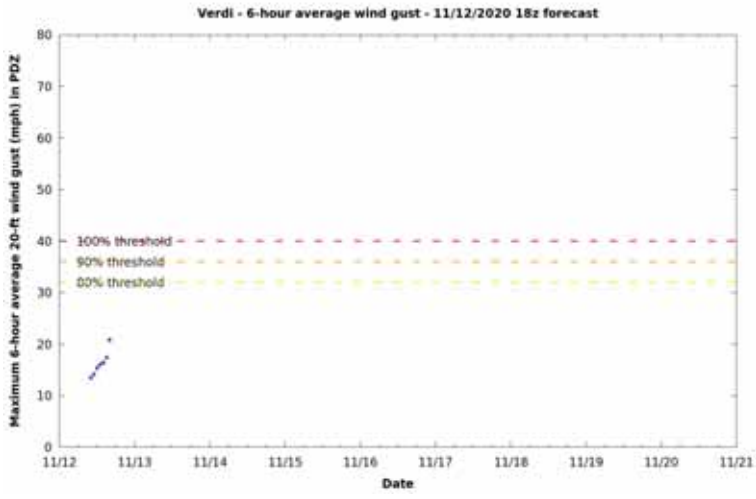
Floriston



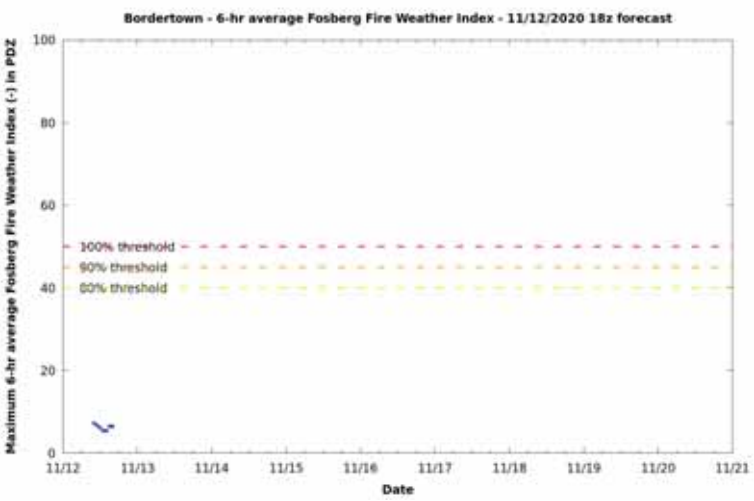


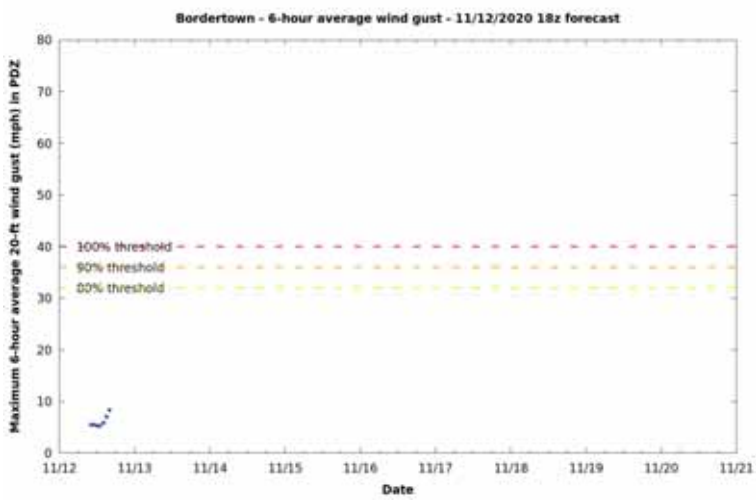
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/12/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
80% threshold
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
Date


Bordertown - 6-hour average wind gust - 11/12/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
80% threshold
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
Date

Liberty Utilities Fire Potential Index Forecast for 11/13/20 - 11/19/20

Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	moderate	moderate	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	moderate	low	low	low	low	low

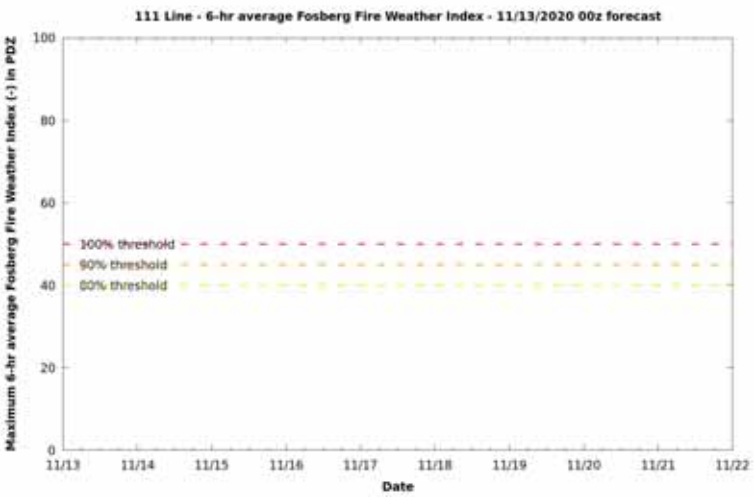
Liberty Utilities Energy Release Component Forecast for 11/13/20 - 11/19/20

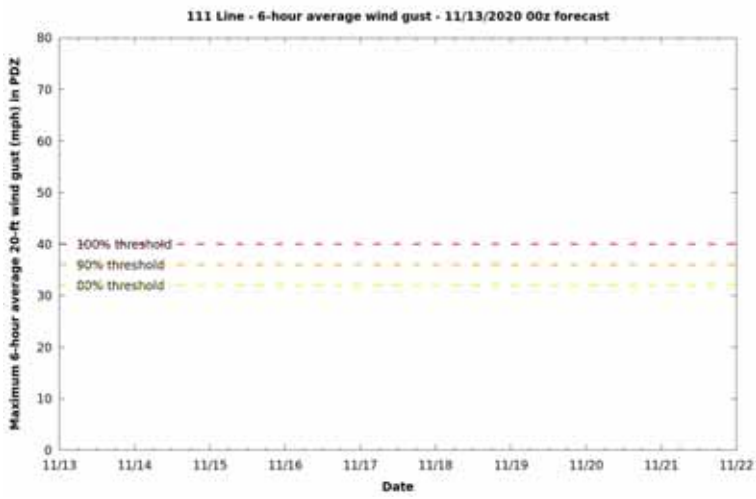
Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	66.0	60.0	55.0	51.0	52.0	56.0	54.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	62.0	48.0	43.0	38.0	36.0	39.0	34.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	58.0	58.0	54.0	50.0	54.0	56.0	56.0

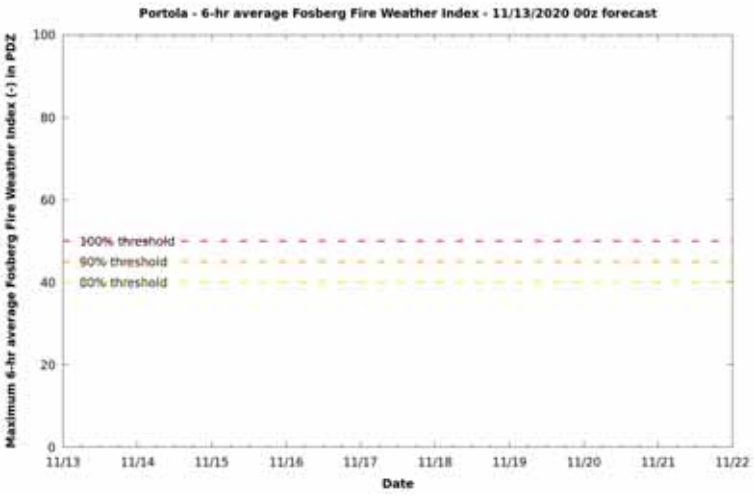
Liberty Utilities Fire Weather Summary Plots - 11/13/2020 00z forecast

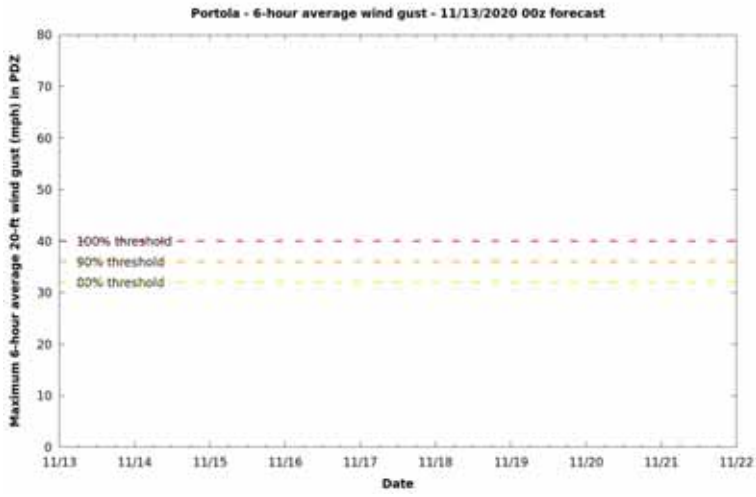
111 Line



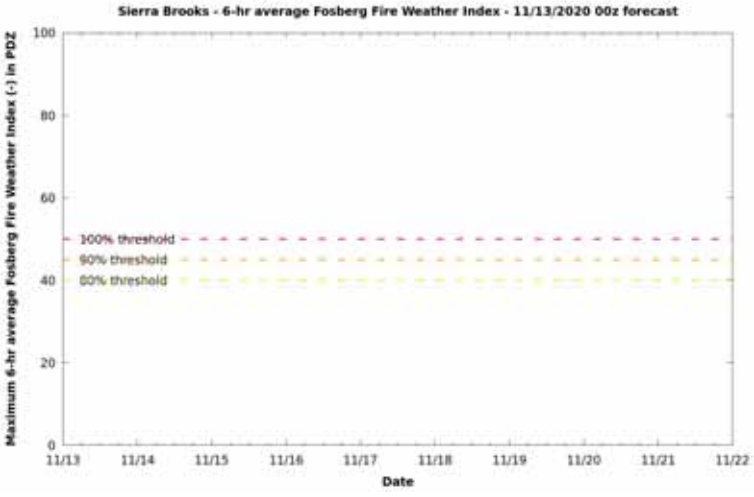


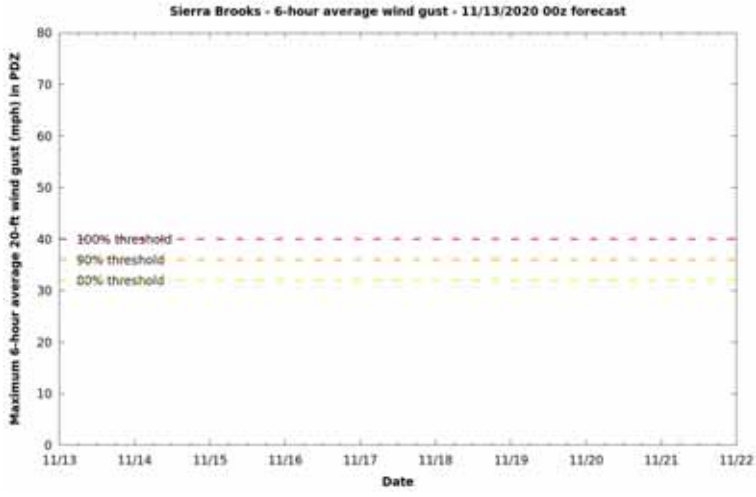
Portola



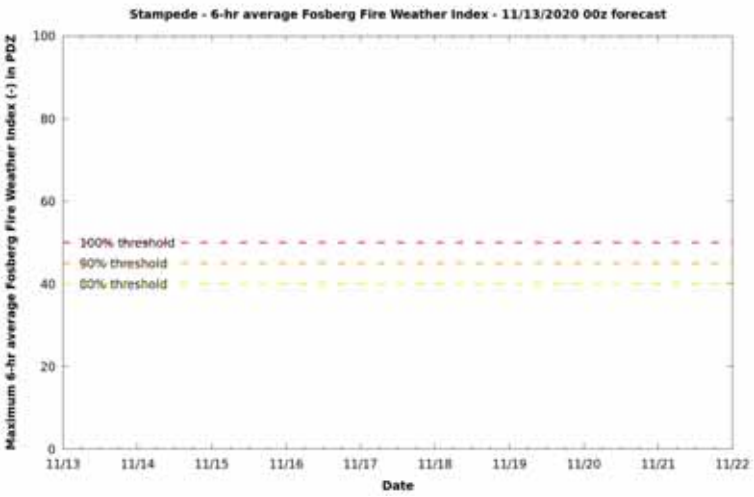


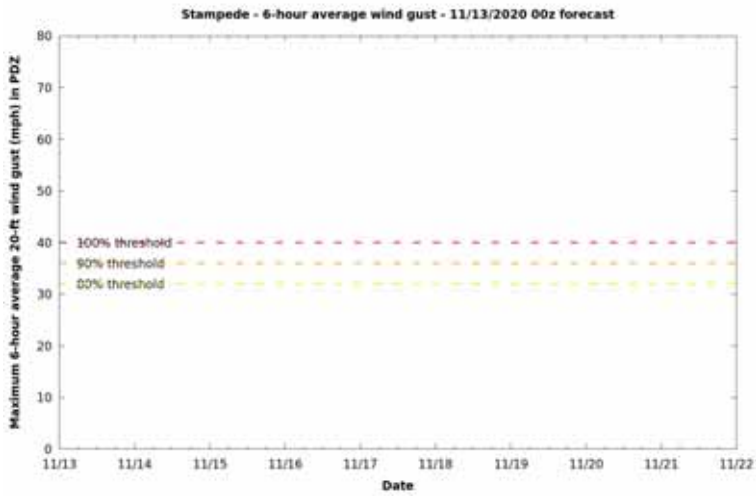
Sierra Brooks



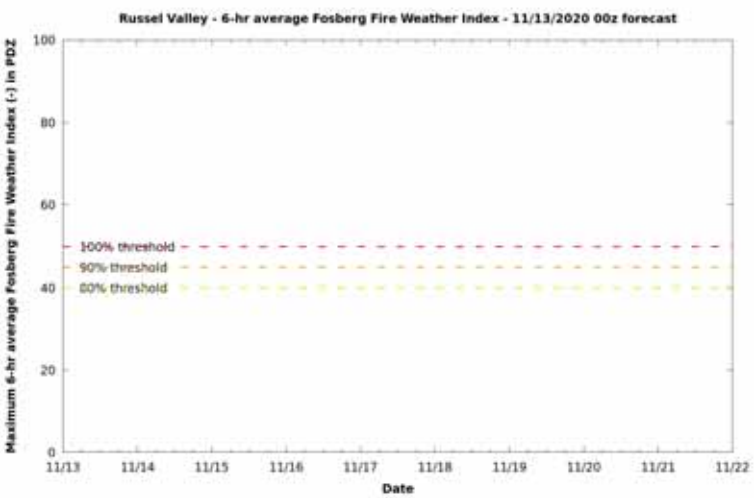


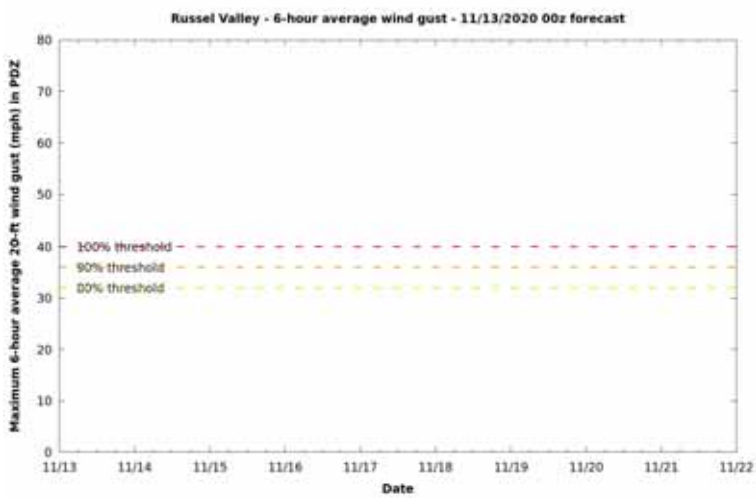
Stampede



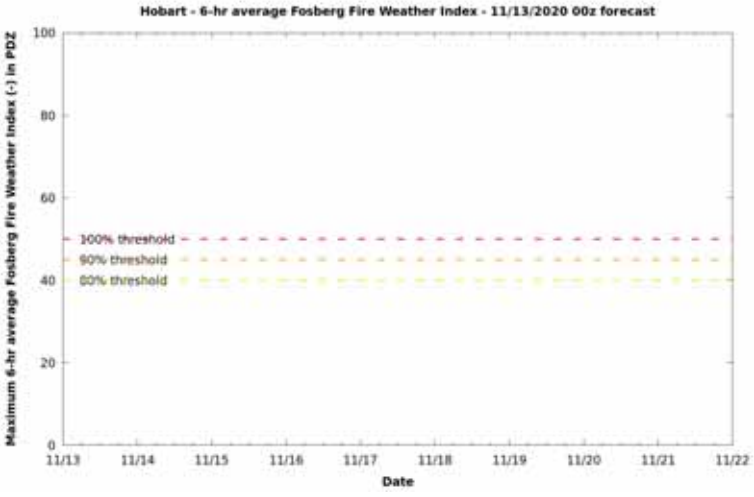


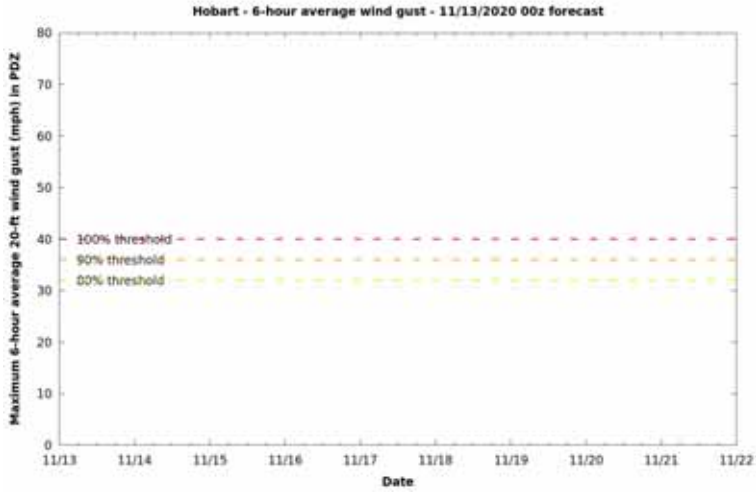
Russell Valley



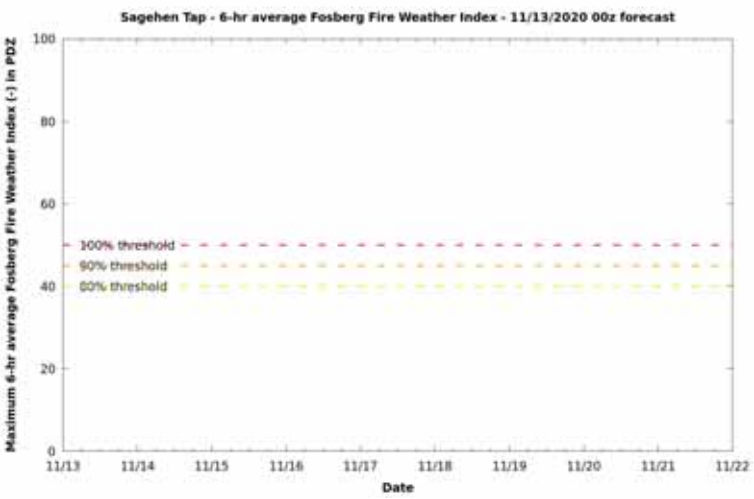


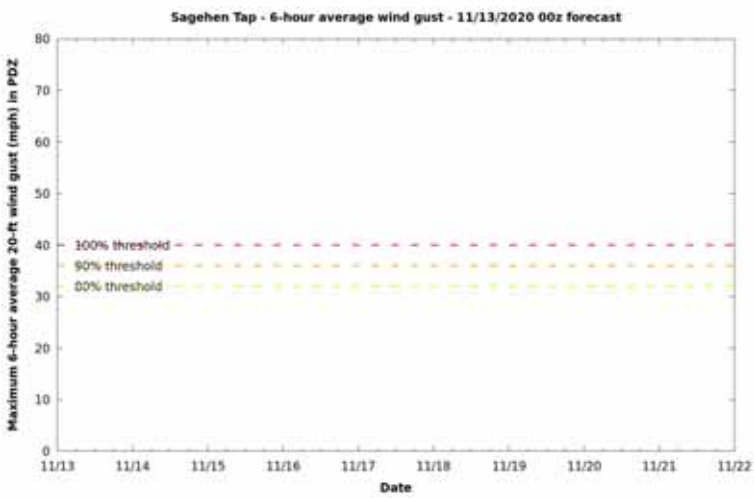
Hobart



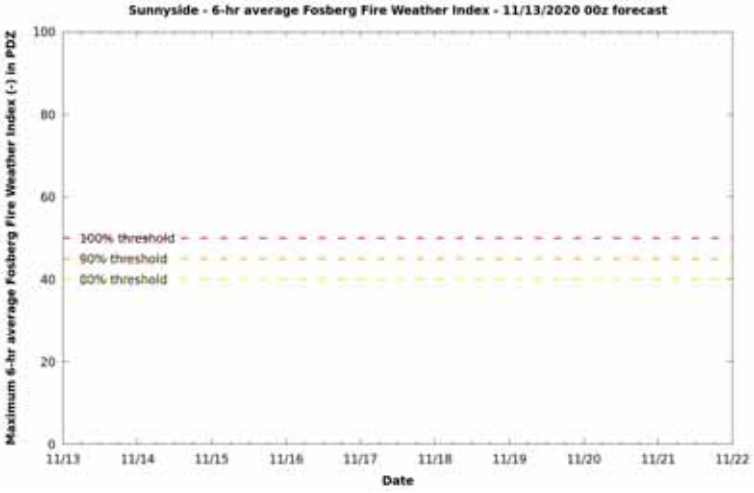


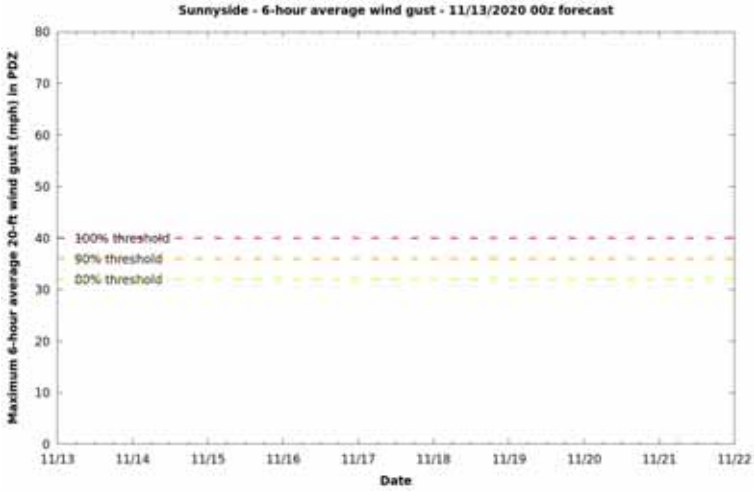
Sagehen tap



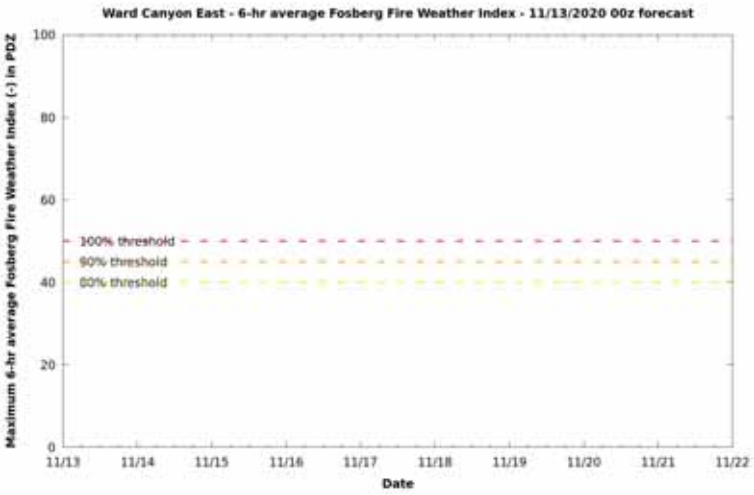


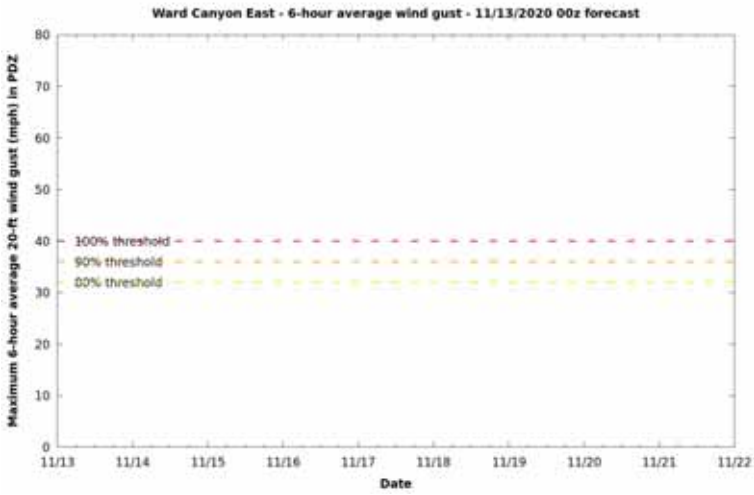
Sunnyside



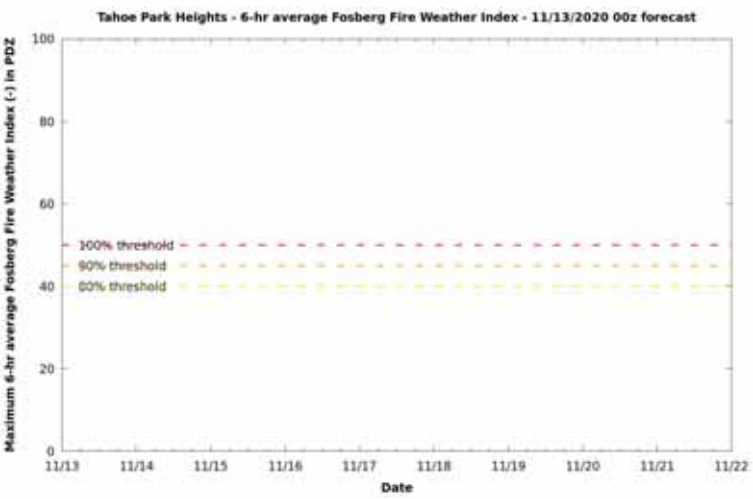


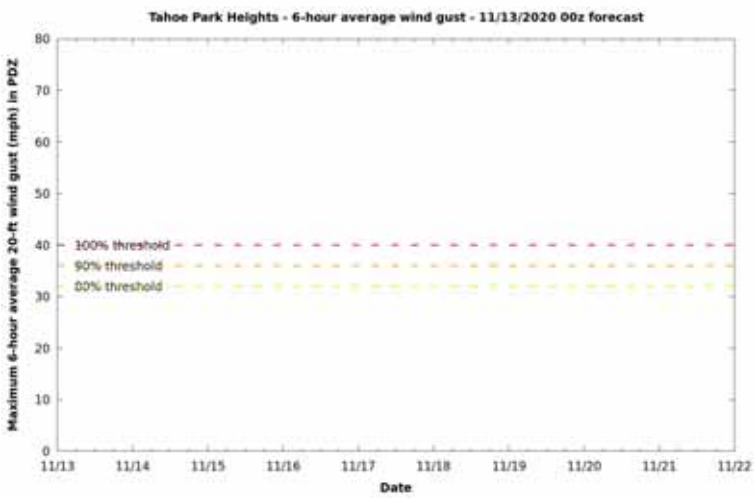
Ward Canyon East



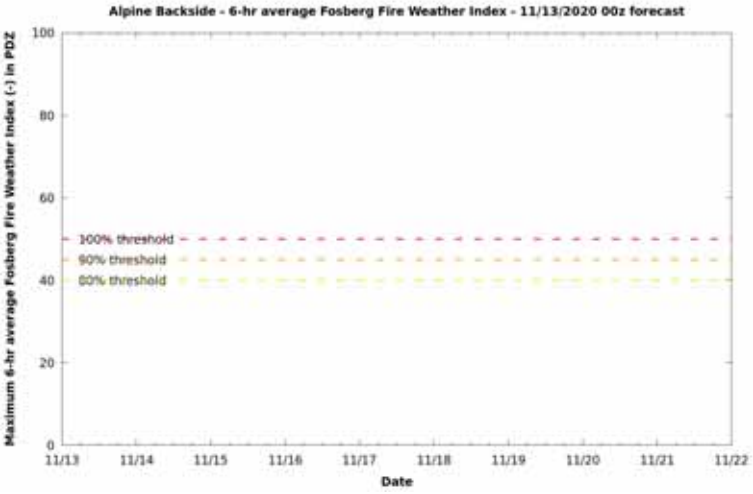


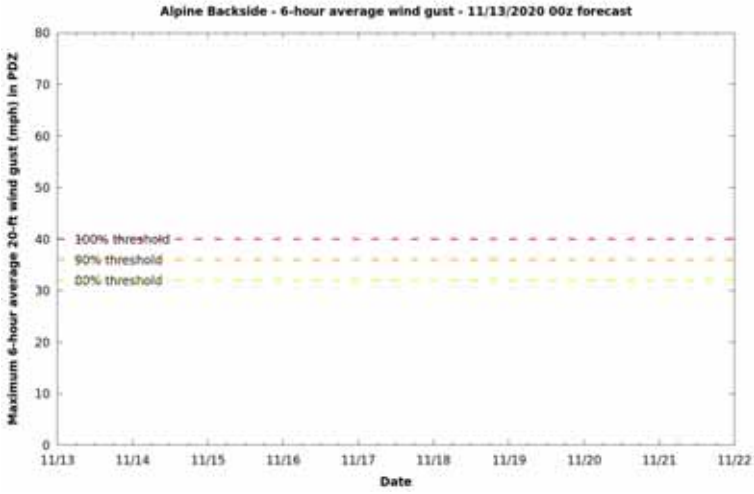
Tahoe Park Heights



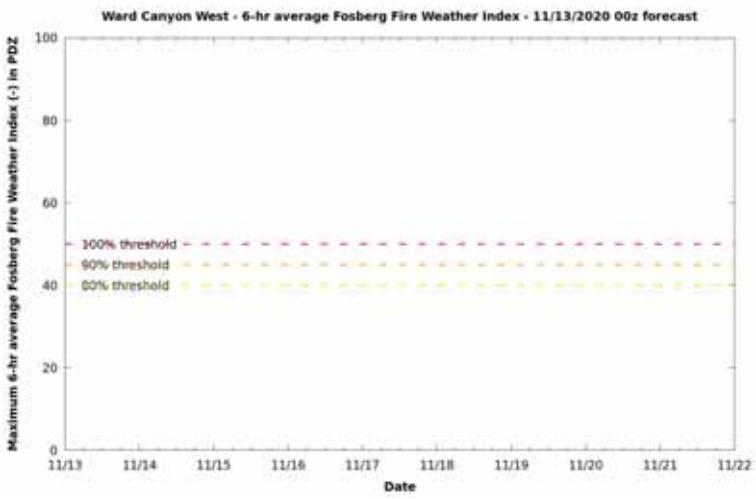


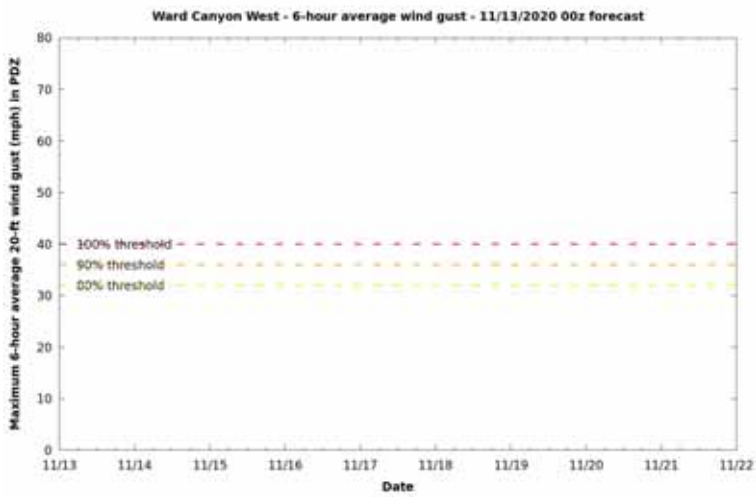
Alpine Backside



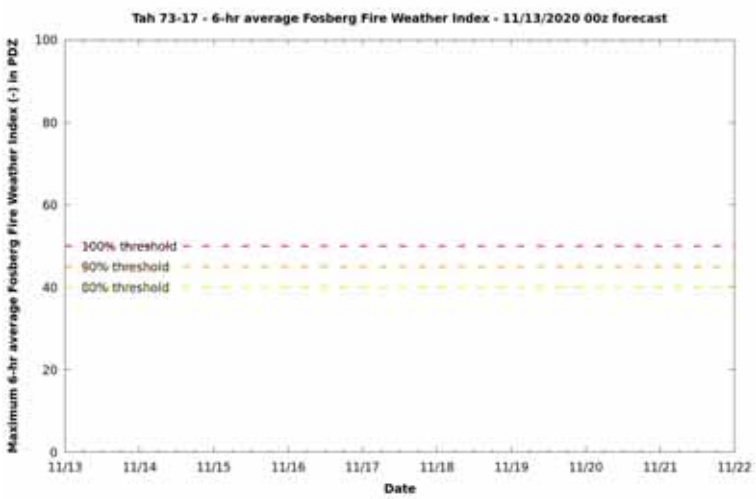


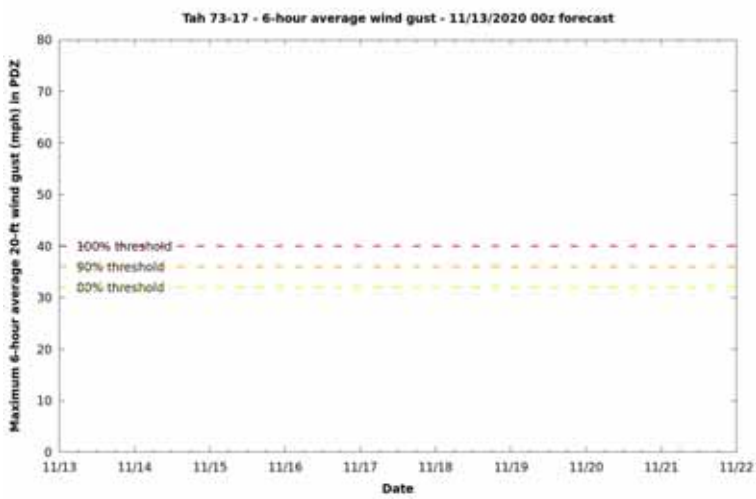
Ward Canyon West



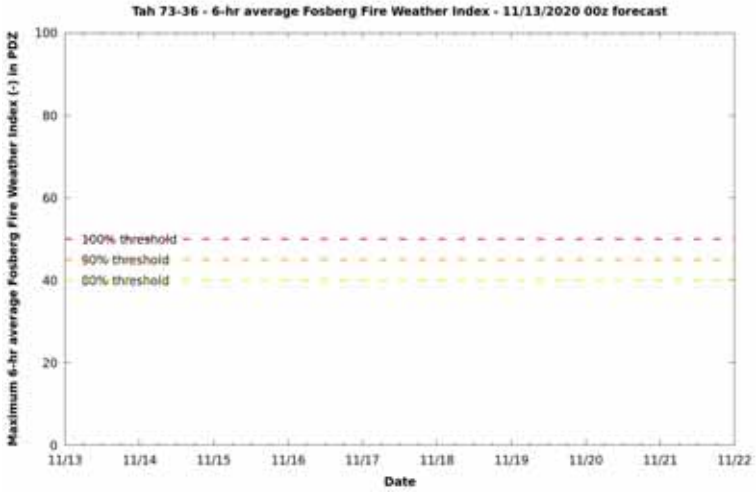


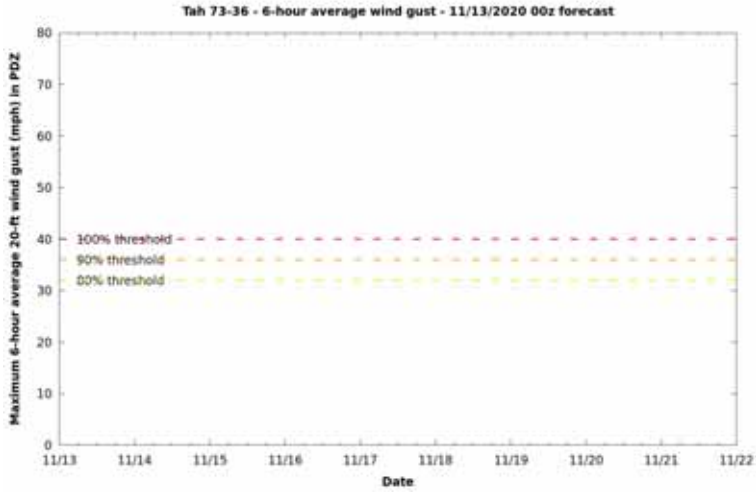
Tah 73-17



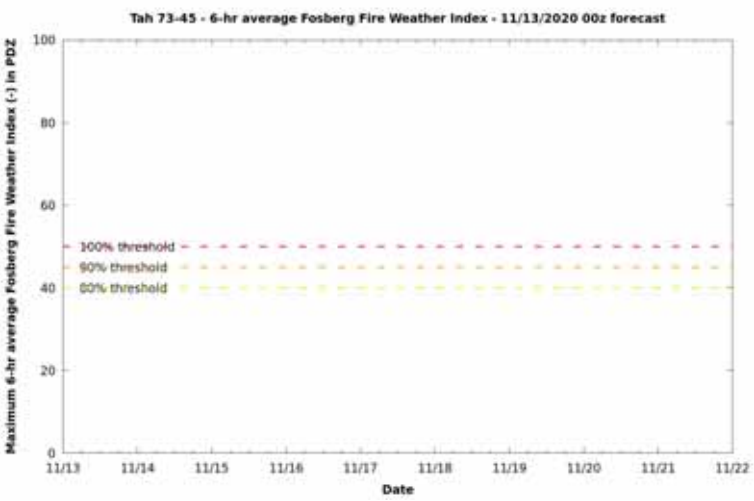


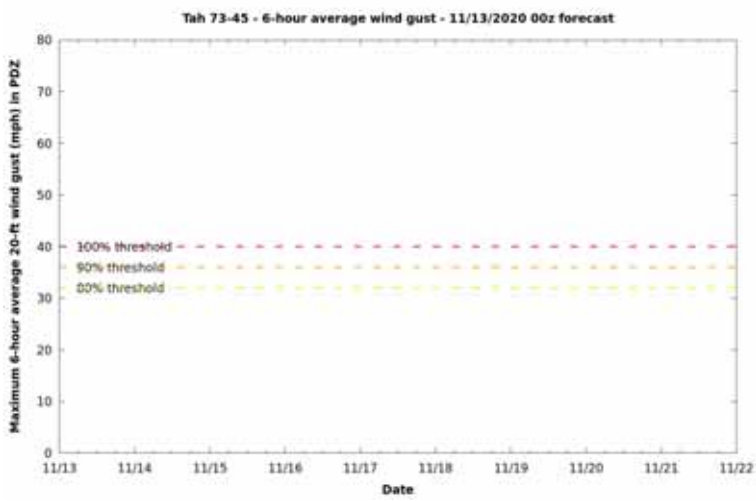
Tah 73-36



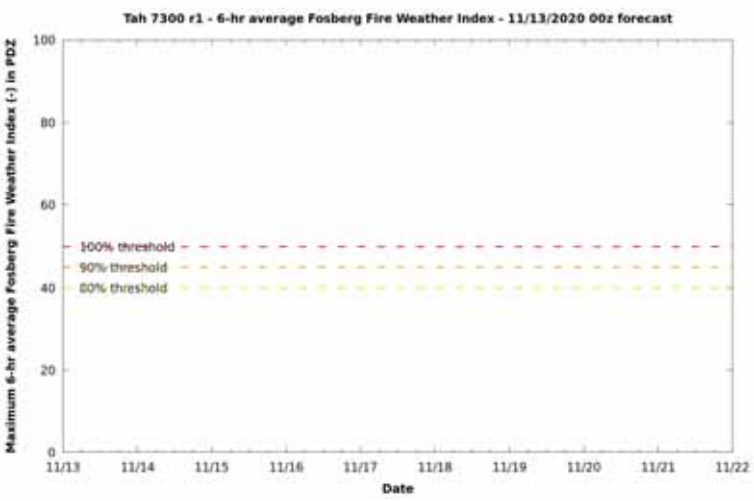


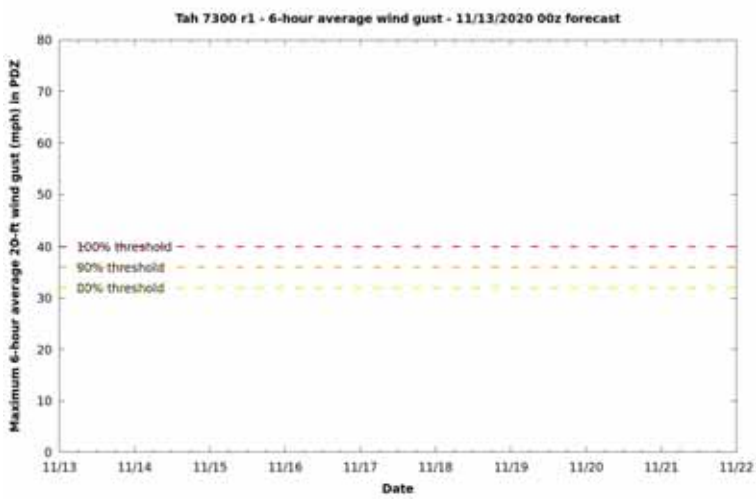
Tah 73-45



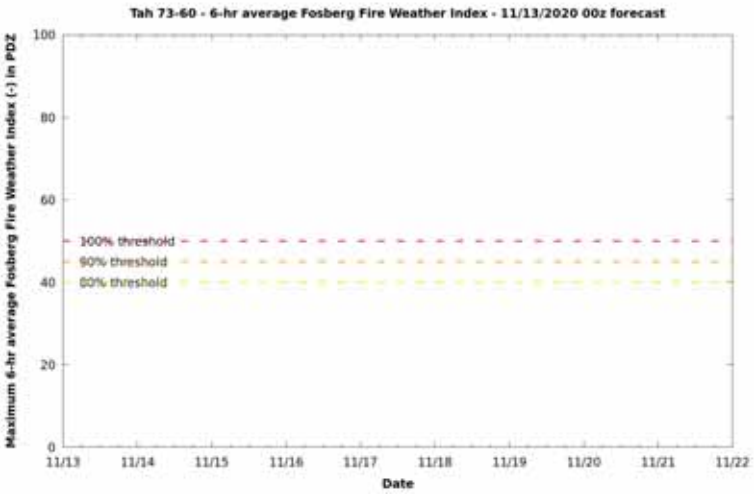


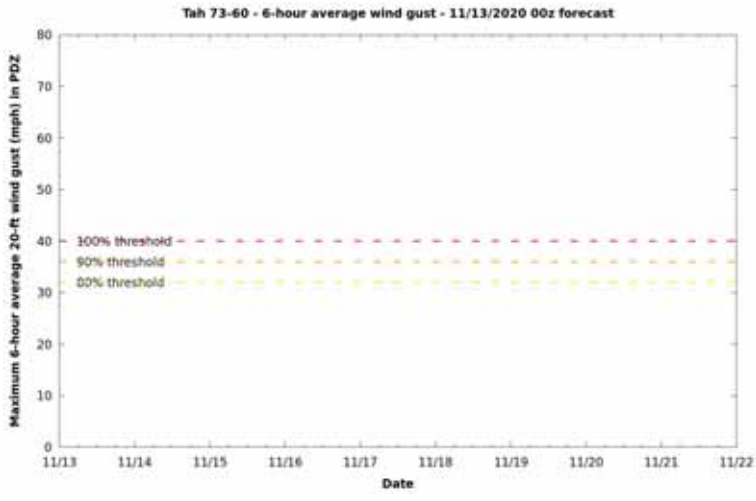
Tah 7300 r1



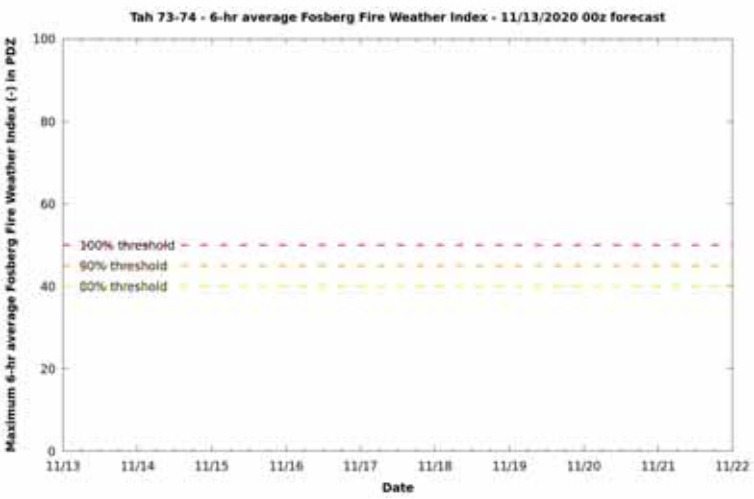


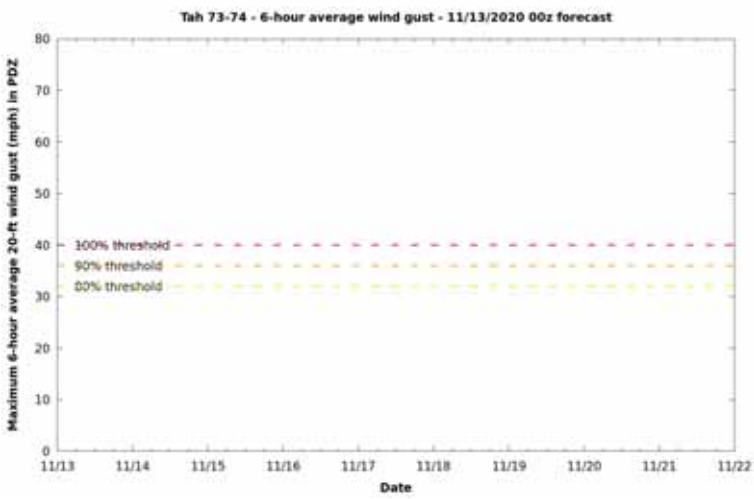
Tah 73-60



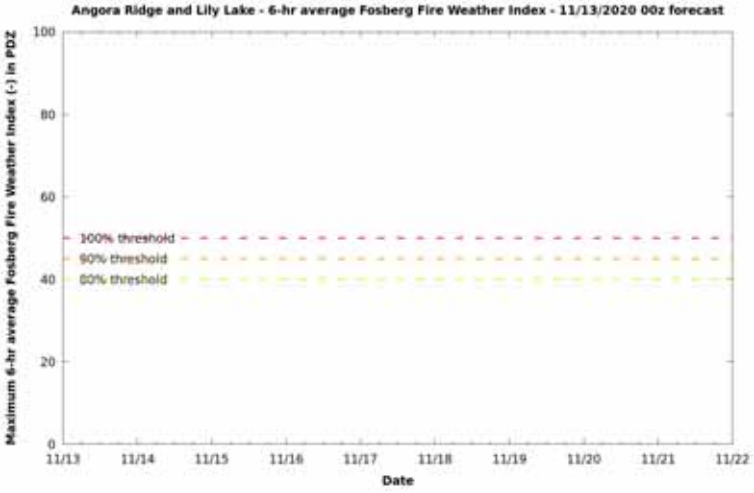


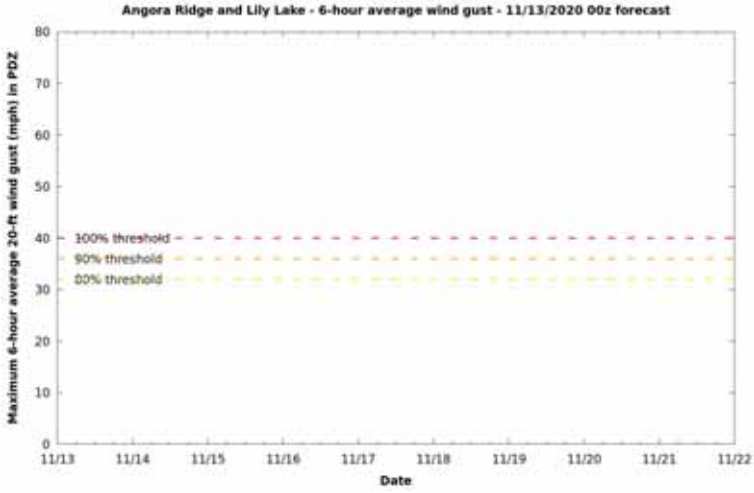
Tah 73-74



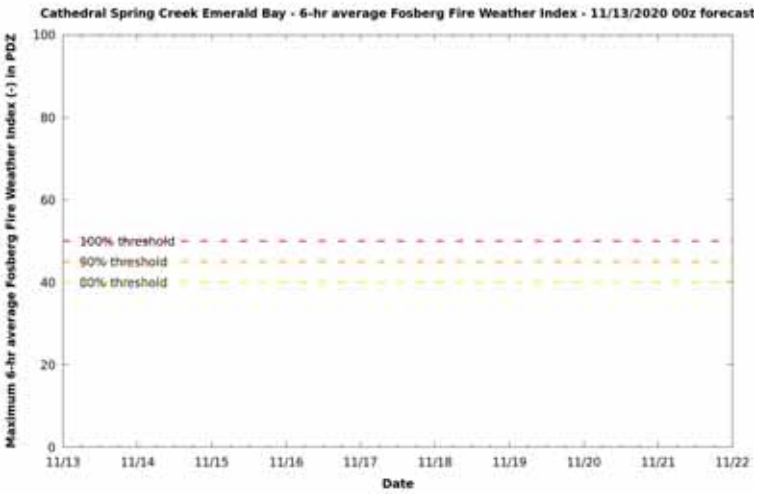


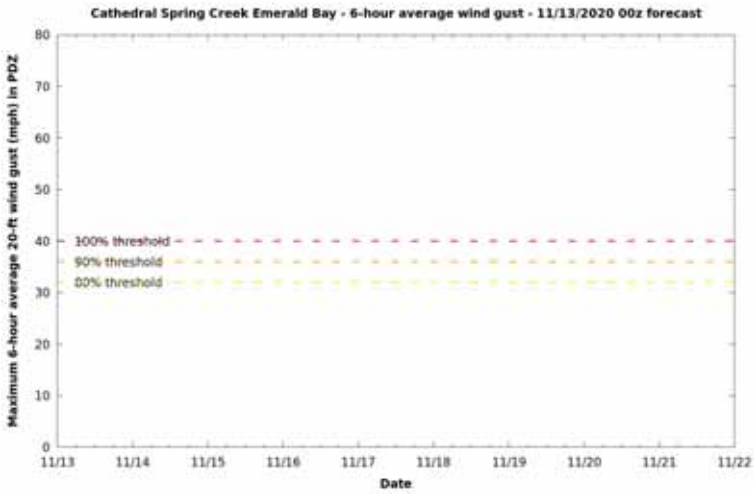
Angora Ridge and Lily Lake



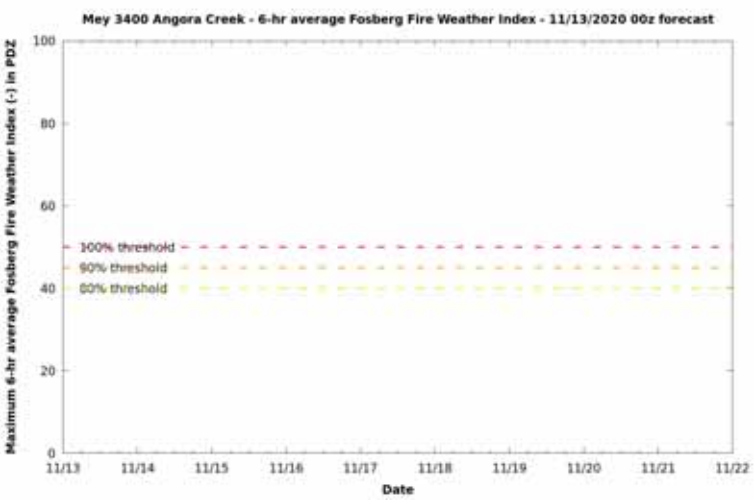


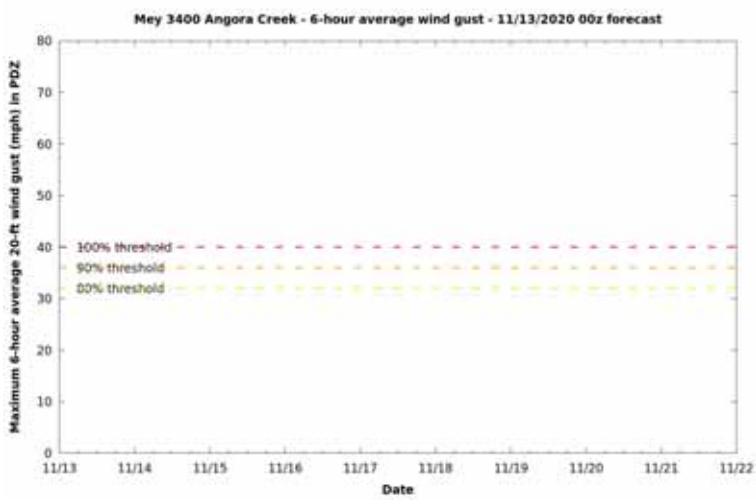
Cathedral Spring Creek Emerald Bay



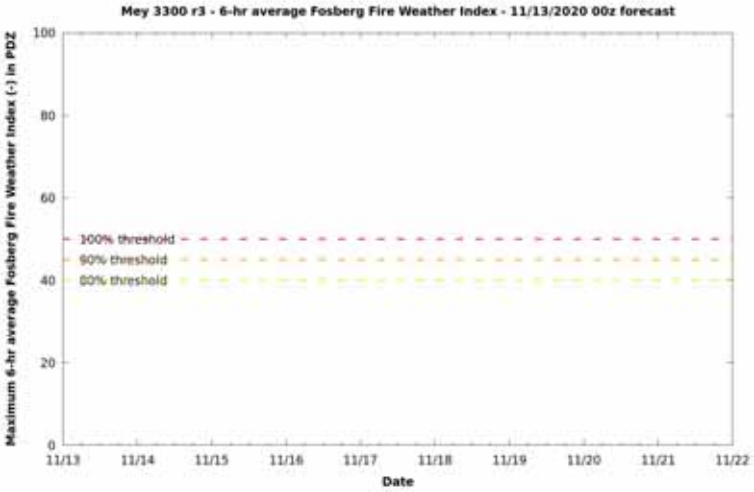


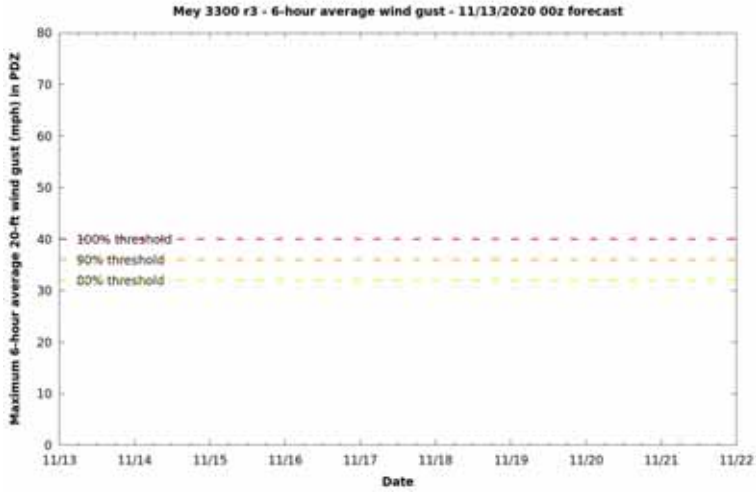
Mey 3400 Angora Creek



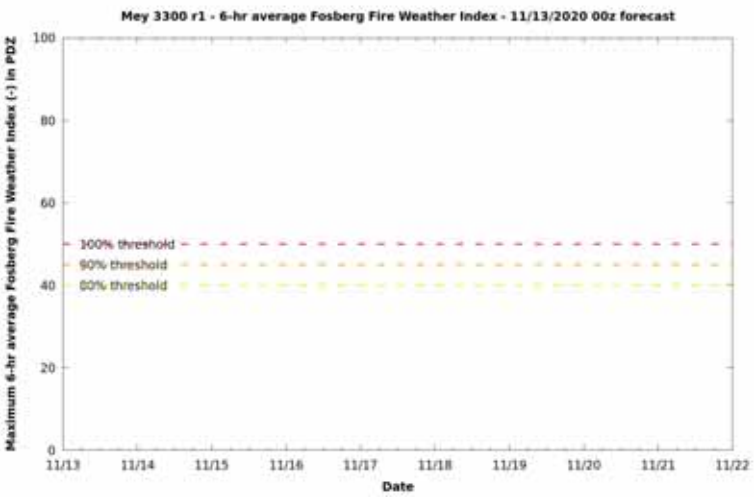


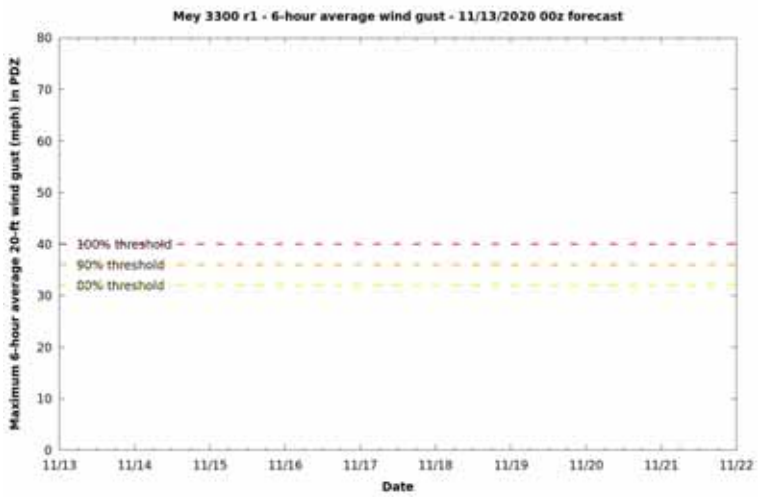
Mey 3300 r3



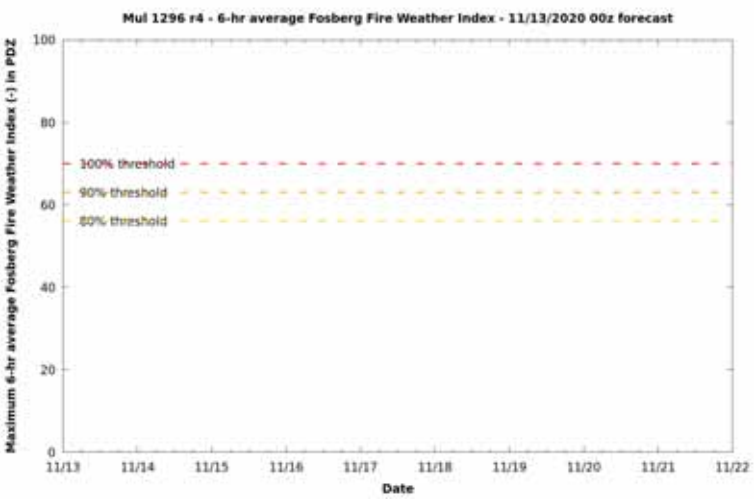


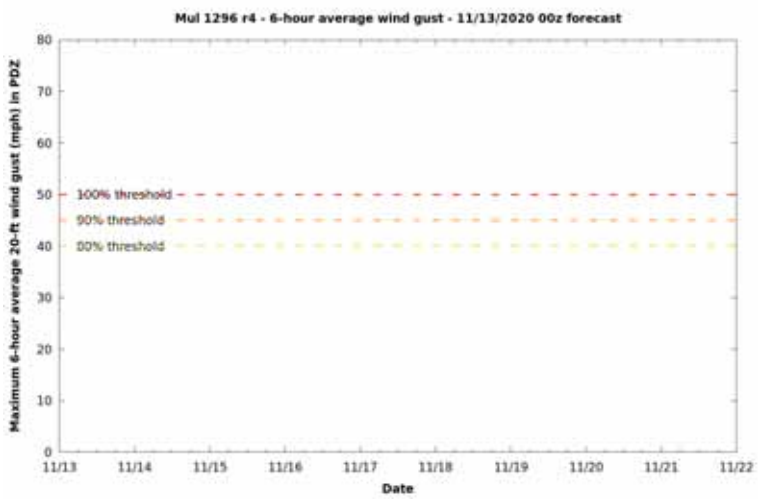
Mey 3300 r1



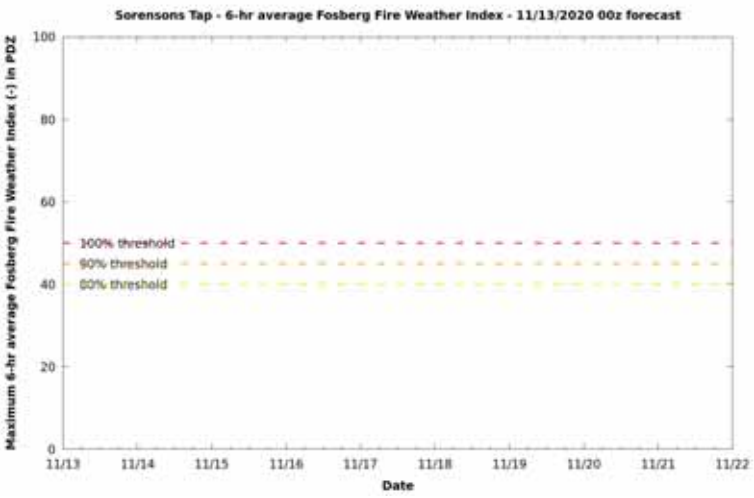


Mul 1296 r4



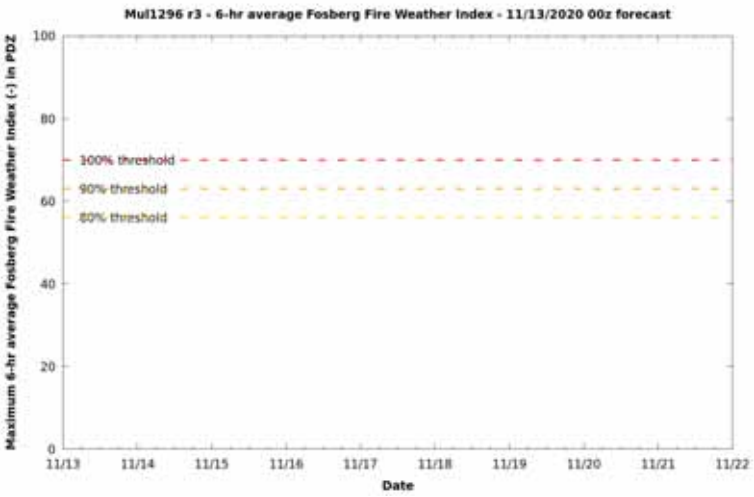


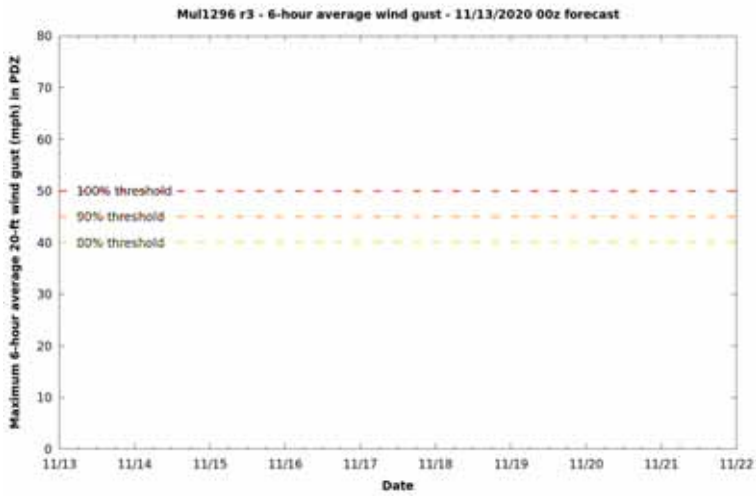
Sorensons Tap



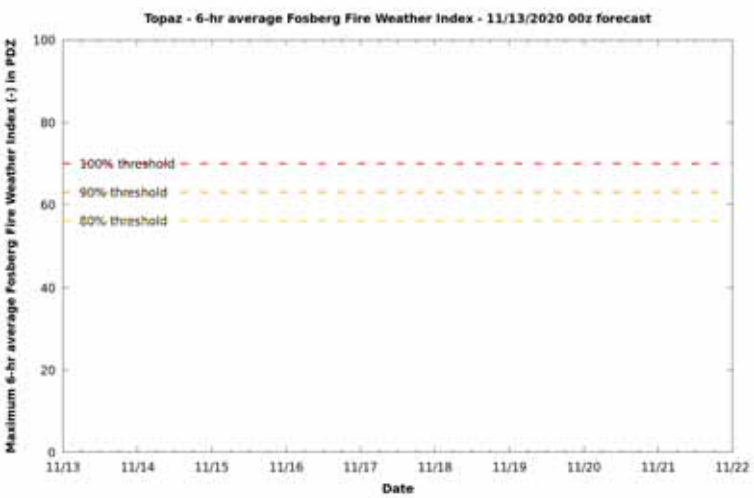


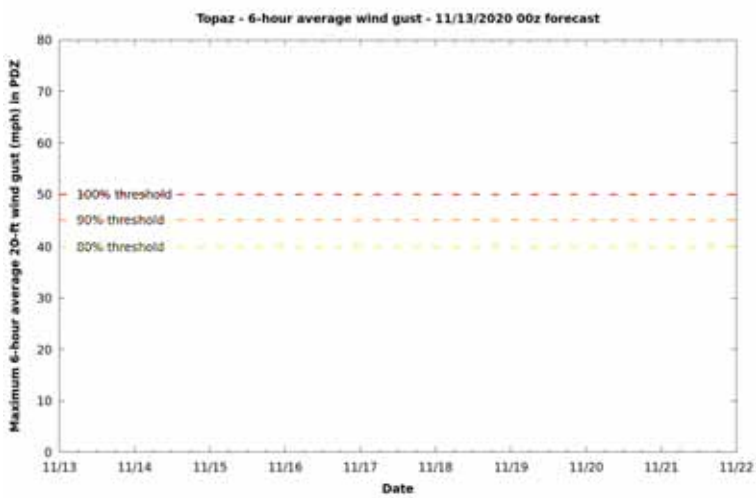
Mul 1296 r3



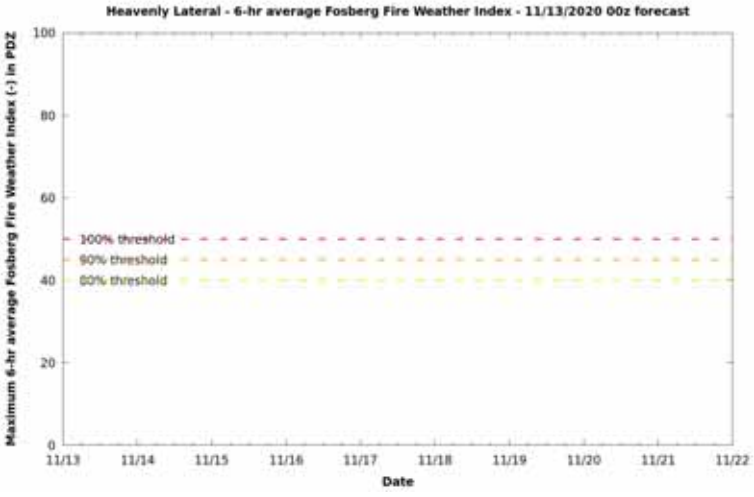


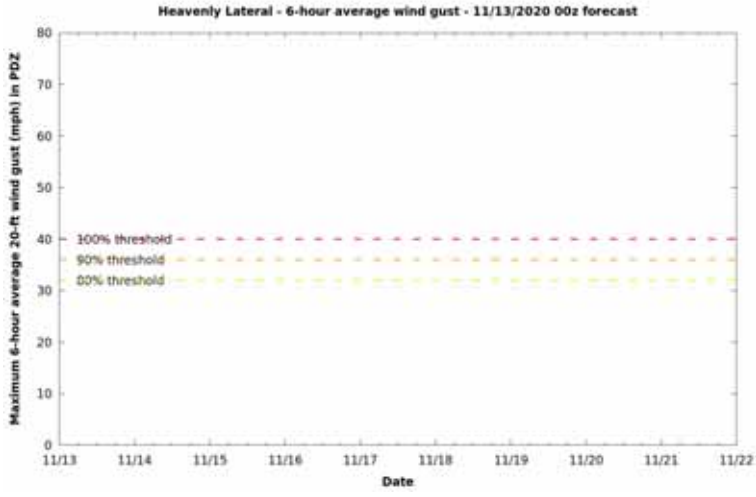
Topaz



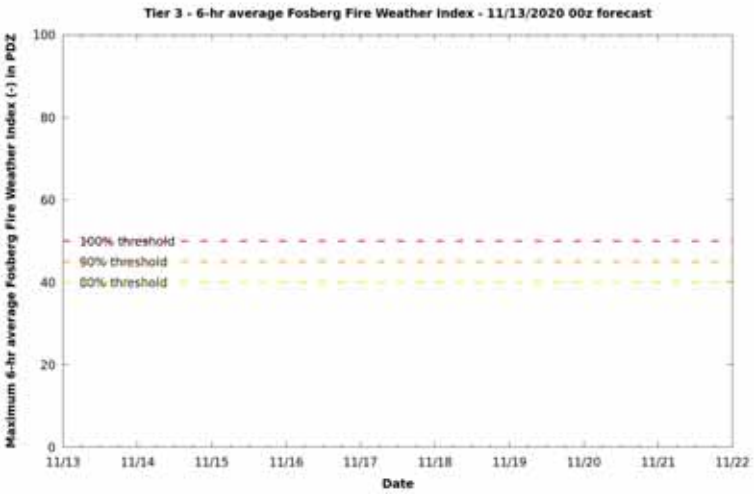


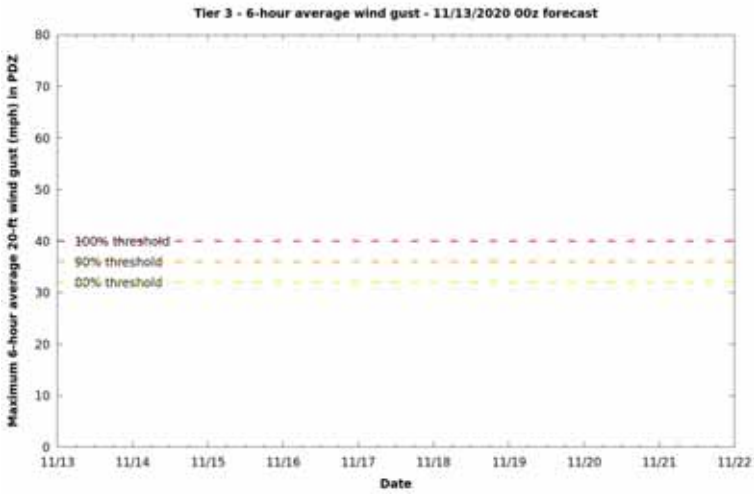
Heavenly Lateral



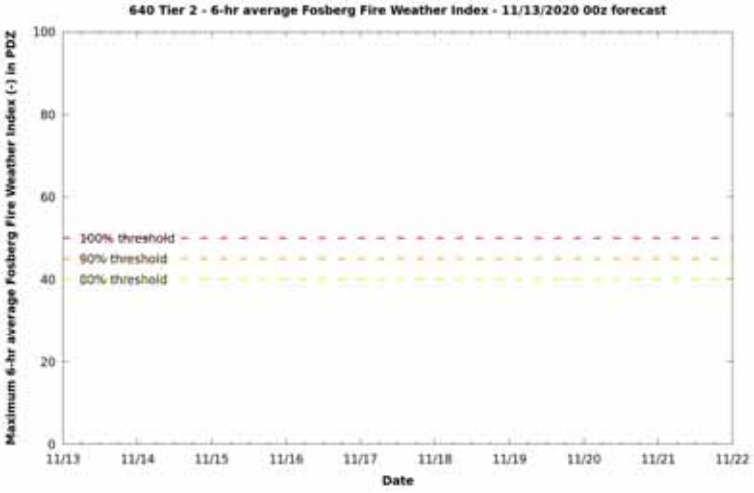


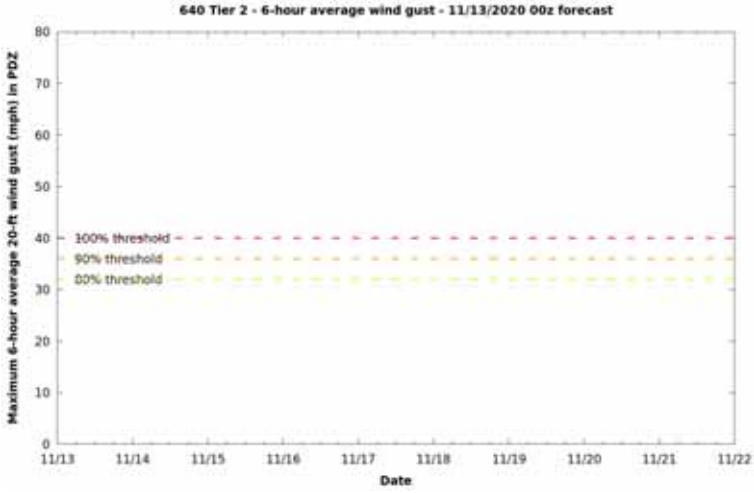
Tier 3



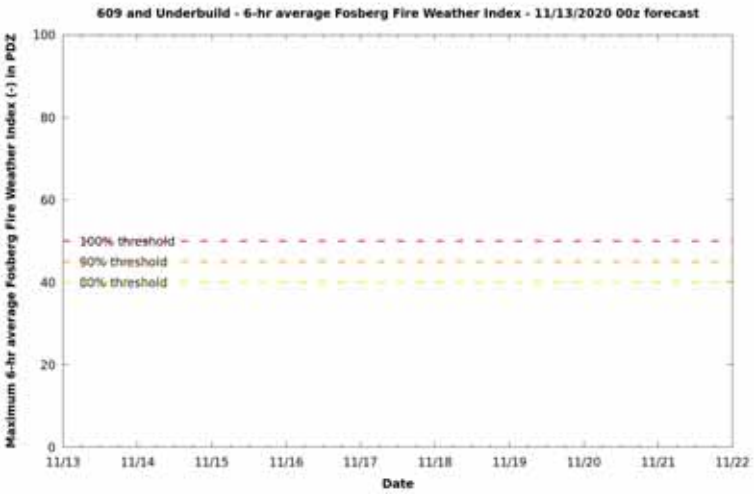


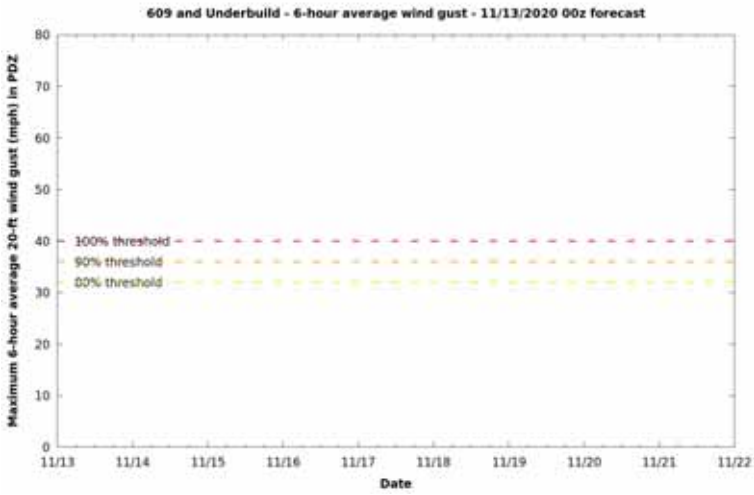
640 Tier 2



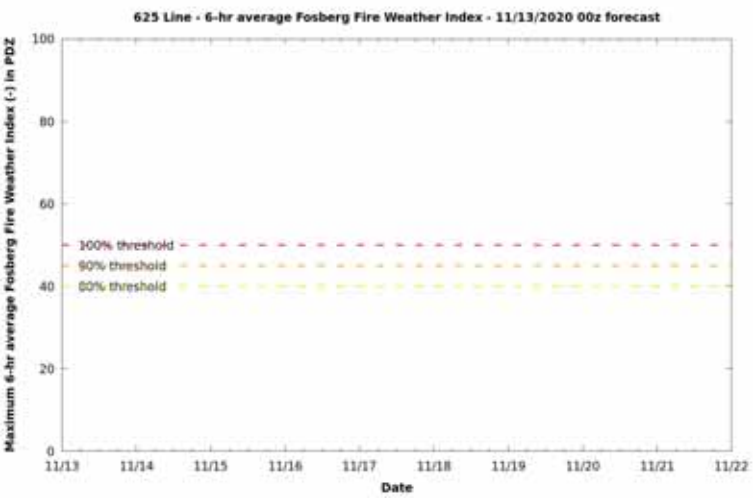


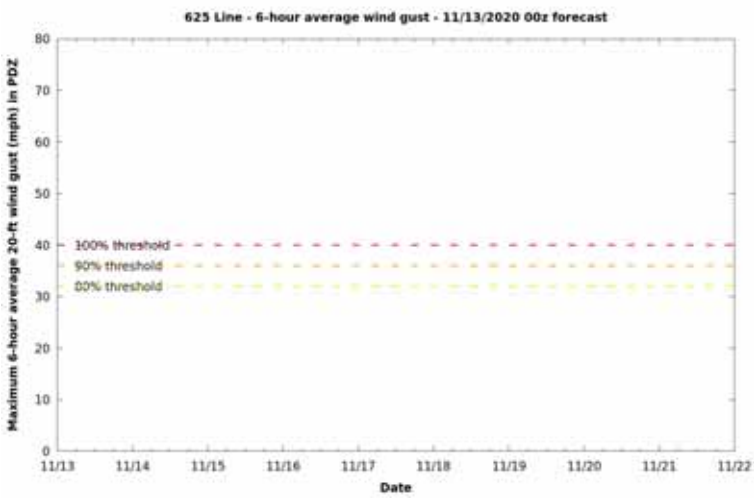
609 and Underbuild



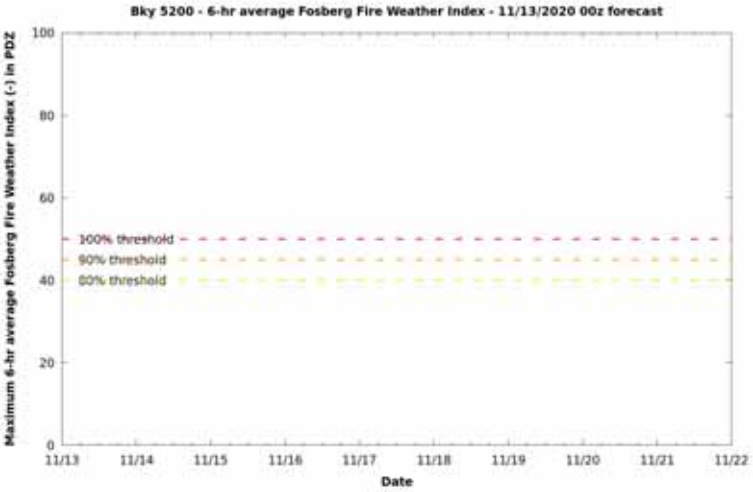


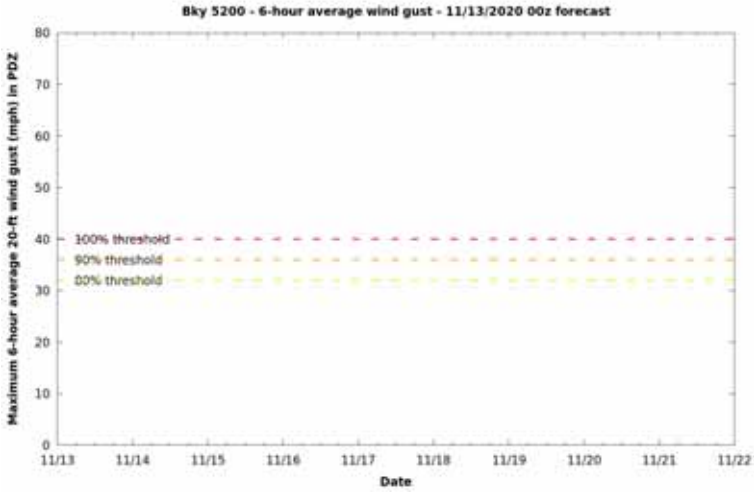
625 Line



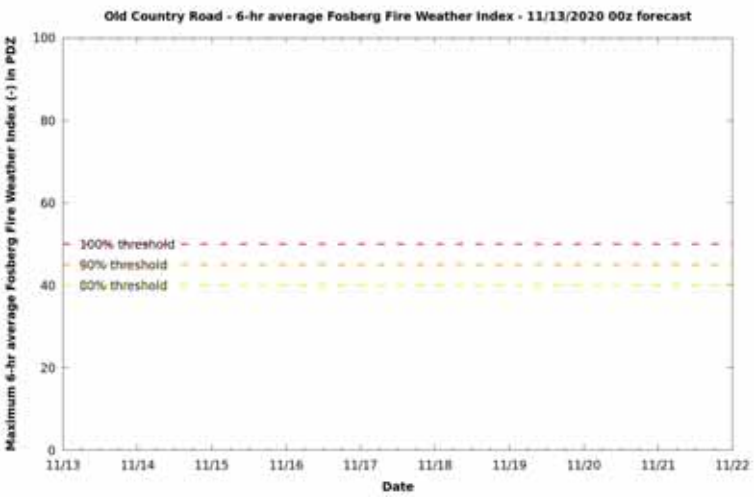


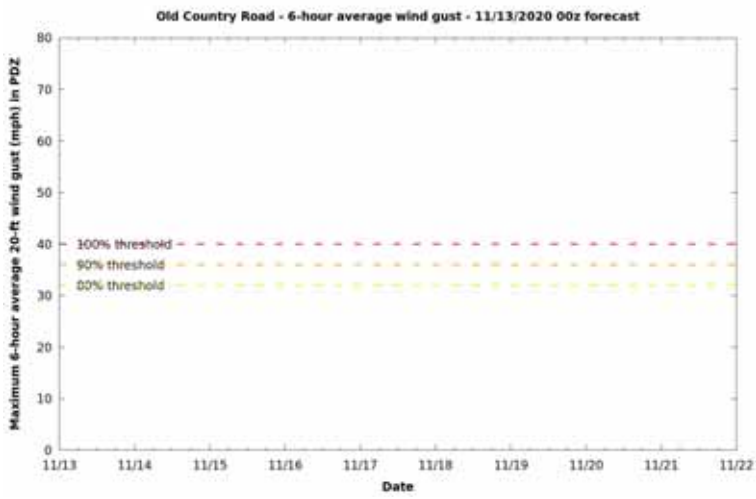
Bky 5200



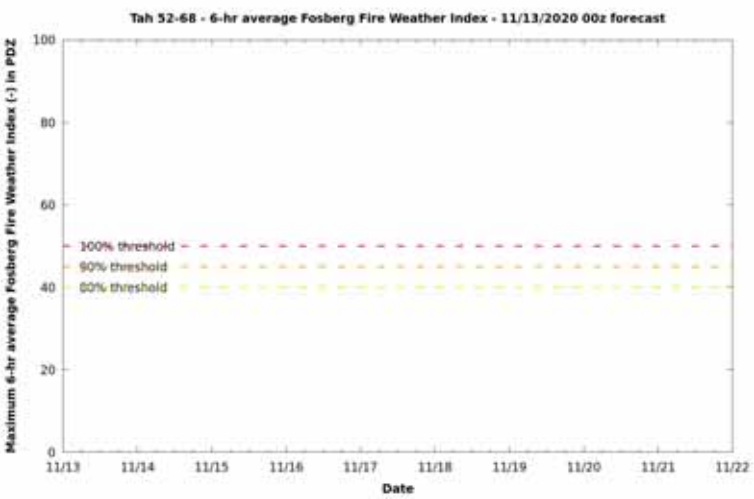


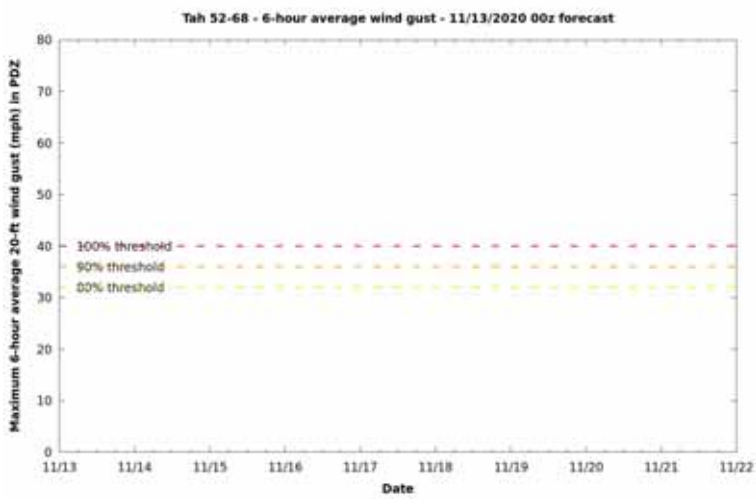
Old Country Road



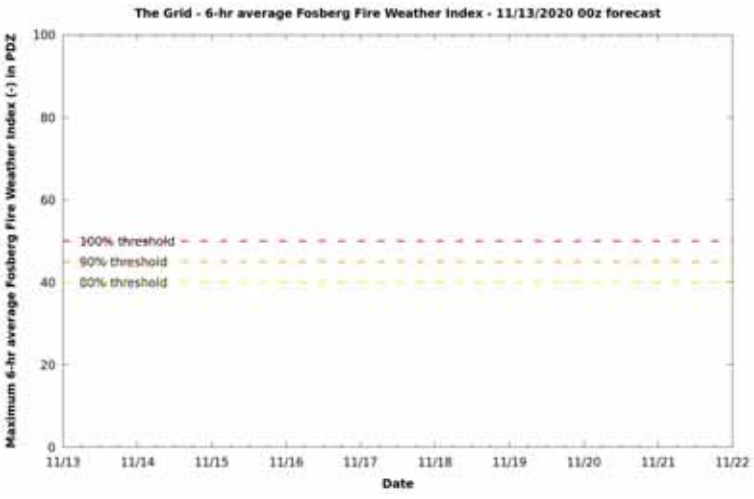


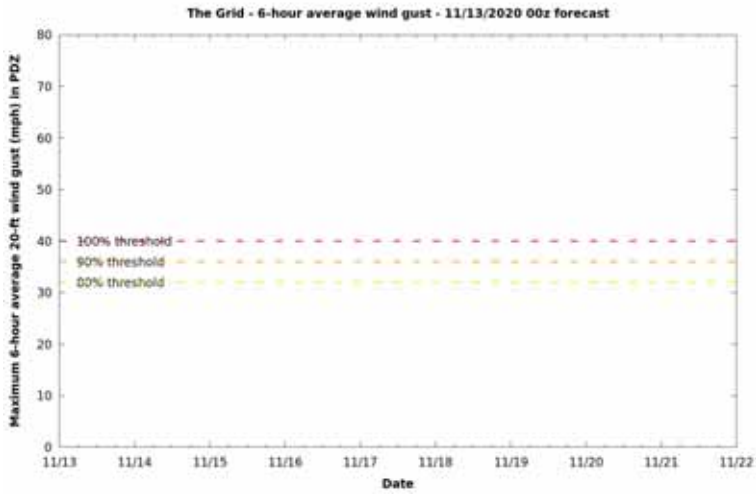
Tah 52-68



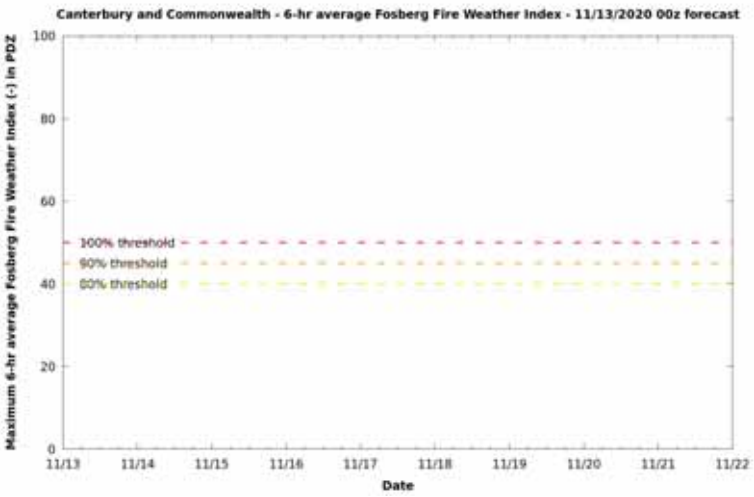


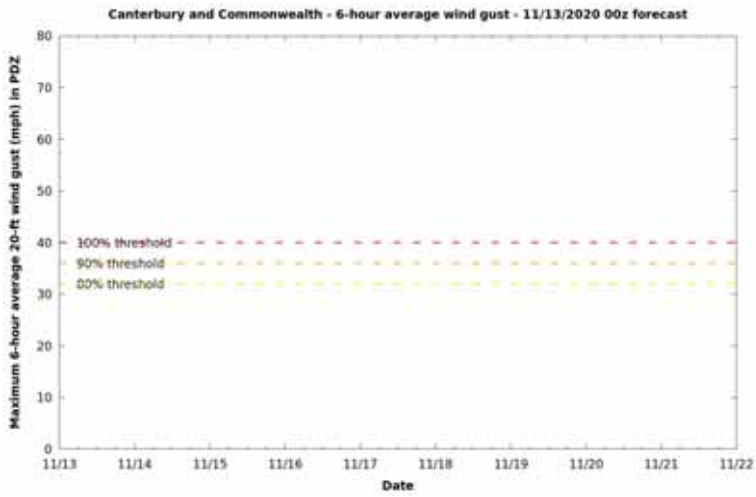
The Grid



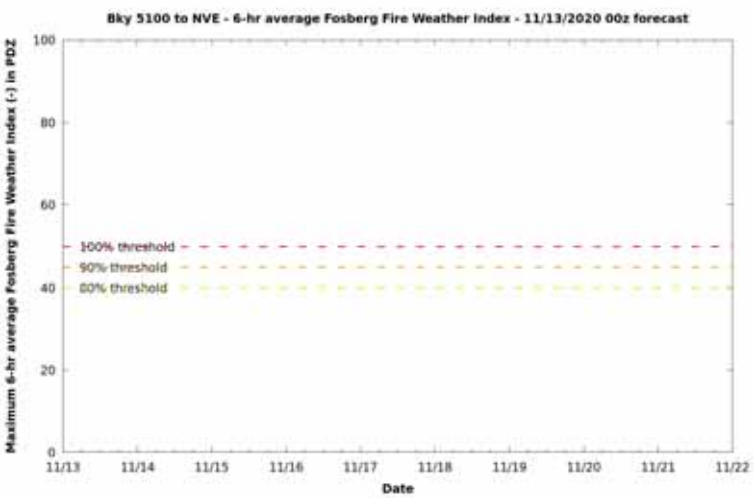


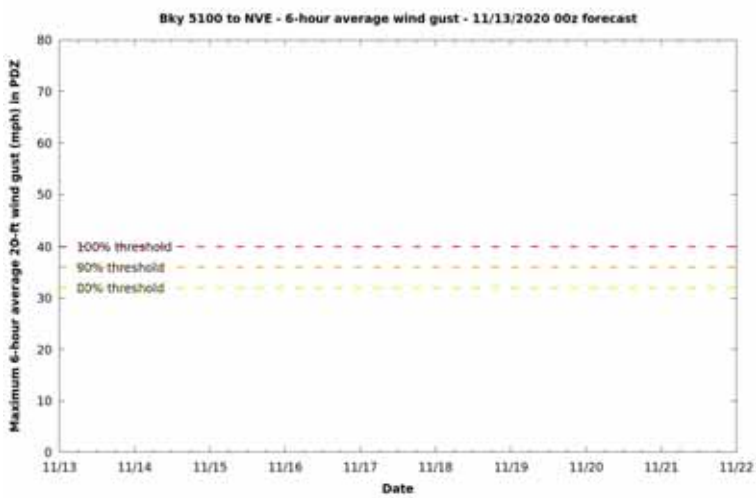
Canterbuy and Commonwealth



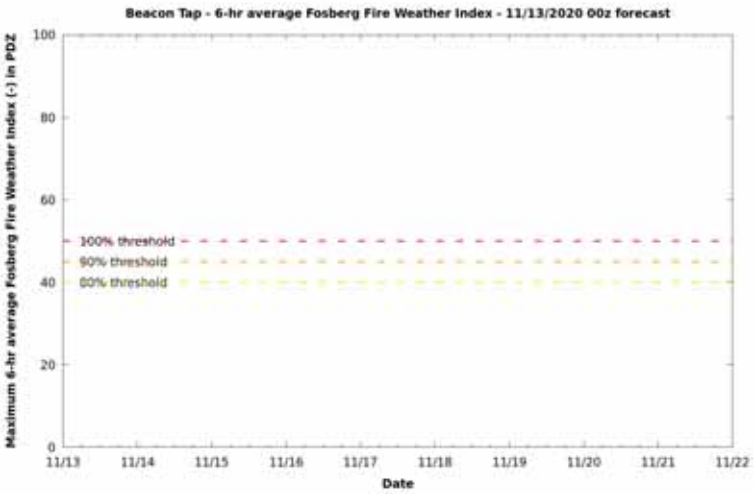


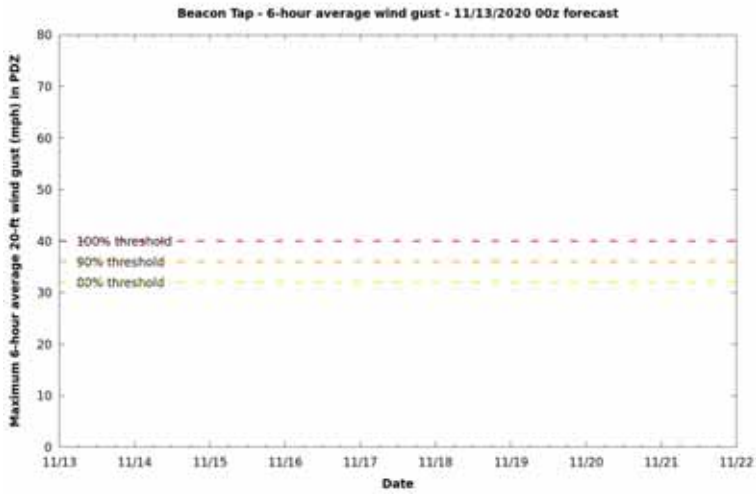
Bky 5100 to NVE



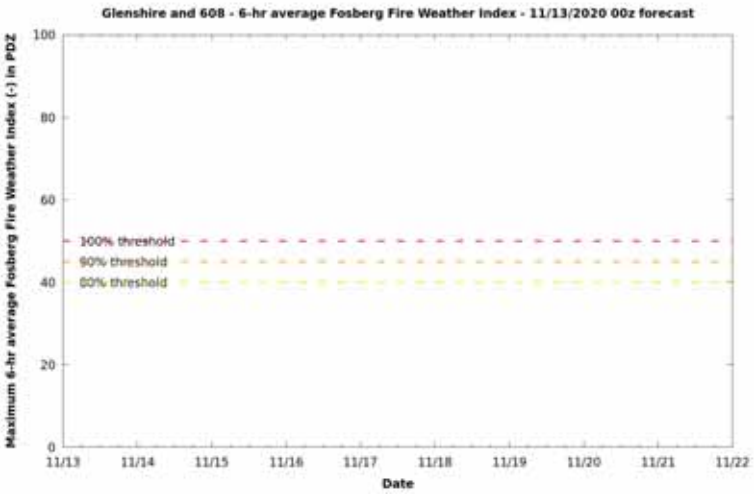


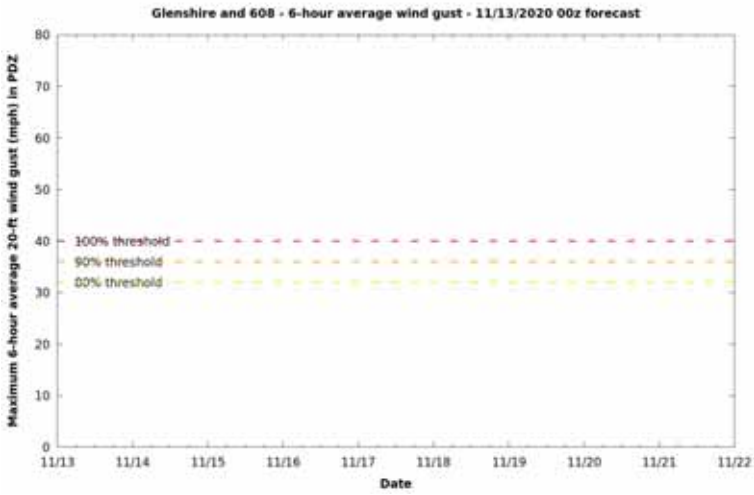
Beacon Tap



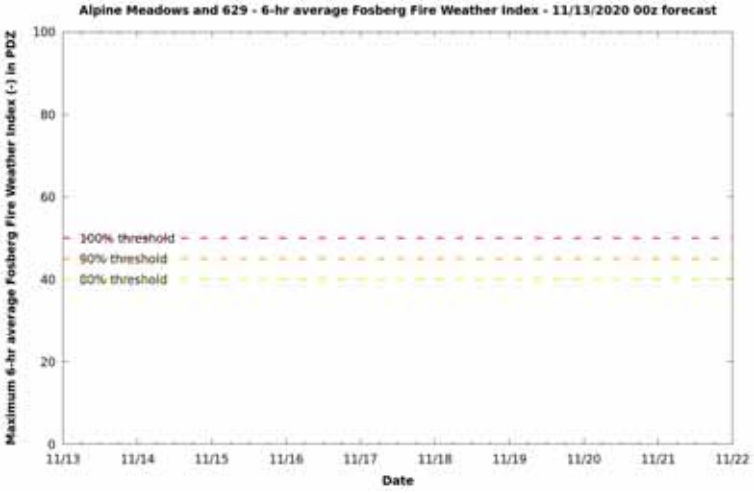


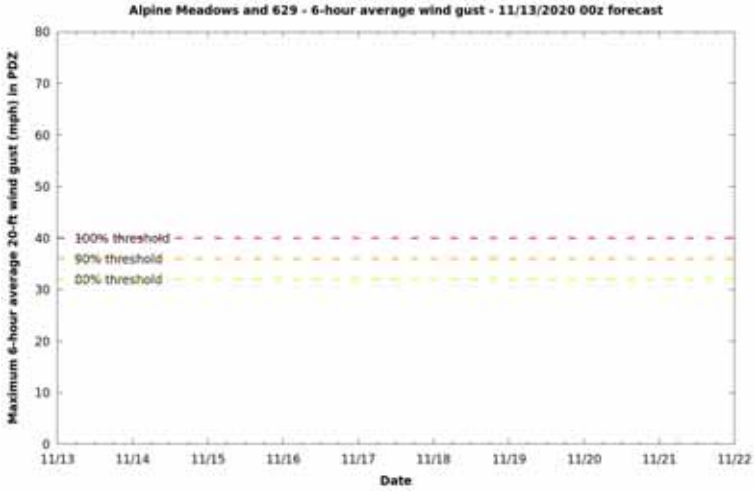
Glenshire and 608



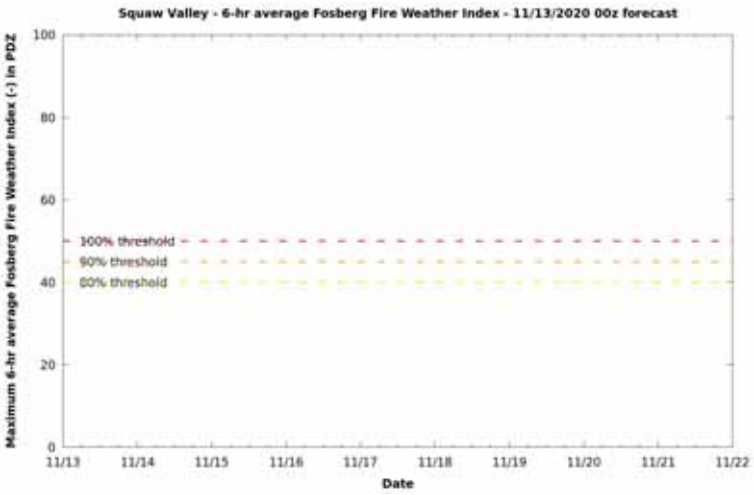


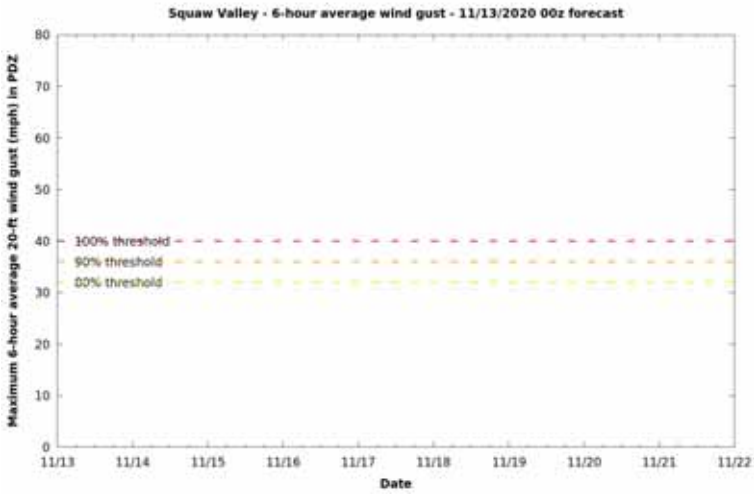
Alpine Meadows and 629



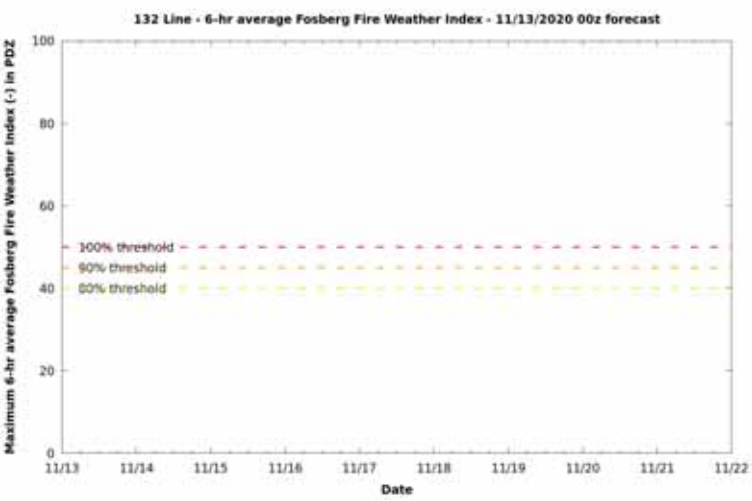


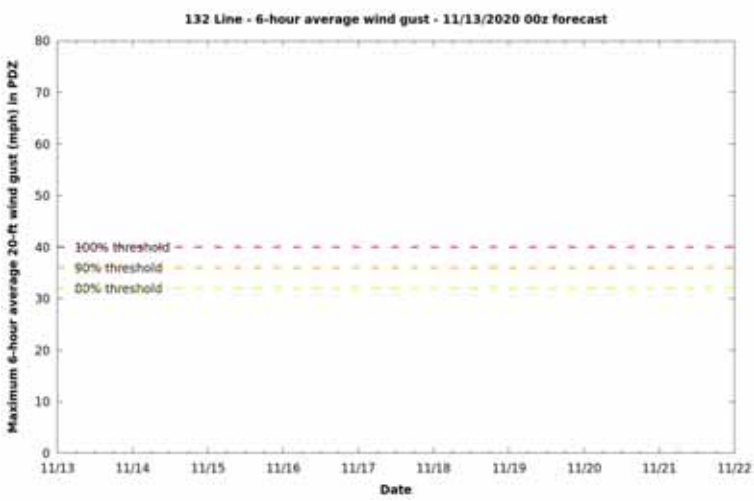
Squaw Valley



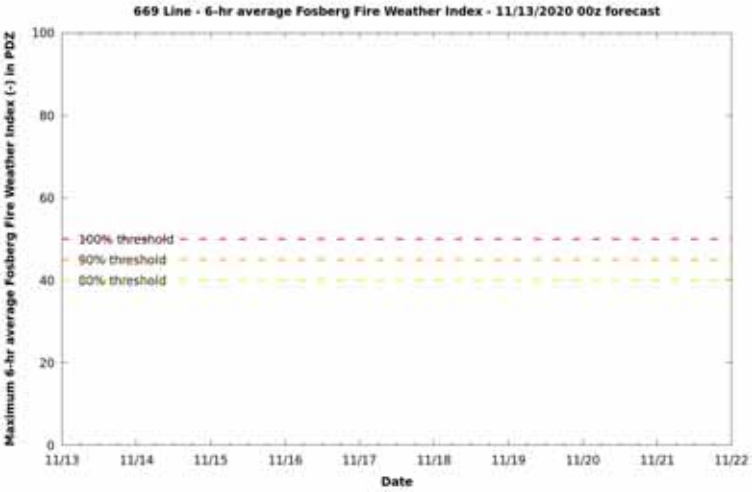


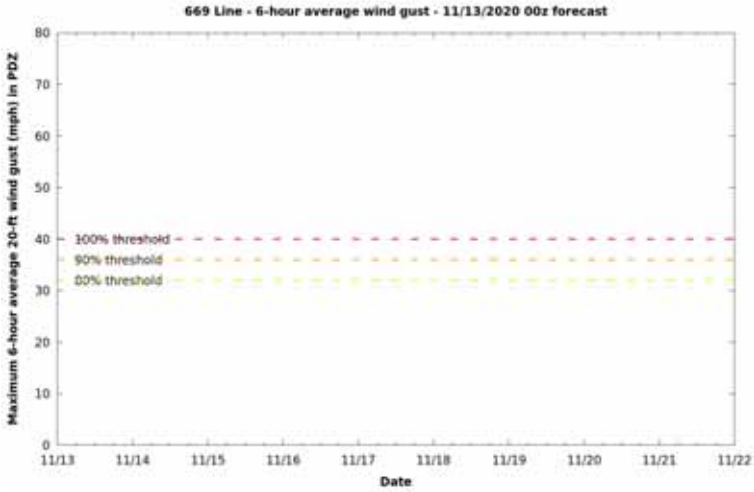
132 Line



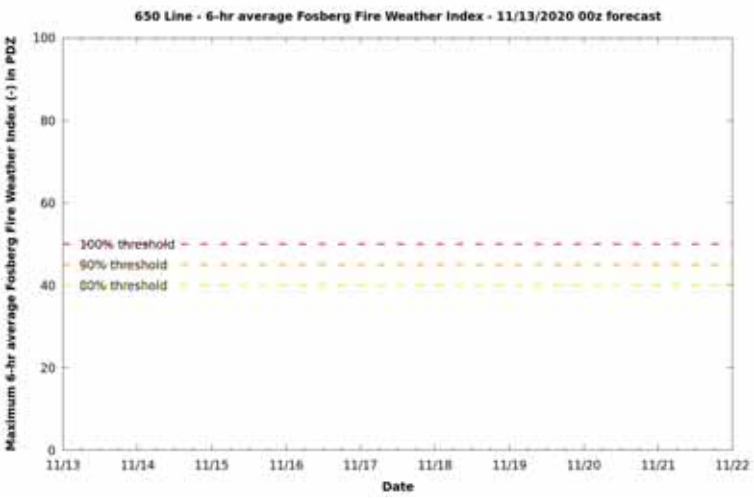


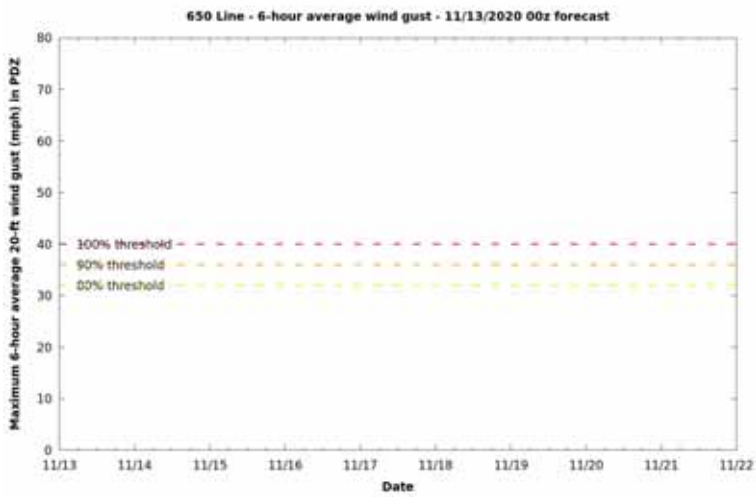
669 Line



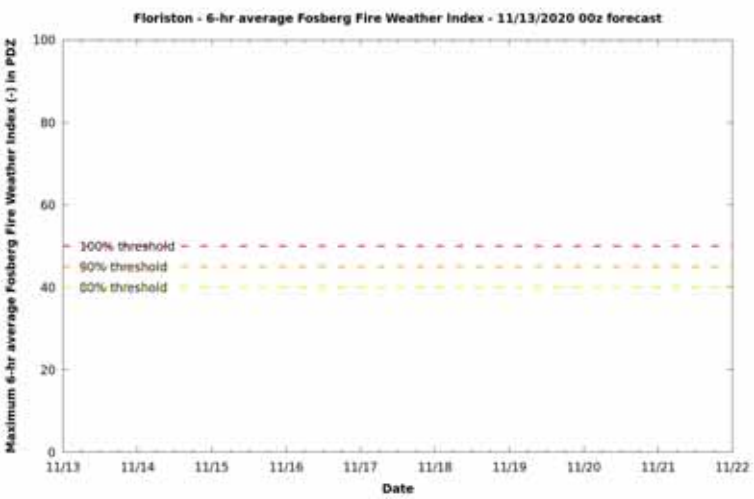


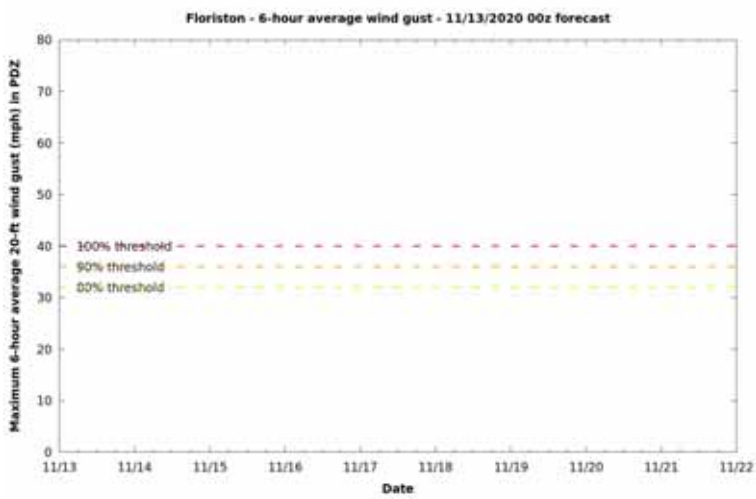
650 Line



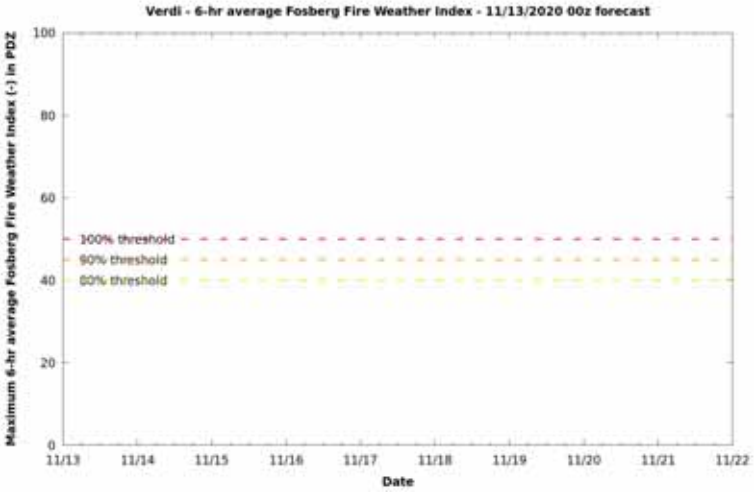


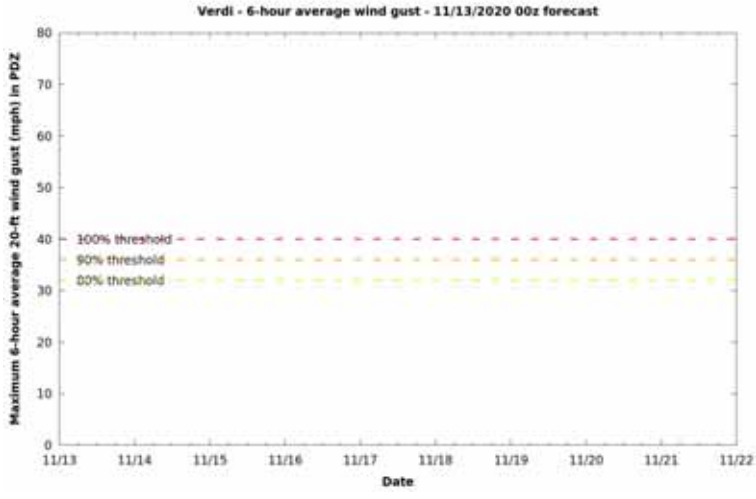
Floriston



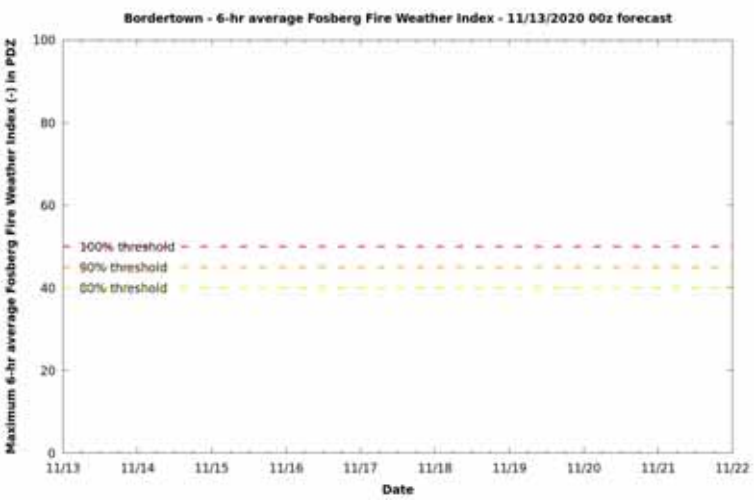


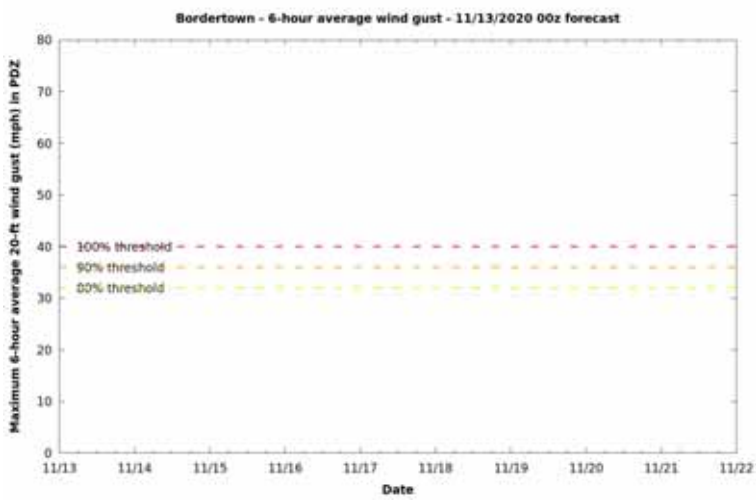
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/13/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
00% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date


Bordertown - 6-hour average wind gust - 11/13/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
00% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date

Liberty Utilities Fire Potential Index Forecast for 11/13/20 - 11/19/20

Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	moderate	moderate	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	moderate	low	low	low	low	low

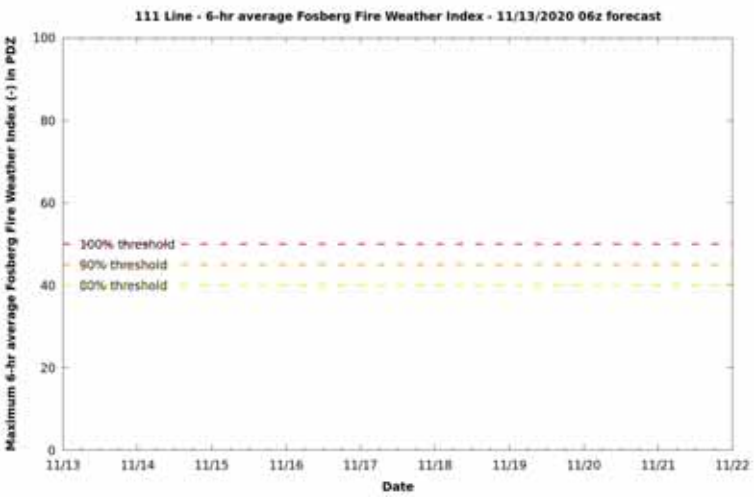
Liberty Utilities Energy Release Component Forecast for 11/13/20 - 11/19/20

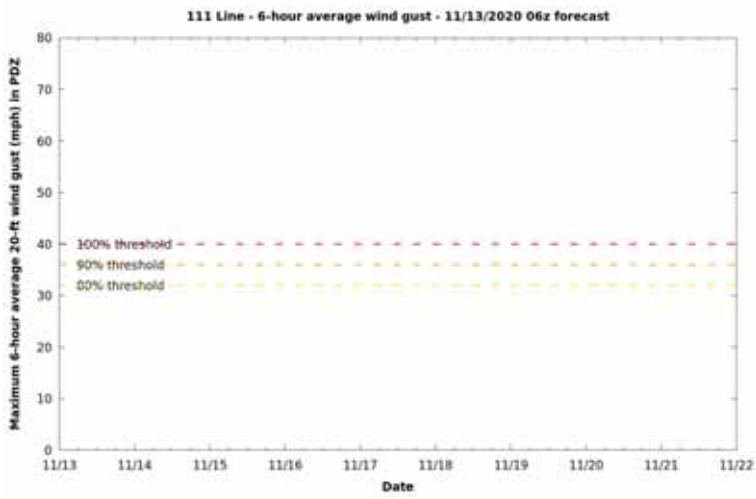
Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	66.0	60.0	55.0	51.0	52.0	56.0	54.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	62.0	48.0	43.0	38.0	36.0	39.0	34.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	58.0	58.0	54.0	50.0	54.0	56.0	56.0

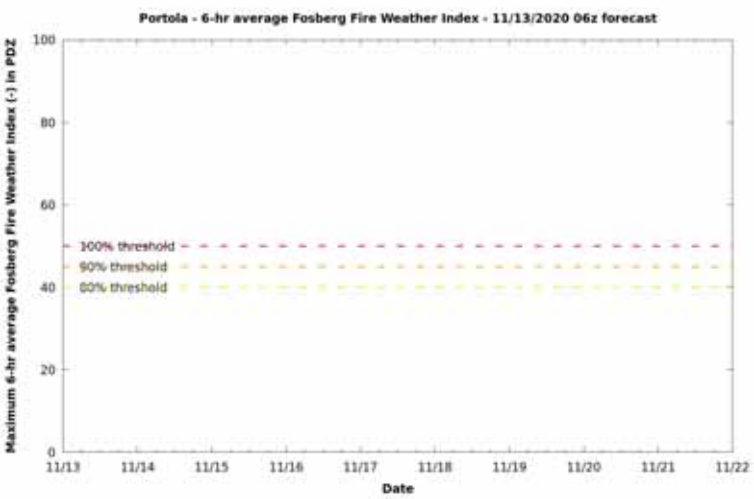
Liberty Utilities Fire Weather Summary Plots - 11/13/2020 06z forecast

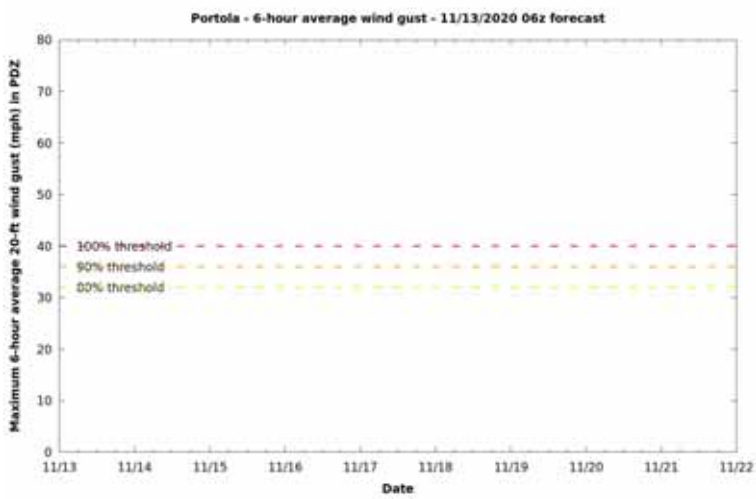
111 Line



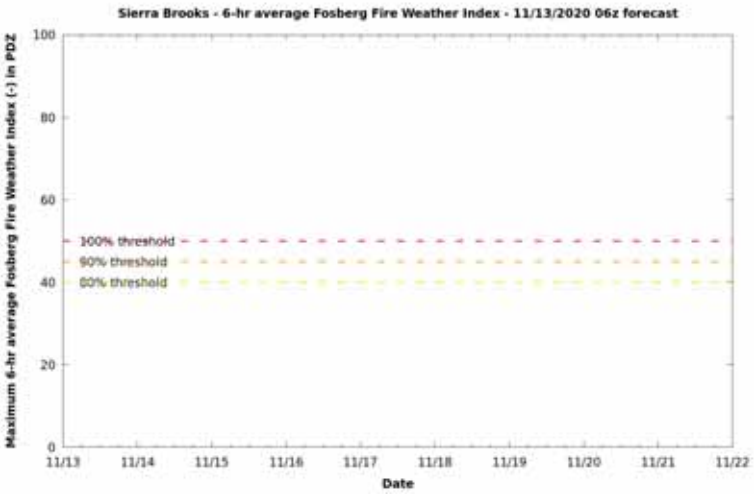


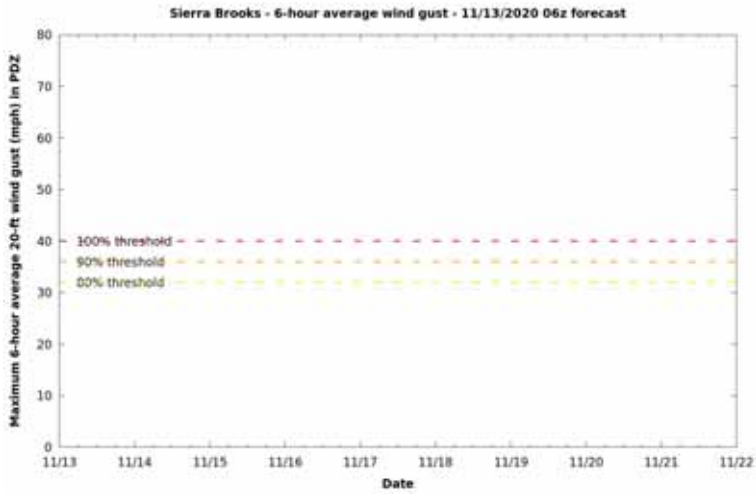
Portola



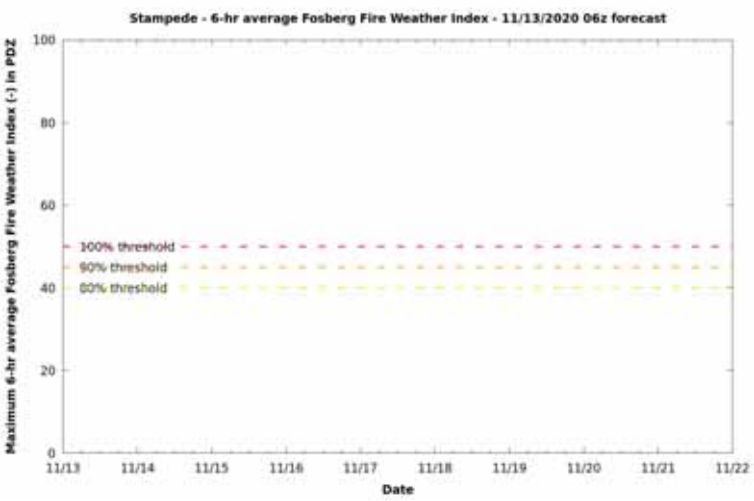


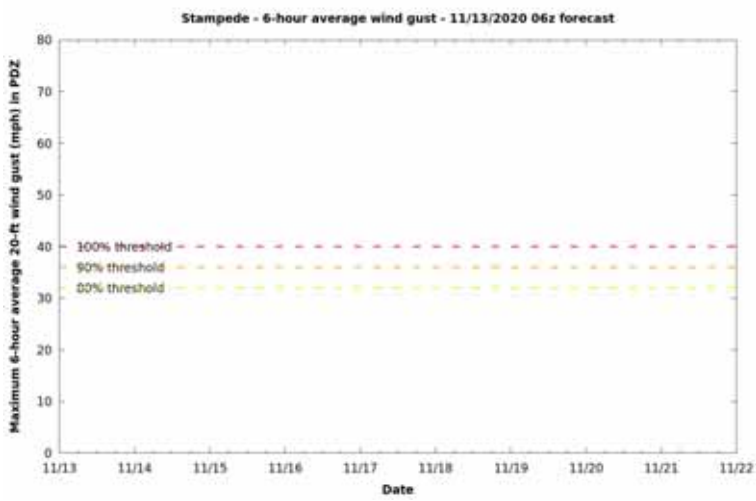
Sierra Brooks



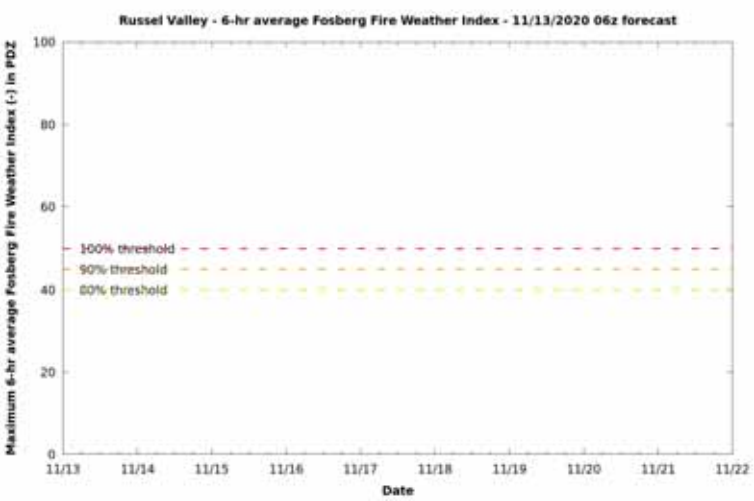


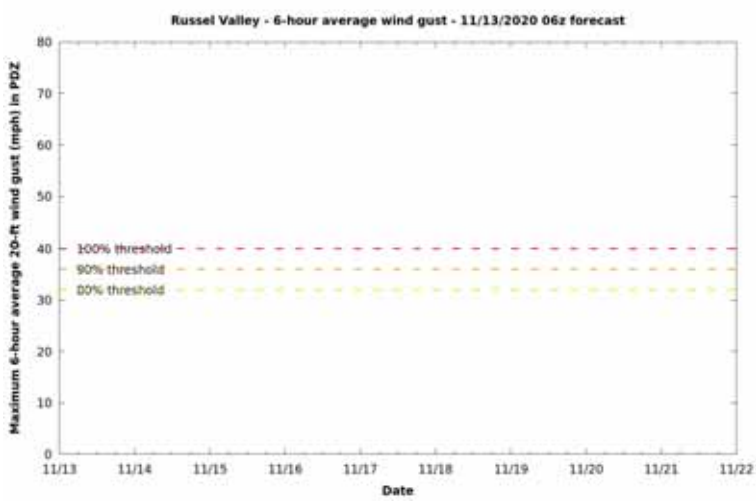
Stampede



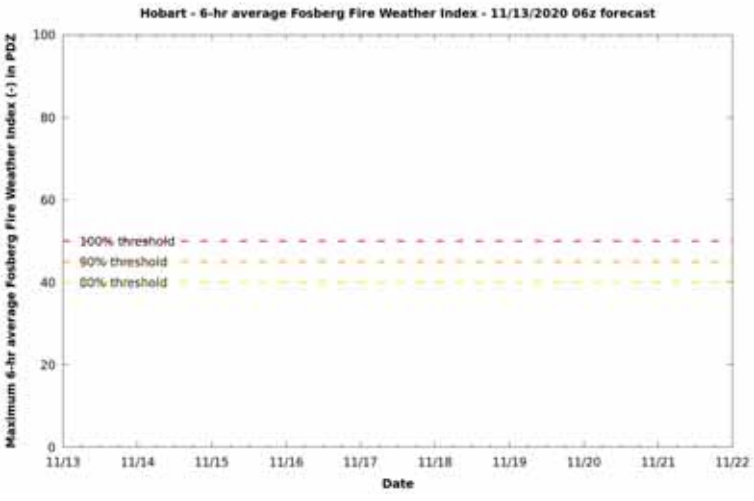


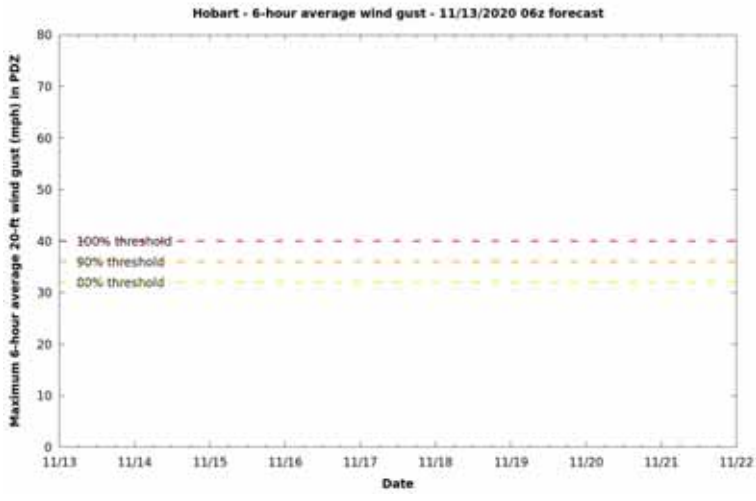
Russell Valley



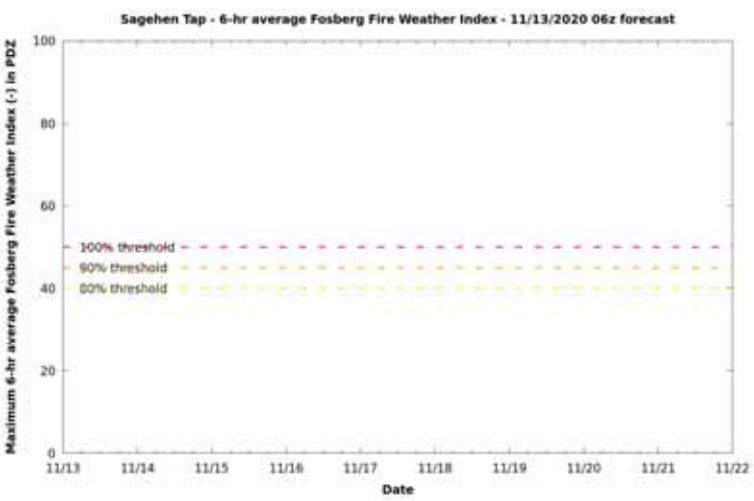


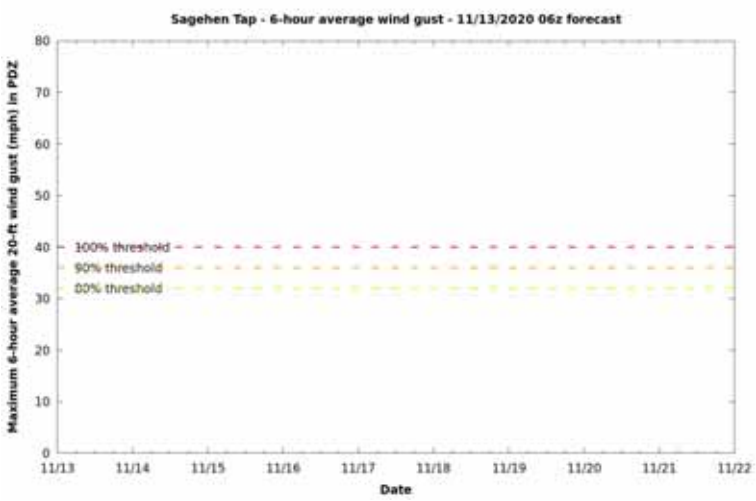
Hobart



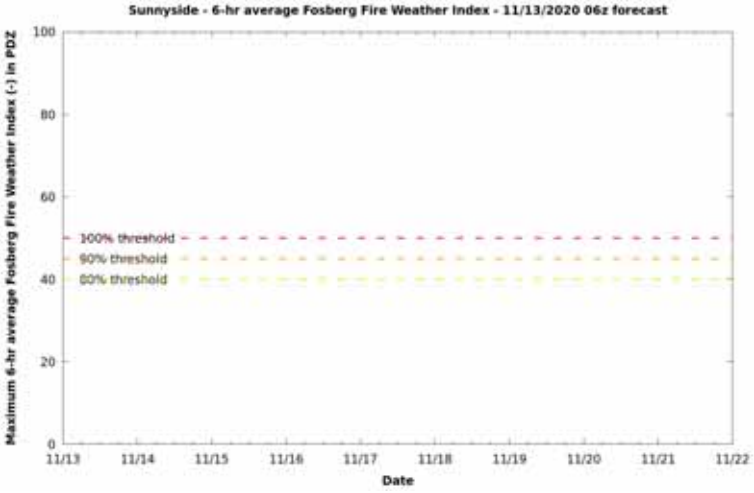


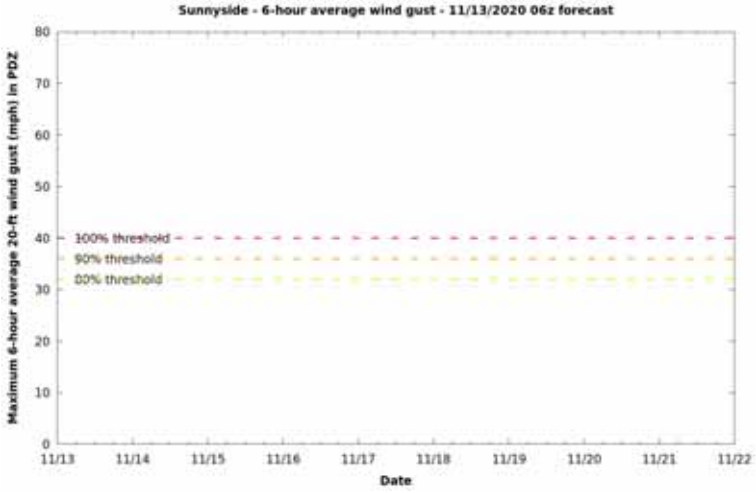
Sagehen tap



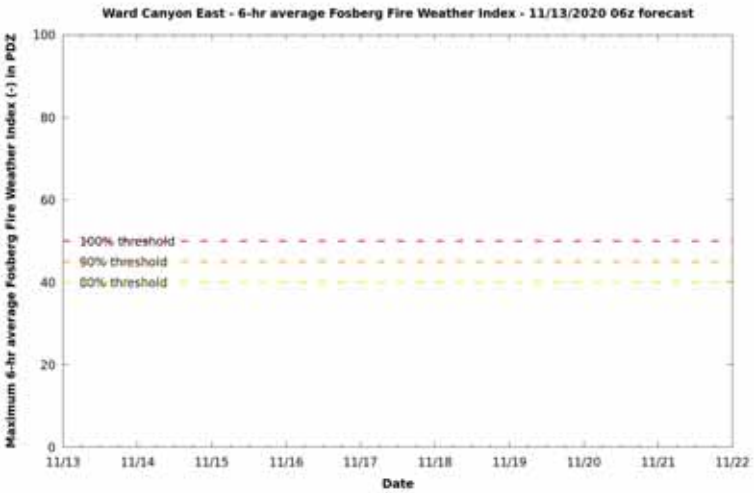


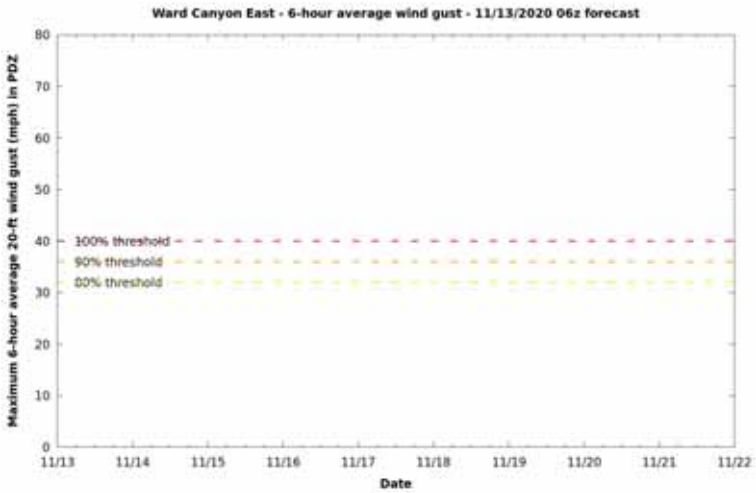
Sunnyside



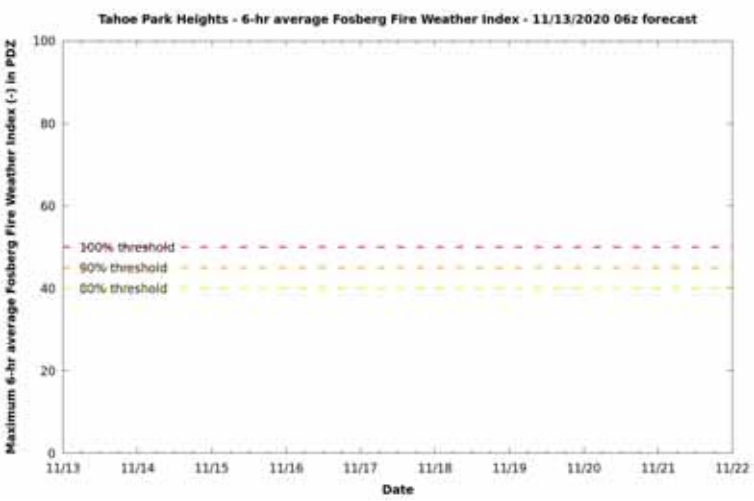


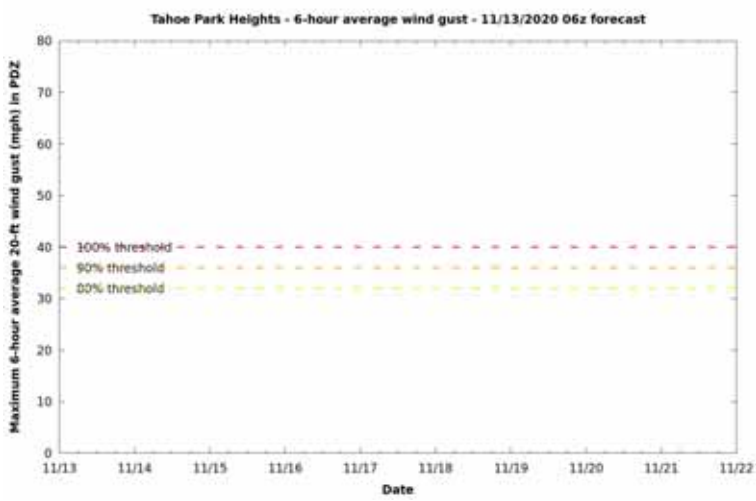
Ward Canyon East



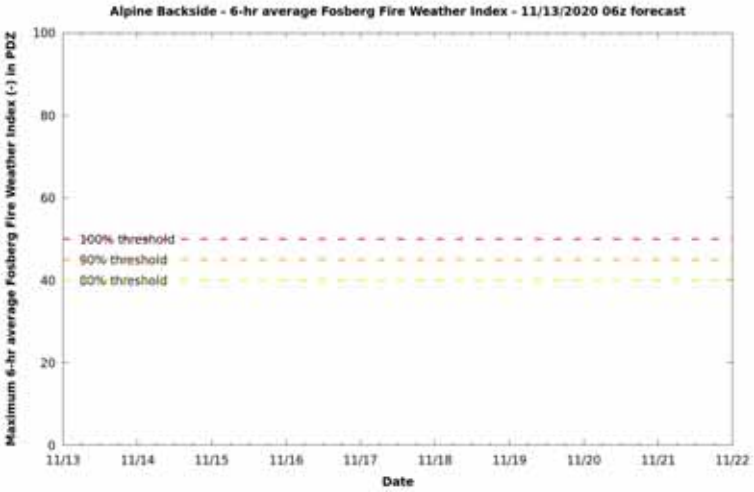


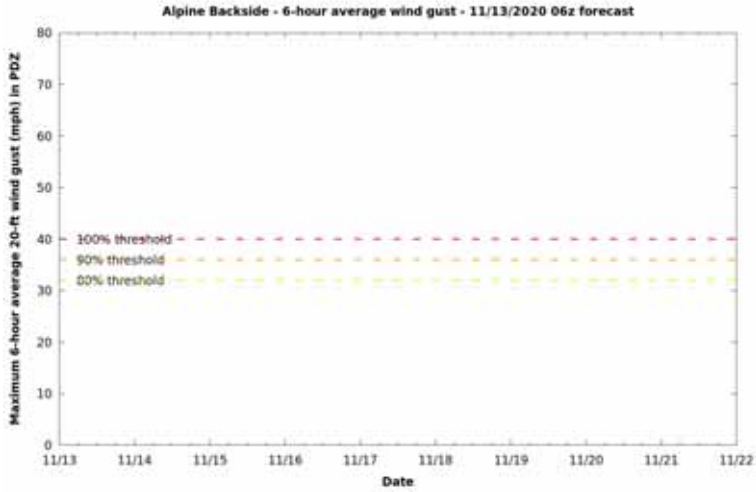
Tahoe Park Heights



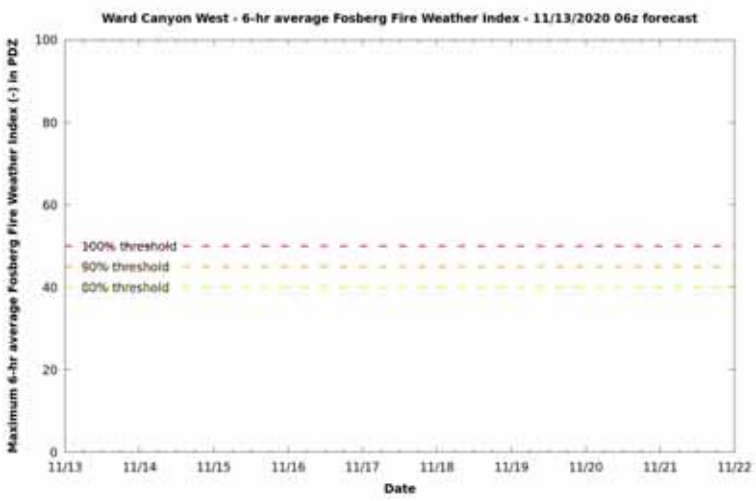


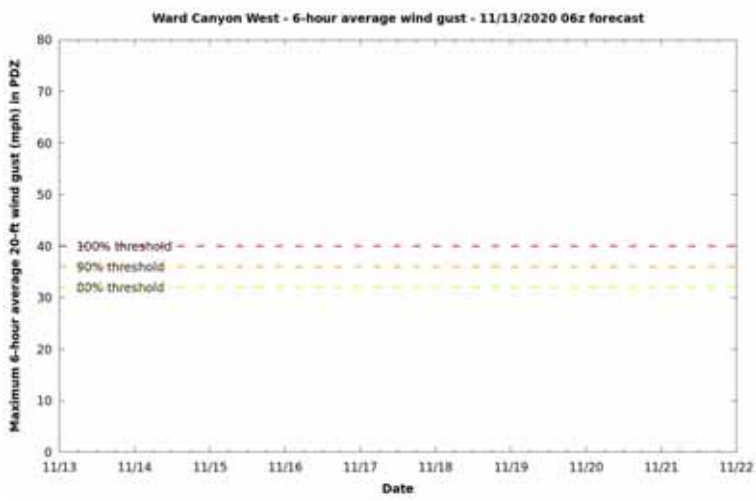
Alpine Backside



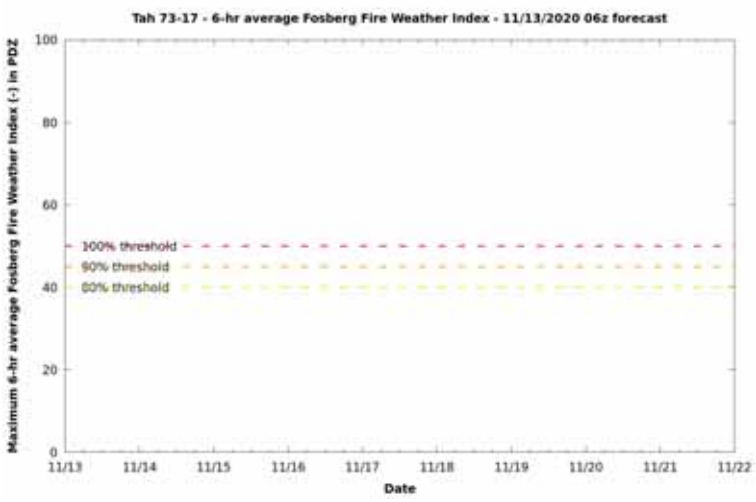


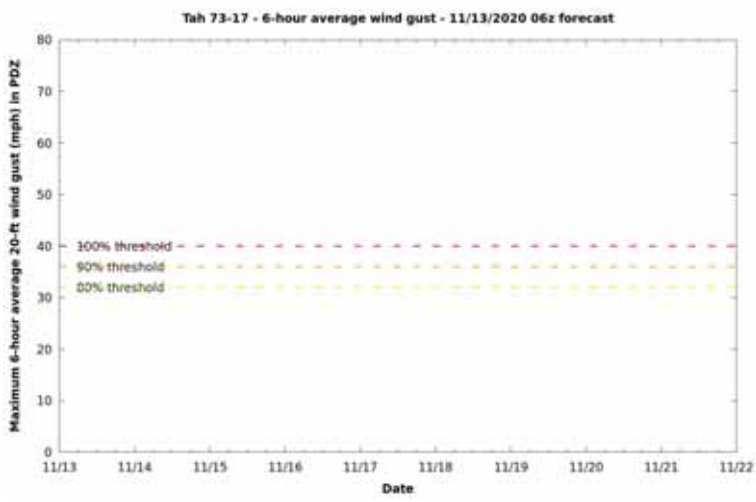
Ward Canyon West



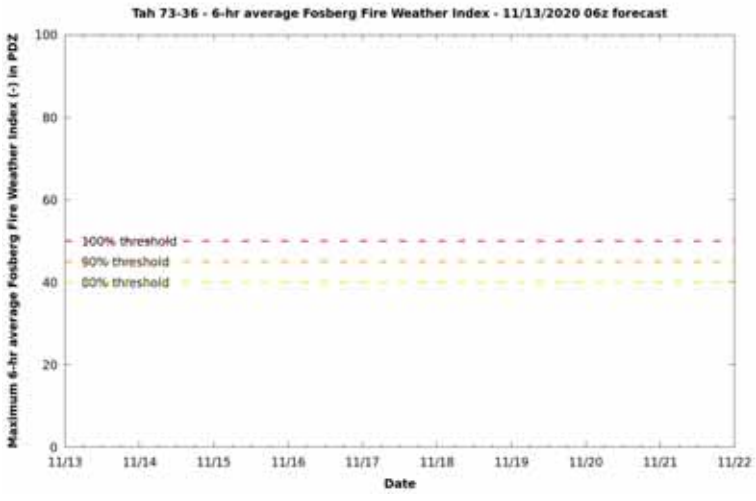


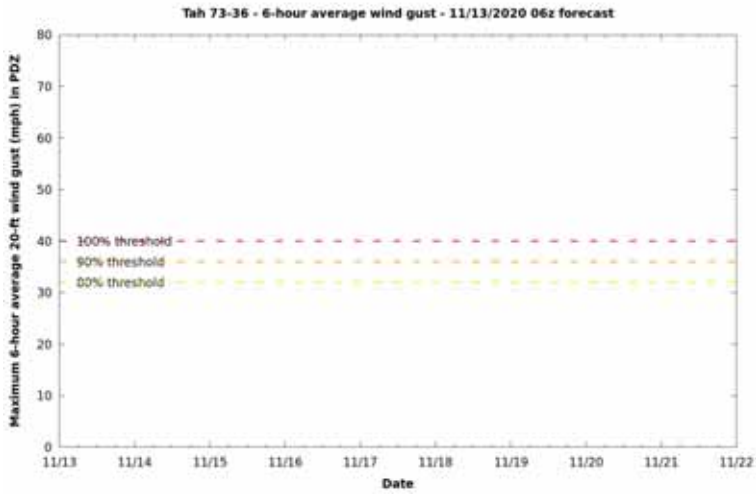
Tah 73-17



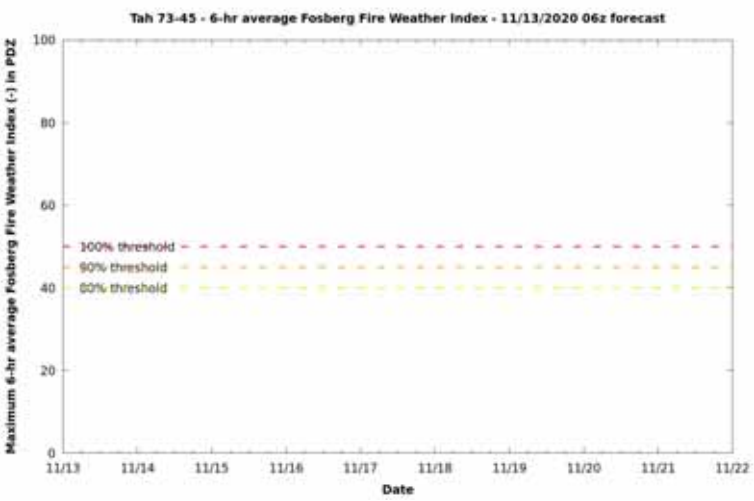


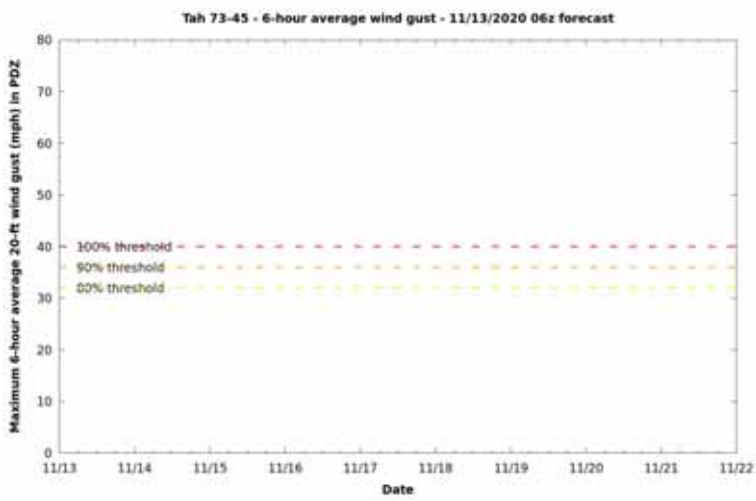
Tah 73-36



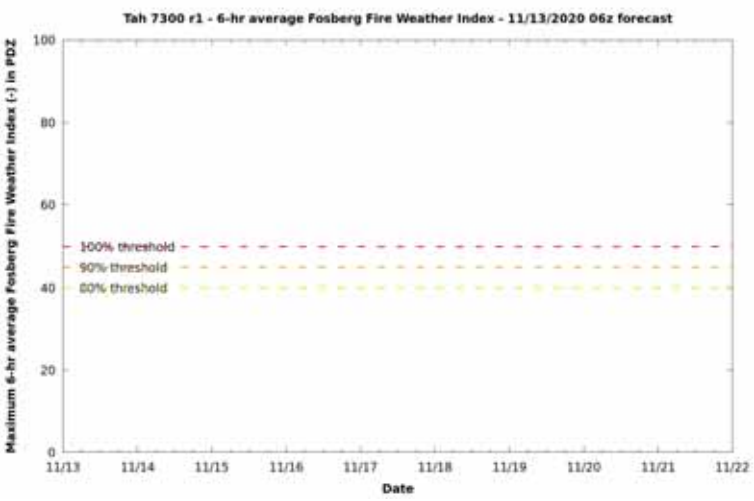


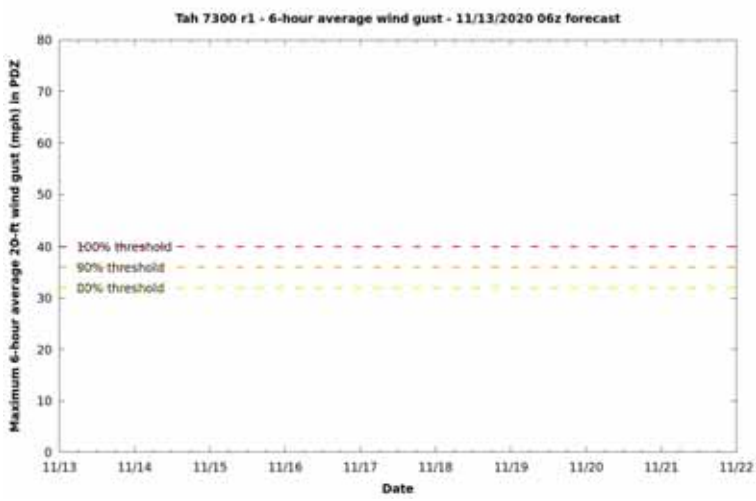
Tah 73-45



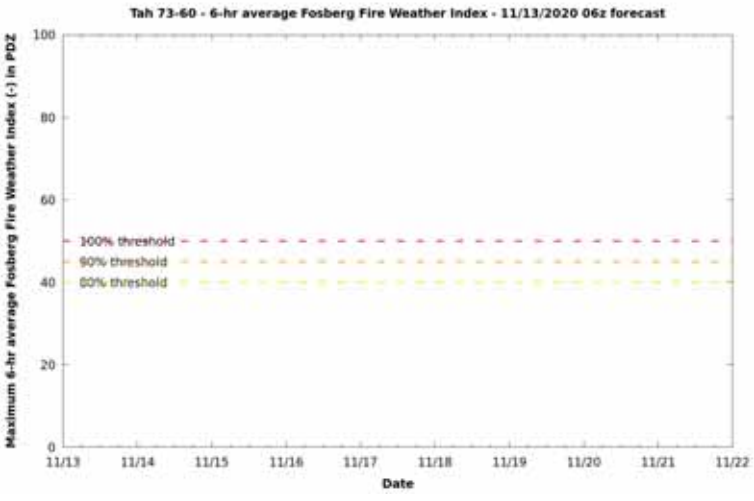


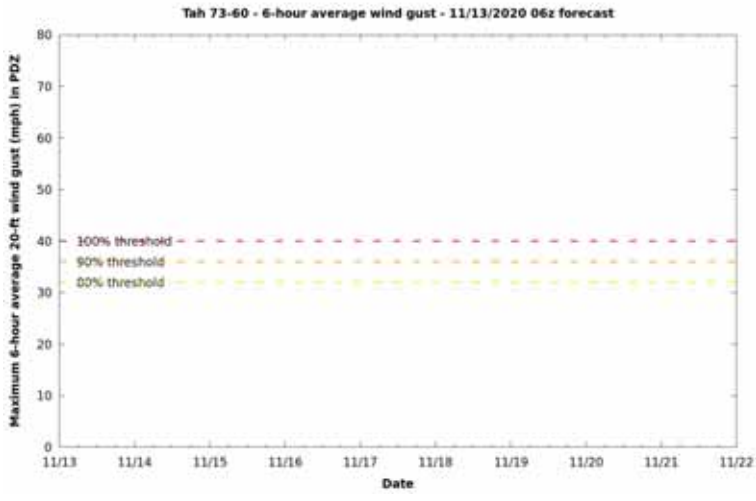
Tah 7300 r1



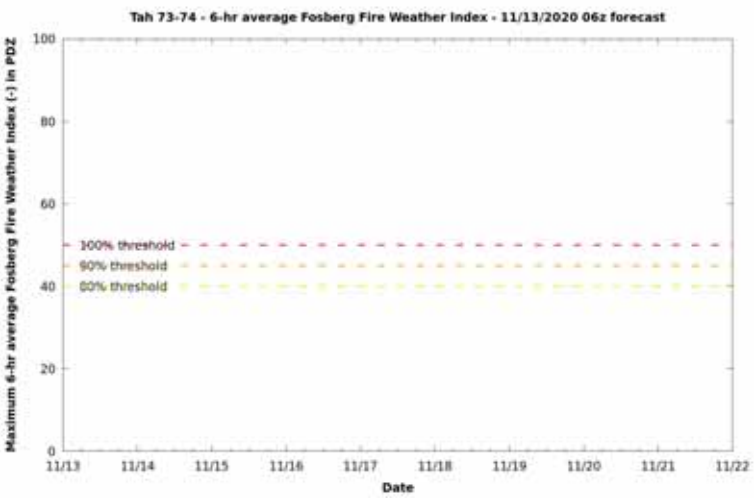


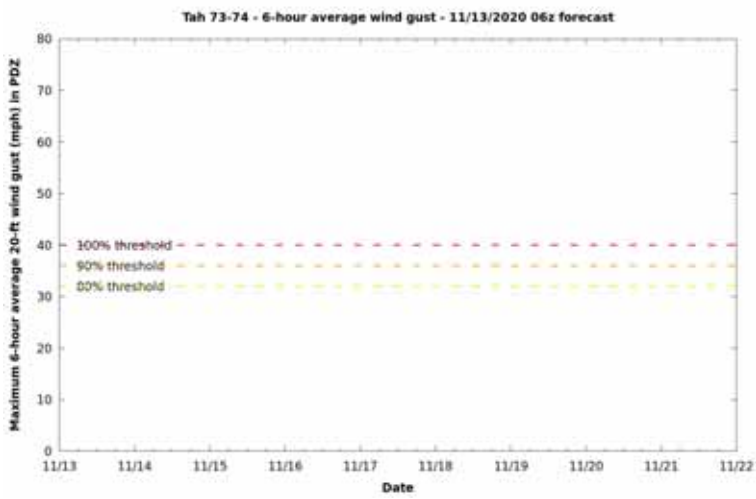
Tah 73-60



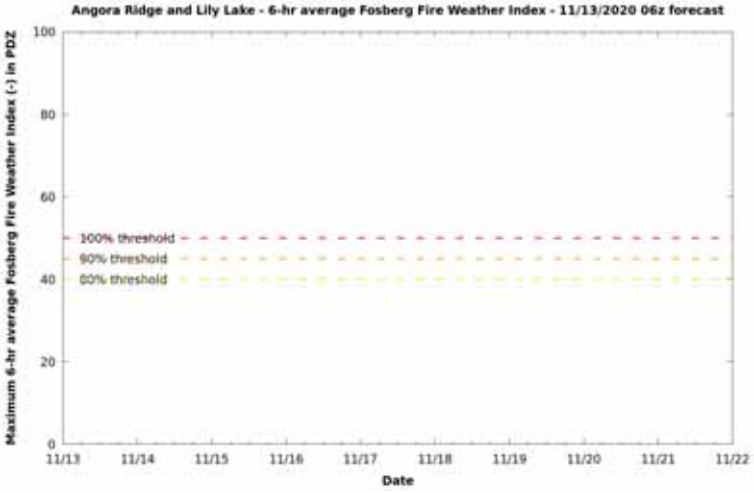


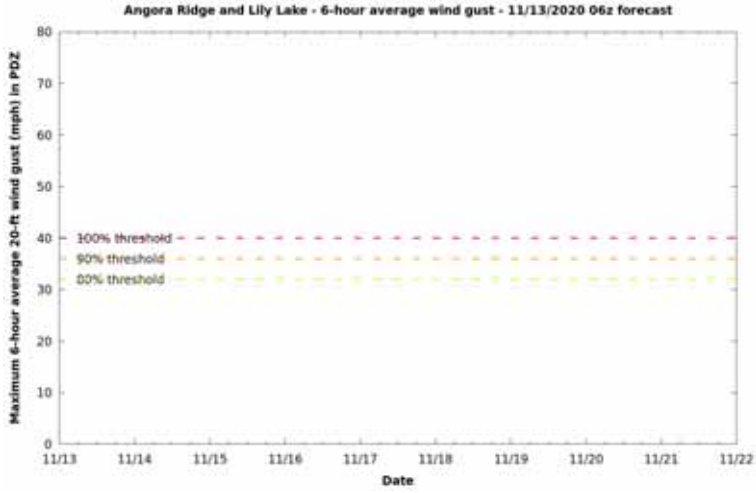
Tah 73-74



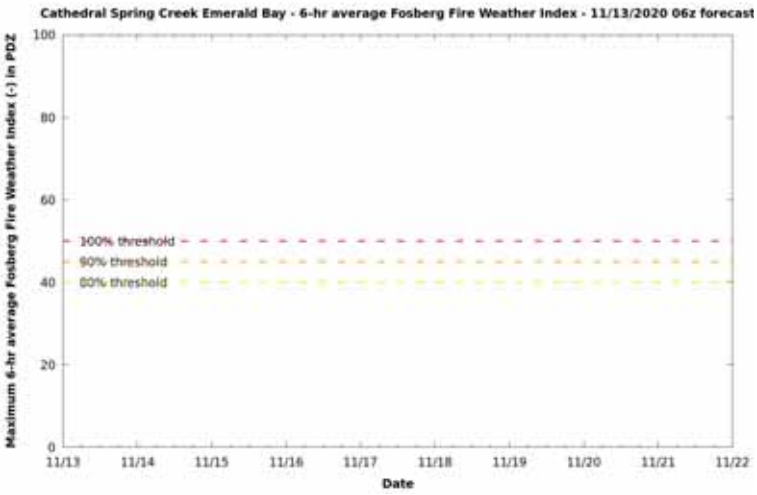


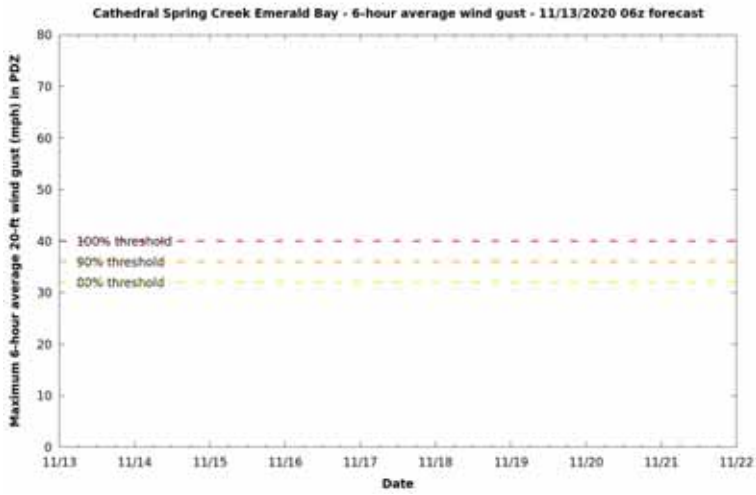
Angora Ridge and Lily Lake



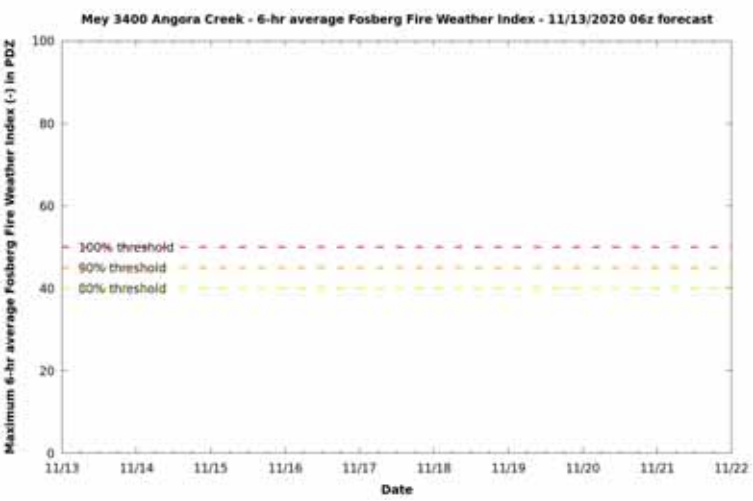


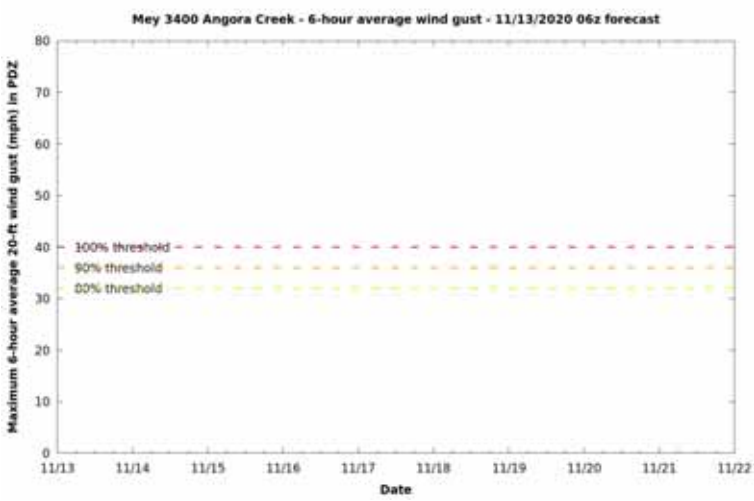
Cathedral Spring Creek Emerald Bay



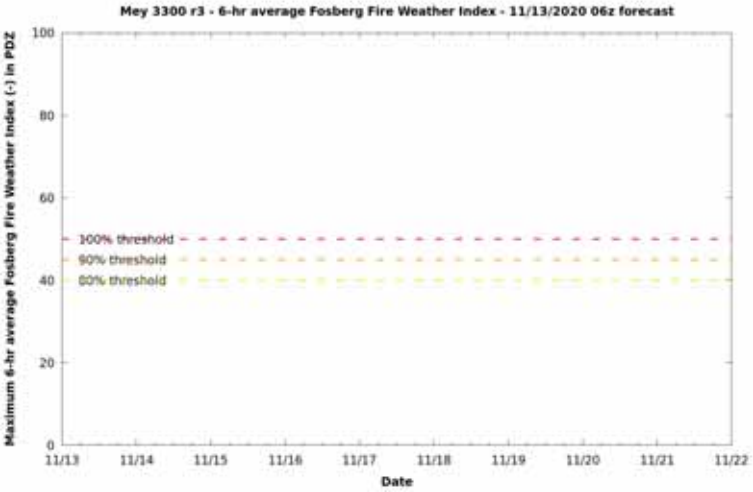


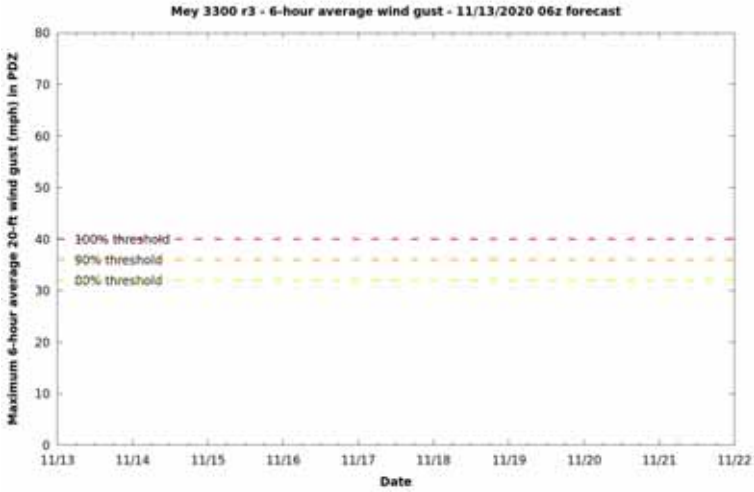
Mey 3400 Angora Creek



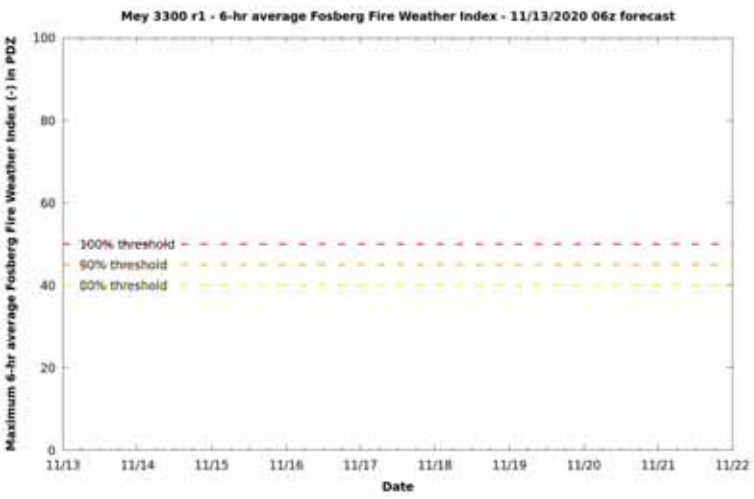


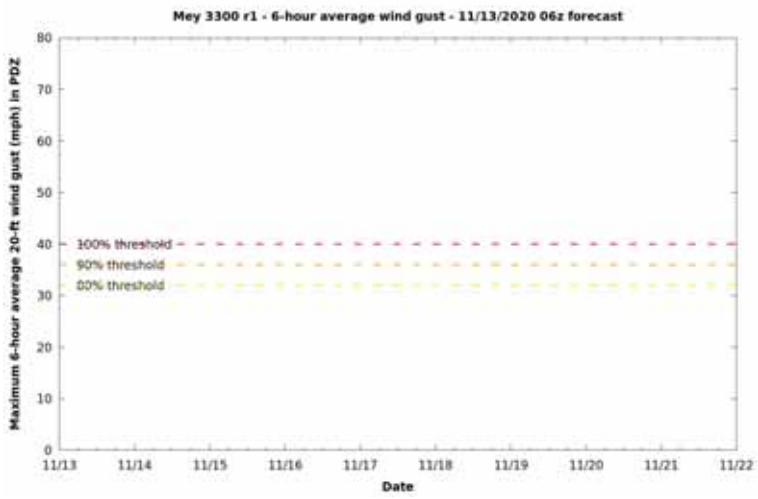
Mey 3300 r3



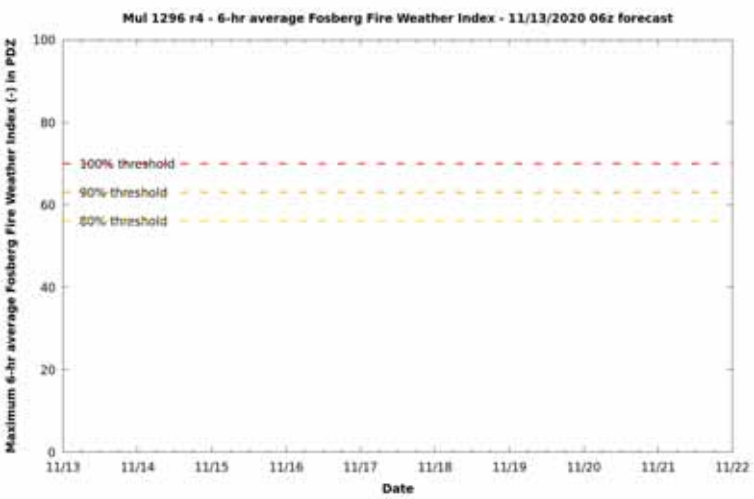


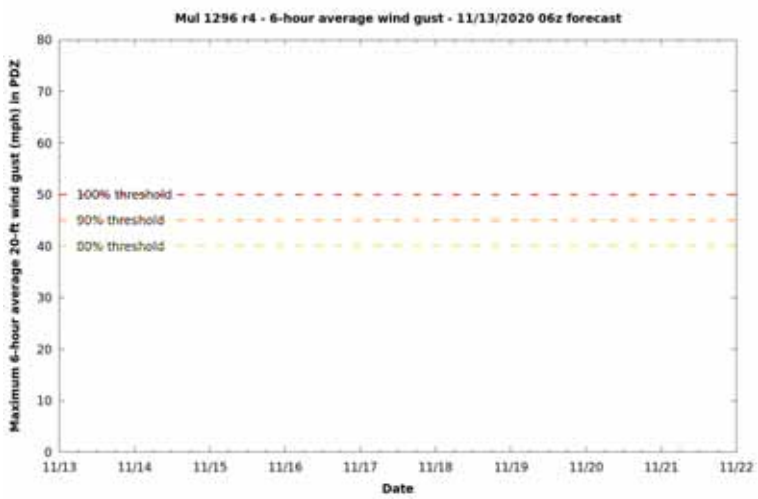
Mey 3300 r1



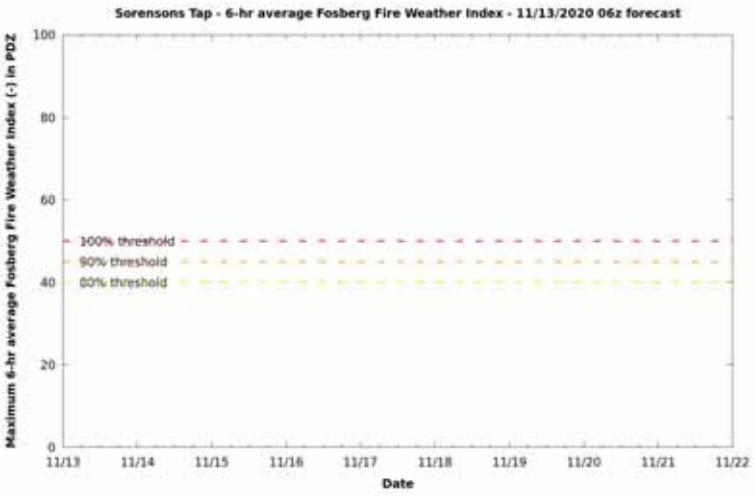


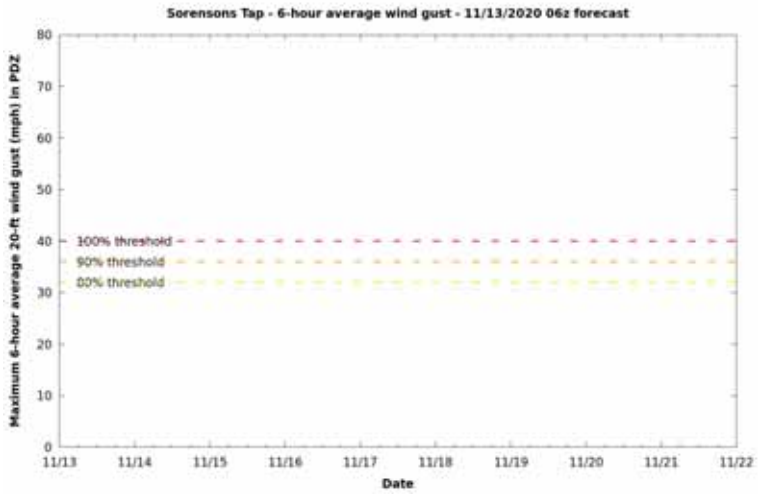
Mul 1296 r4



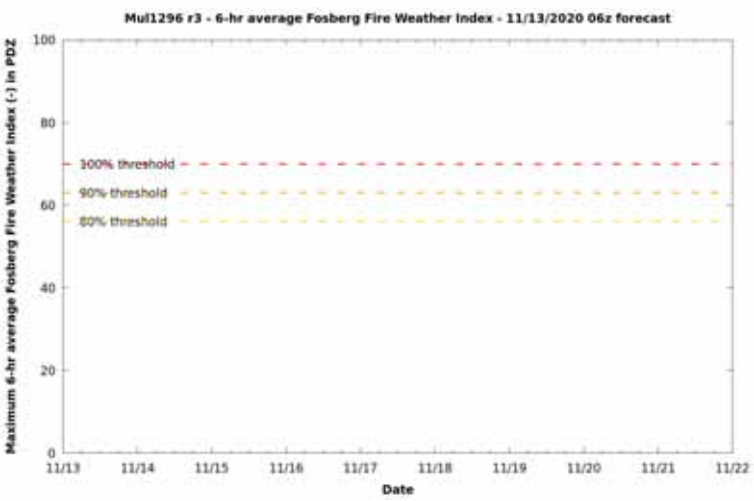


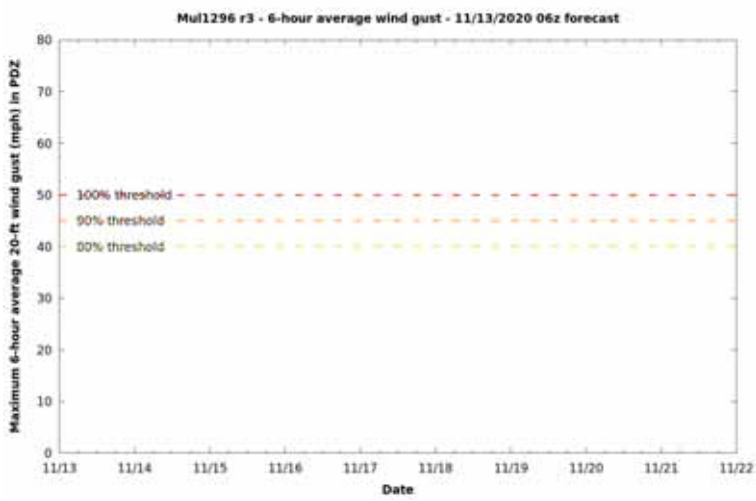
Sorensons Tap



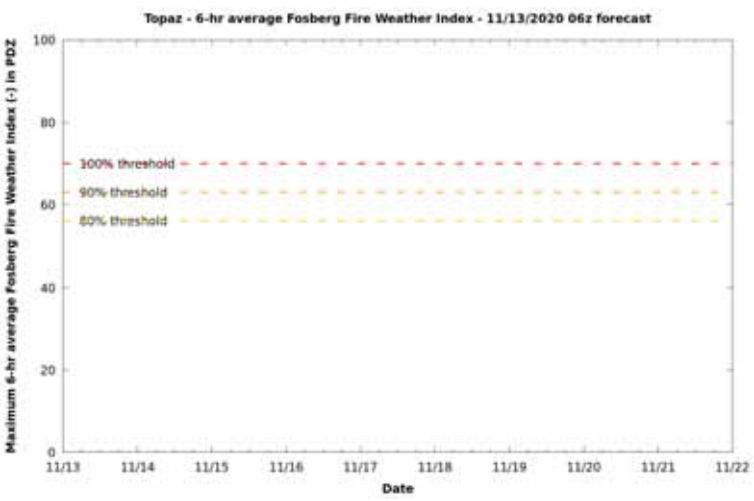


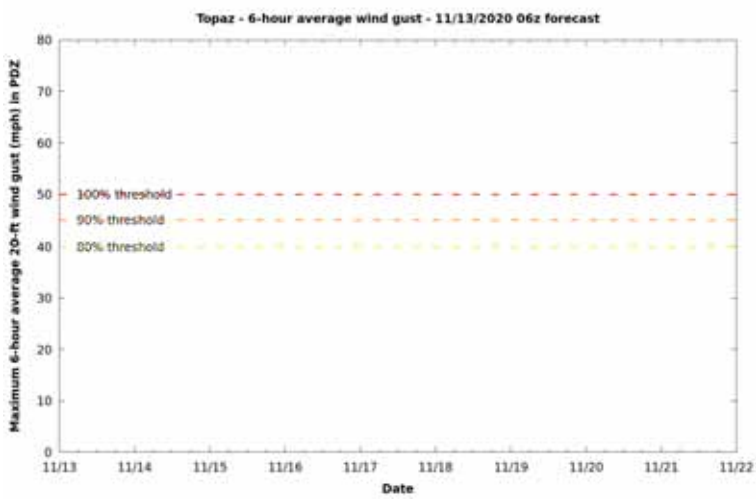
Mul 1296 r3



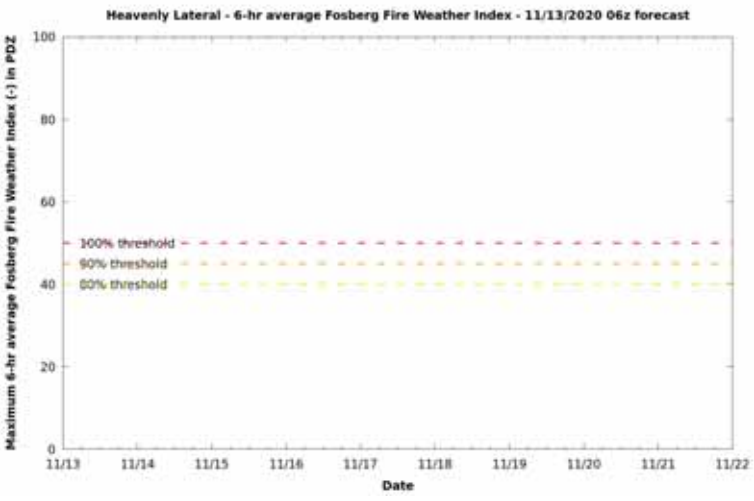


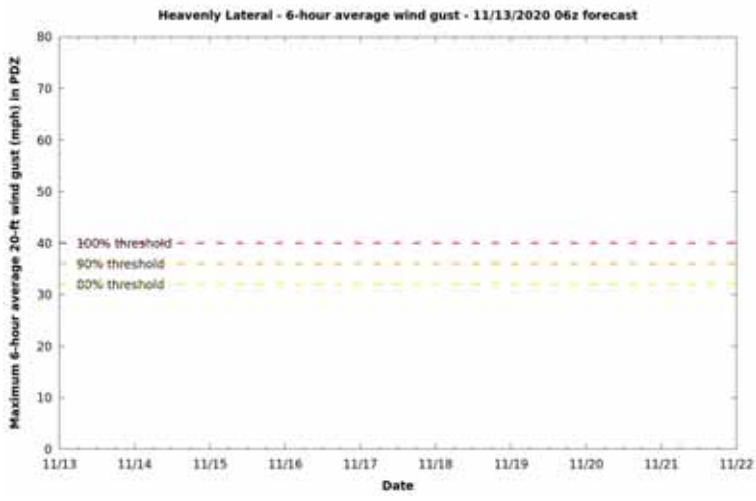
Topaz



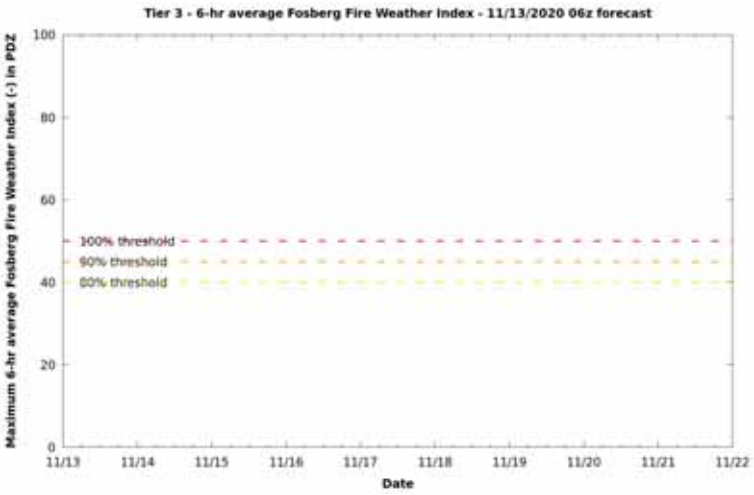


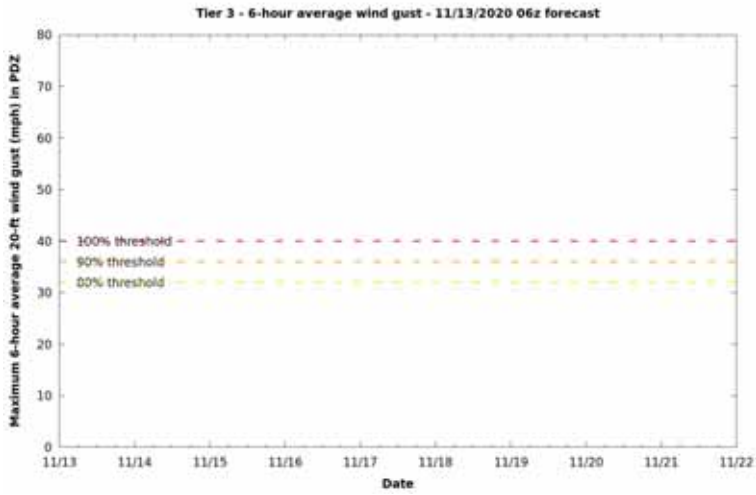
Heavenly Lateral



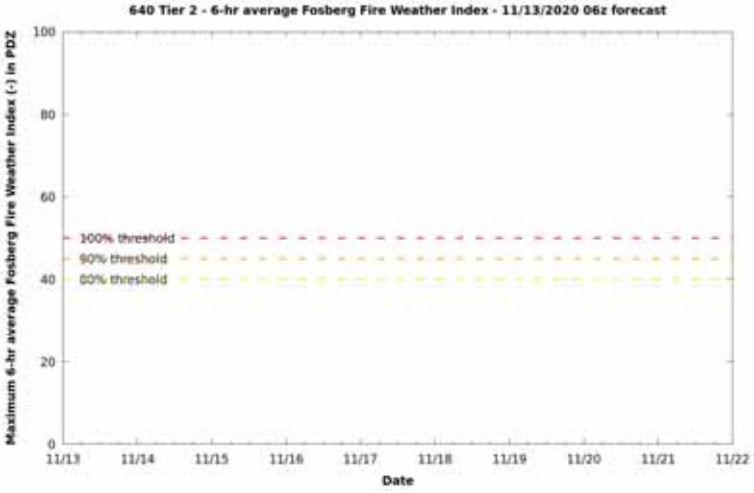


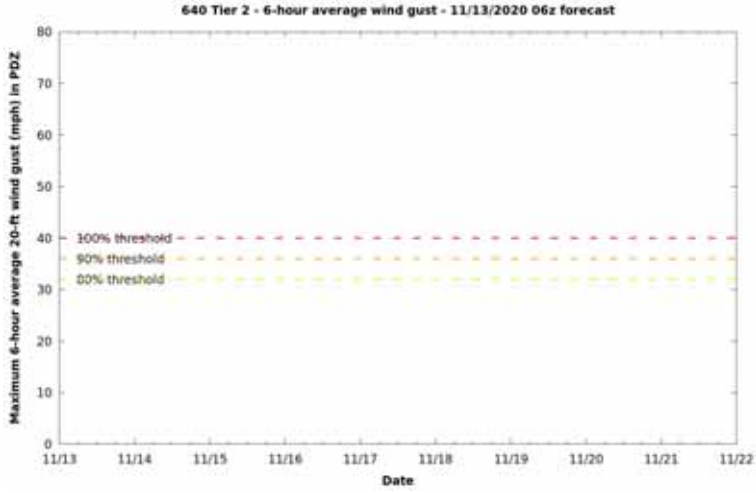
Tier 3



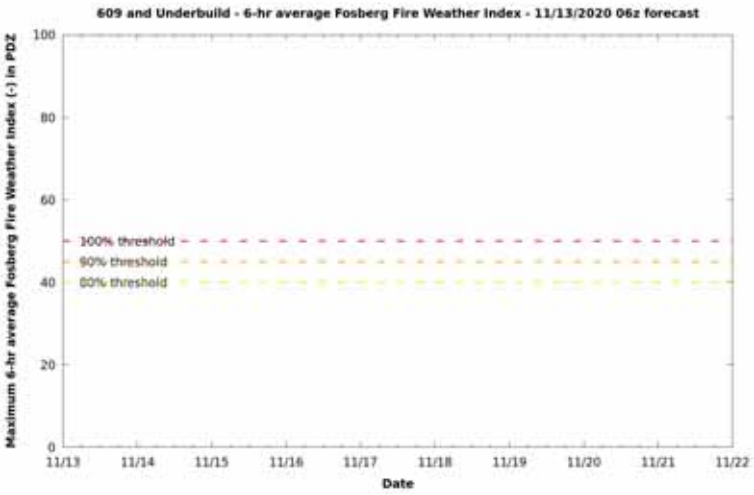


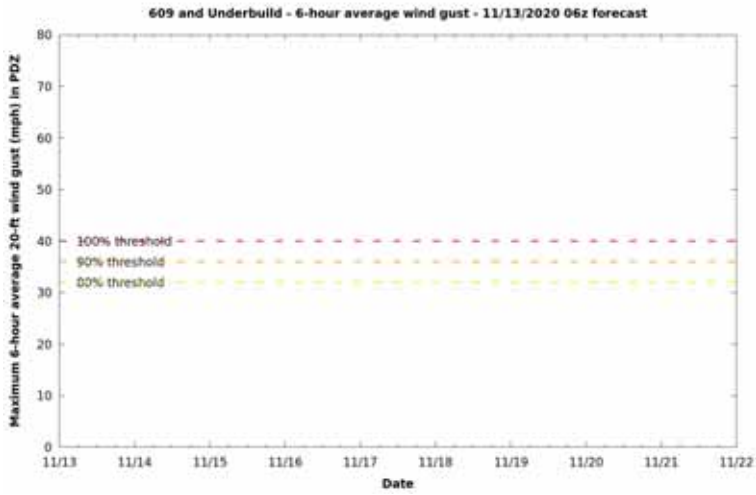
640 Tier 2



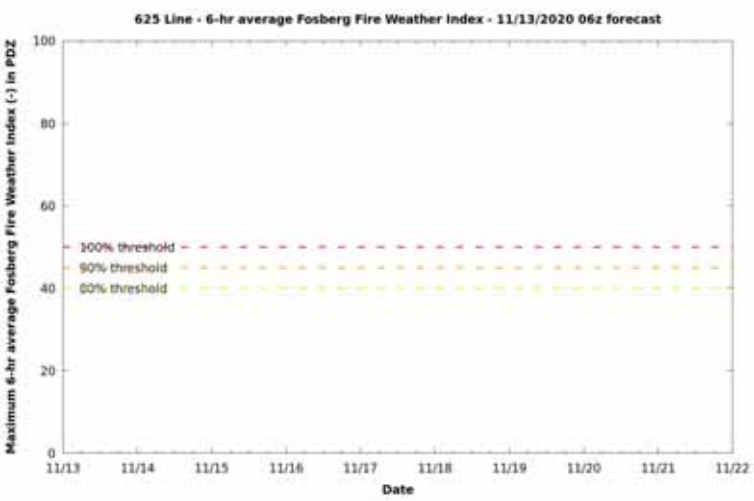


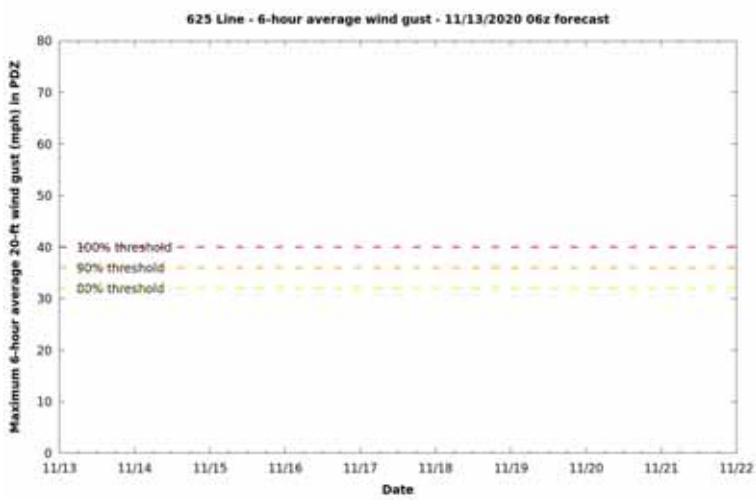
609 and Underbuild



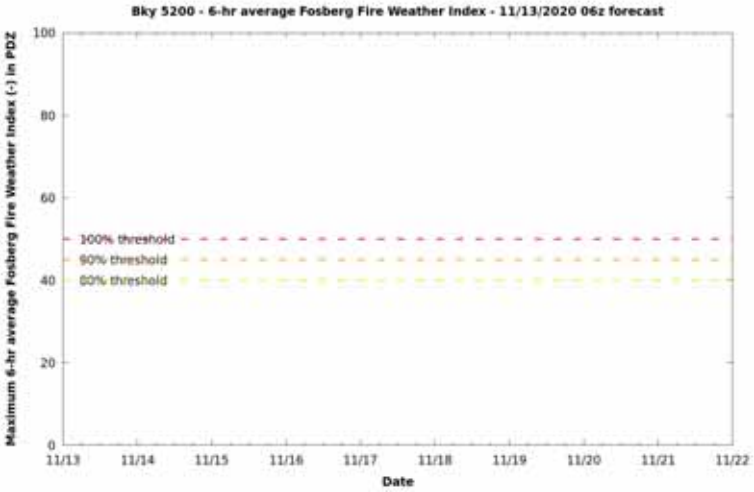


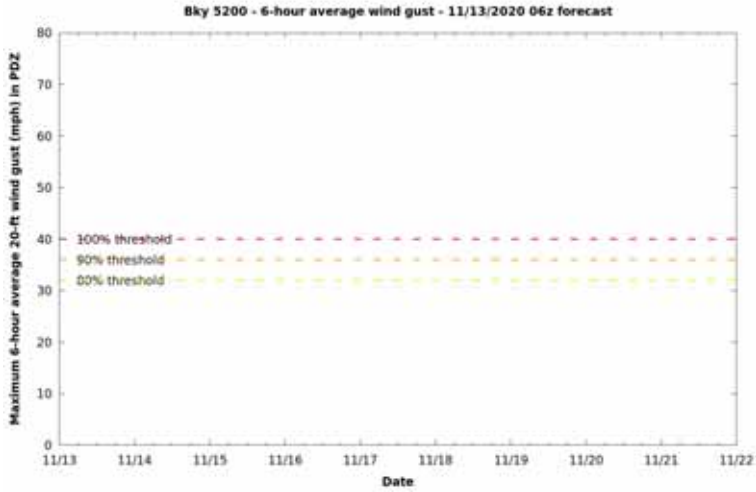
625 Line



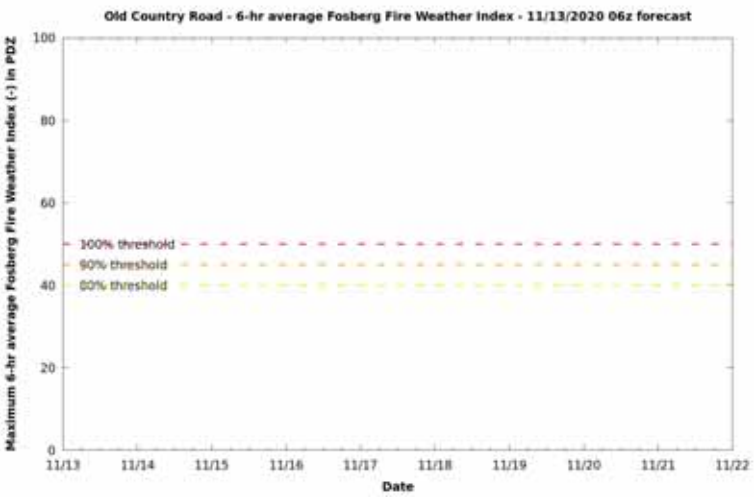


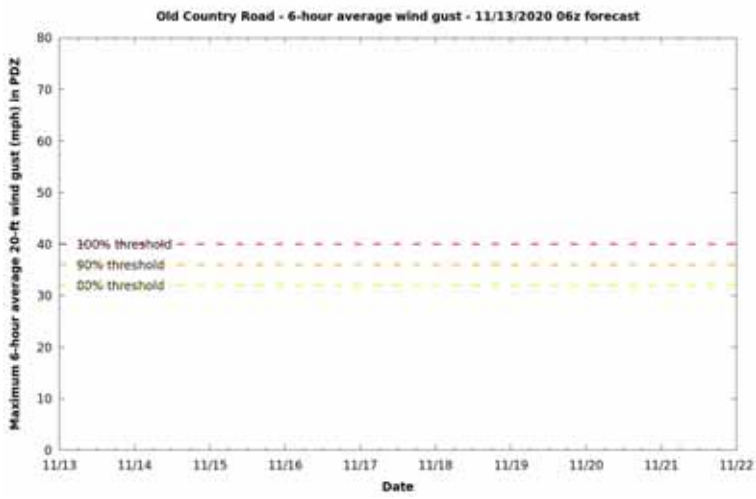
Bky 5200



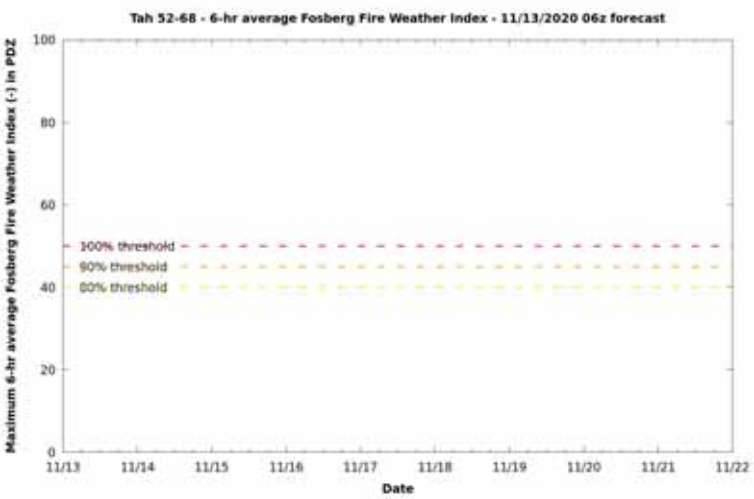


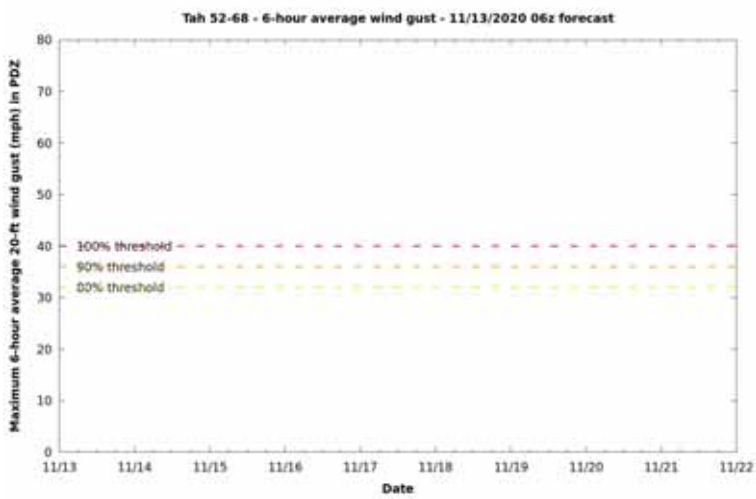
Old Country Road



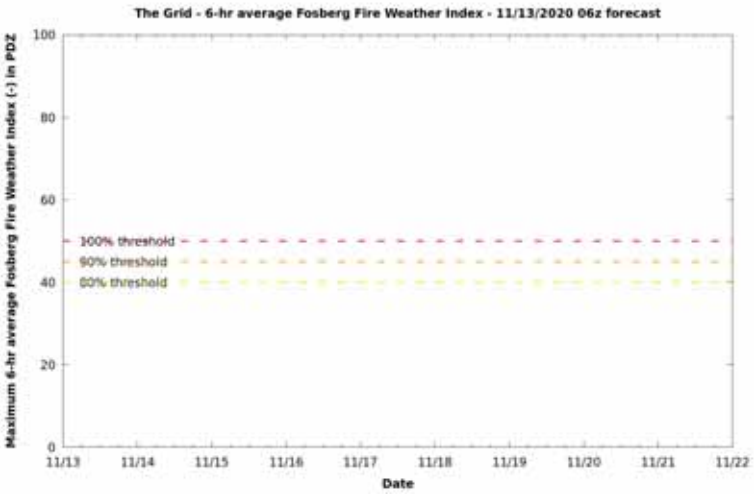


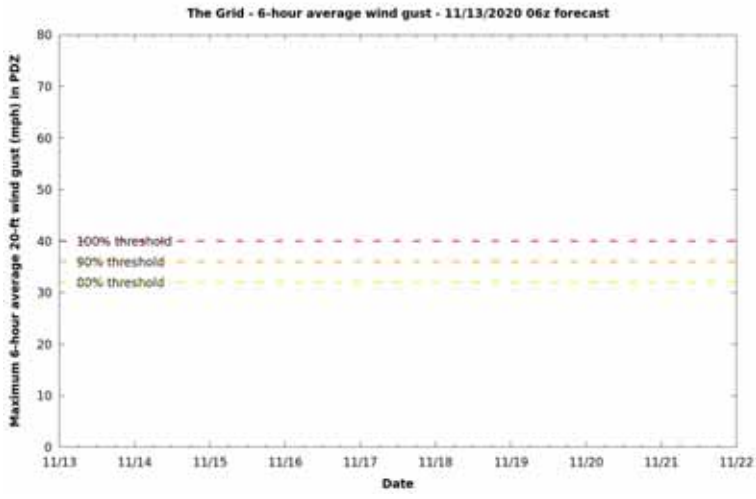
Tah 52-68



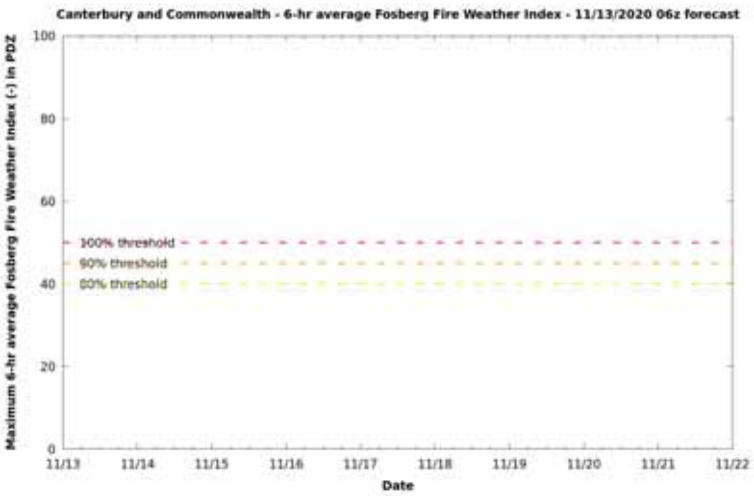


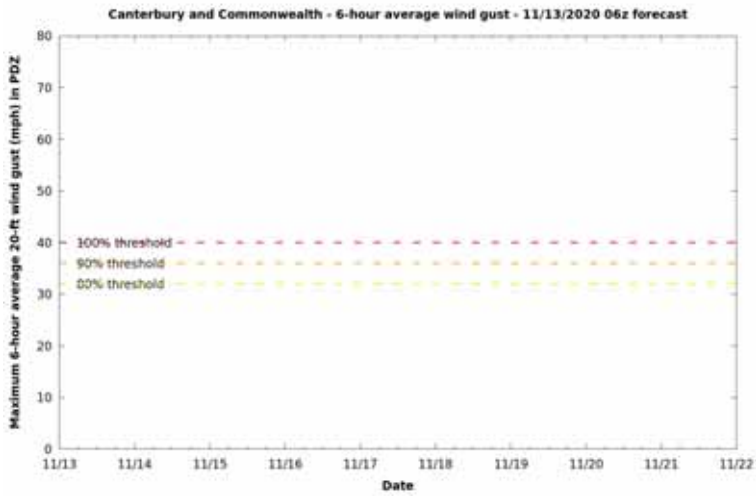
The Grid



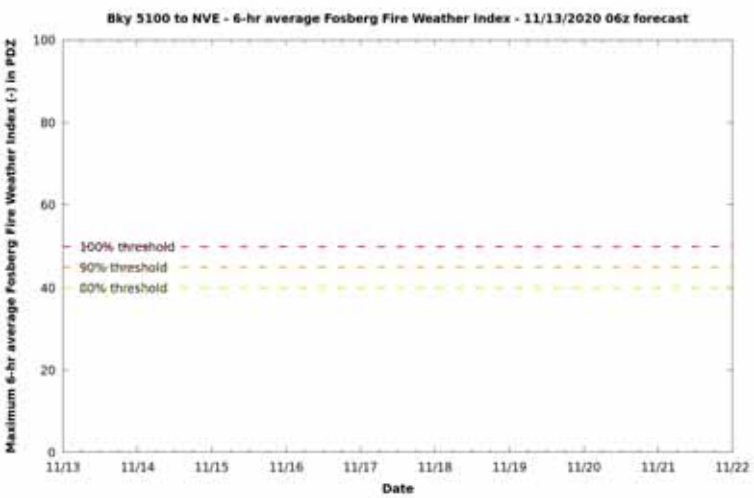


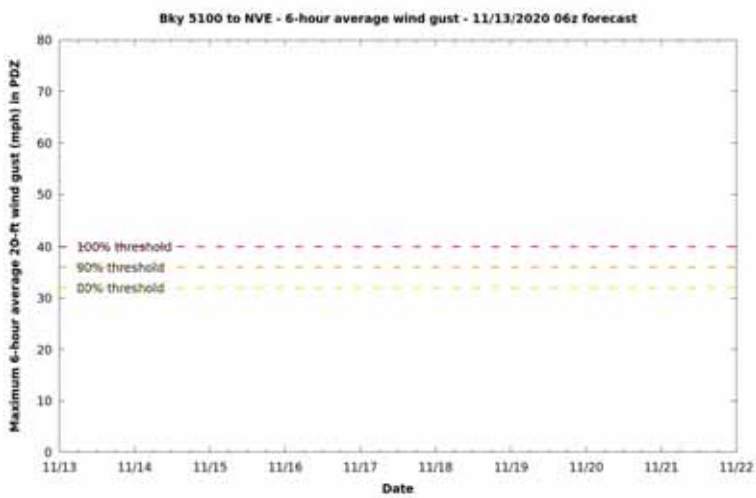
Canterbuy and Commonwealth



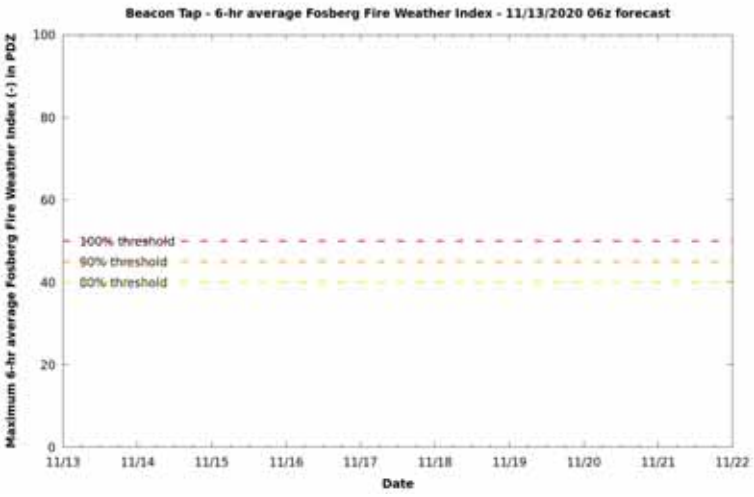


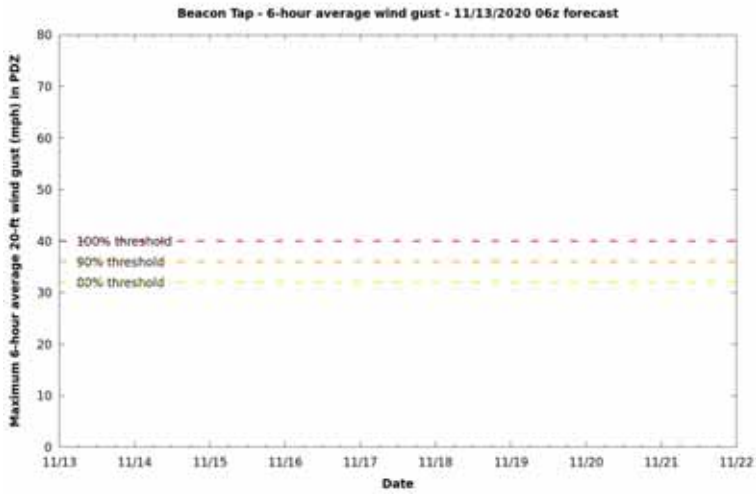
Bky 5100 to NVE



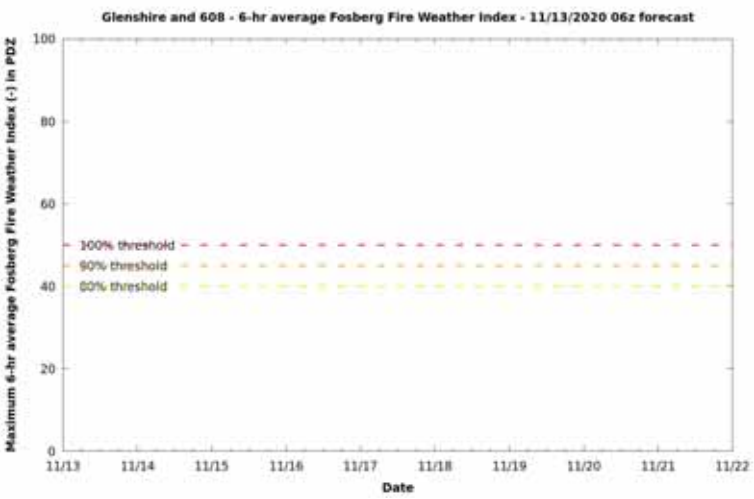


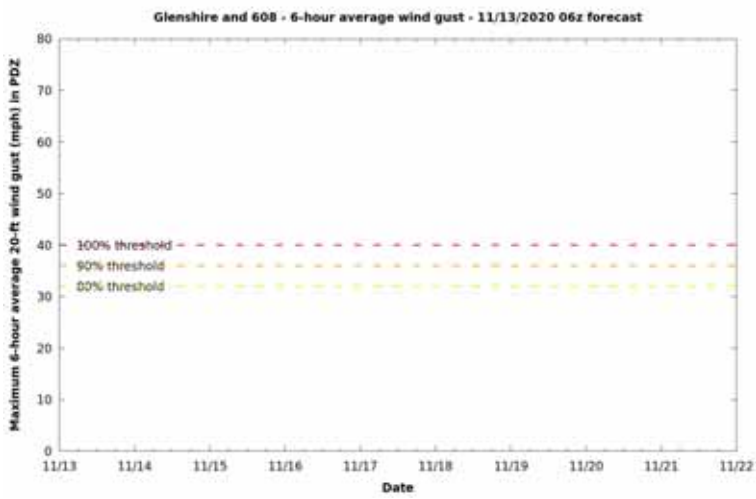
Beacon Tap



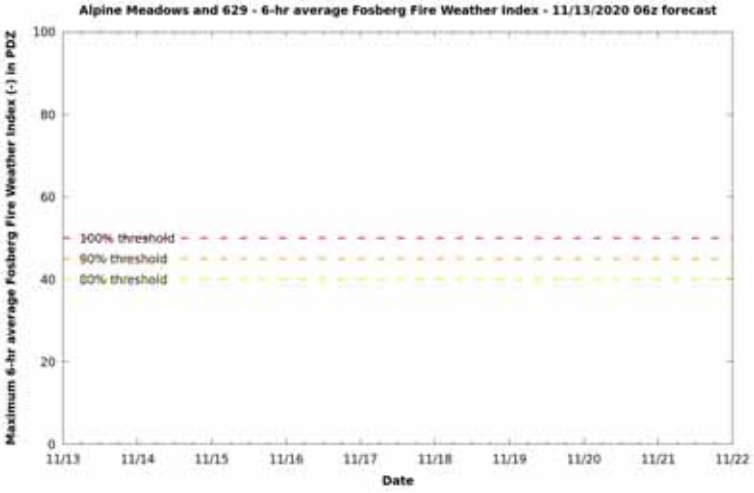


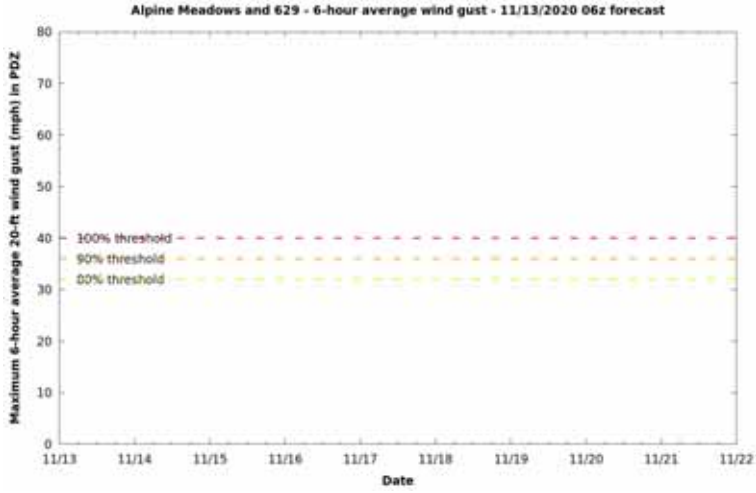
Glenshire and 608



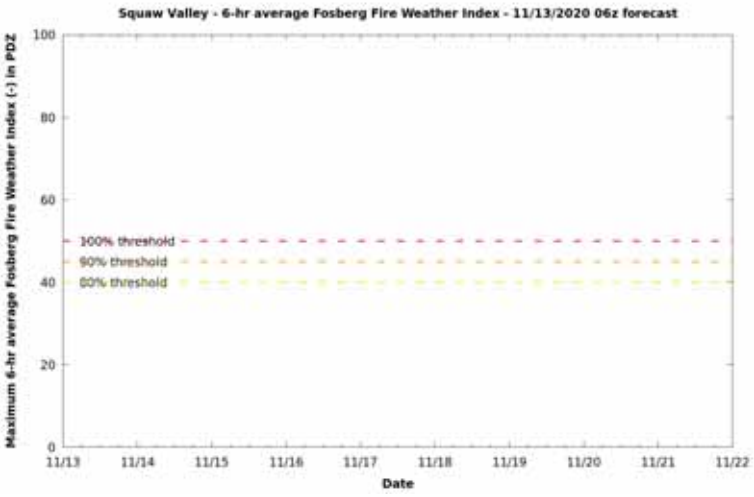


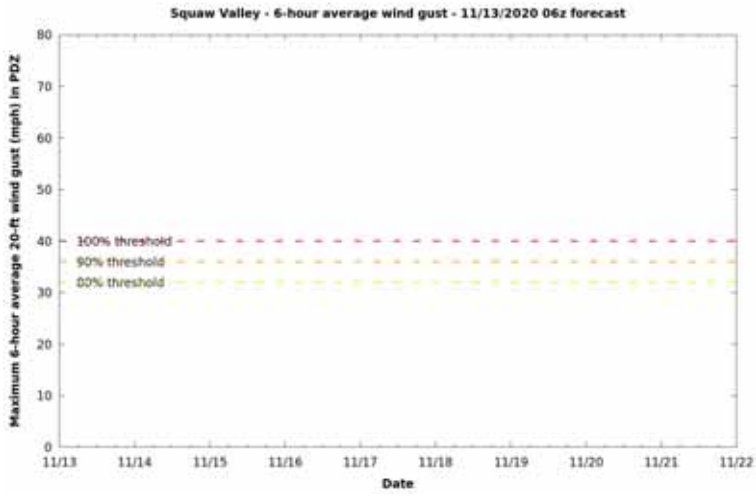
Alpine Meadows and 629



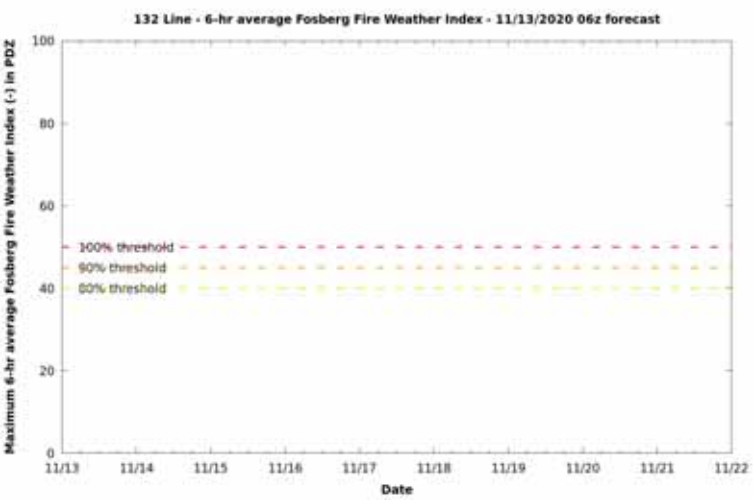


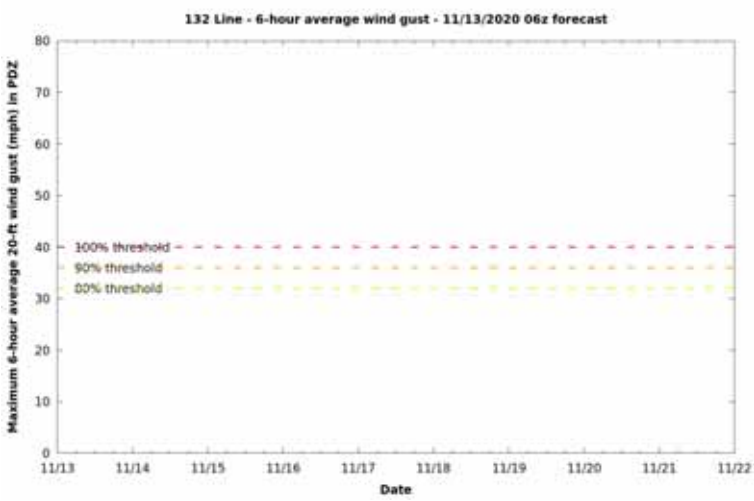
Squaw Valley



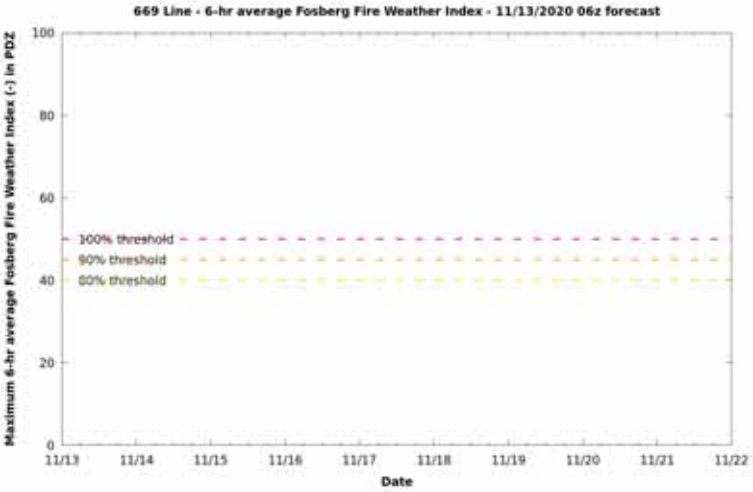


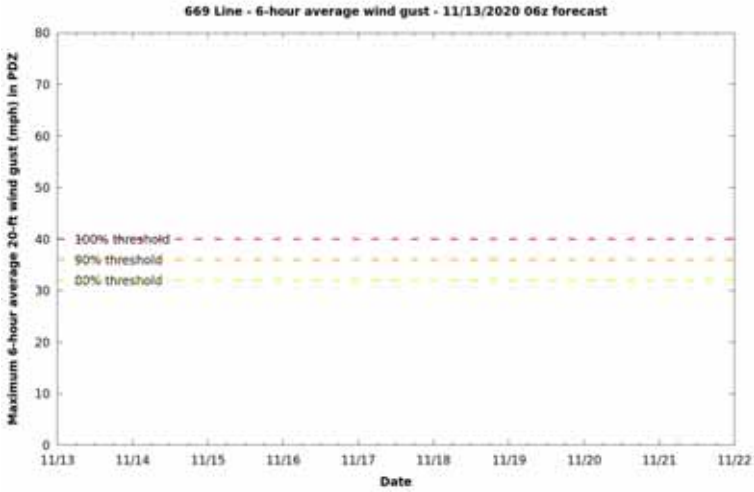
132 Line



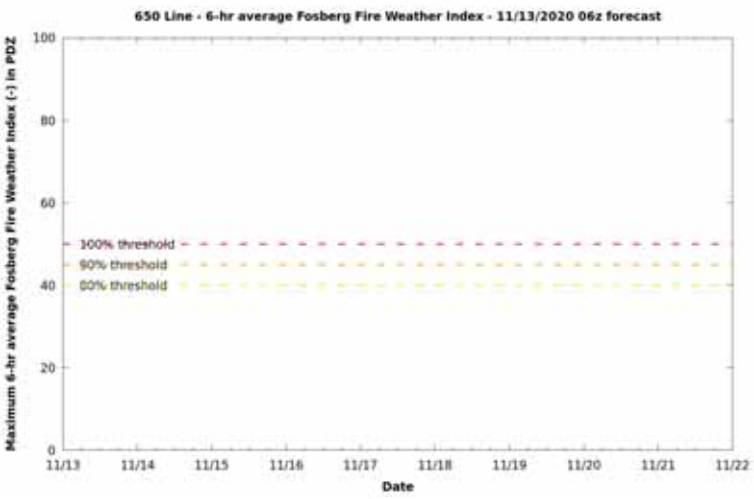


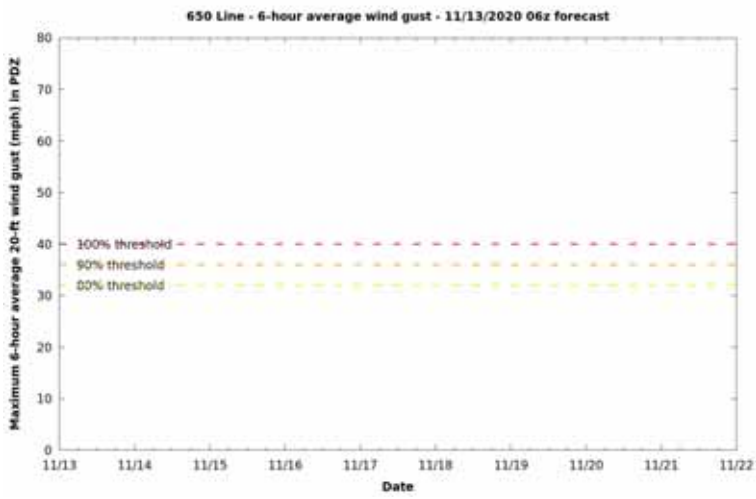
669 Line



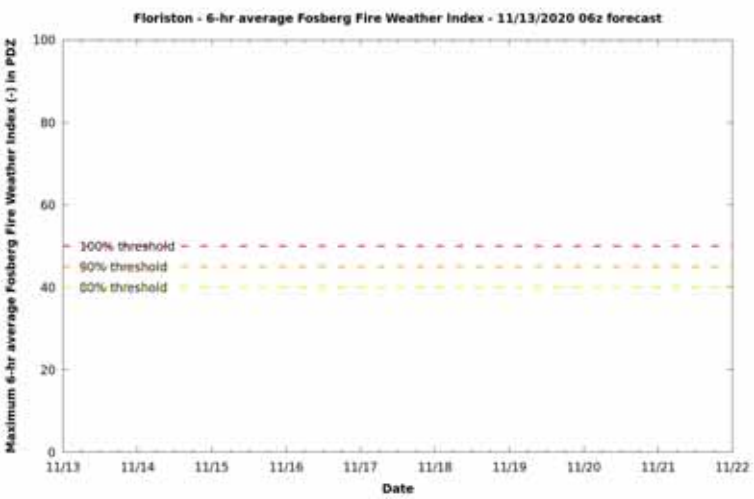


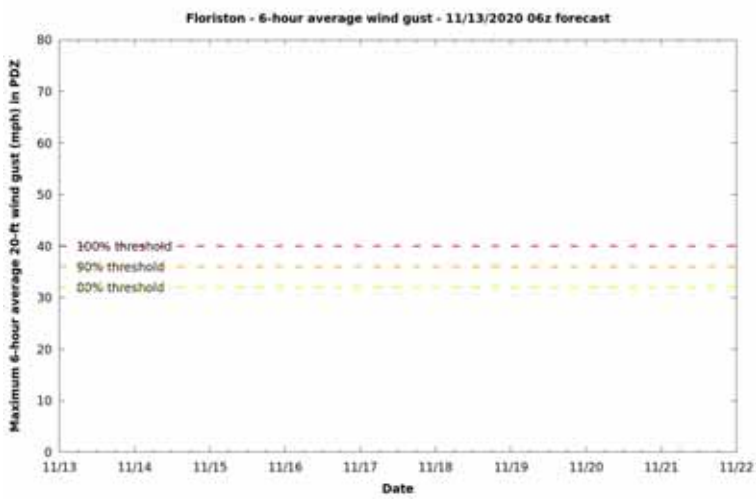
650 Line



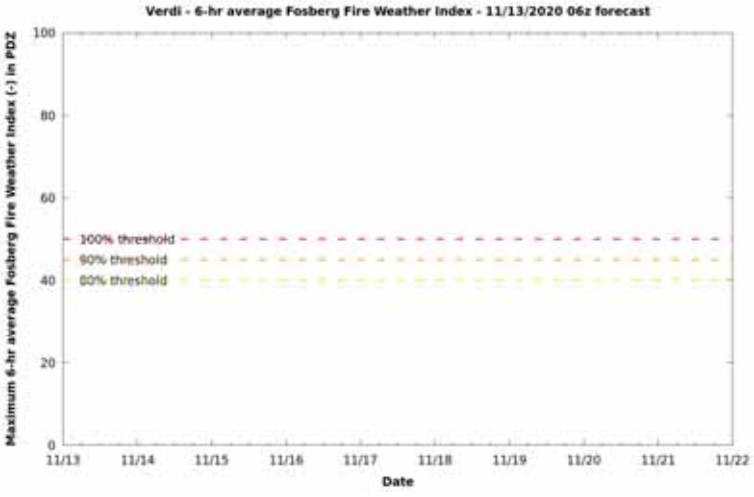


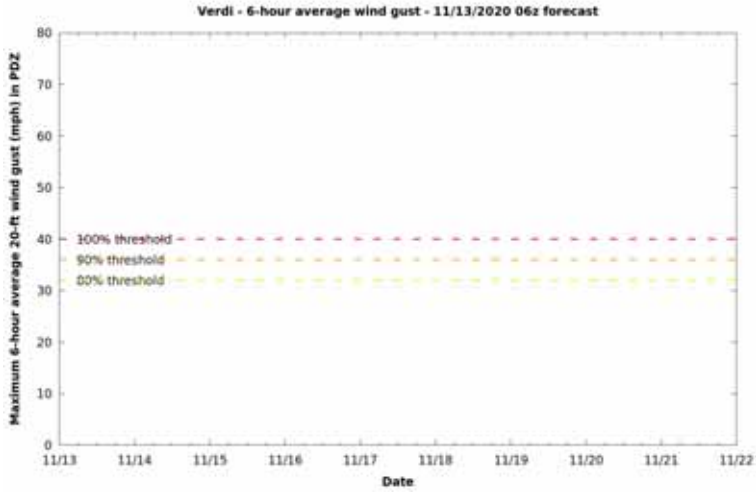
Floriston



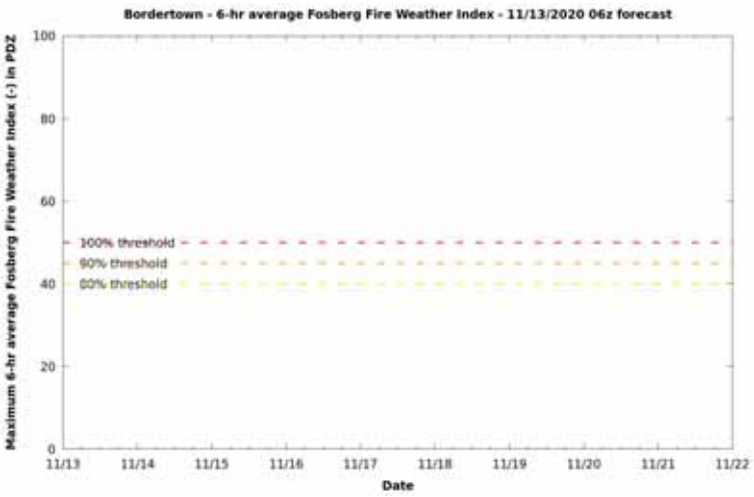


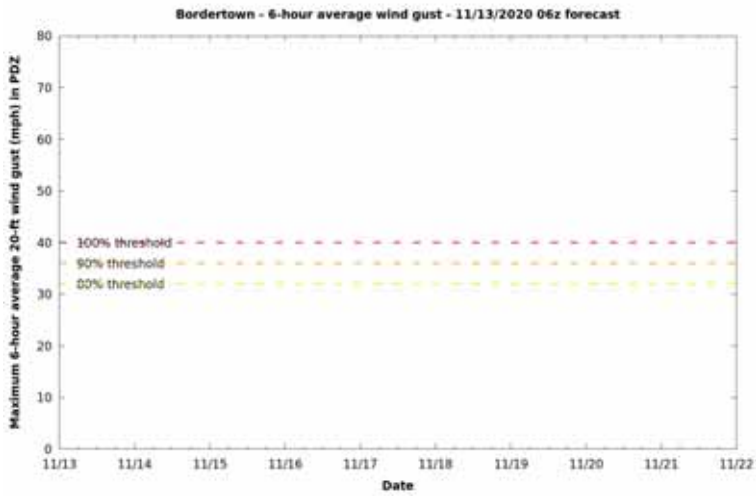
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/13/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
80% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date


Bordertown - 6-hour average wind gust - 11/13/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
80% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date

Liberty Utilities Fire Potential Index Forecast for 11/13/20 - 11/19/20

Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

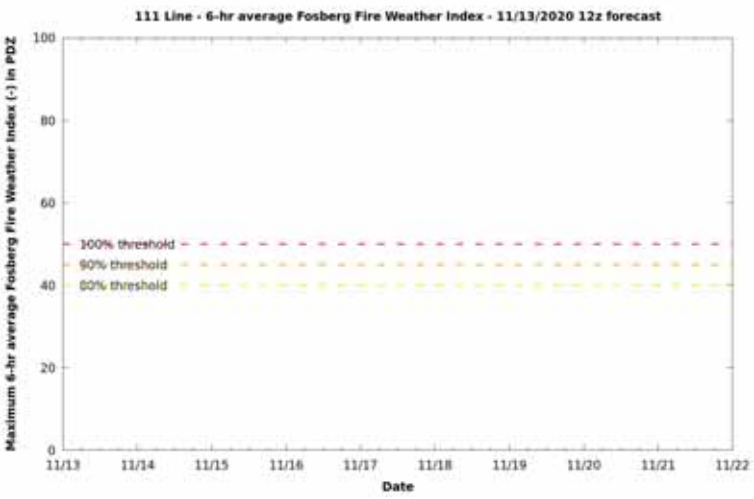
Liberty Utilities Energy Release Component Forecast for 11/13/20 - 11/19/20

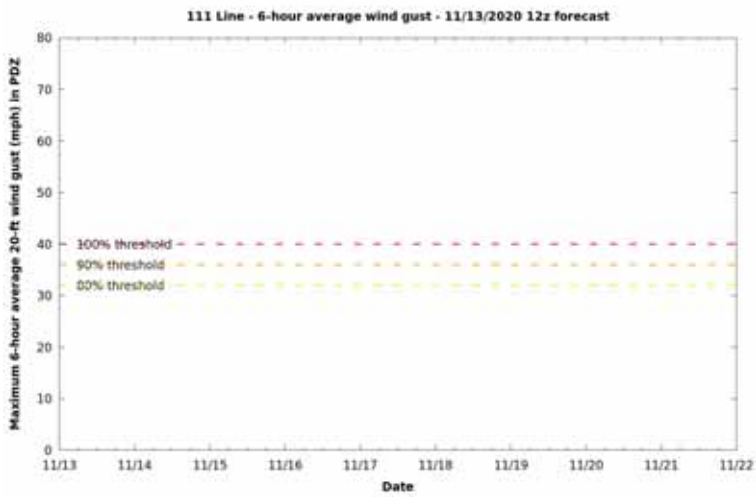
Zone	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	57.0	55.0	51.0	56.0	58.0	55.0
Sierra Brooks	58.0	61.0	58.0	55.0	61.0	62.0	62.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	51.0	43.0	48.0	42.0	35.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	56.0	56.0	53.0	50.0	56.0	57.0	57.0

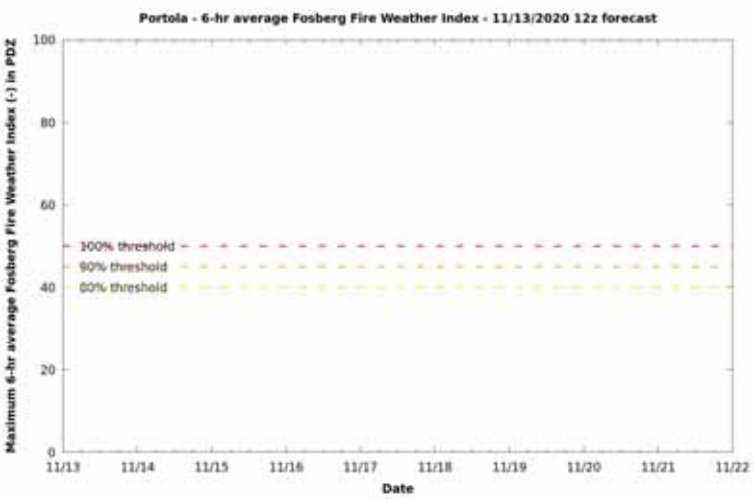
Liberty Utilities Fire Weather Summary Plots - 11/13/2020 12z forecast

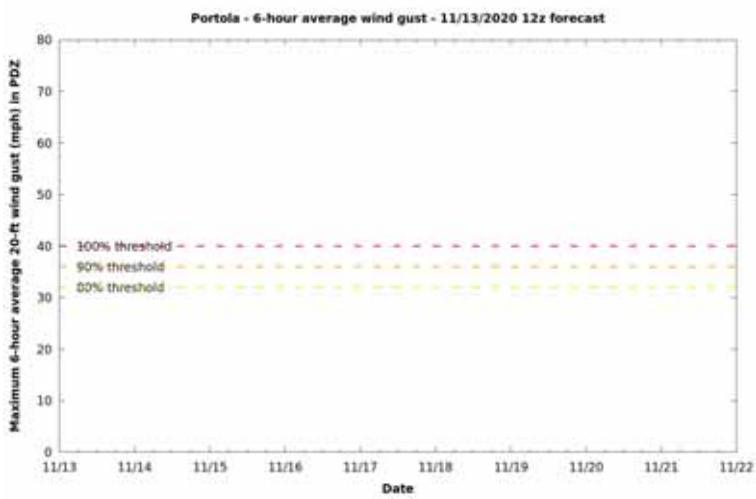
111 Line



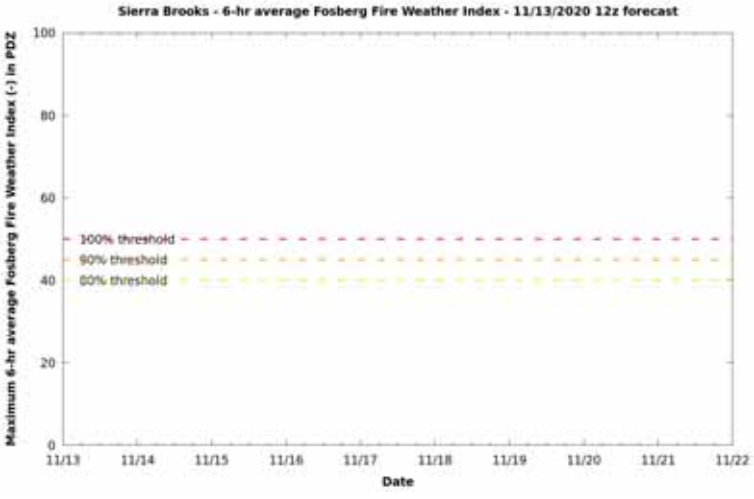


Portola



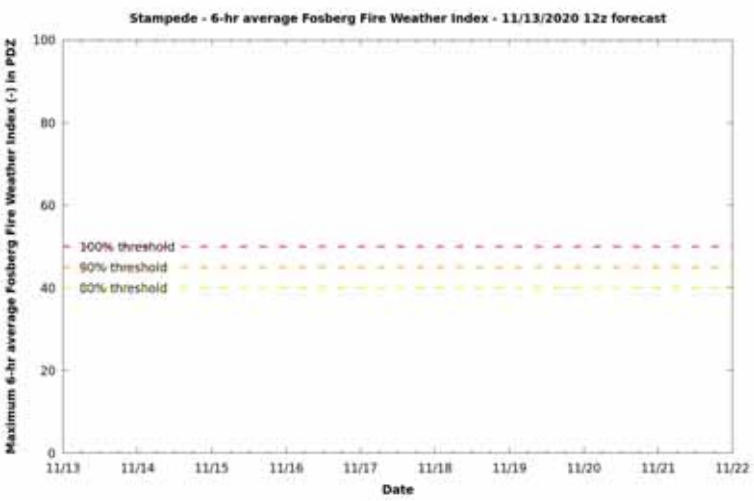


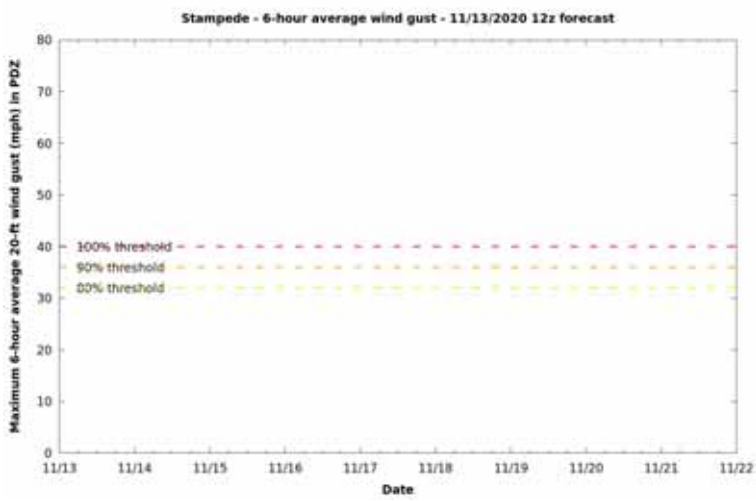
Sierra Brooks



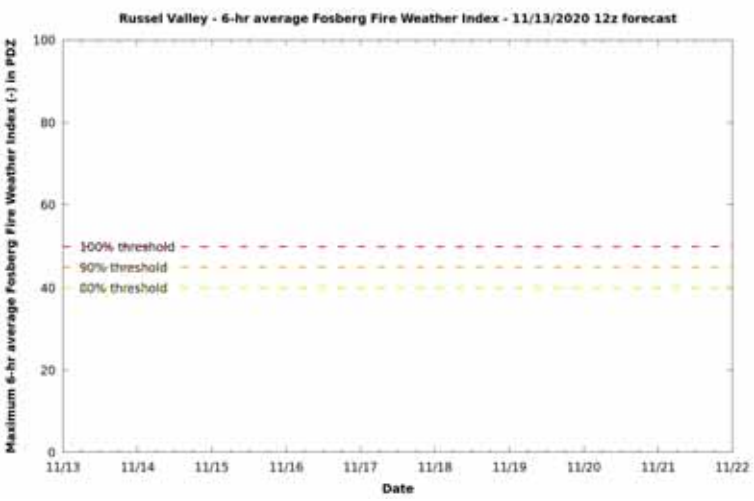


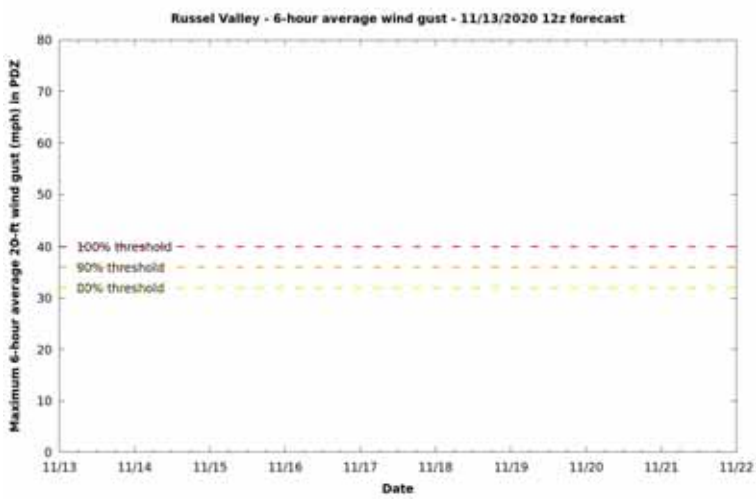
Stampede



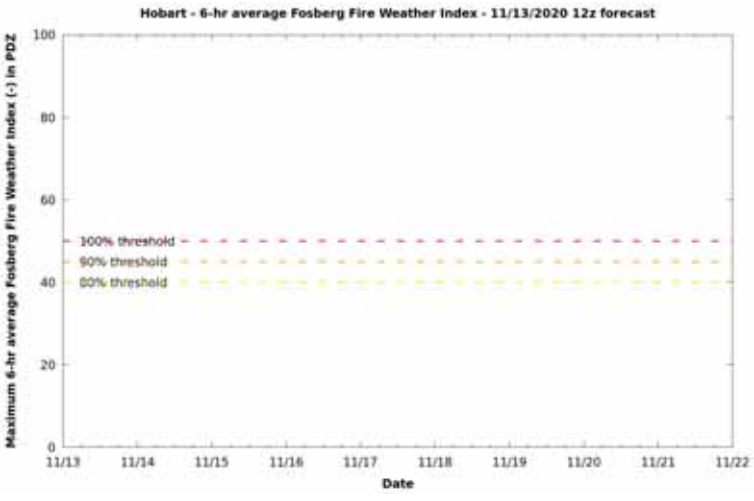


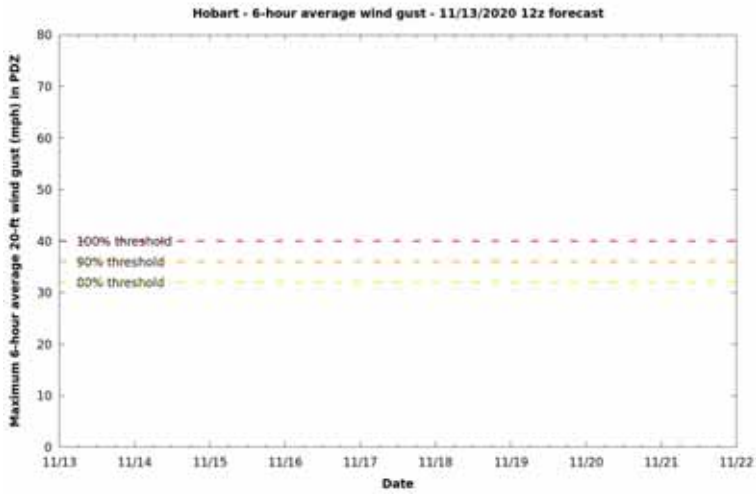
Russell Valley



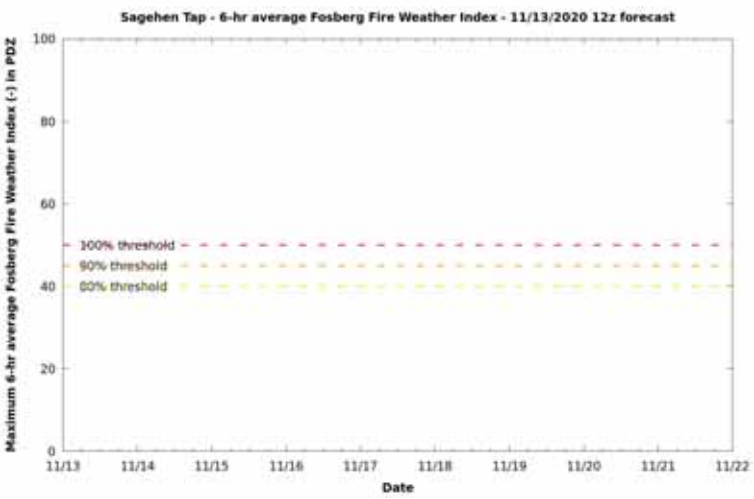


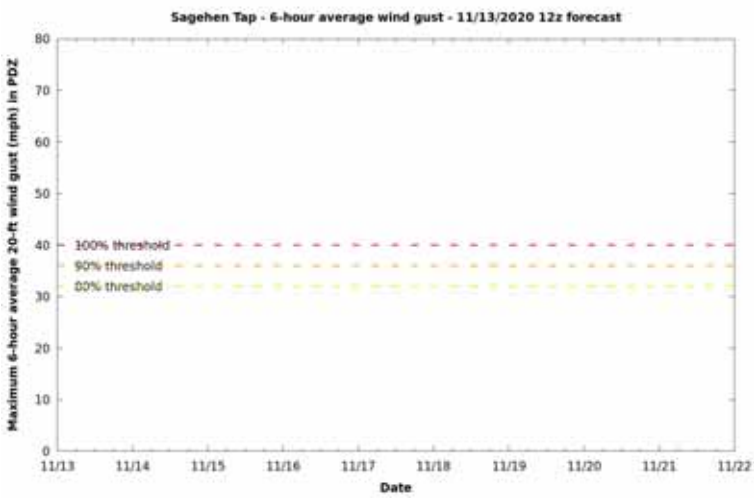
Hobart



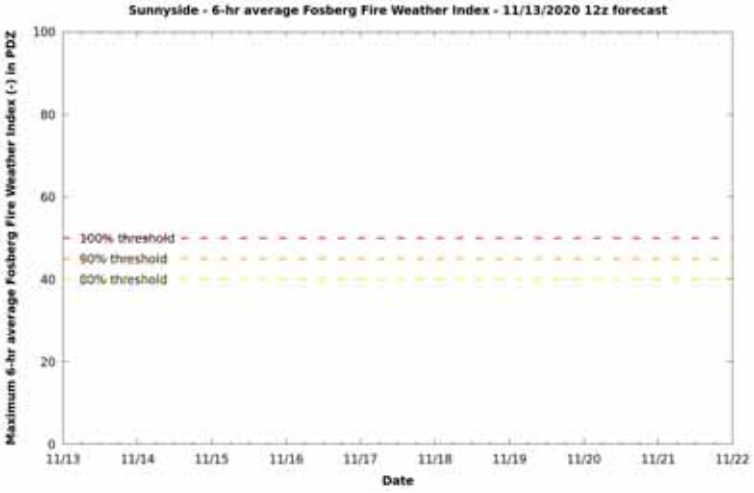


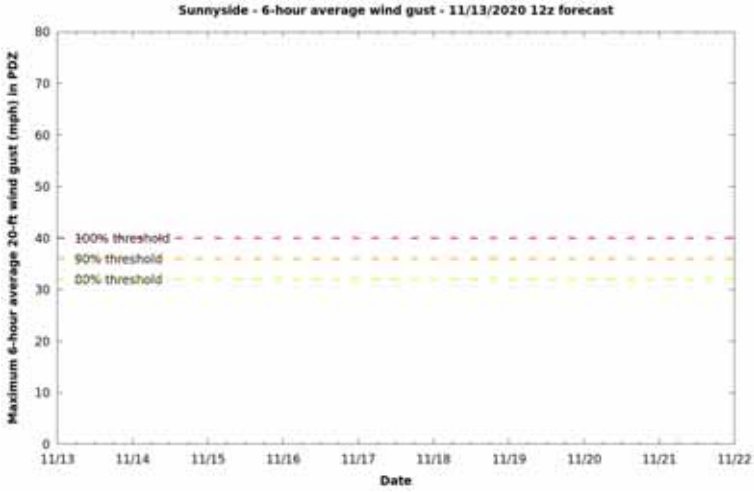
Sagehen tap



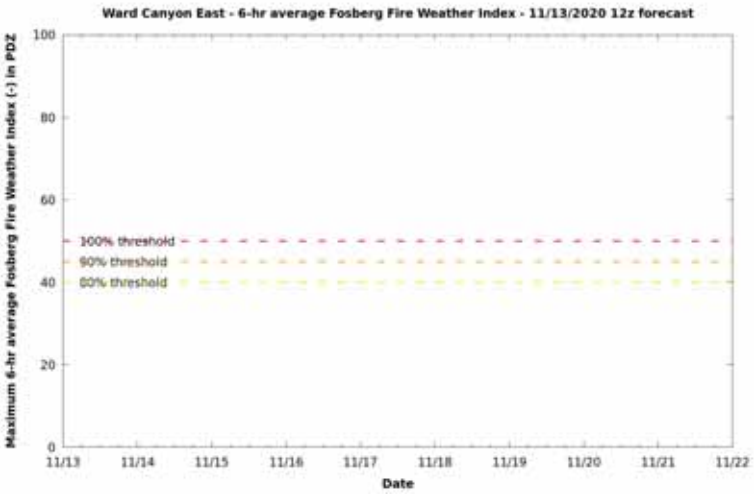


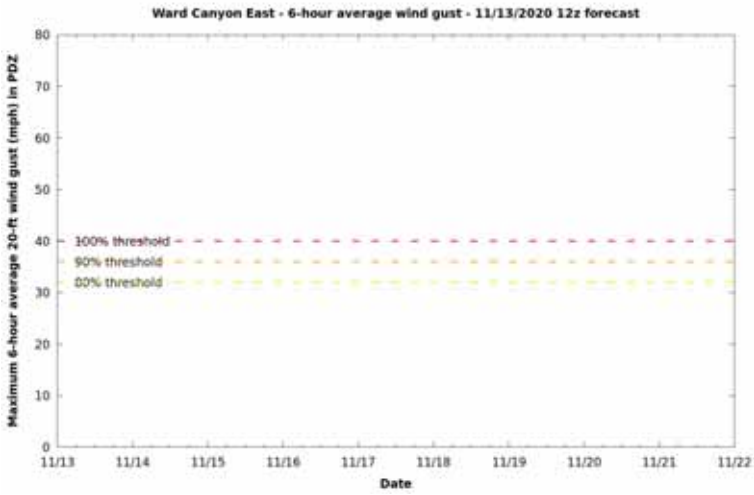
Sunnyside



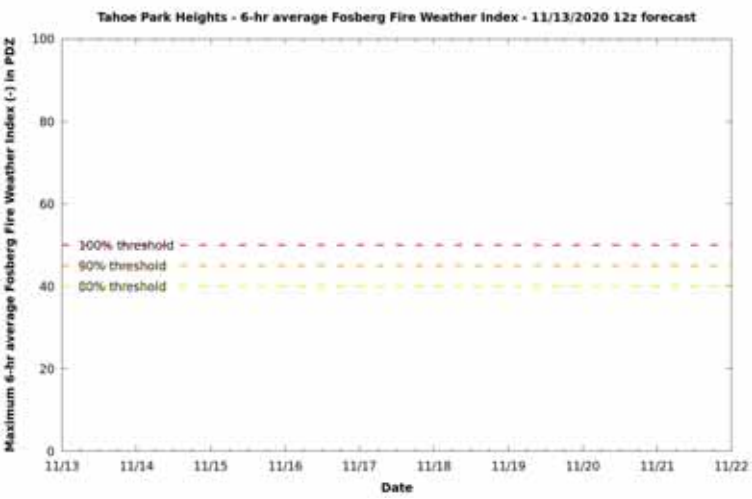


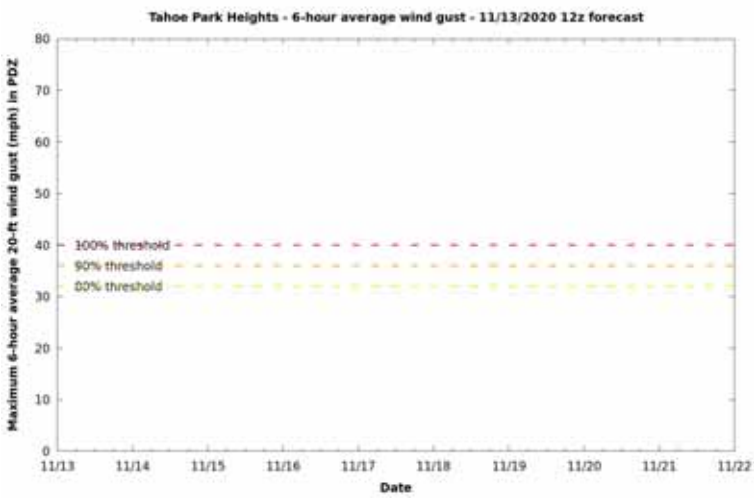
Ward Canyon East



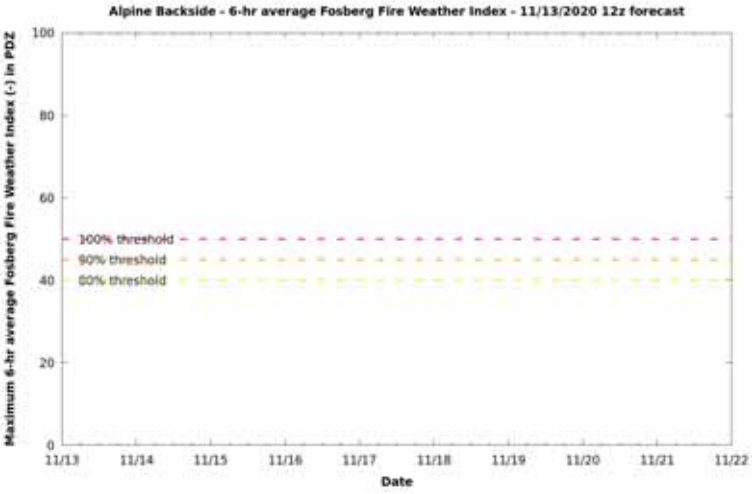


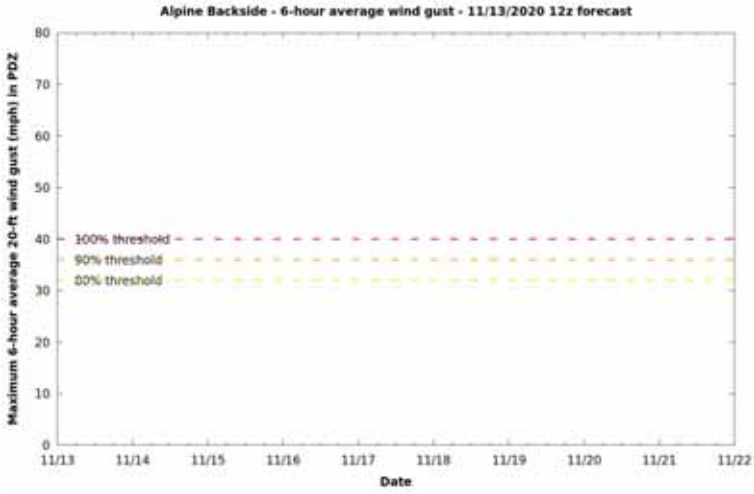
Tahoe Park Heights



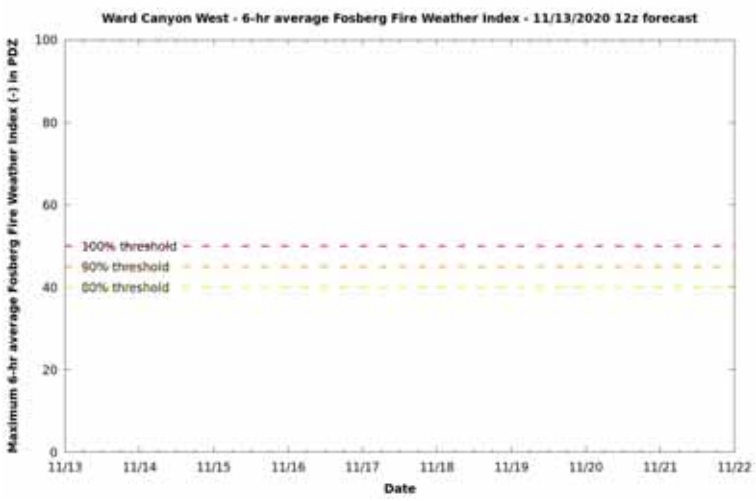


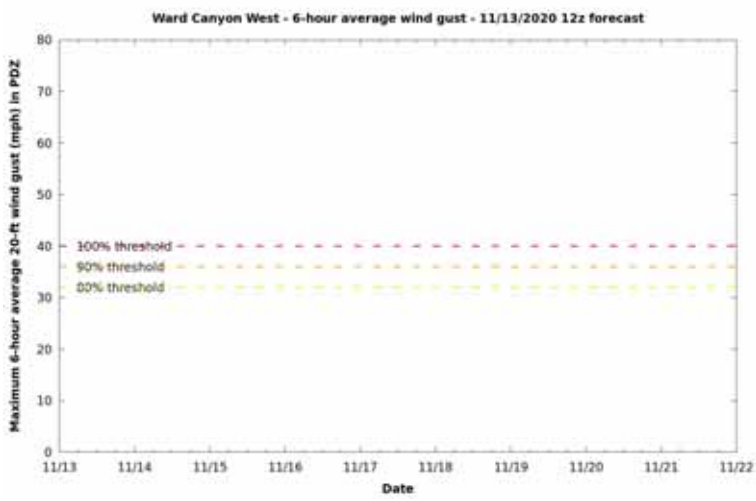
Alpine Backside



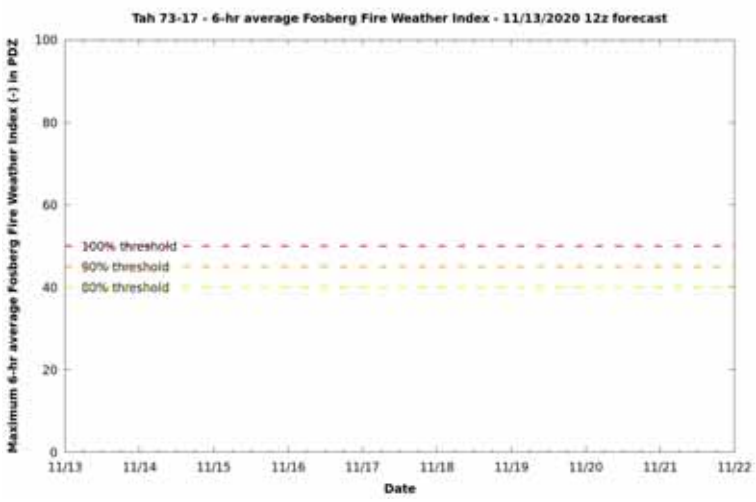


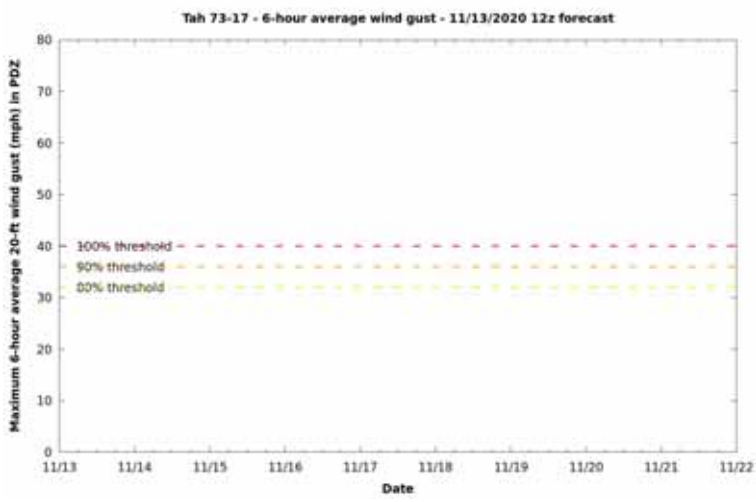
Ward Canyon West



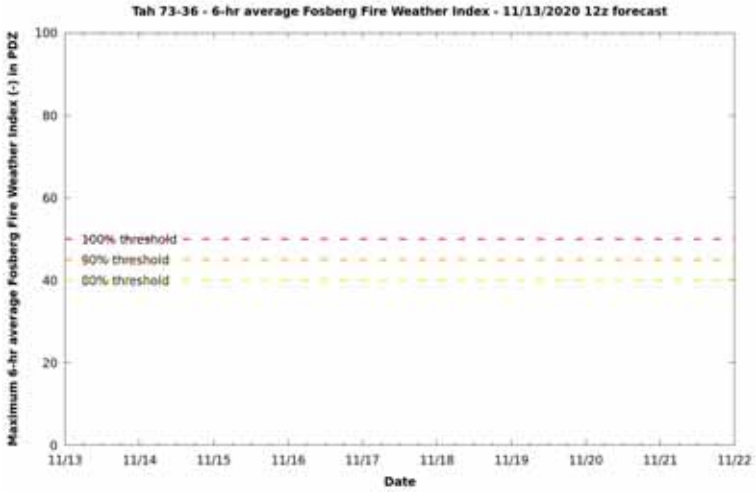


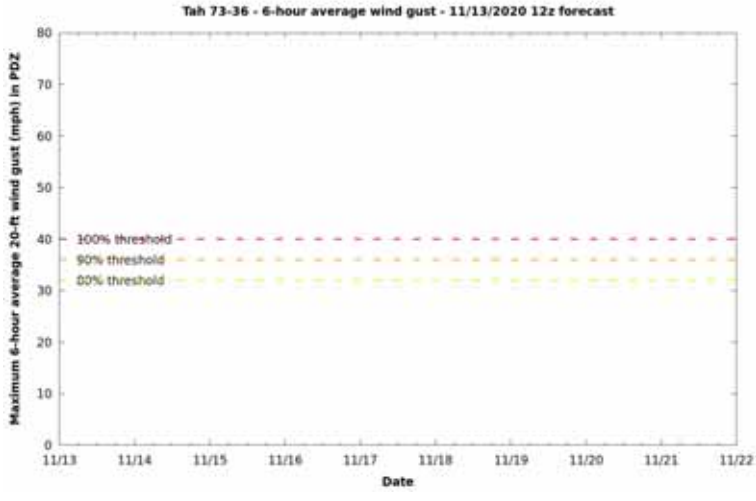
Tah 73-17



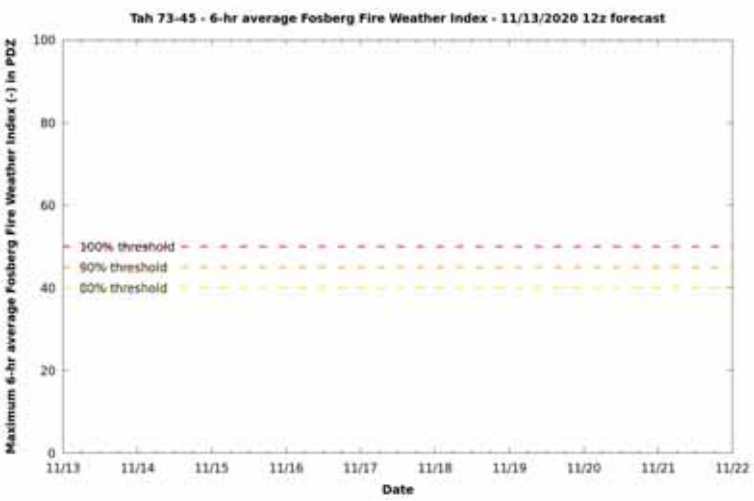


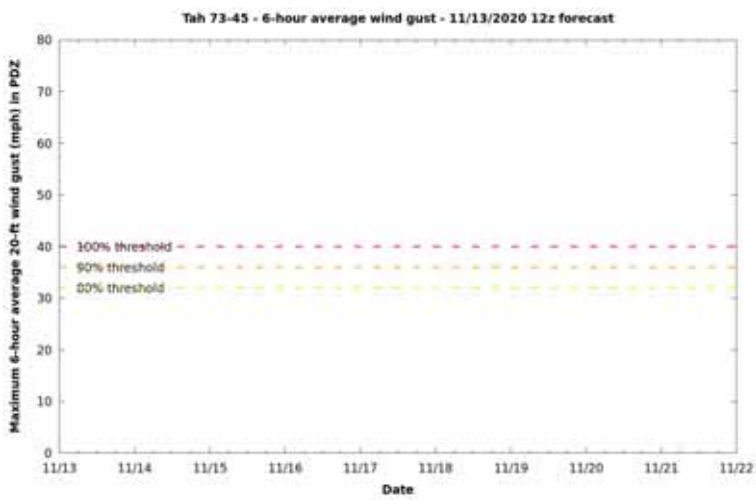
Tah 73-36



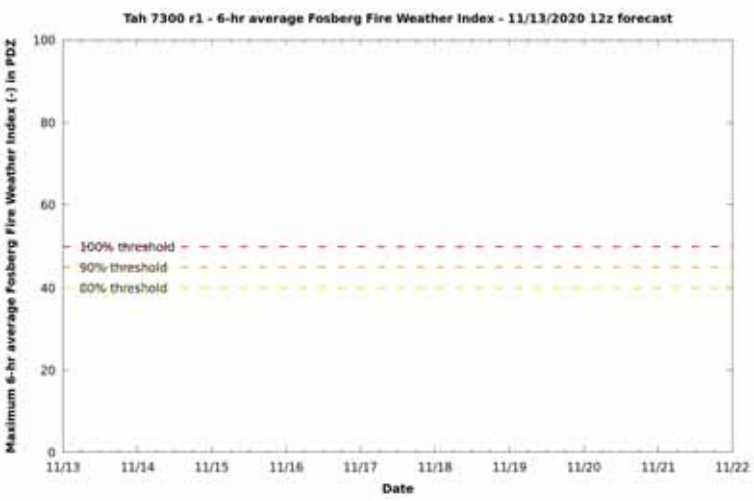


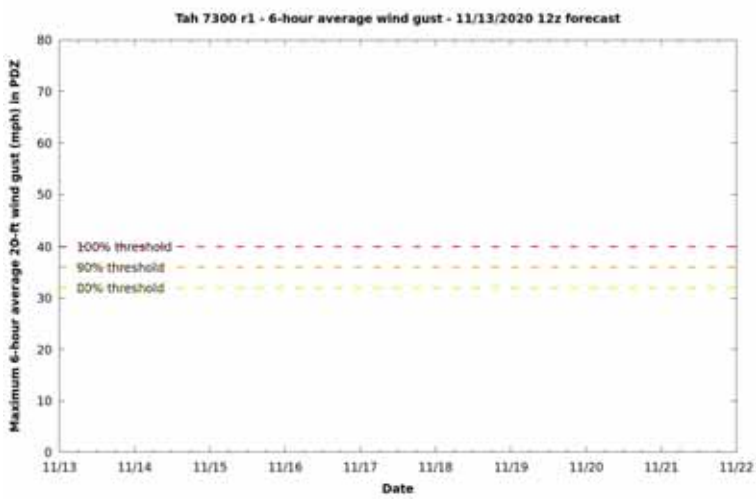
Tah 73-45



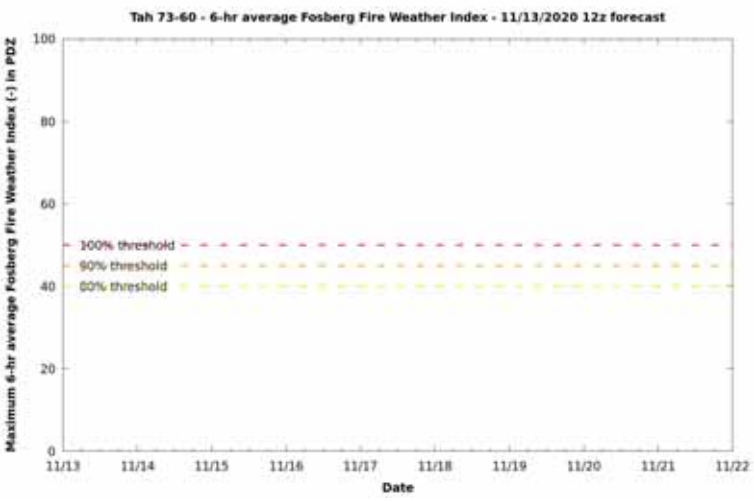


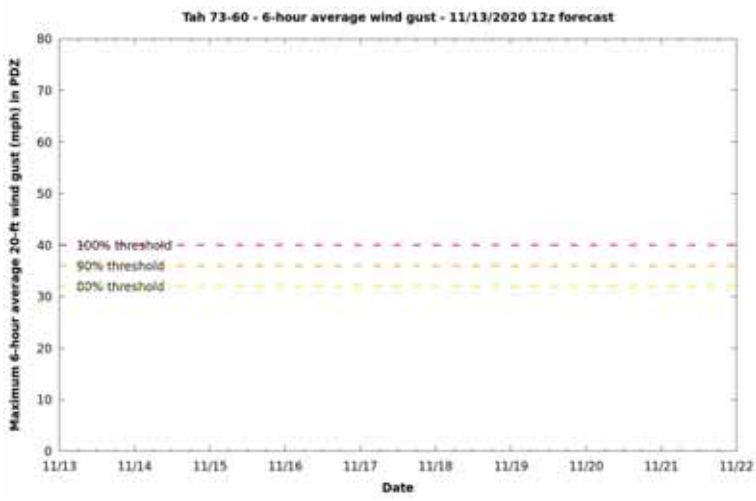
Tah 7300 r1



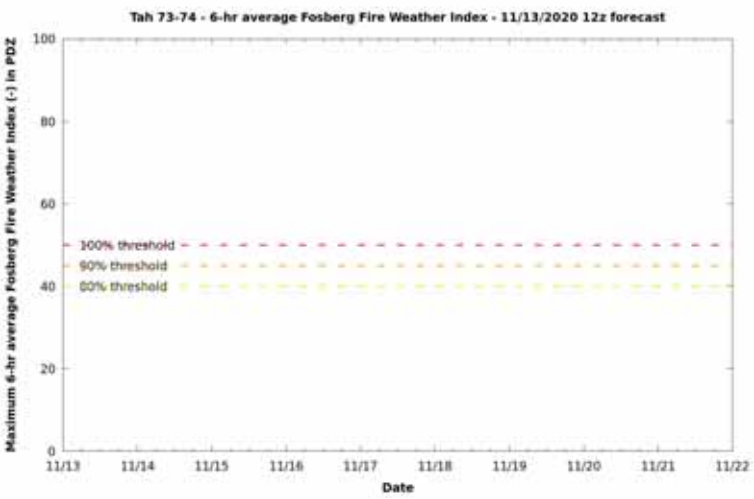


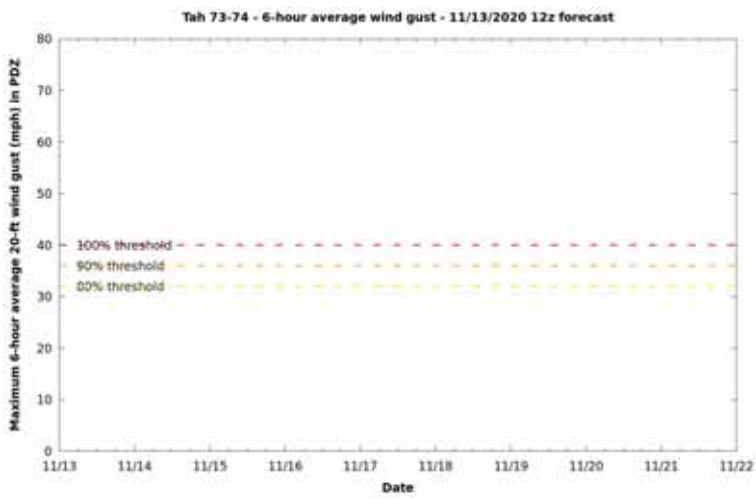
Tah 73-60



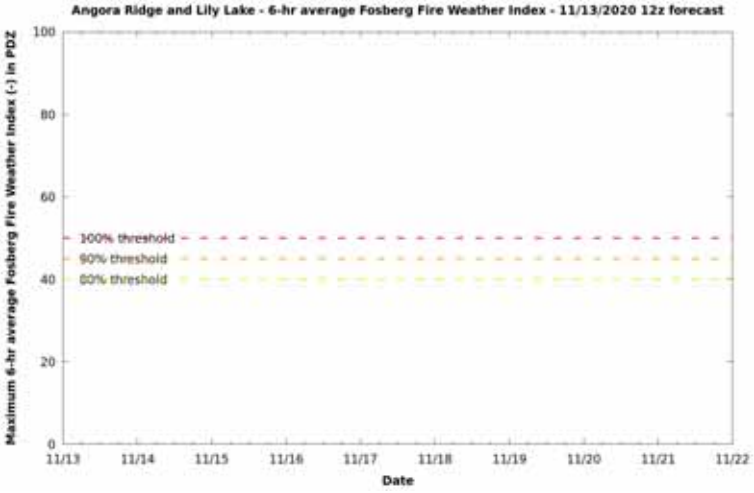


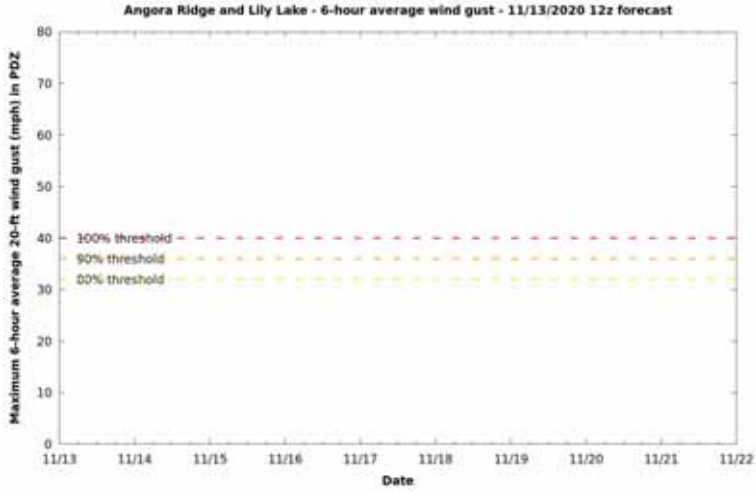
Tah 73-74



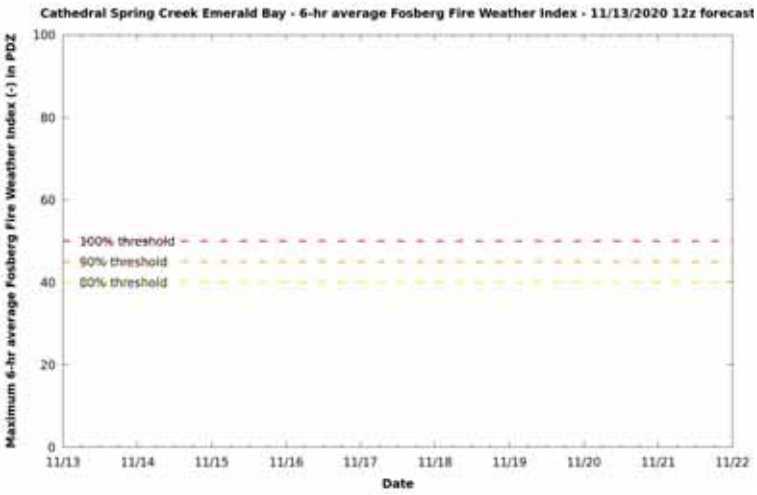


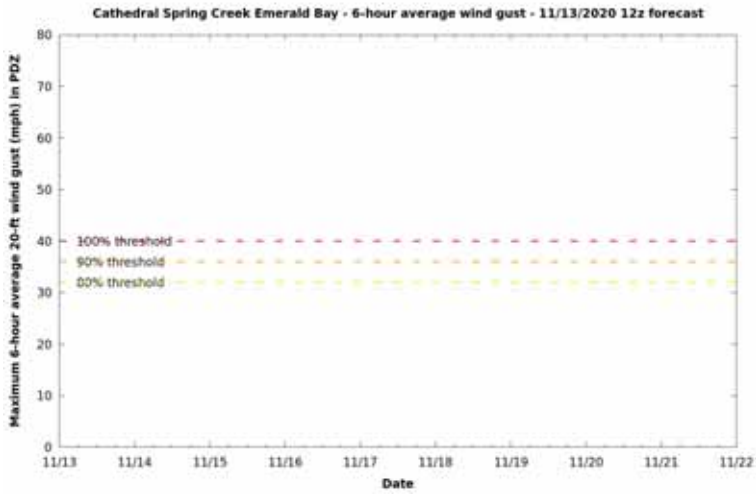
Angora Ridge and Lily Lake



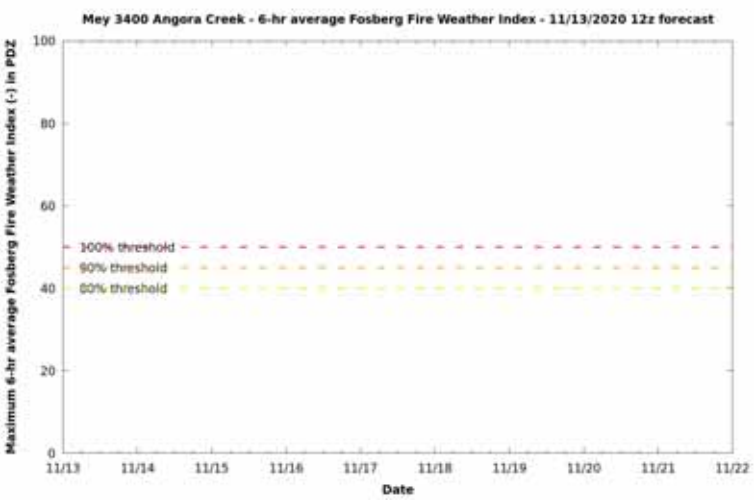


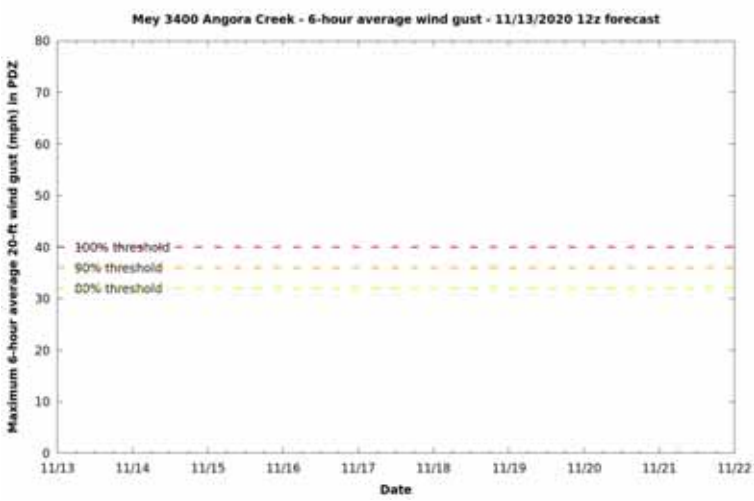
Cathedral Spring Creek Emerald Bay



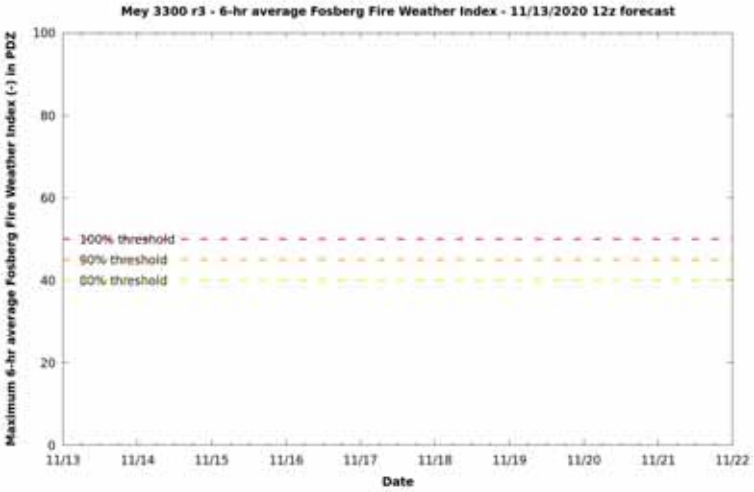


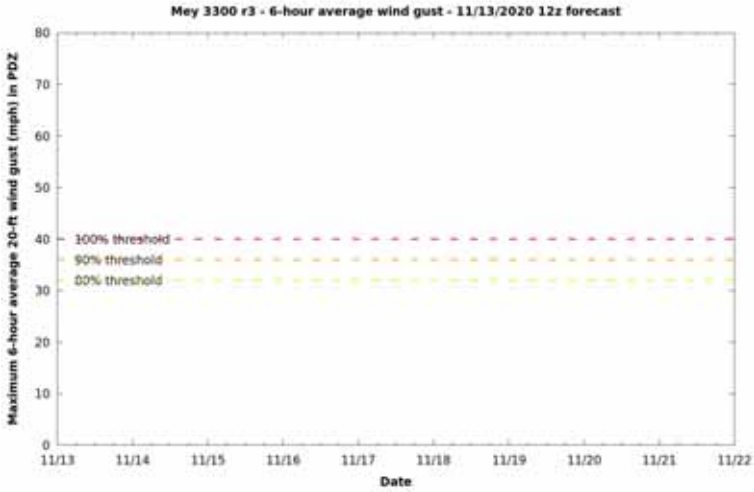
Mey 3400 Angora Creek



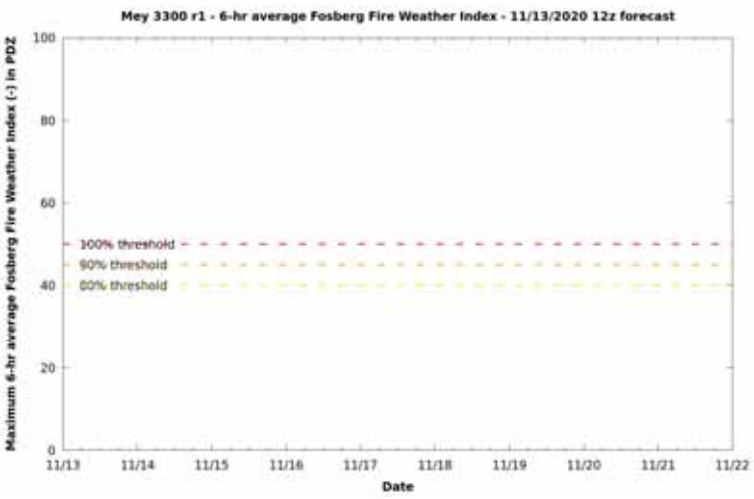


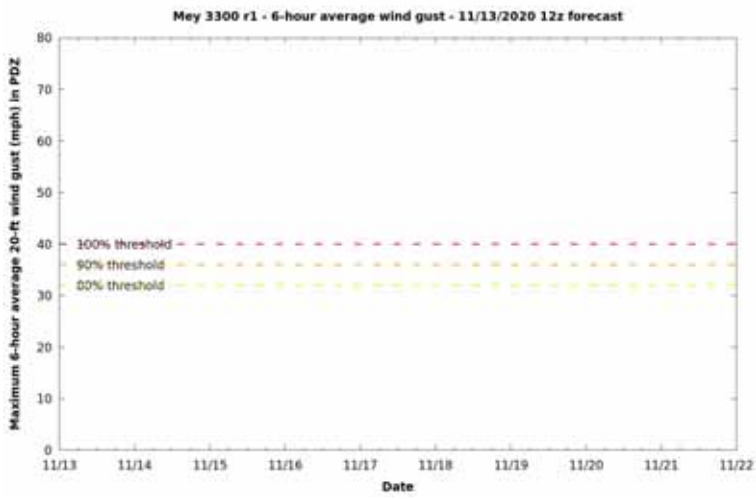
Mey 3300 r3



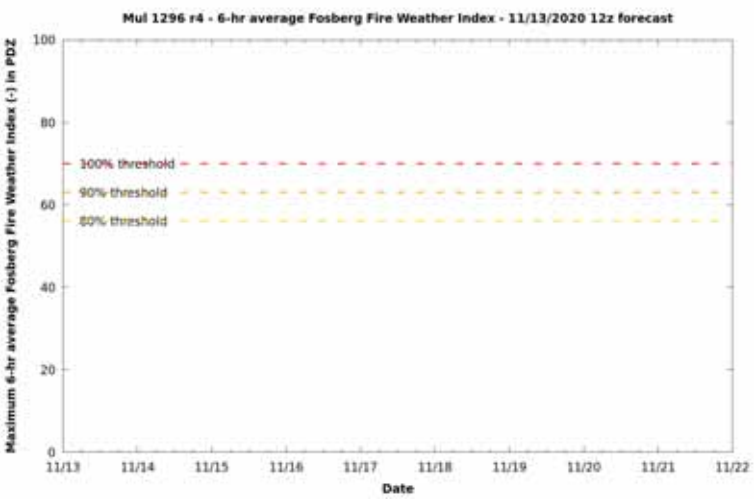


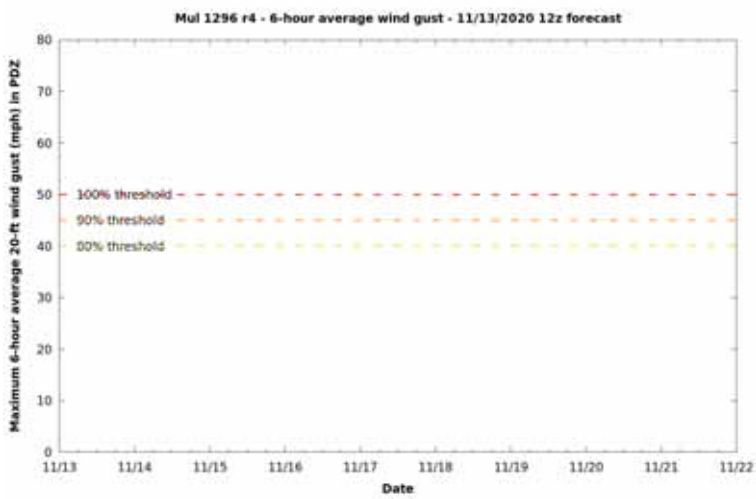
Mey 3300 r1



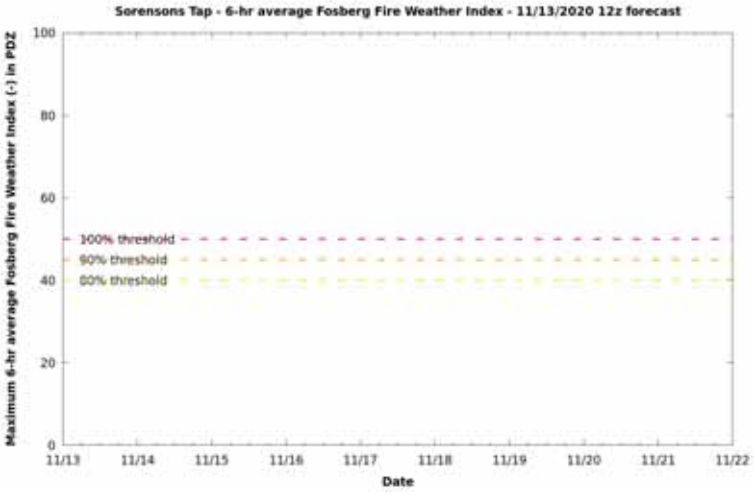


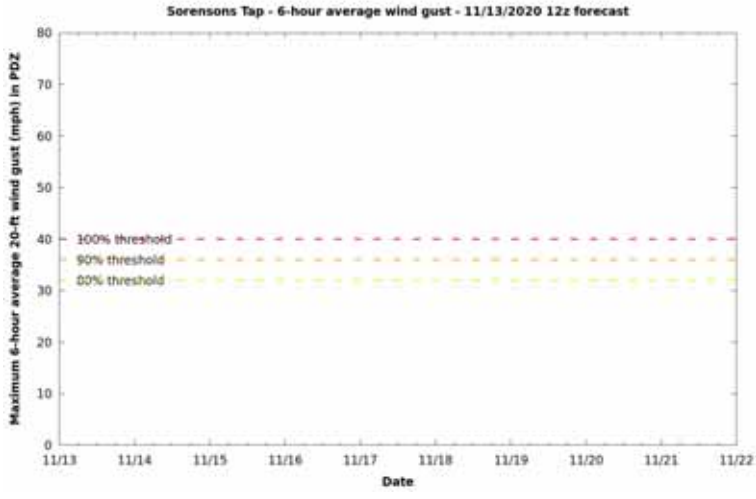
Mul 1296 r4



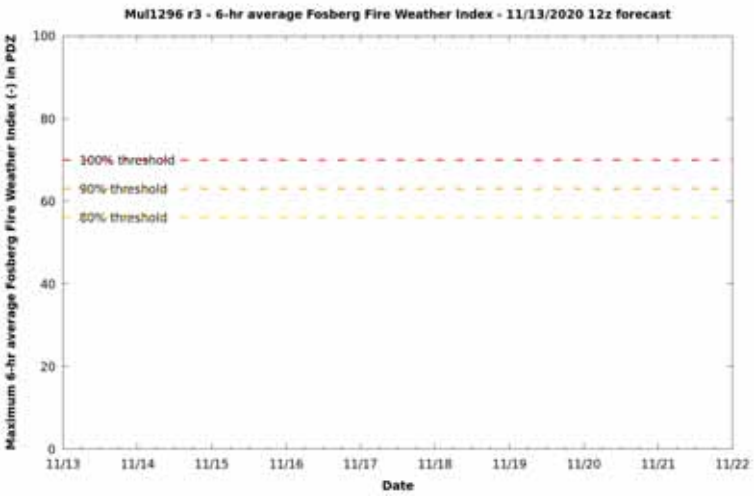


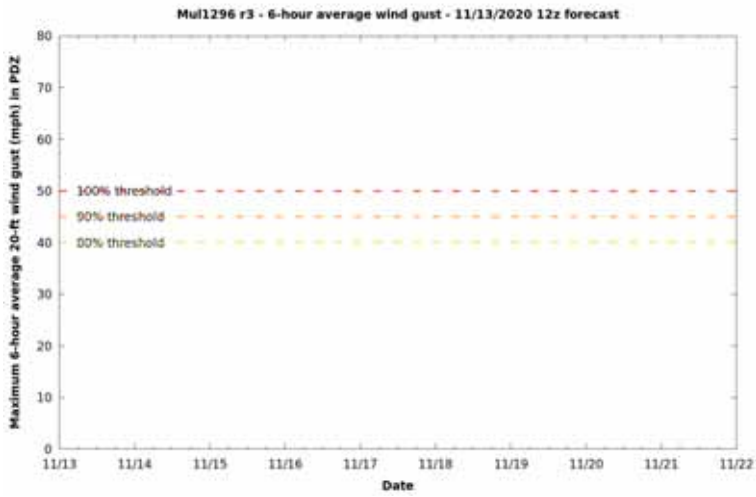
Sorensons Tap



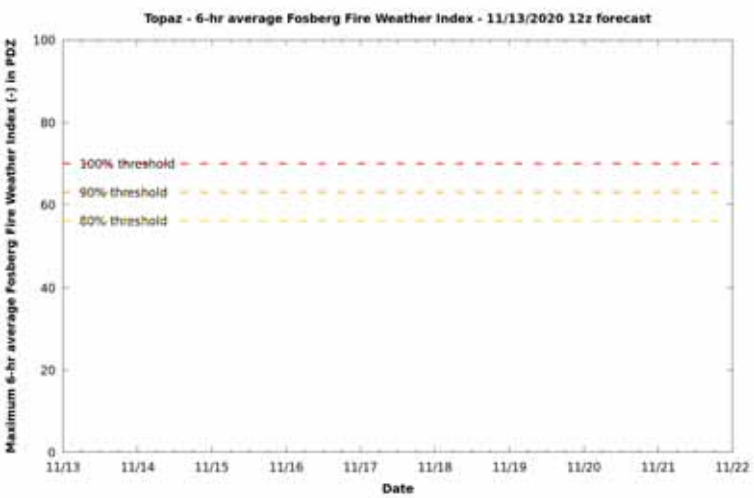


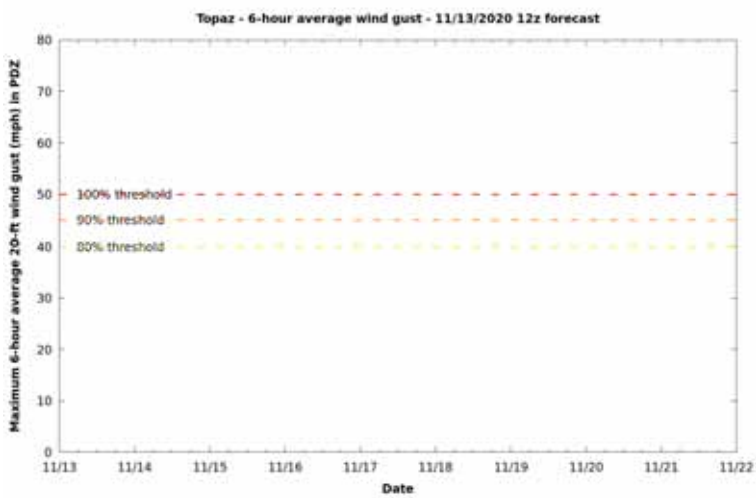
Mul 1296 r3



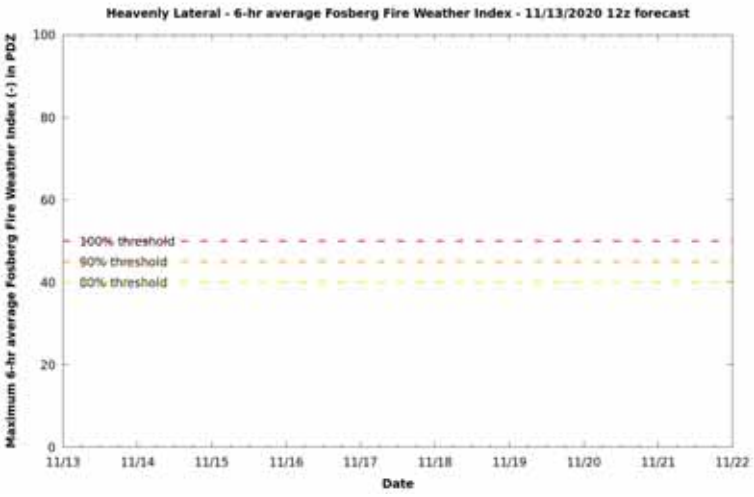


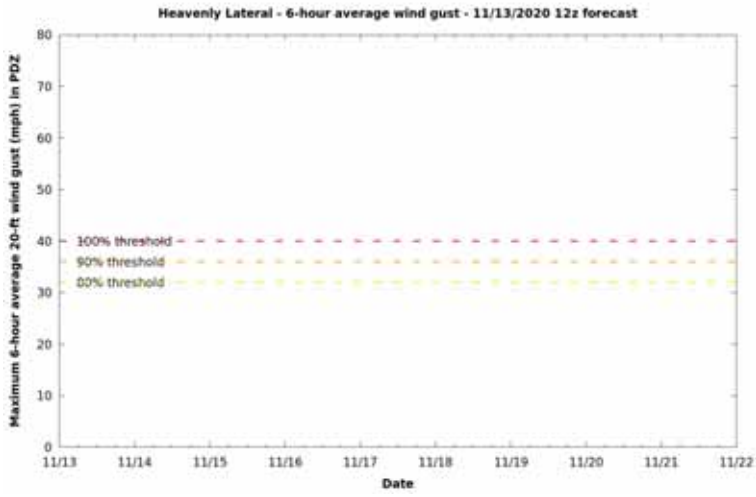
Topaz



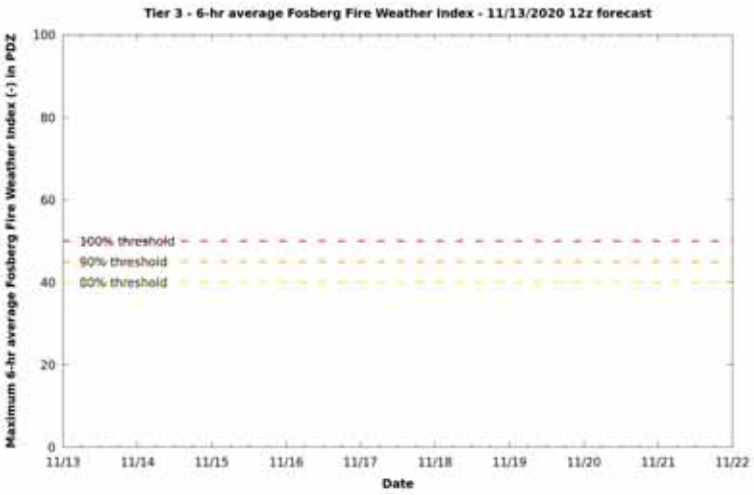


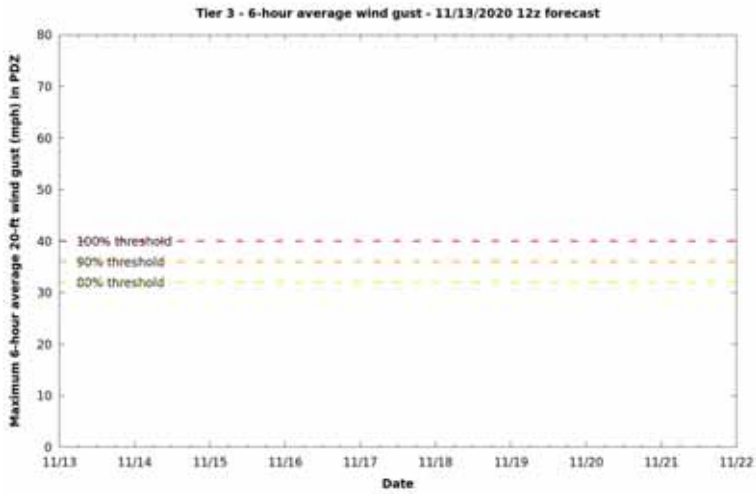
Heavenly Lateral



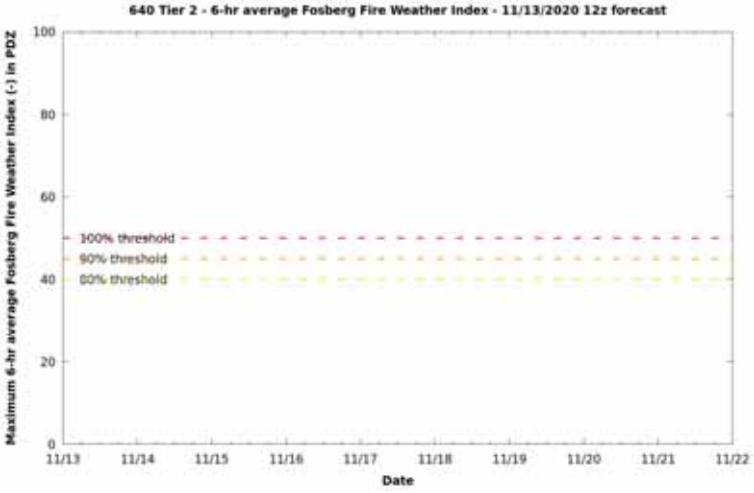


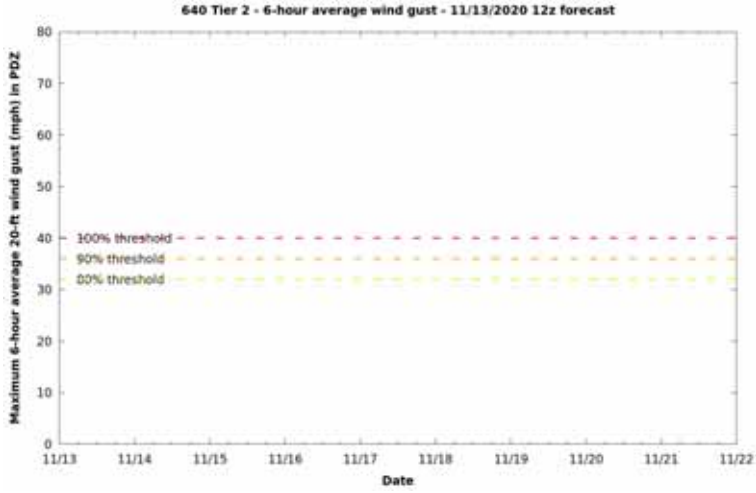
Tier 3



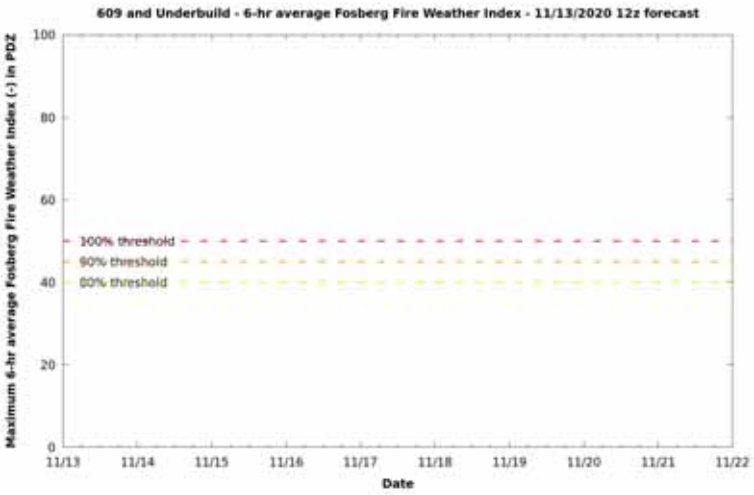


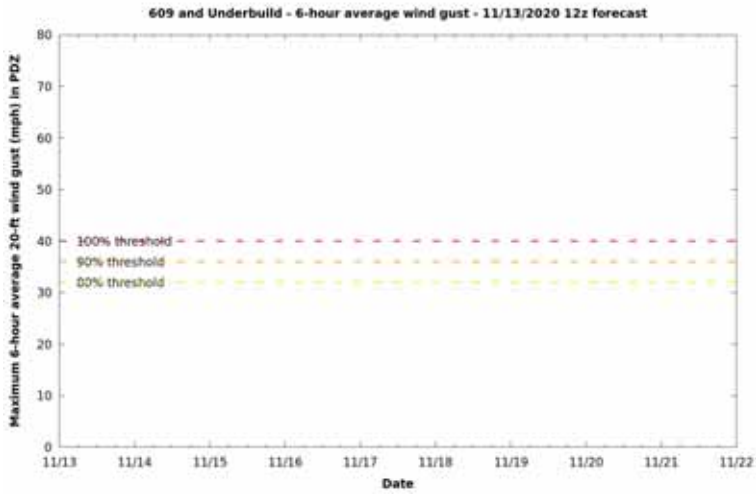
640 Tier 2



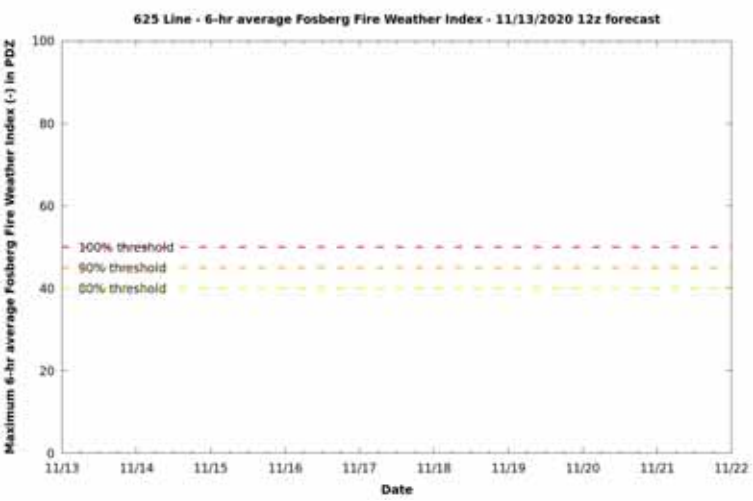


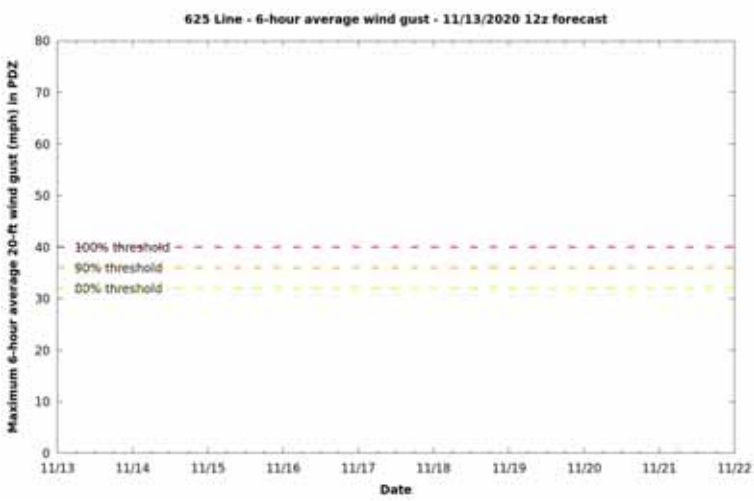
609 and Underbuild



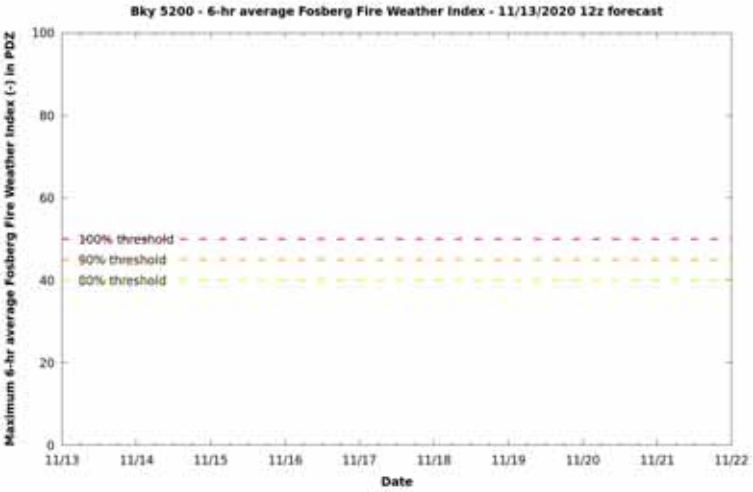


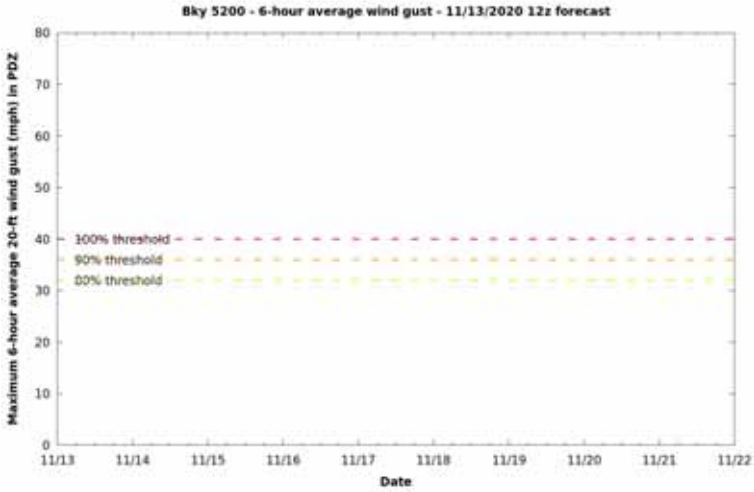
625 Line



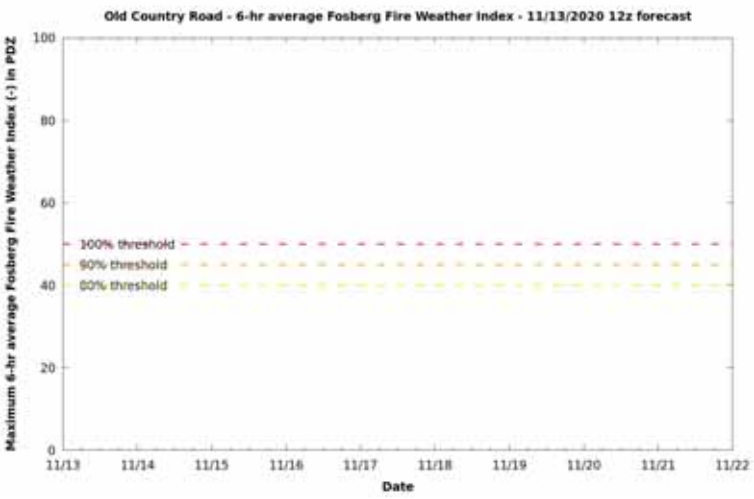


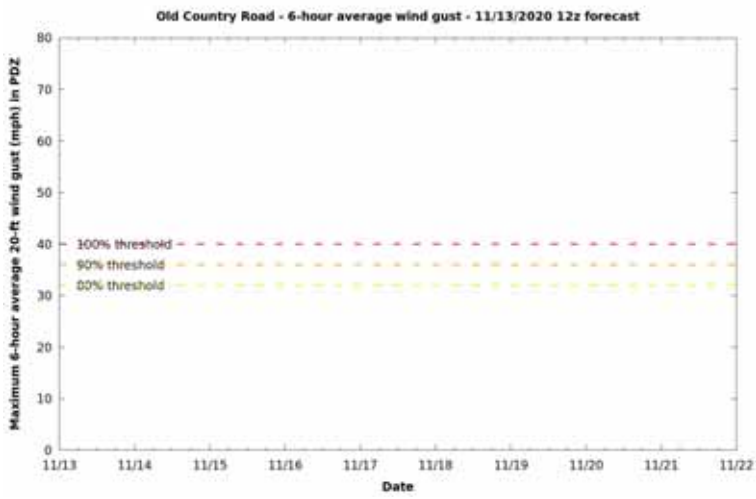
Bky 5200



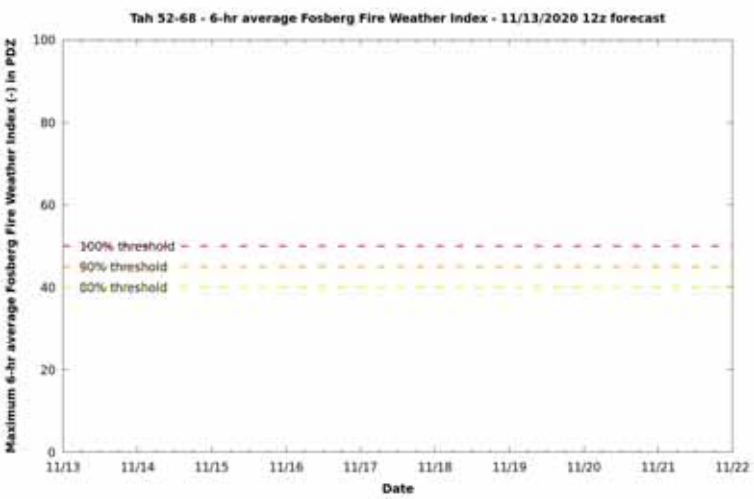


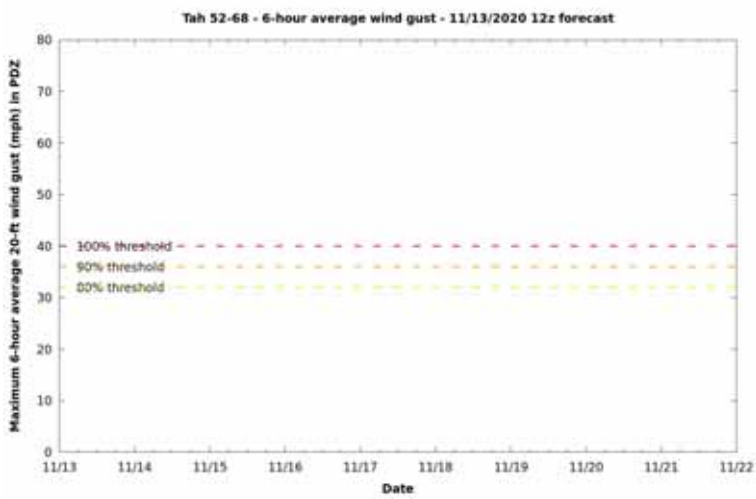
Old Country Road



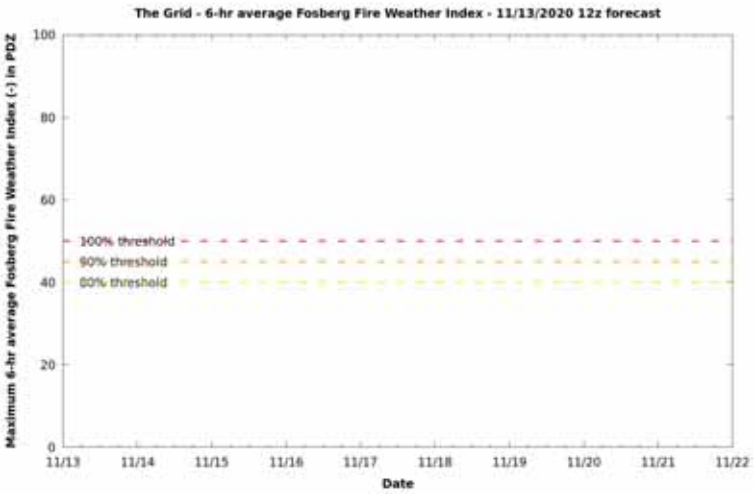


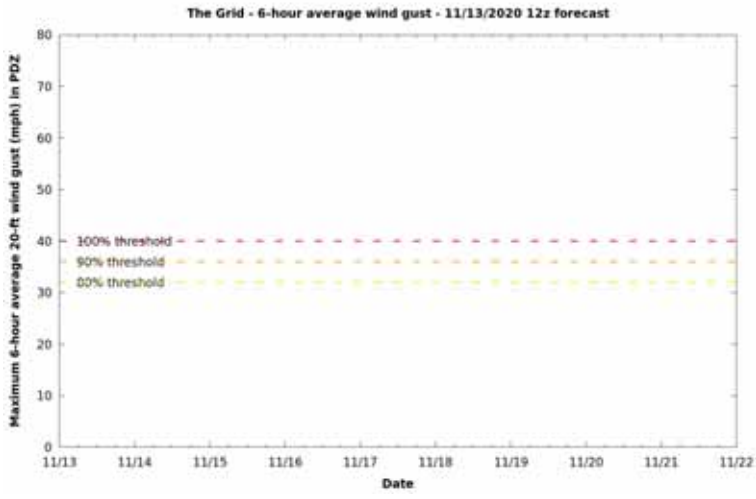
Tah 52-68



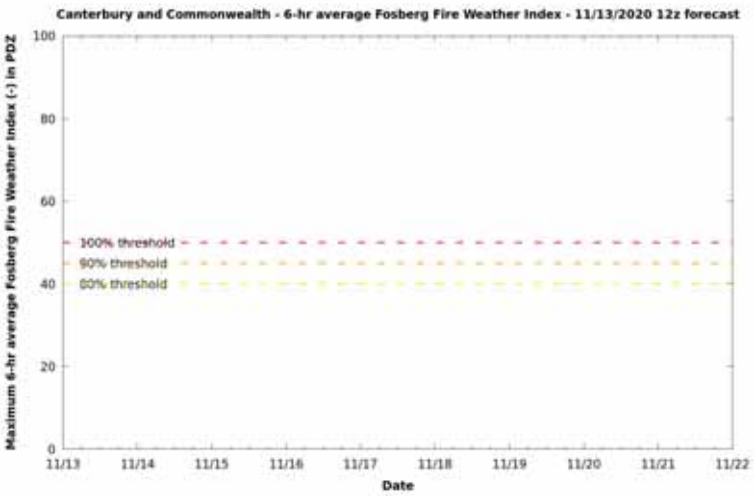


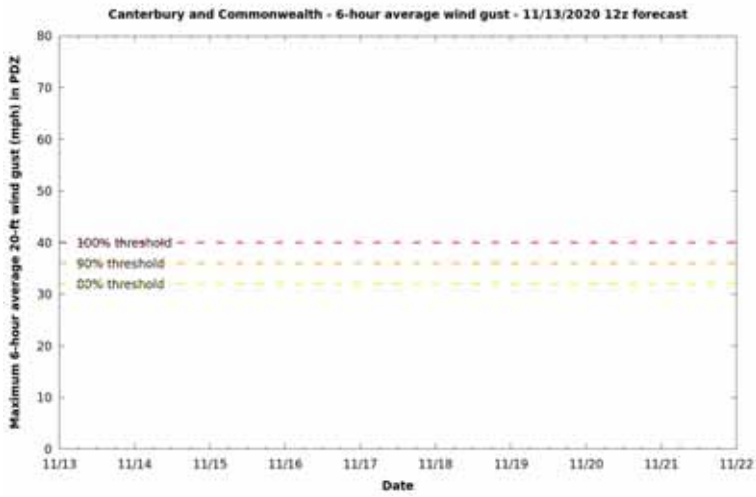
The Grid



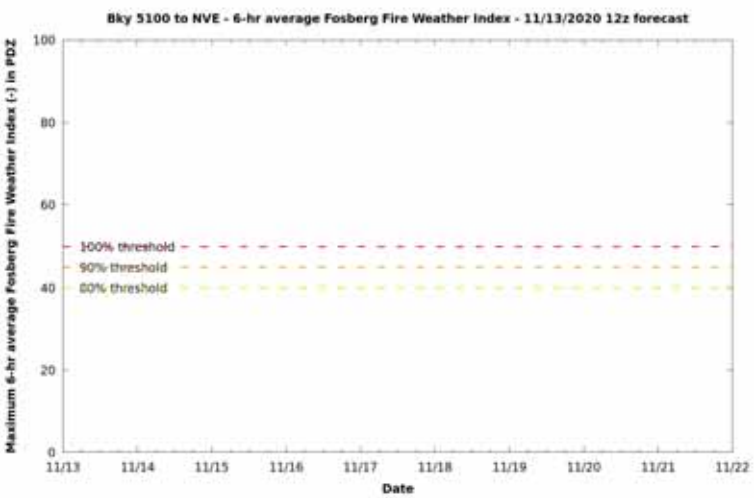


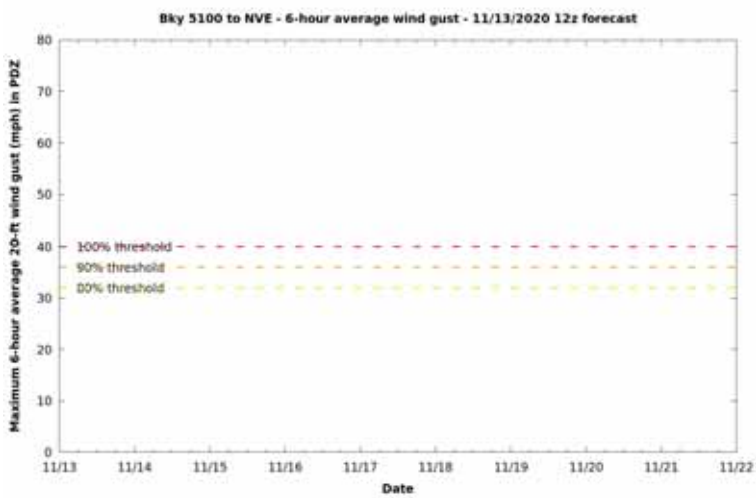
Canterbuy and Commonwealth



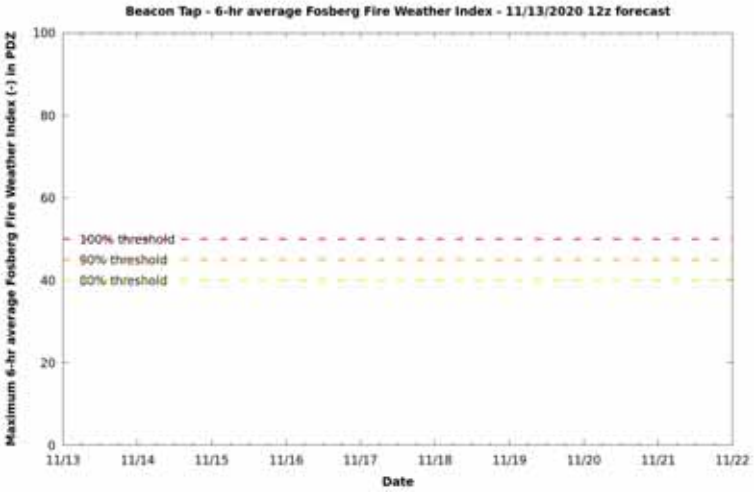


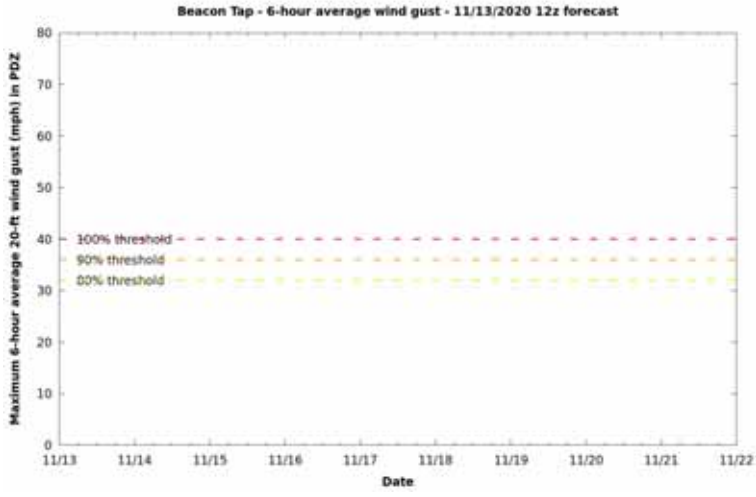
Bky 5100 to NVE



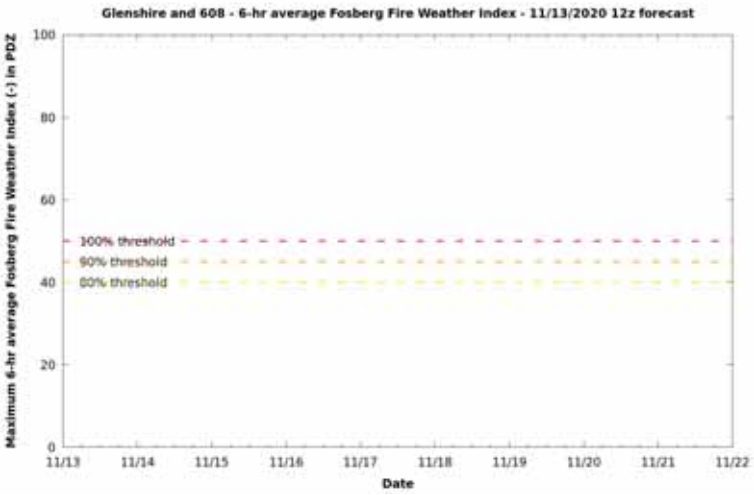


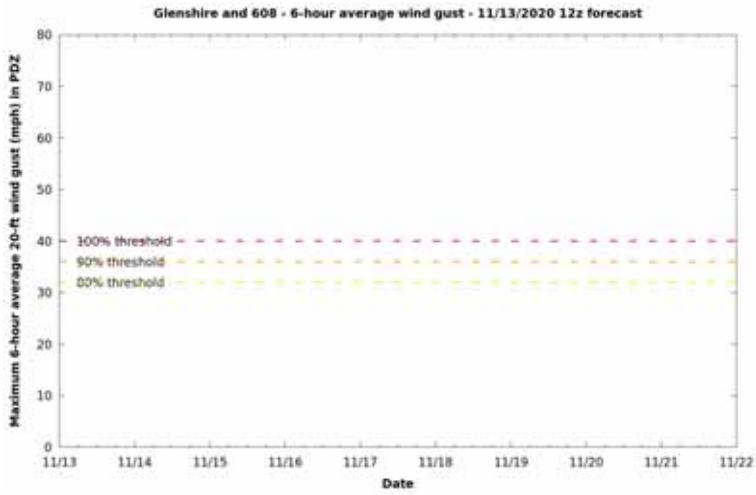
Beacon Tap



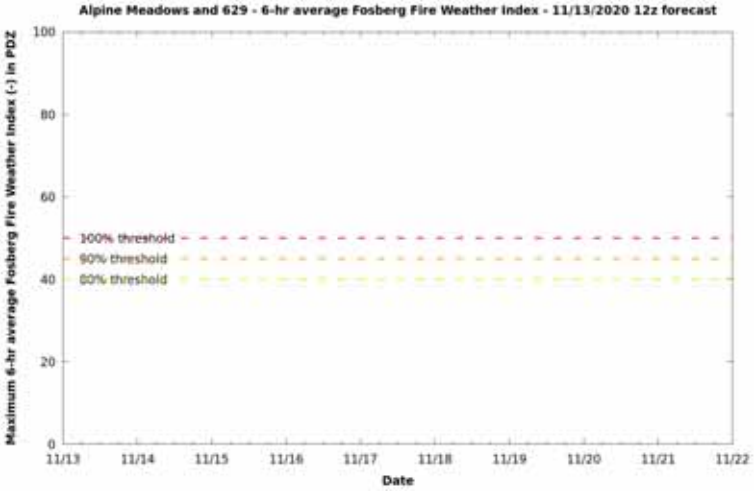


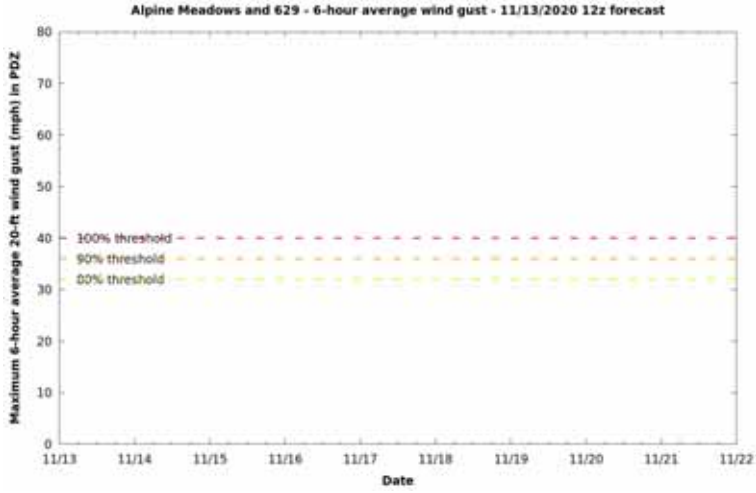
Glenshire and 608



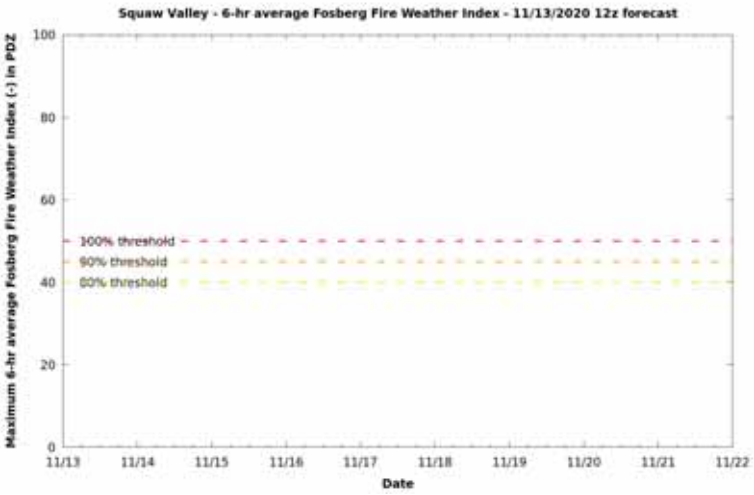


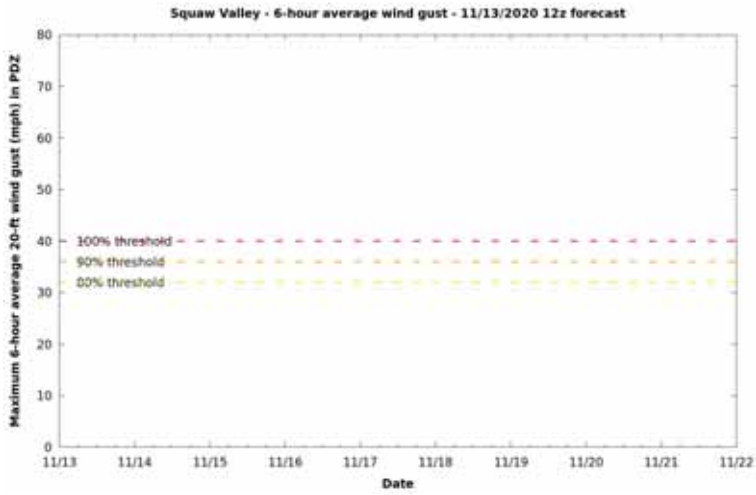
Alpine Meadows and 629



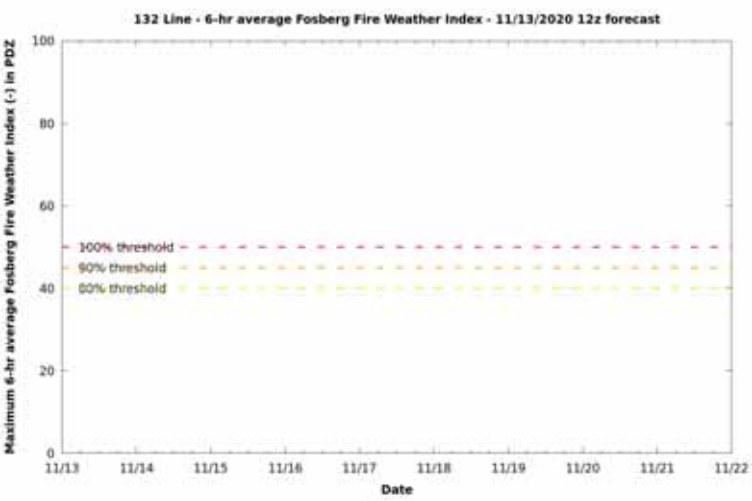


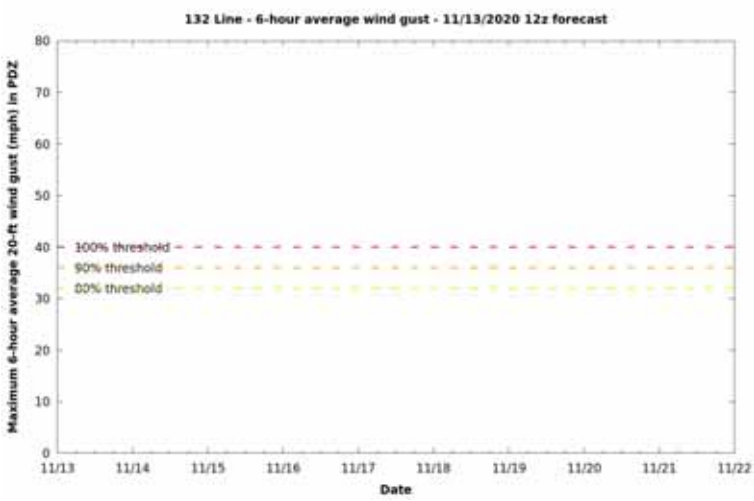
Squaw Valley



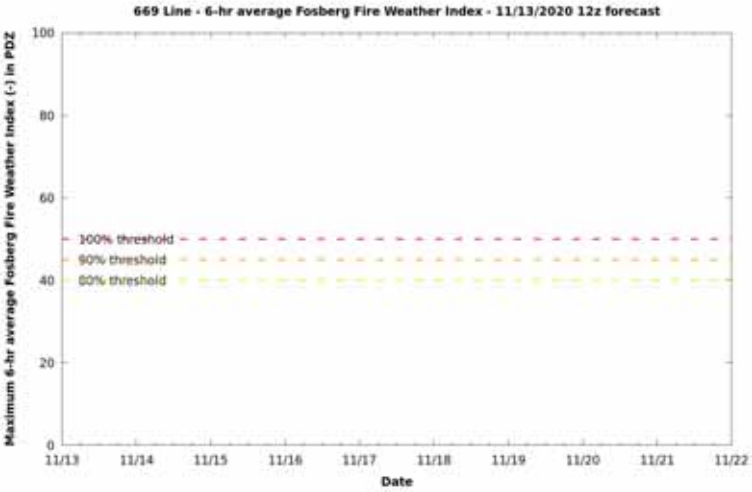


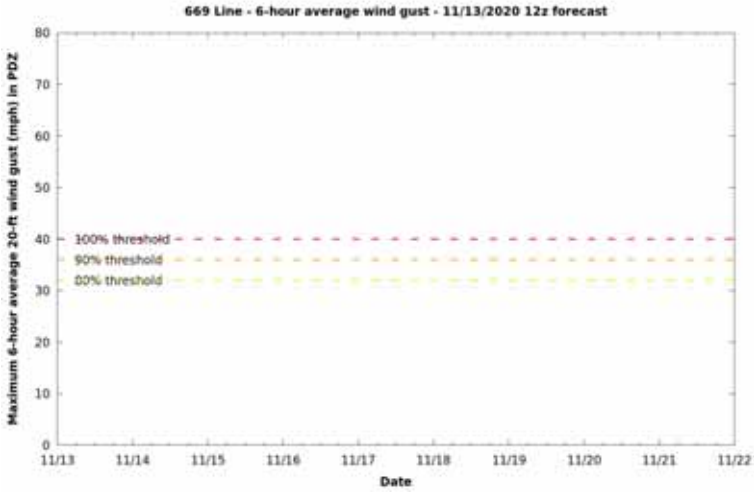
132 Line



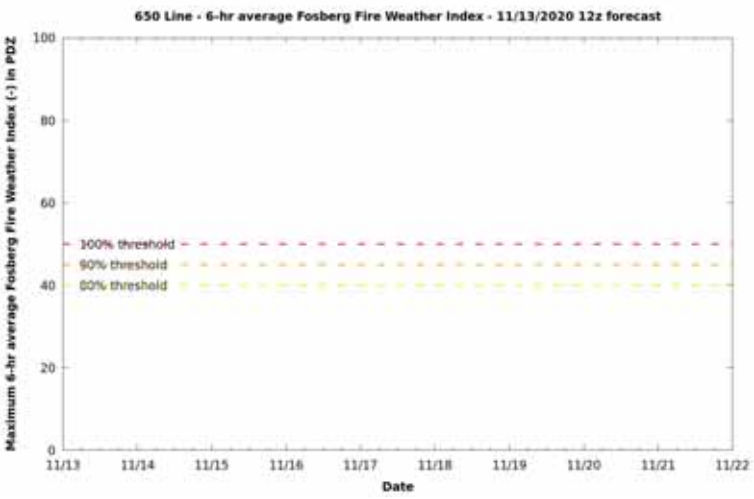


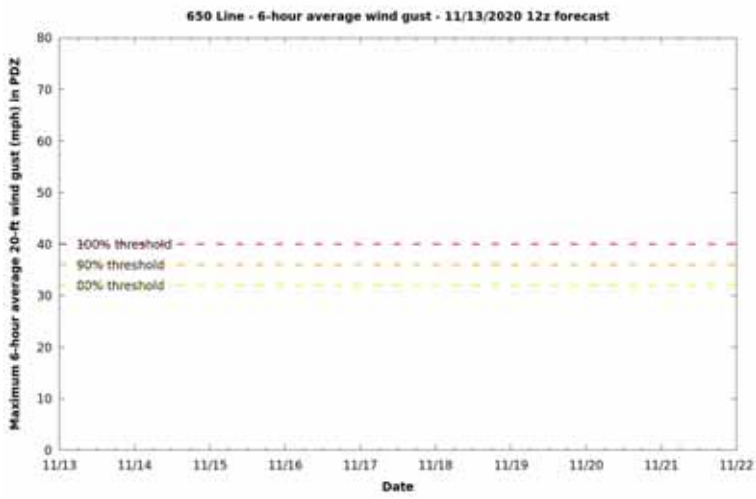
669 Line



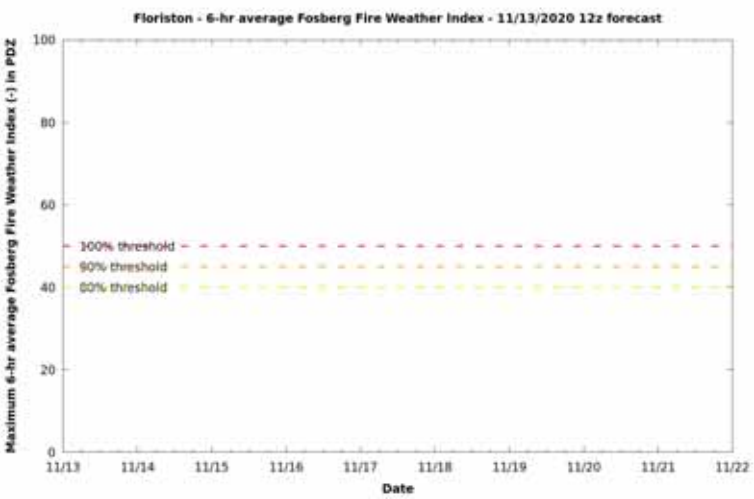


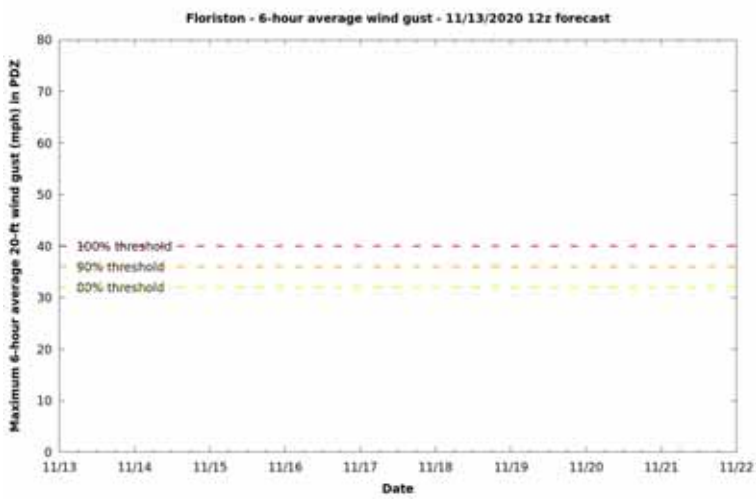
650 Line



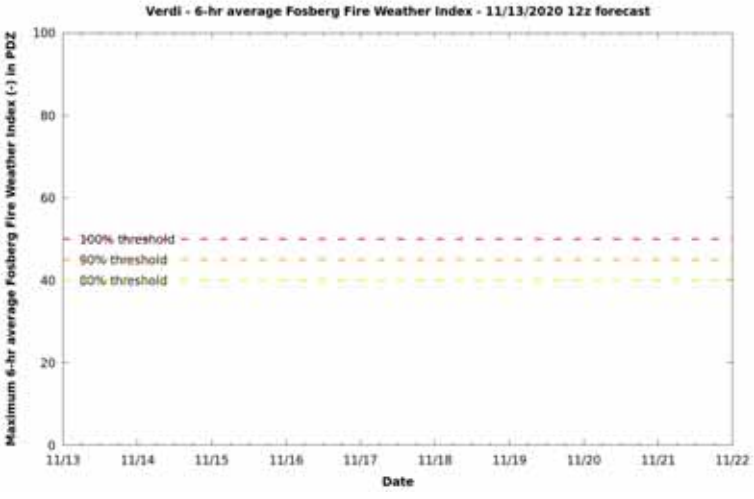


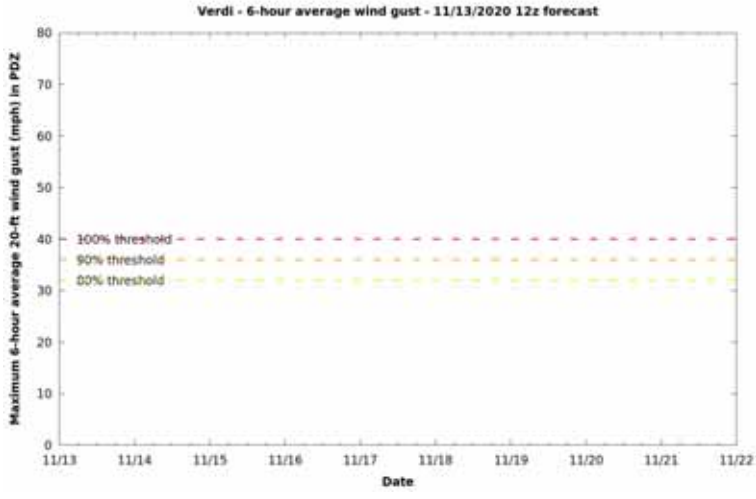
Floriston



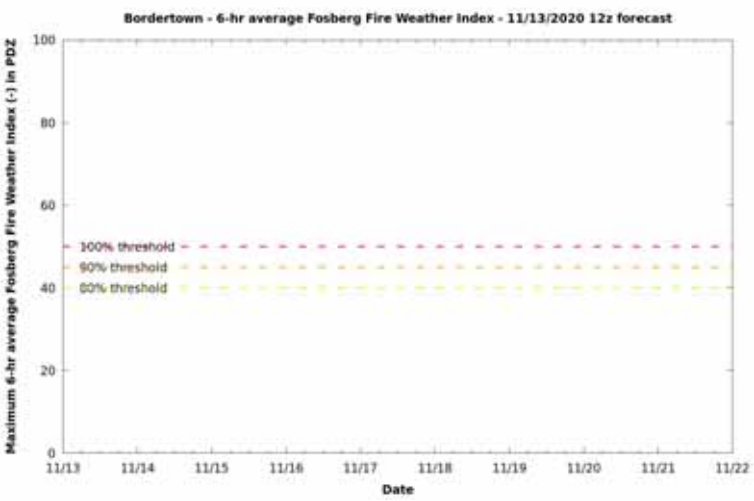


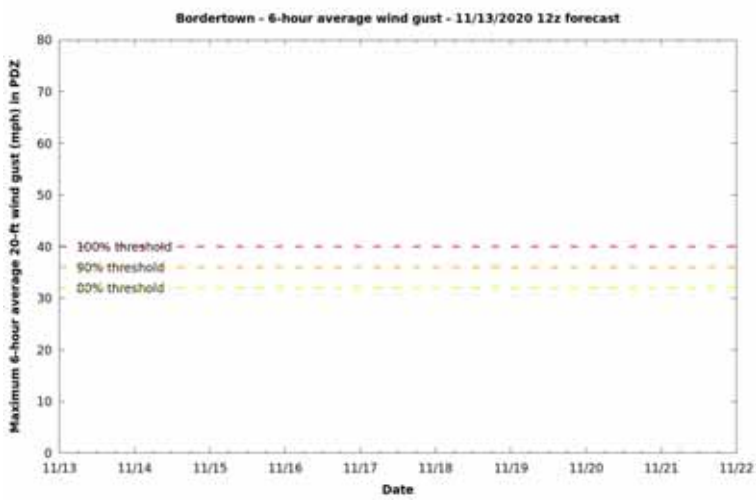
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/13/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
80% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date


Bordertown - 6-hour average wind gust - 11/13/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
80% threshold
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
Date

Liberty Utilities Fire Potential Index Forecast for 11/14/20 - 11/20/20

Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

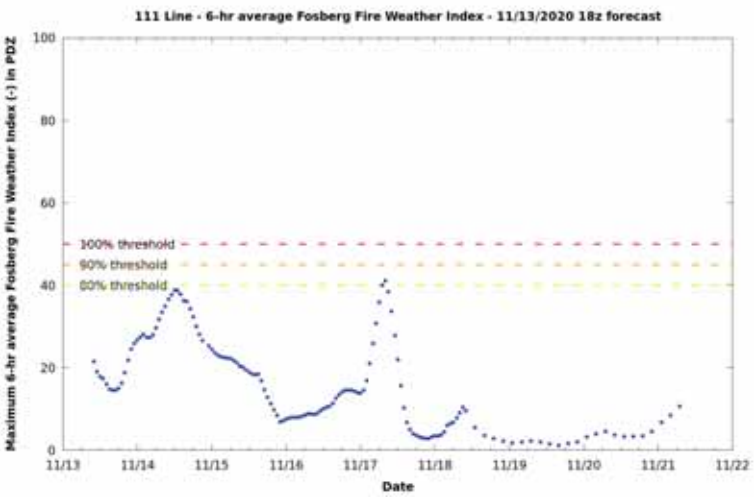
Liberty Utilities Energy Release Component Forecast for 11/14/20 - 11/20/20

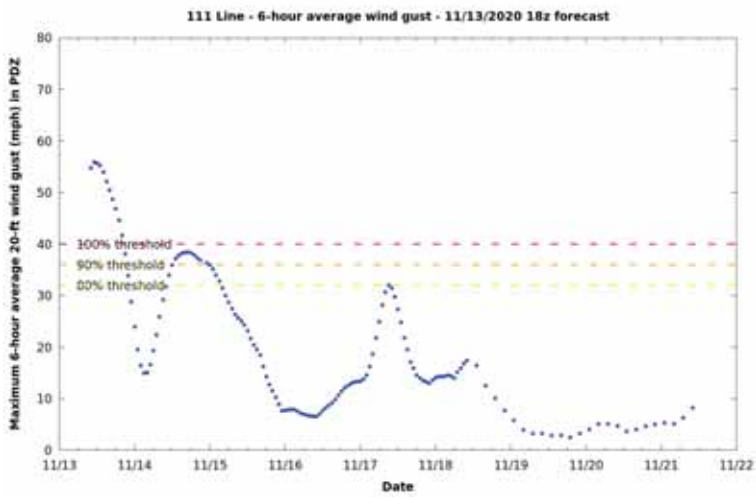
Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	57.0	55.0	51.0	56.0	58.0	55.0
Sierra Brooks	58.0	61.0	58.0	55.0	61.0	62.0	62.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	51.0	43.0	48.0	42.0	35.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	56.0	56.0	53.0	50.0	56.0	57.0	57.0

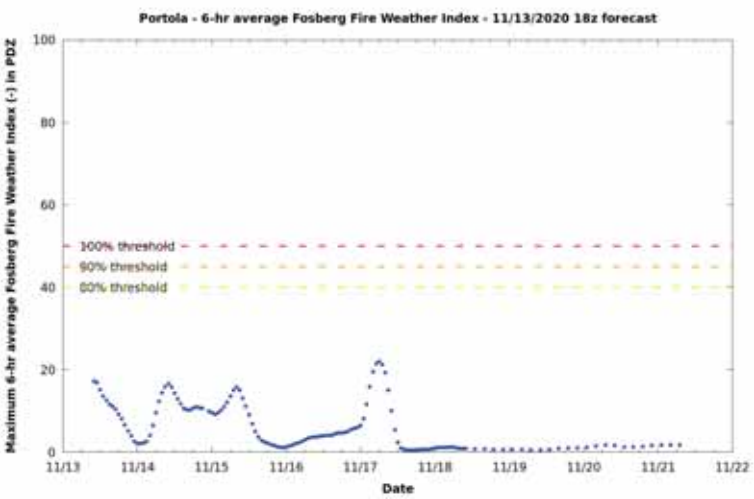
Liberty Utilities Fire Weather Summary Plots - 11/13/2020 18z forecast

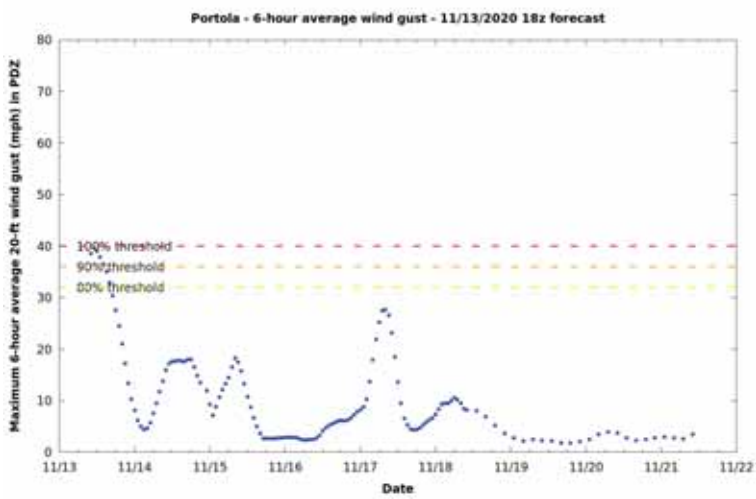
111 Line



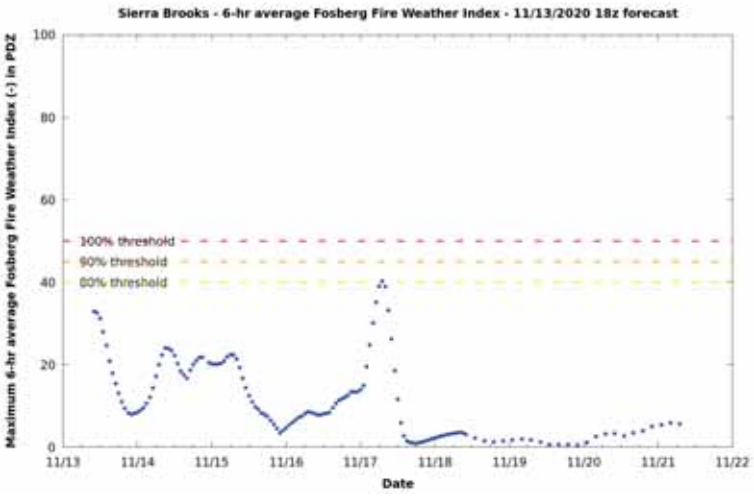


Portola



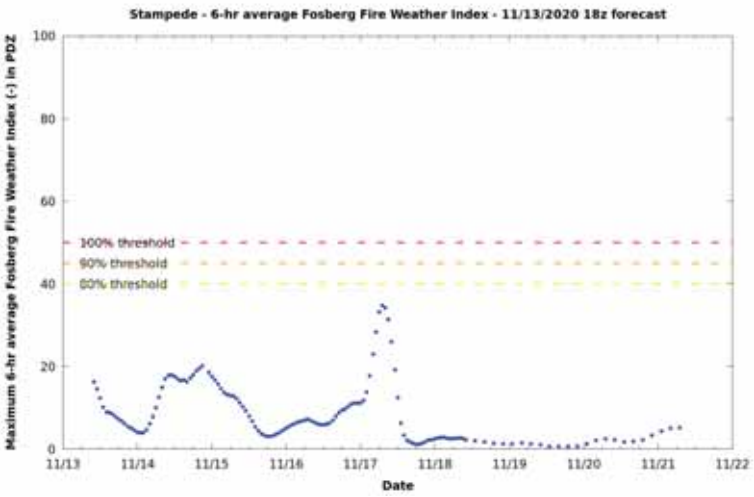


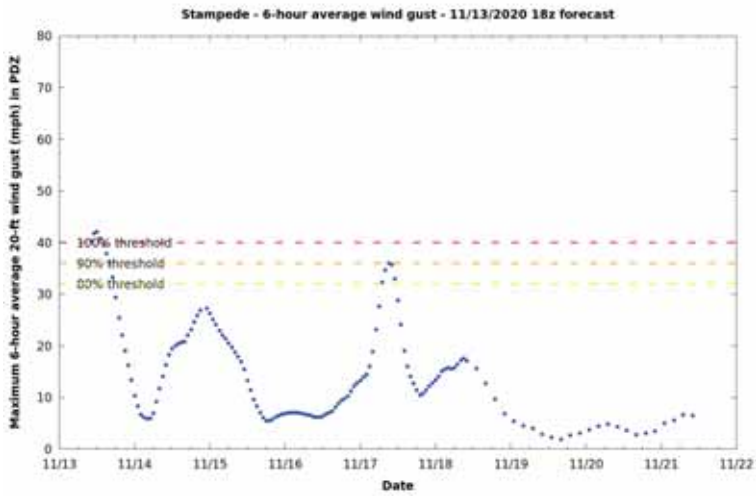
Sierra Brooks



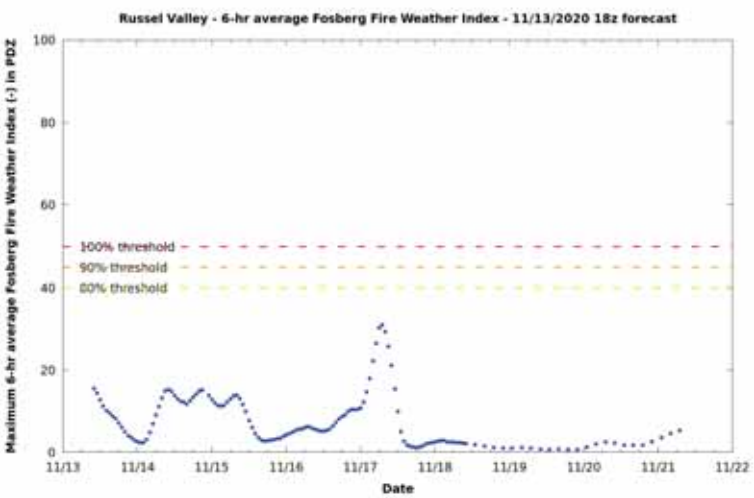


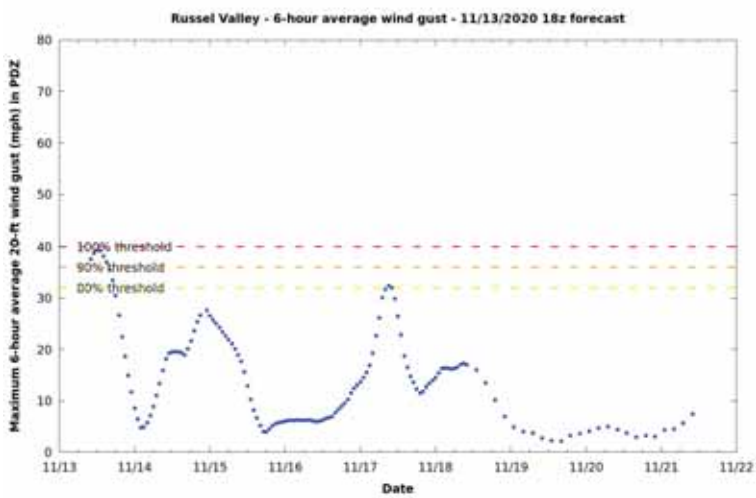
Stampede



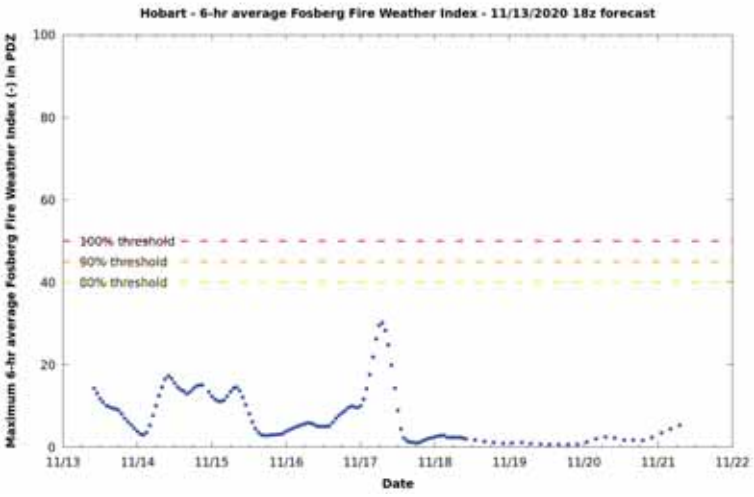


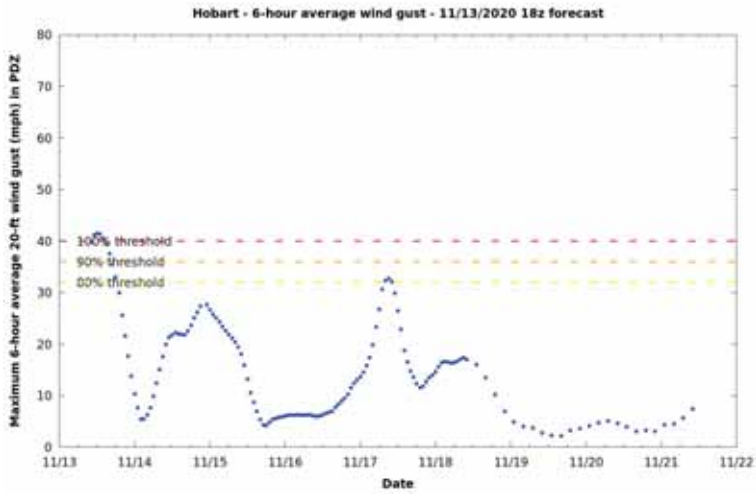
Russell Valley



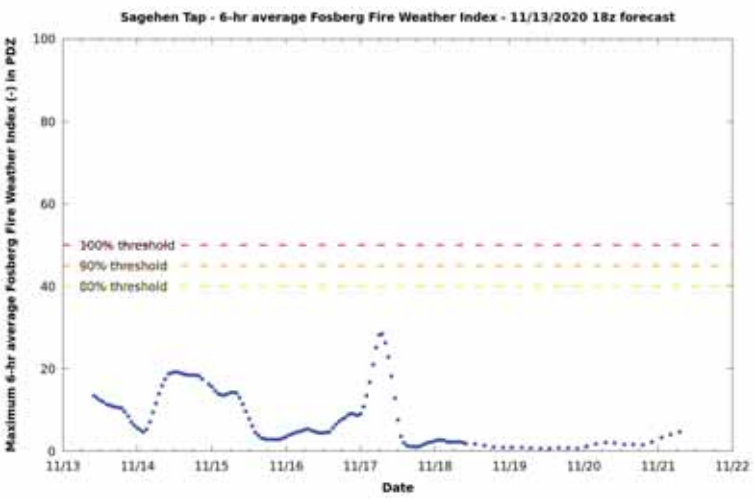


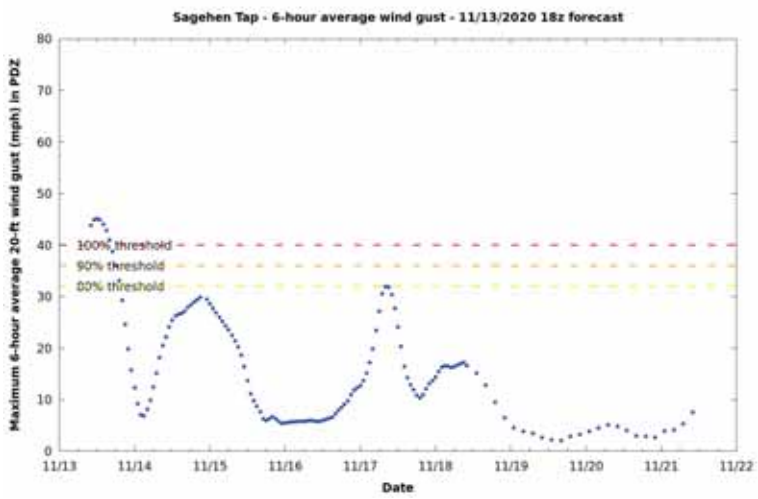
Hobart



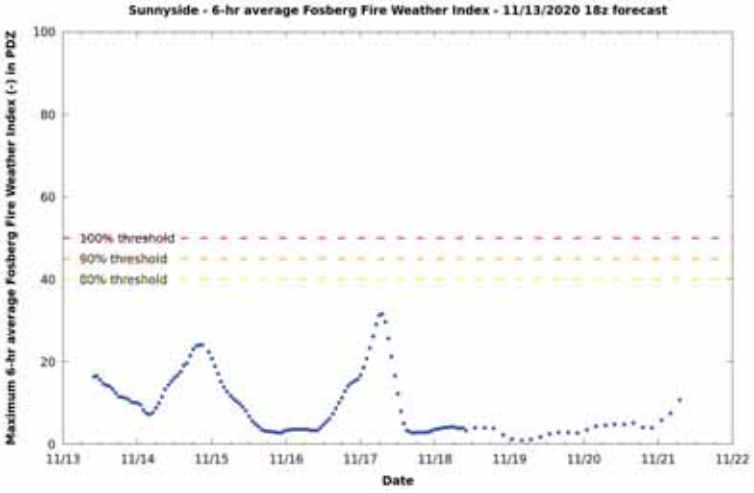


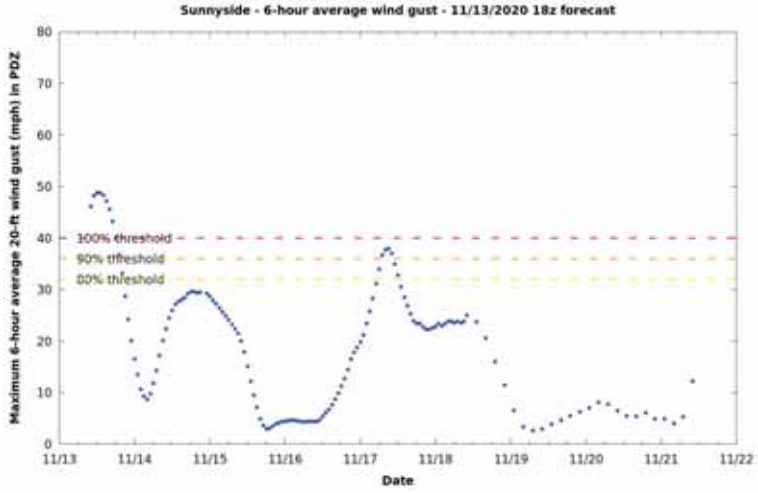
Sagehen tap



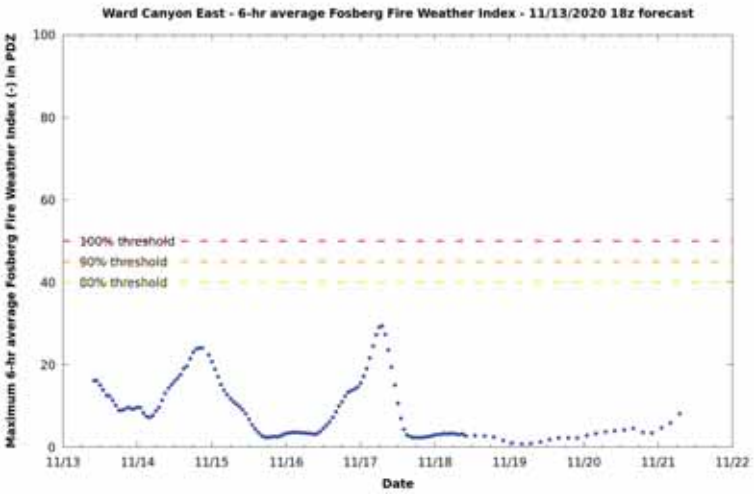


Sunnyside



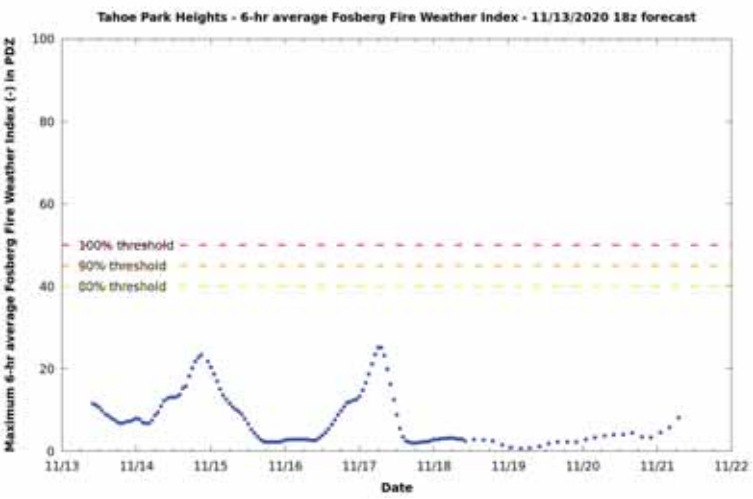


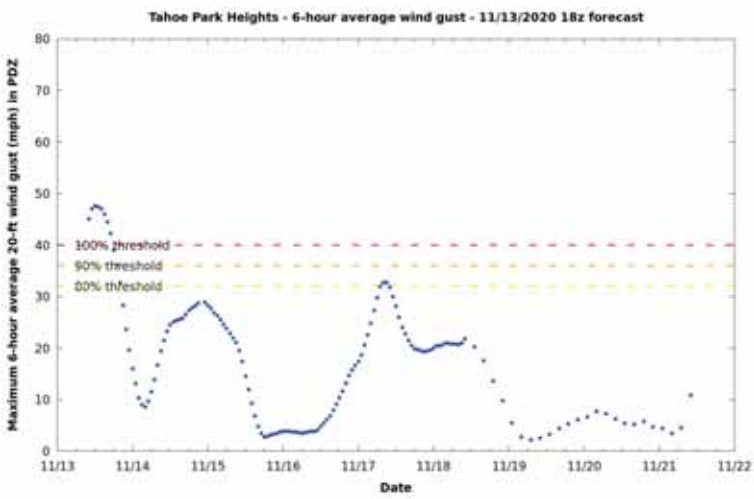
Ward Canyon East



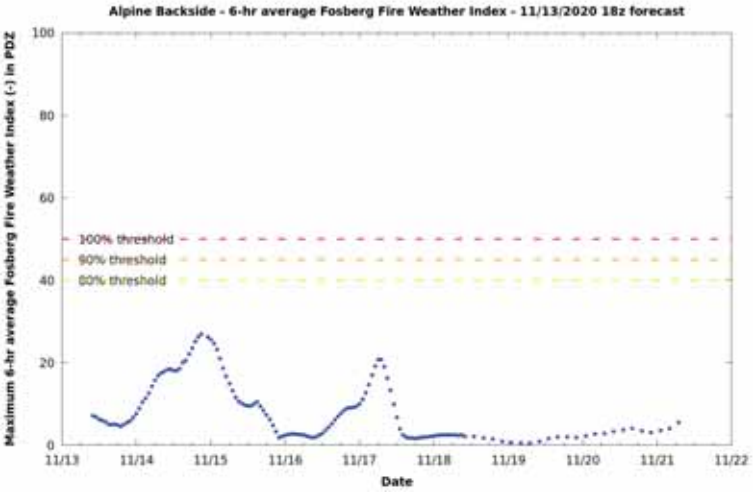


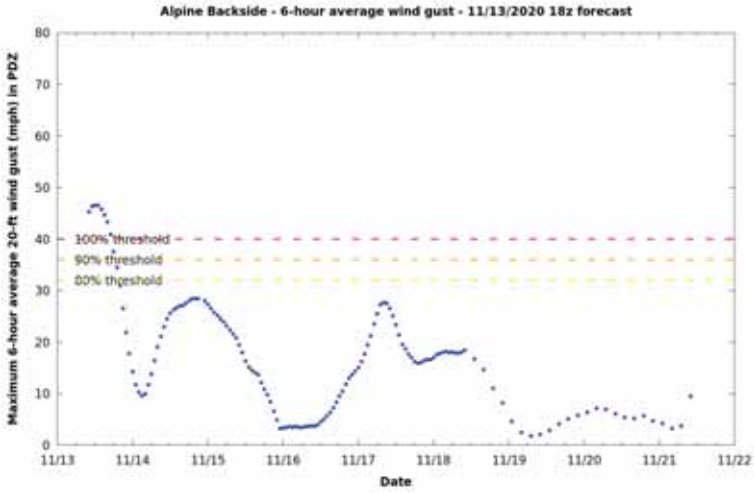
Tahoe Park Heights



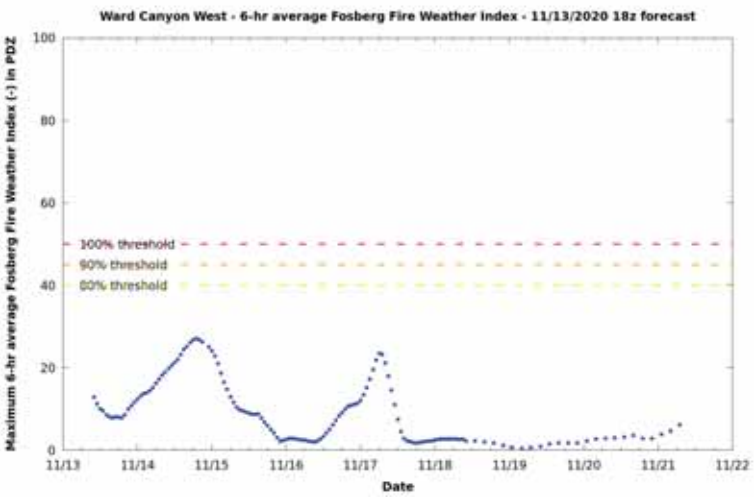


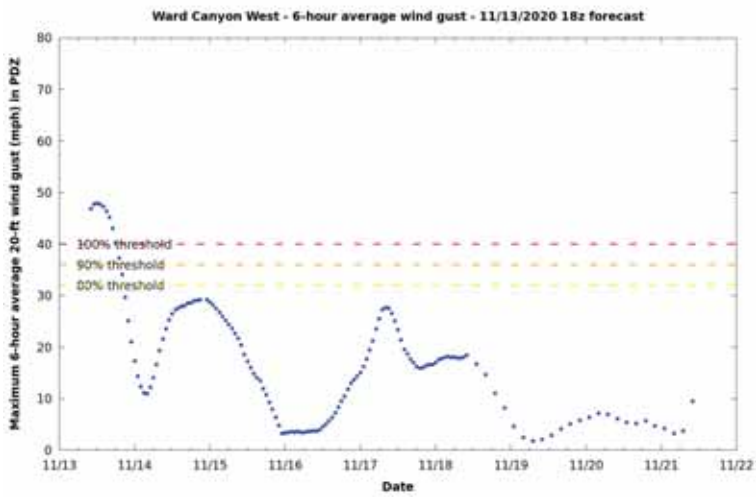
Alpine Backside



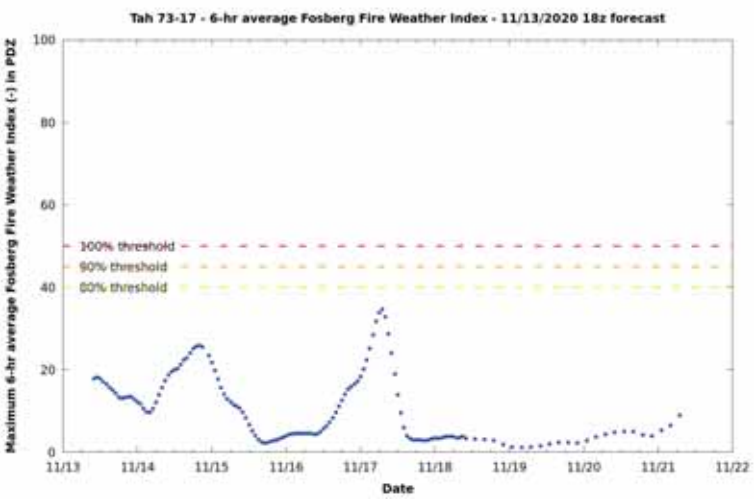


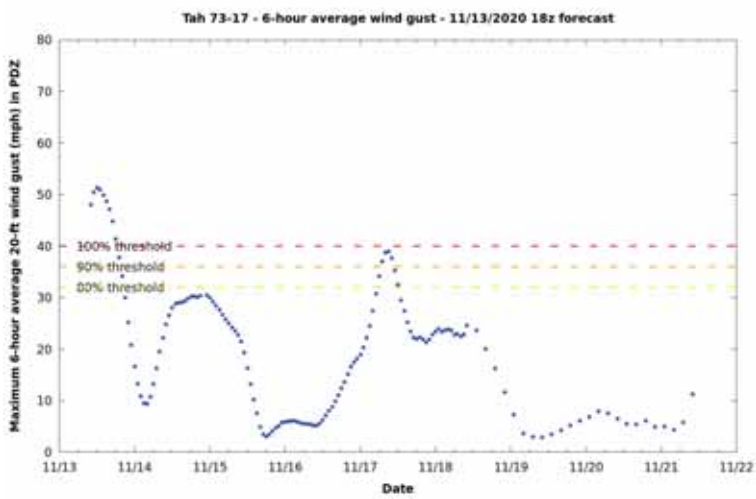
Ward Canyon West



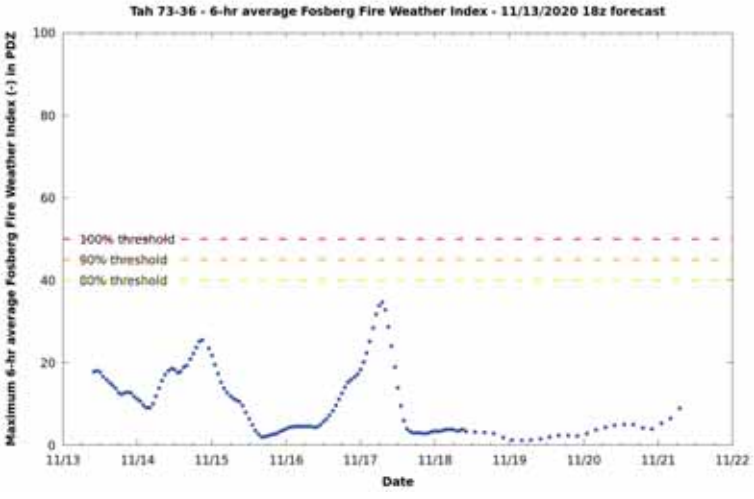


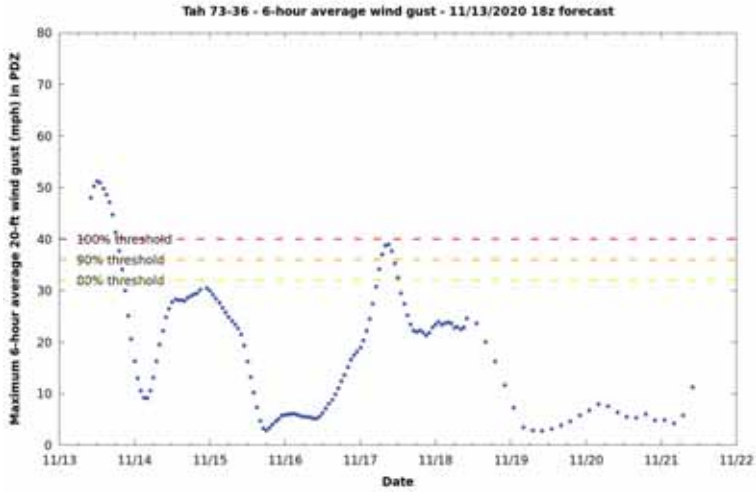
Tah 73-17



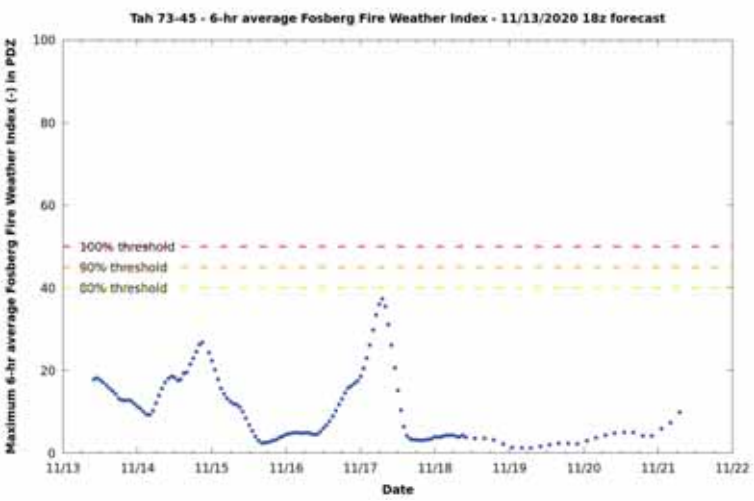


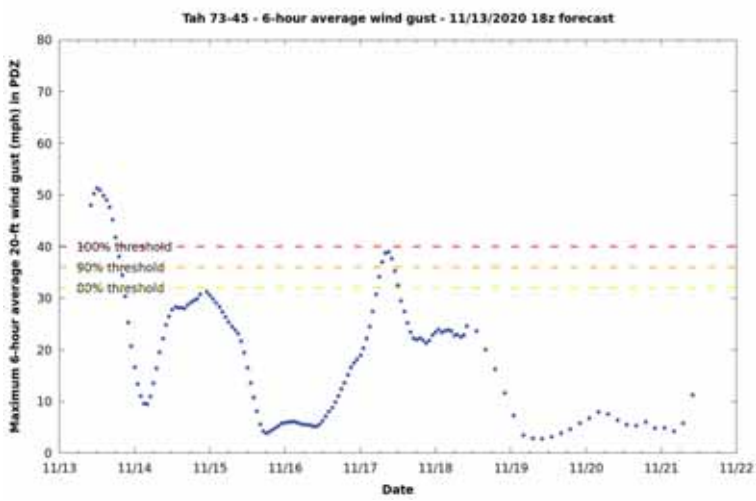
Tah 73-36



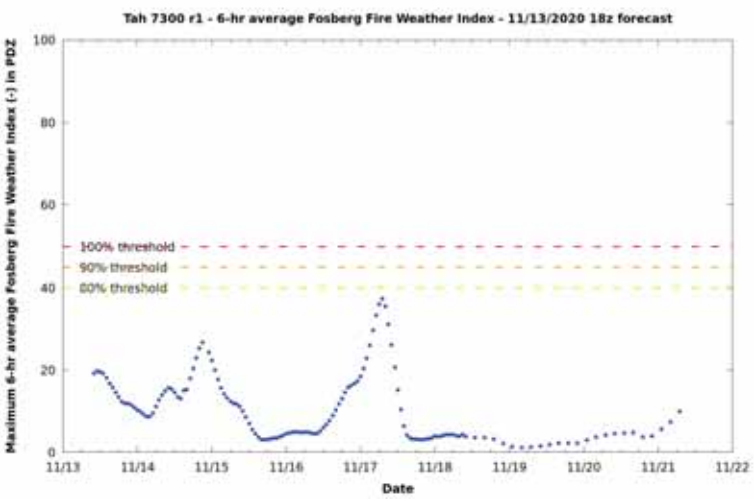


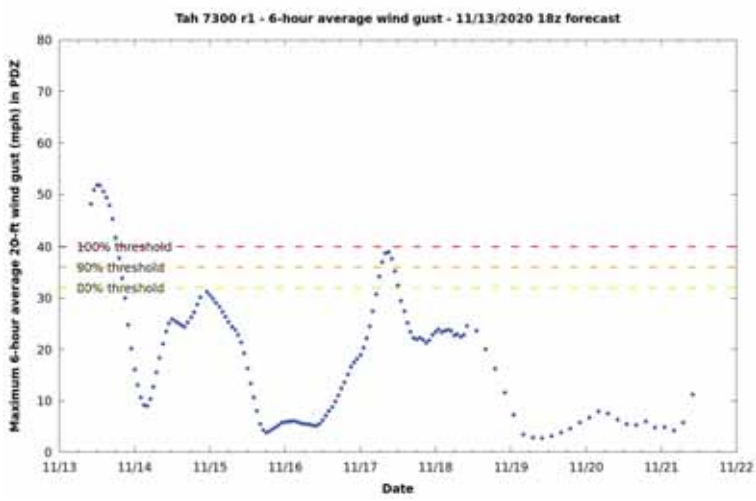
Tah 73-45



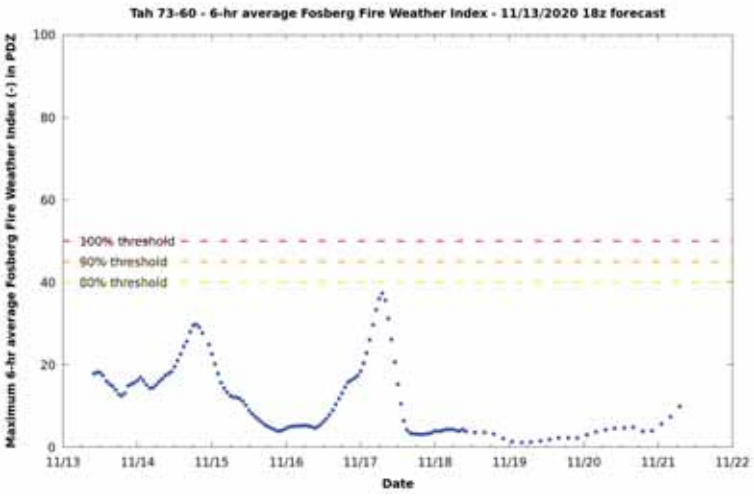


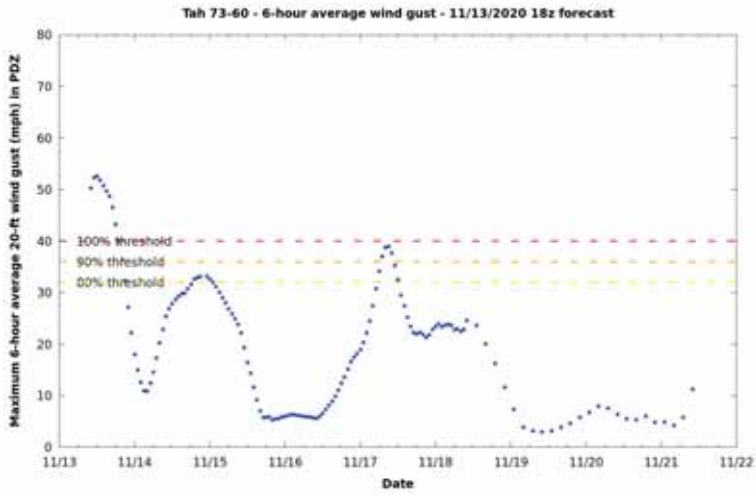
Tah 7300 r1



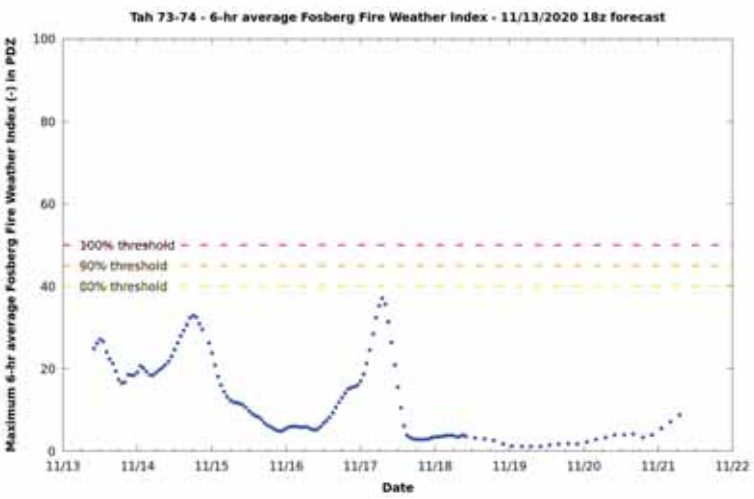


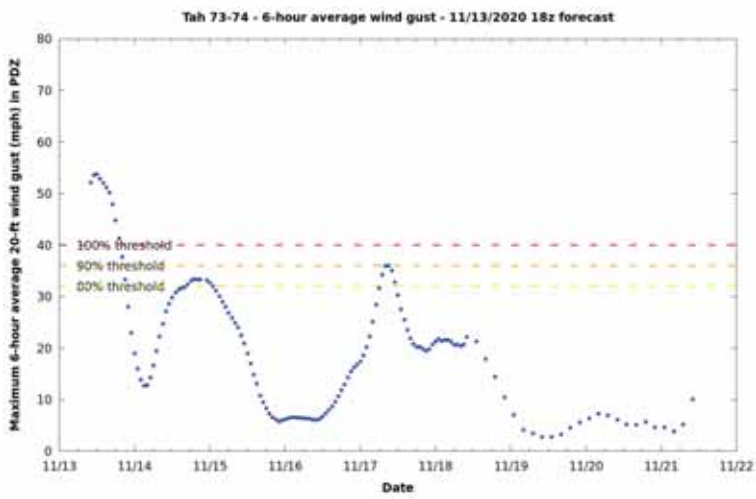
Tah 73-60



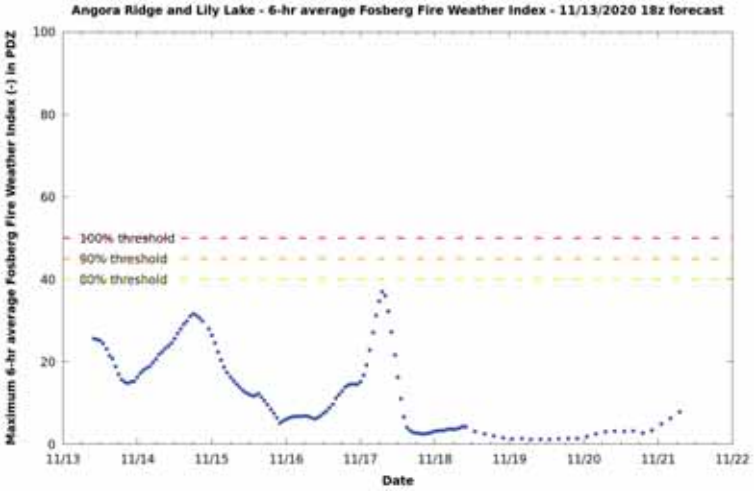


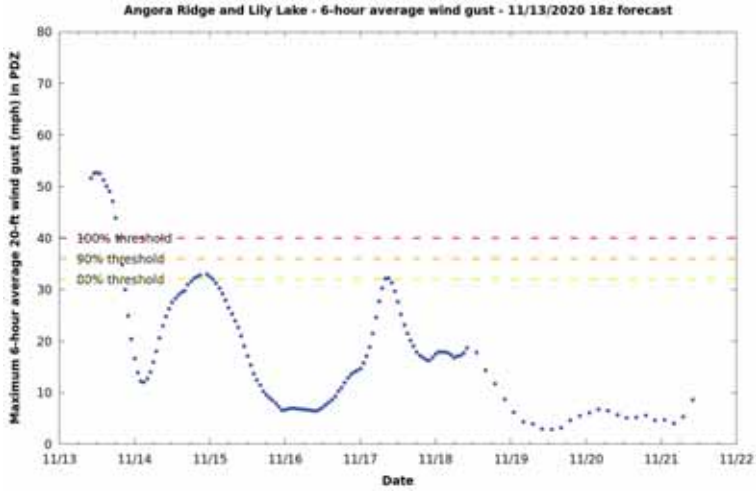
Tah 73-74



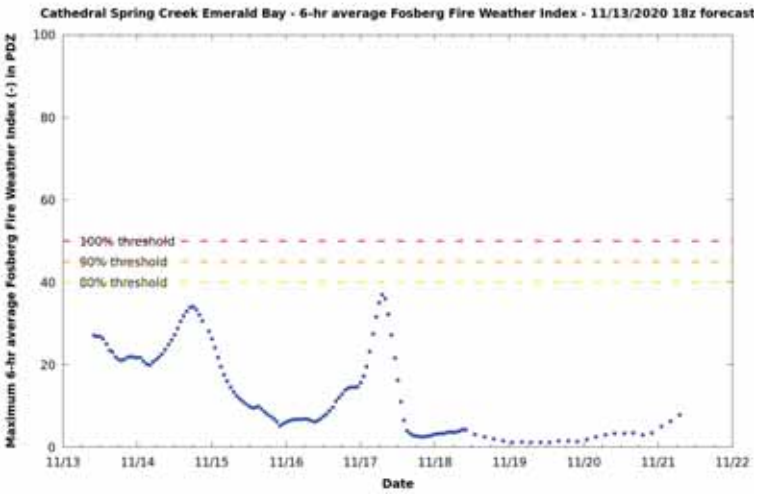


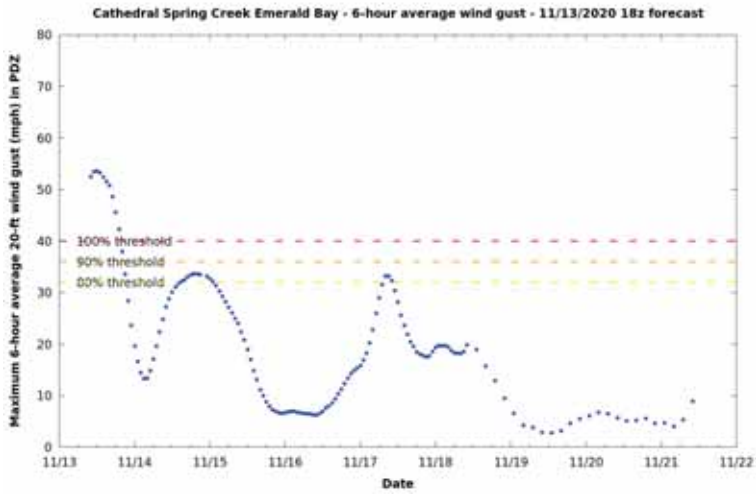
Angora Ridge and Lily Lake



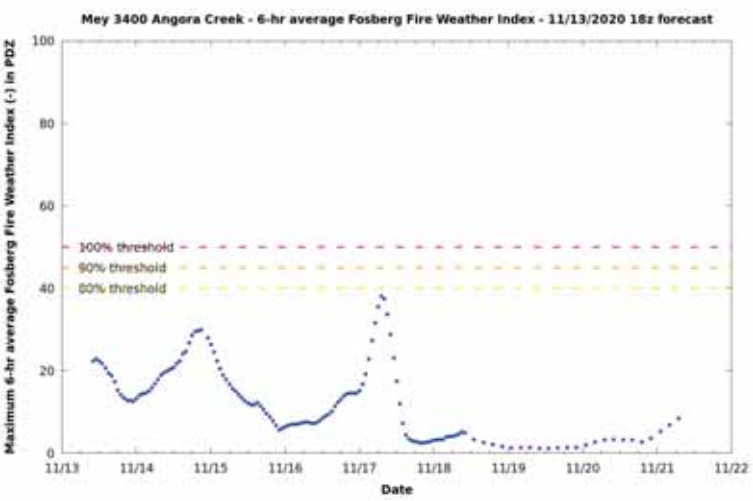


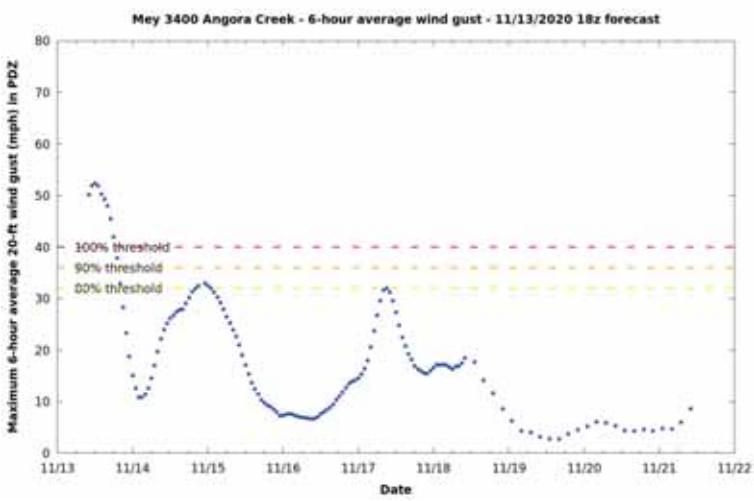
Cathedral Spring Creek Emerald Bay



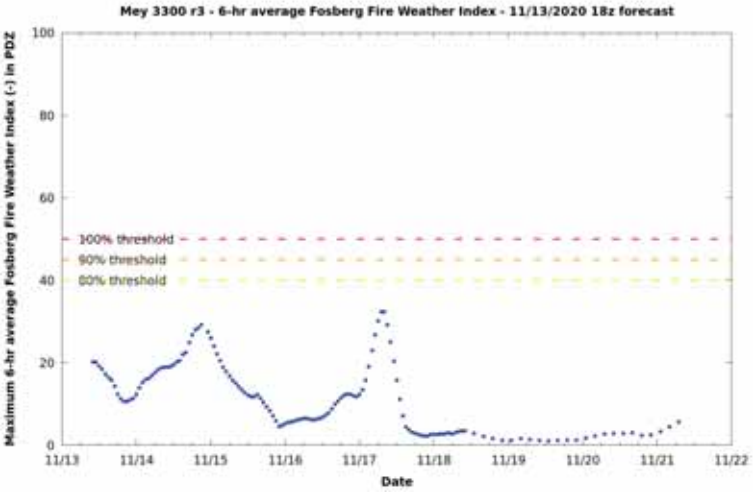


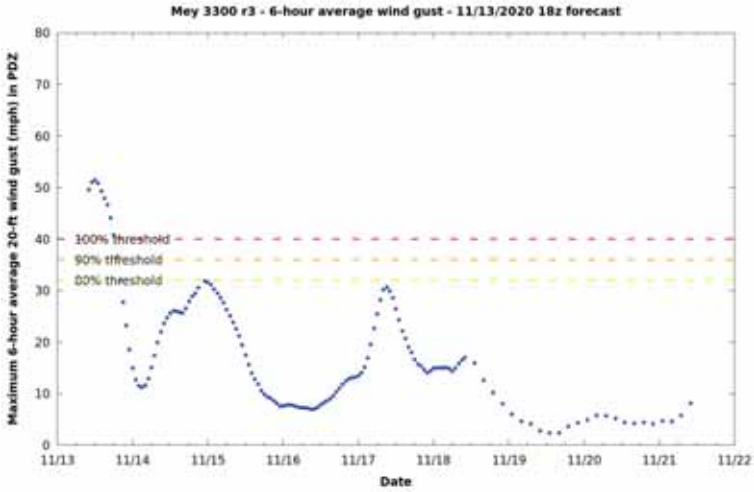
Mey 3400 Angora Creek



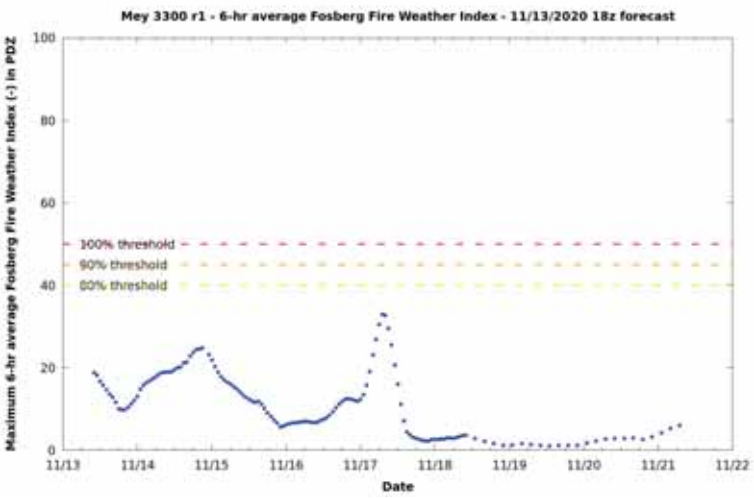


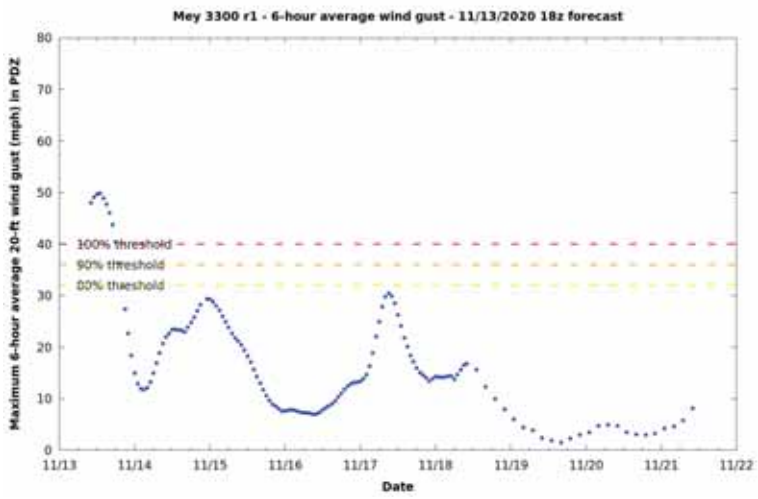
Mey 3300 r3



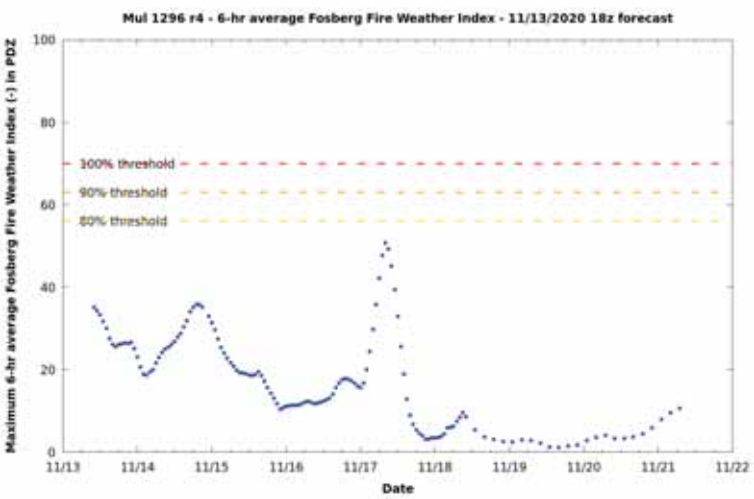


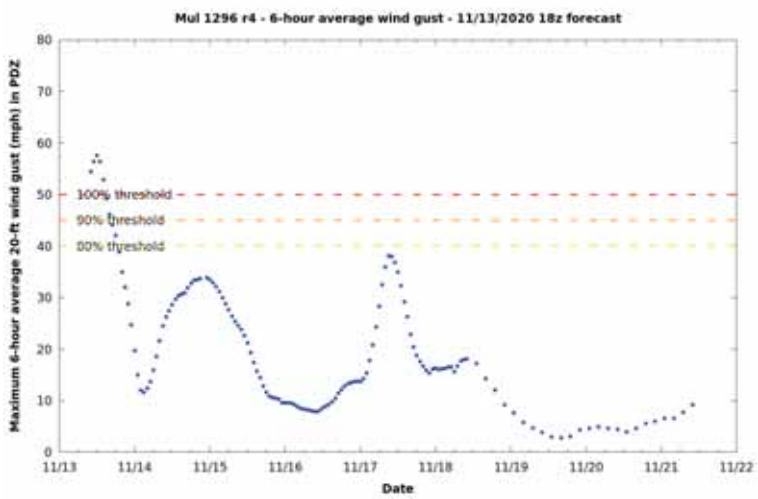
Mey 3300 r1



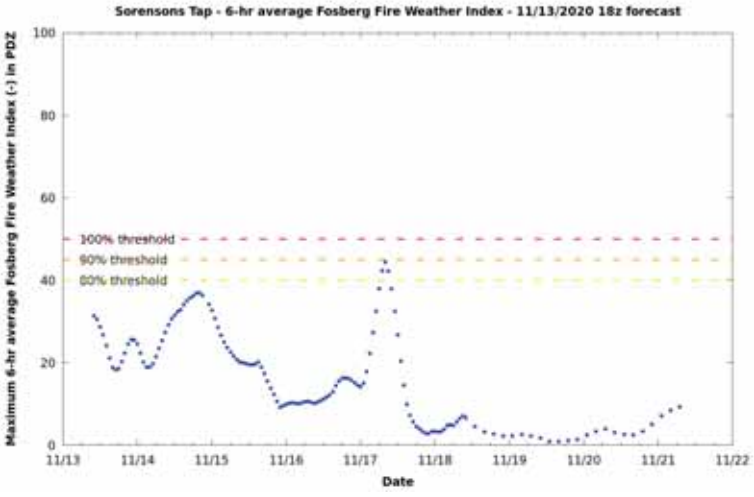


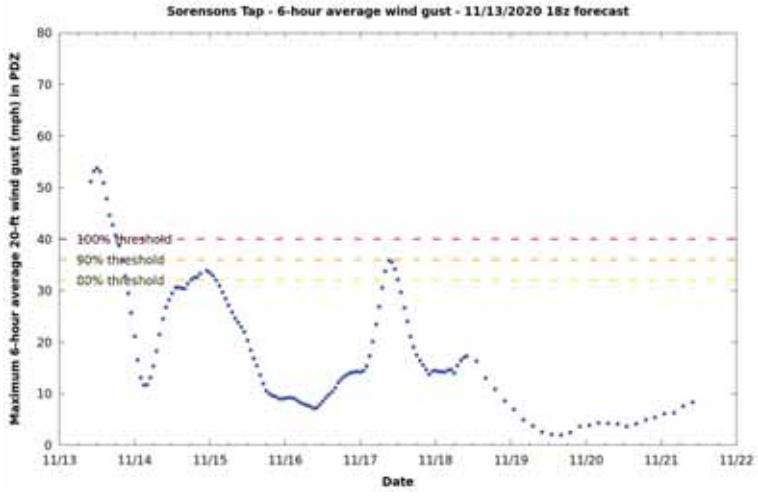
Mul 1296 r4



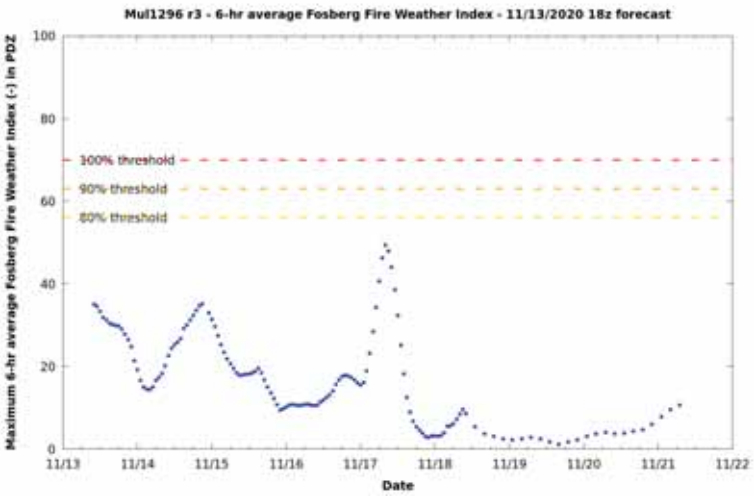


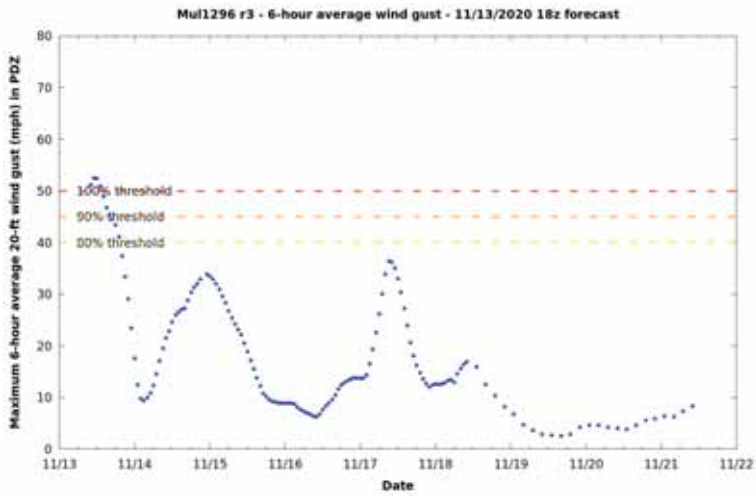
Sorensons Tap



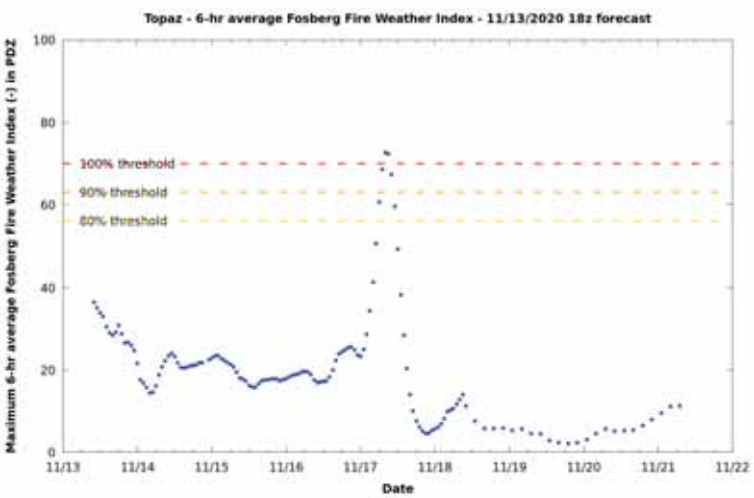


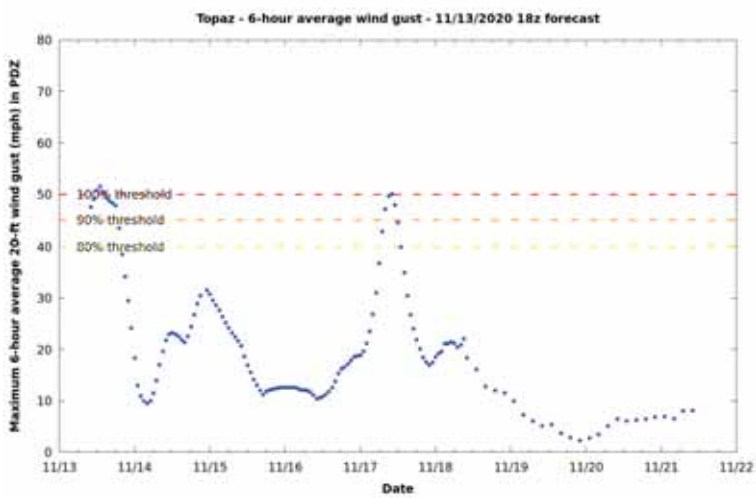
Mul 1296 r3



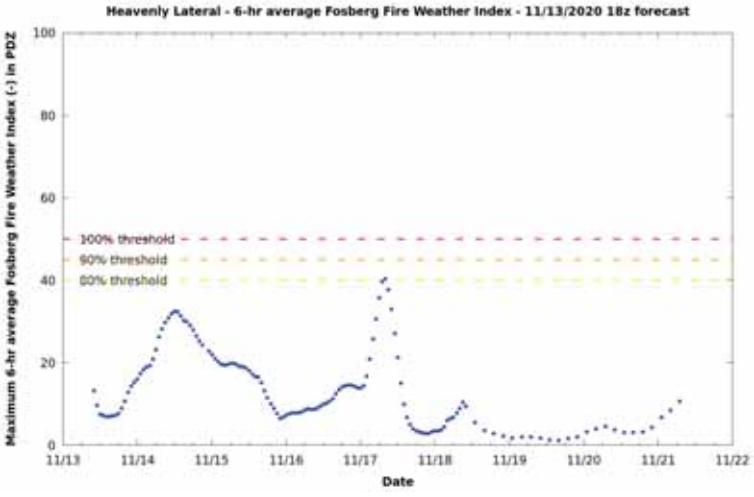


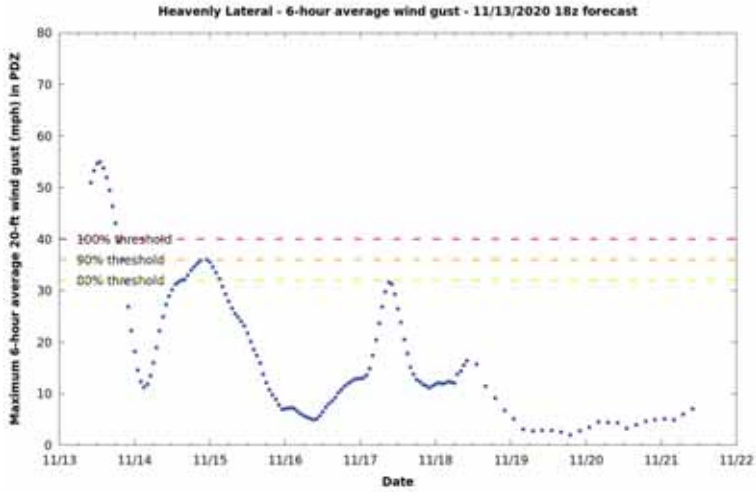
Topaz



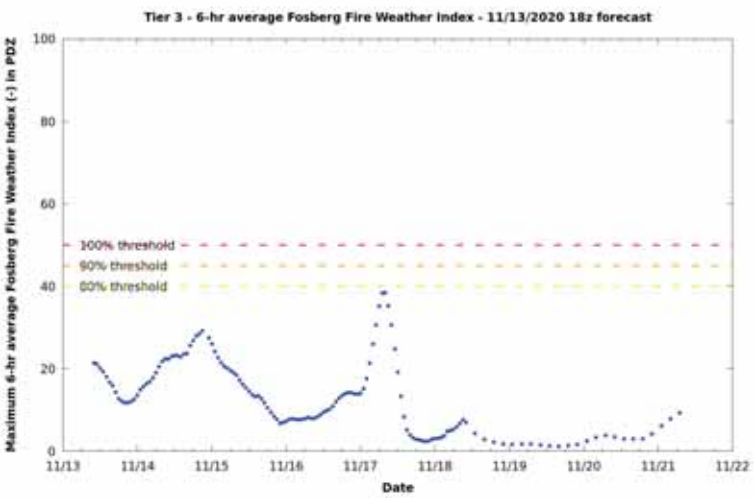


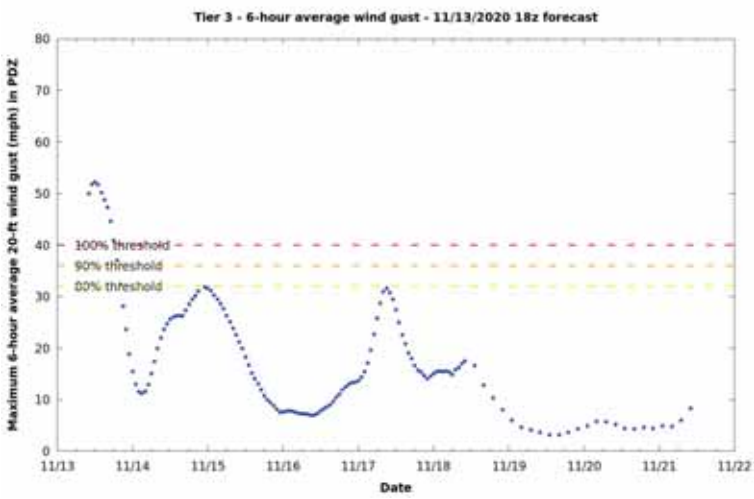
Heavenly Lateral



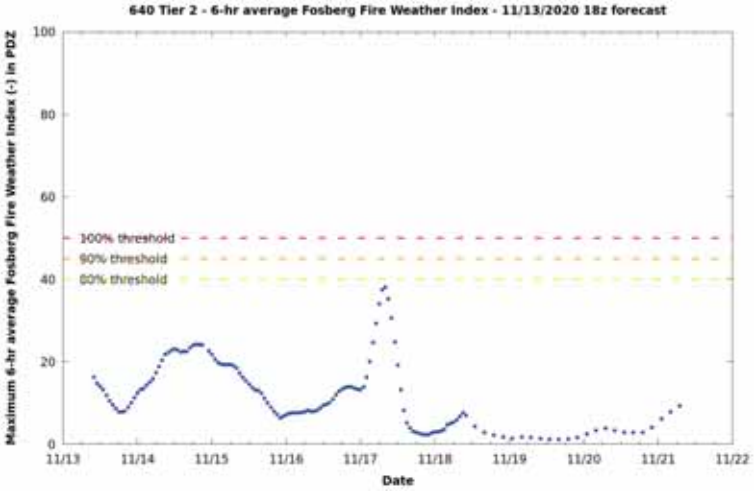


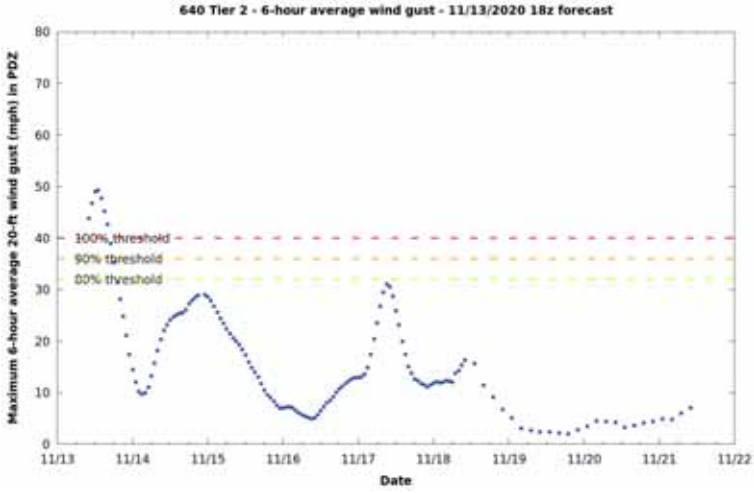
Tier 3



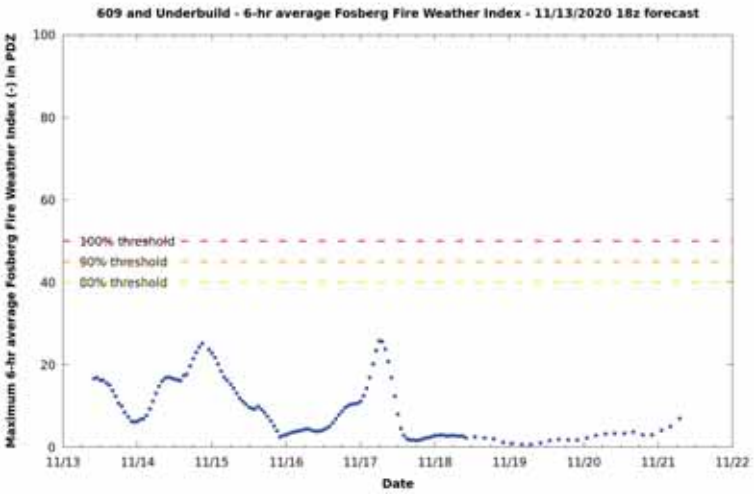


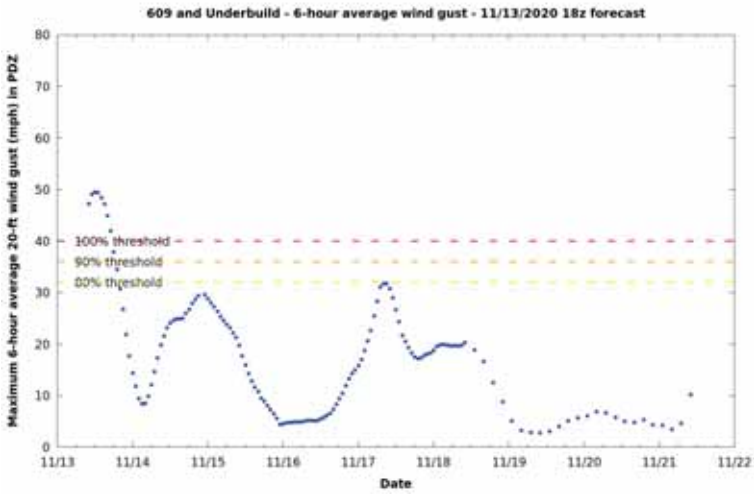
640 Tier 2



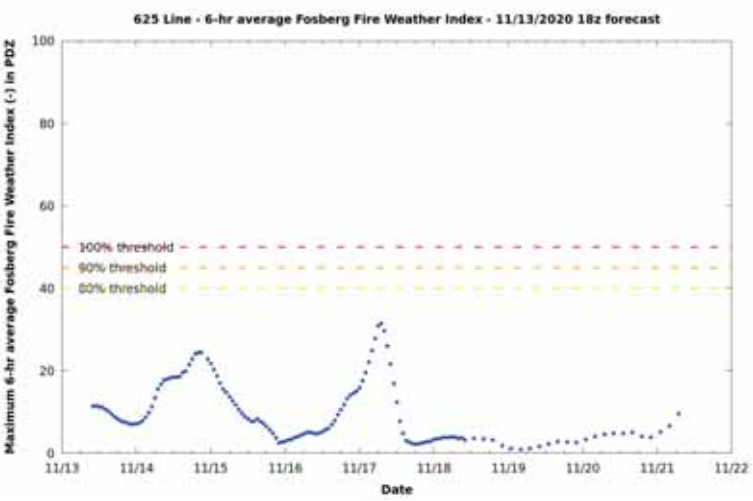


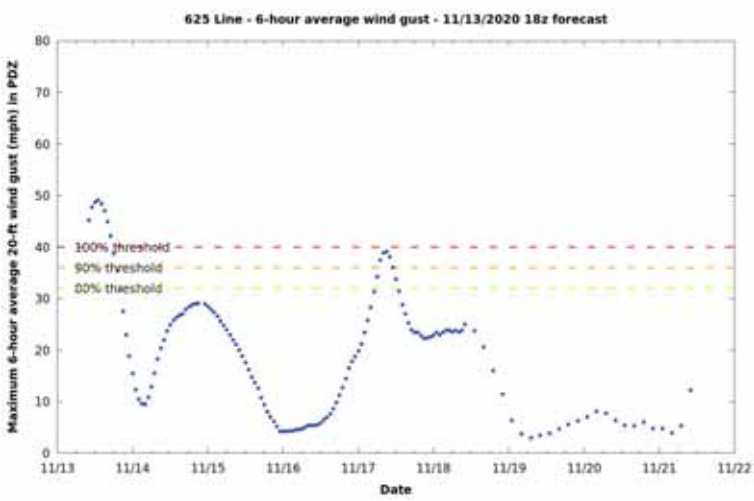
609 and Underbuild



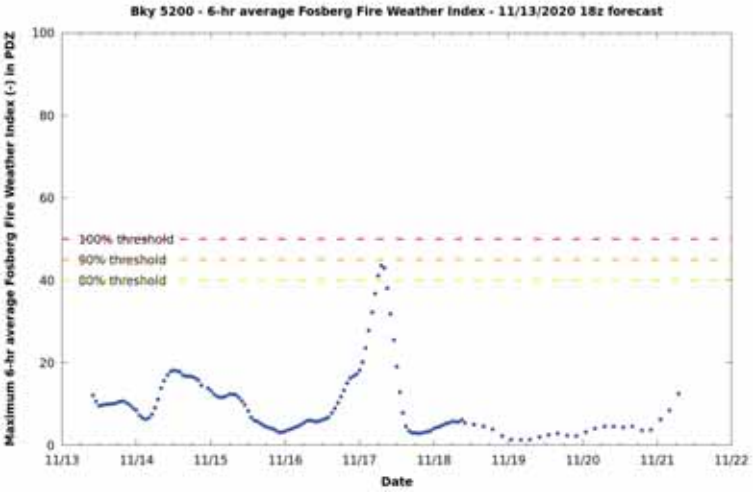


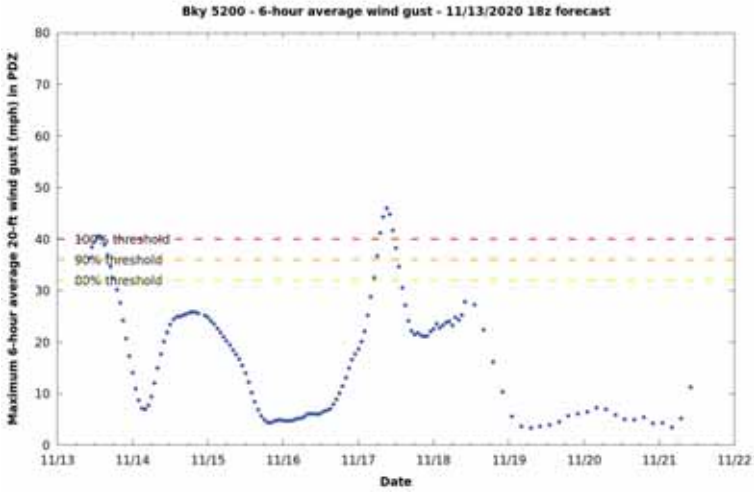
625 Line



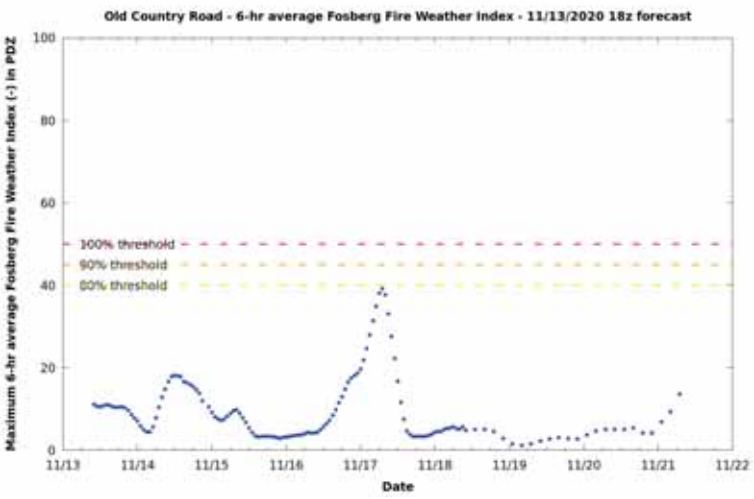


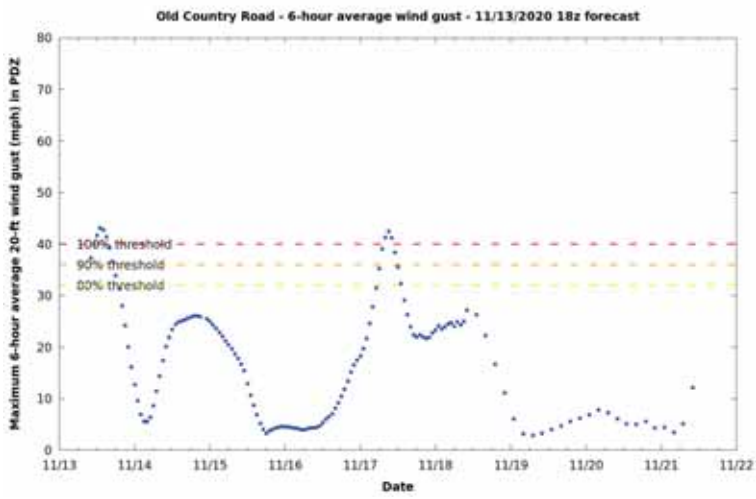
Bky 5200



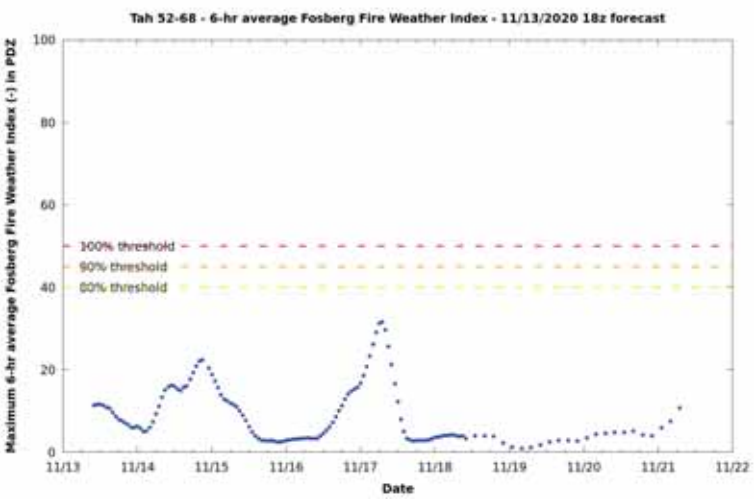


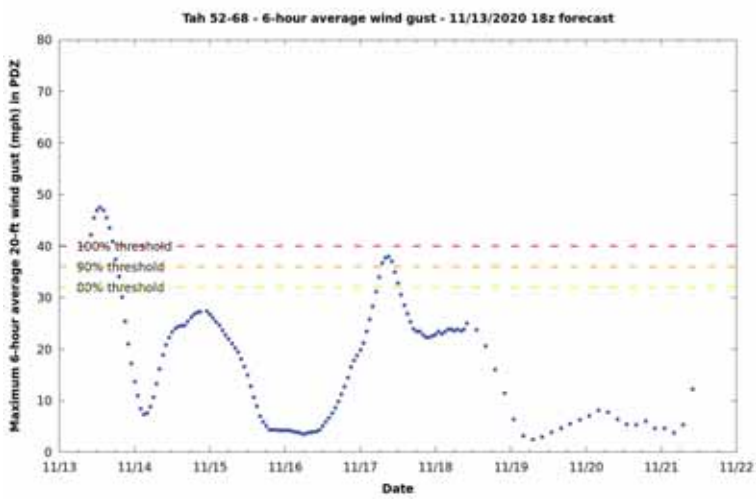
Old Country Road



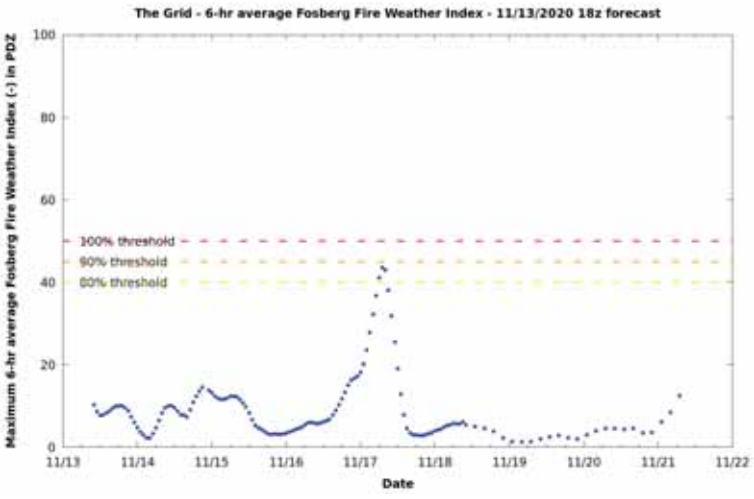


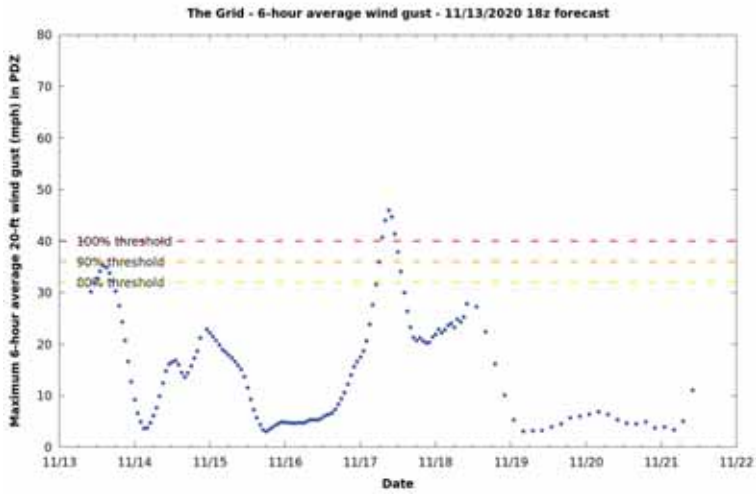
Tah 52-68



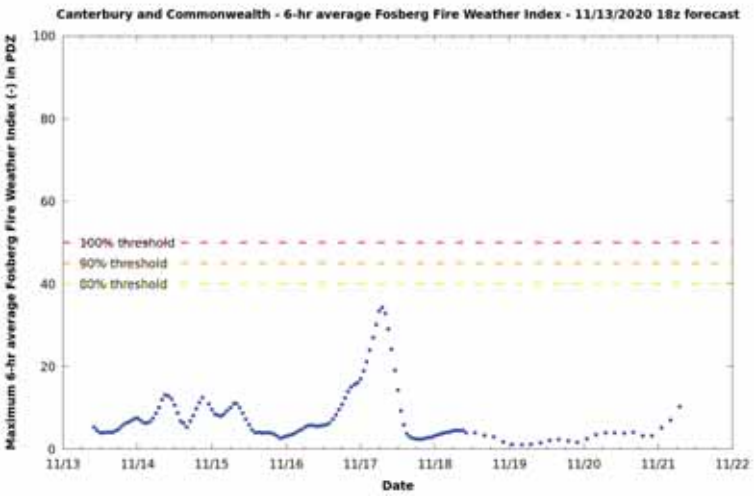


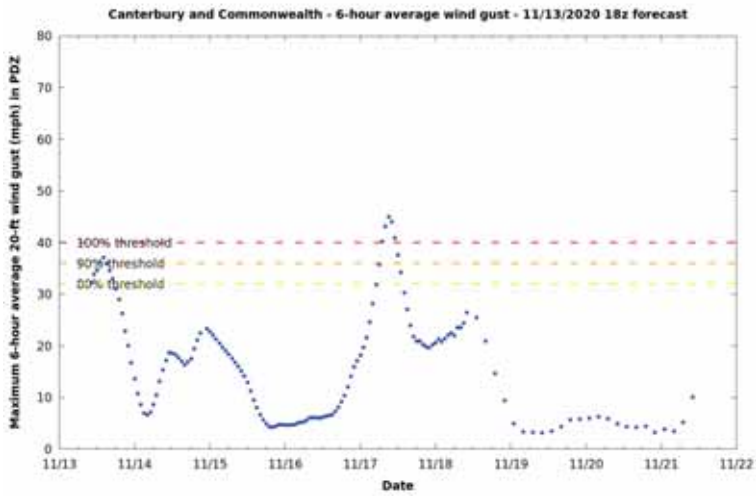
The Grid



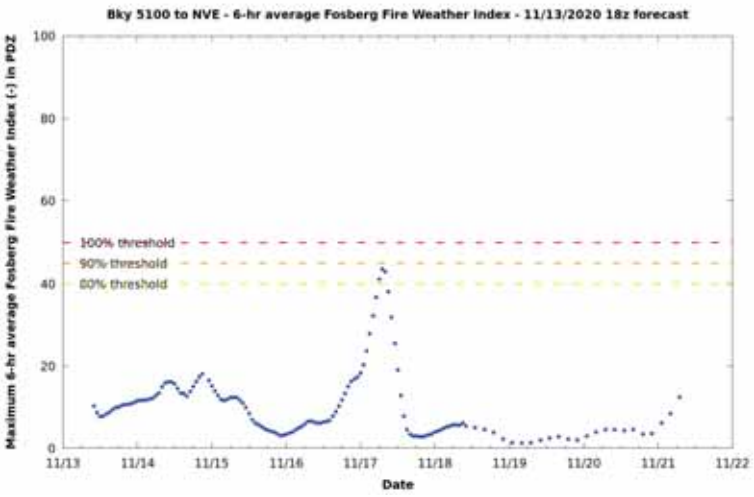


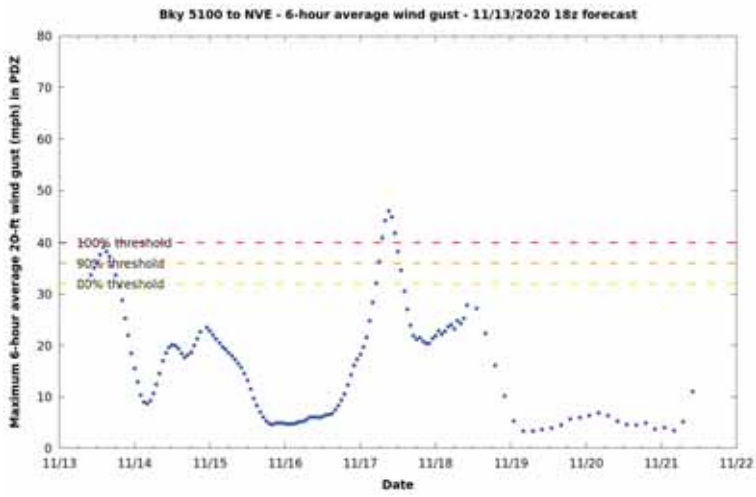
Canterbuy and Commonwealth



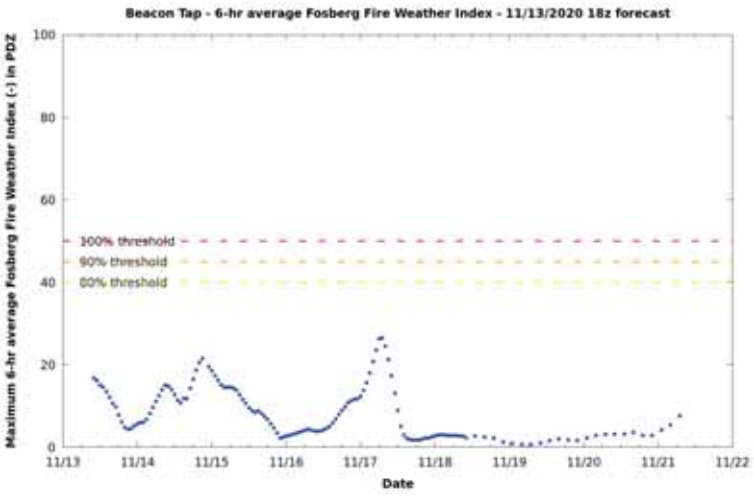


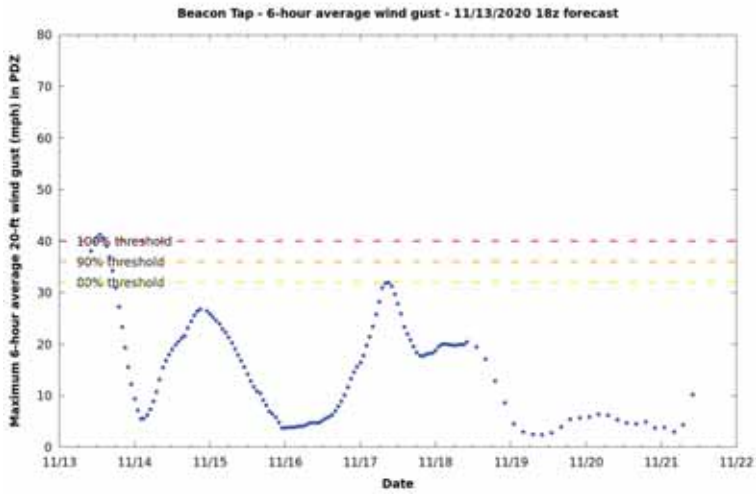
Bky 5100 to NVE



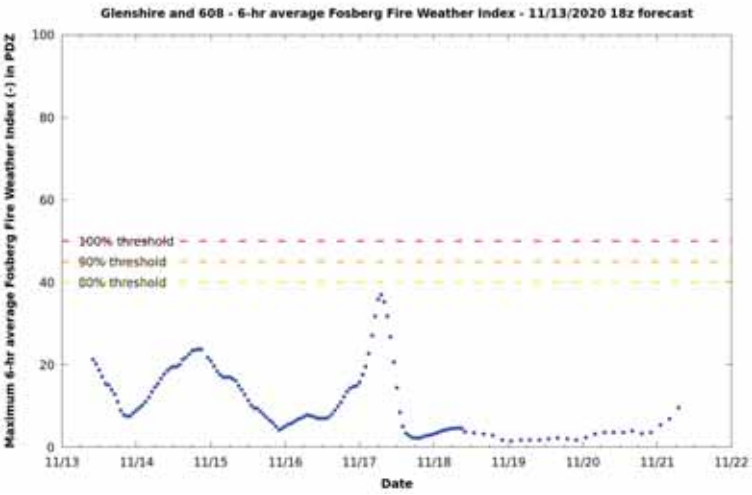


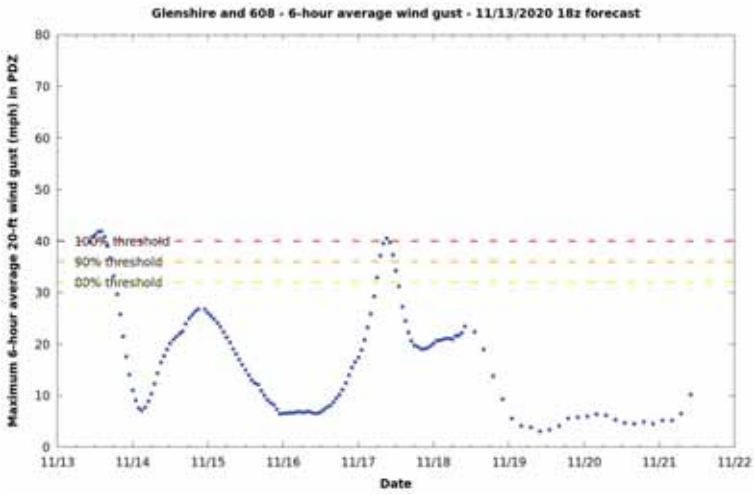
Beacon Tap



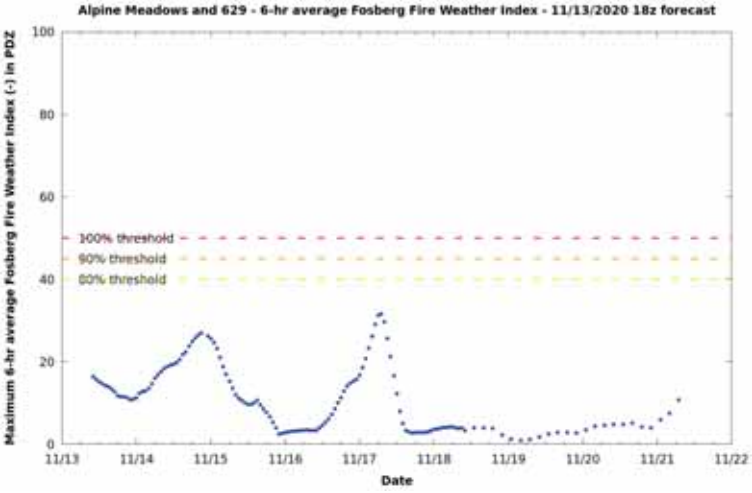


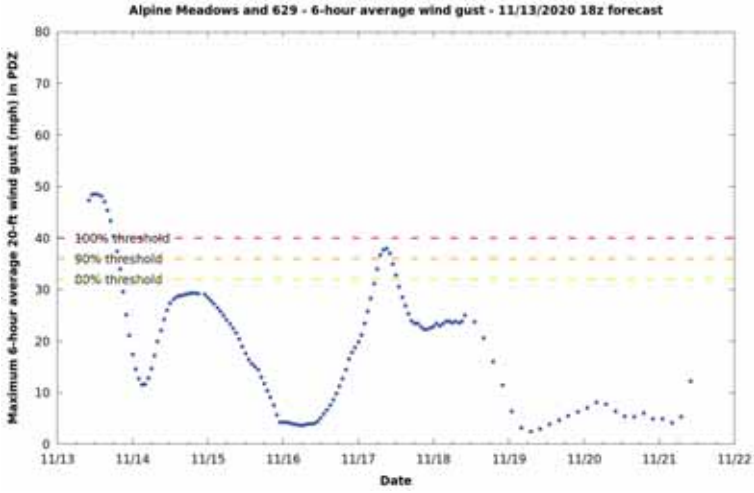
Glenshire and 608



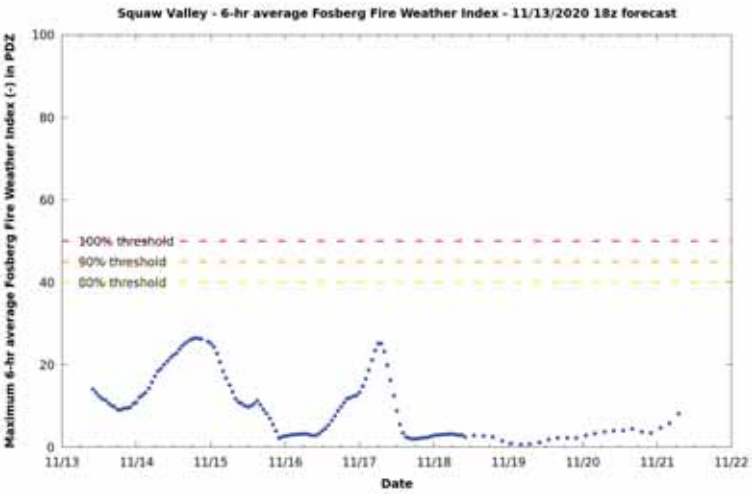


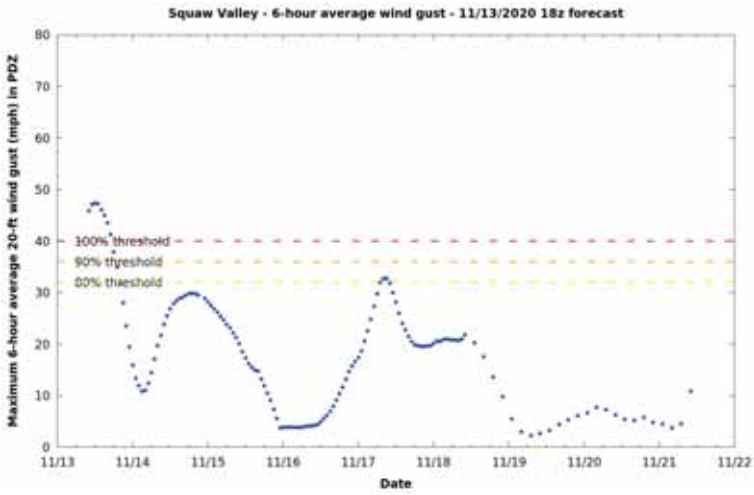
Alpine Meadows and 629



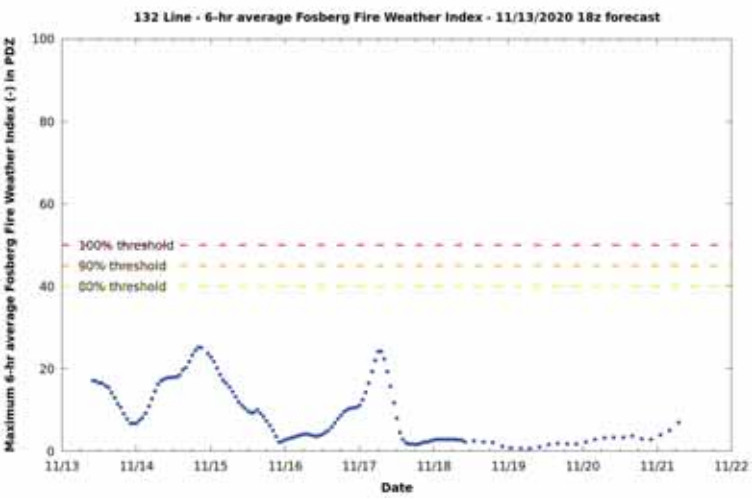


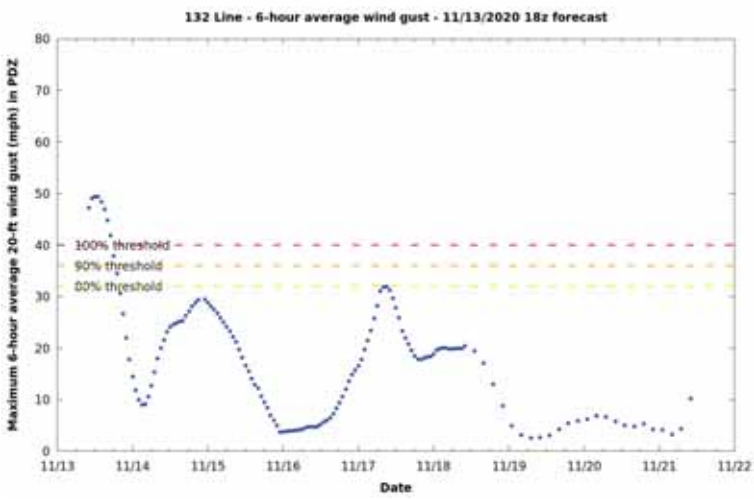
Squaw Valley



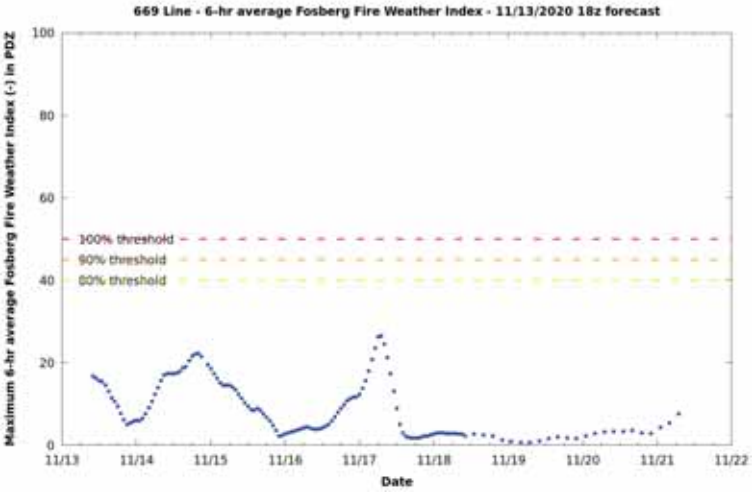


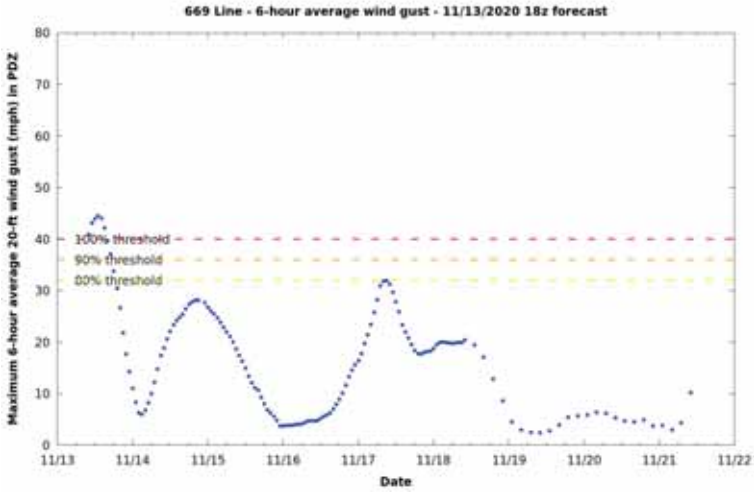
132 Line



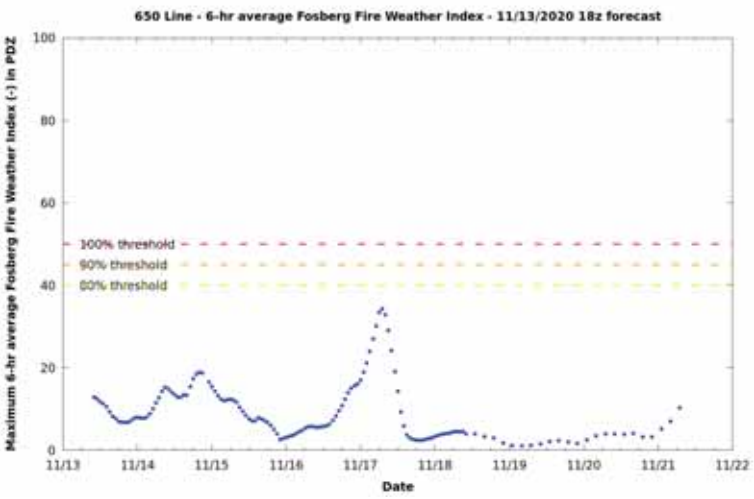


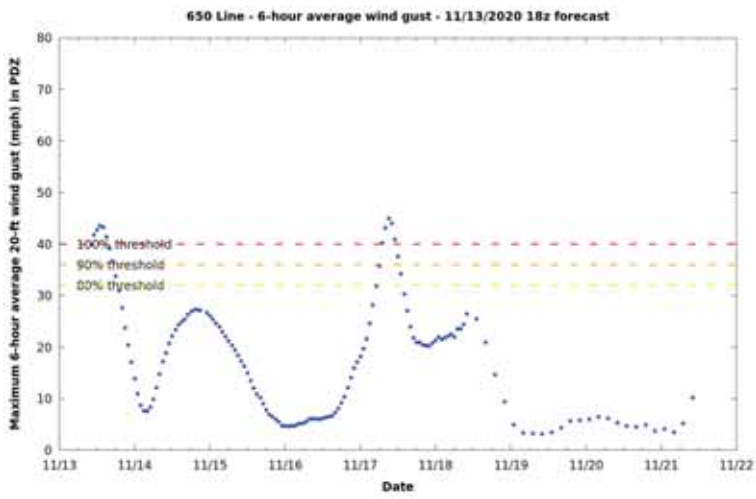
669 Line



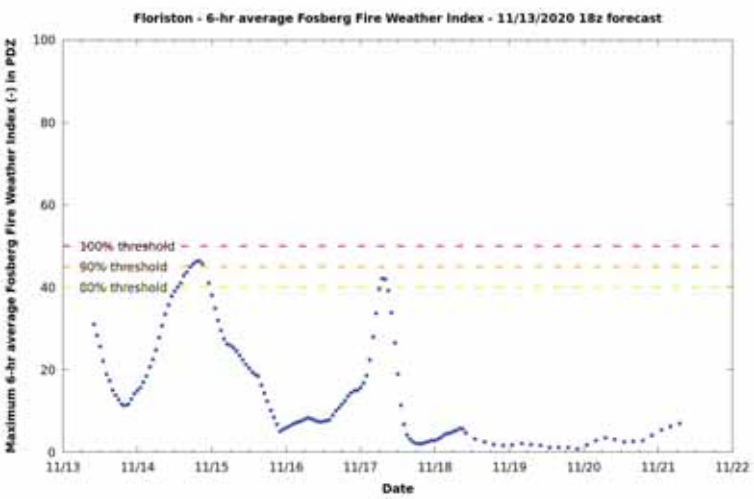


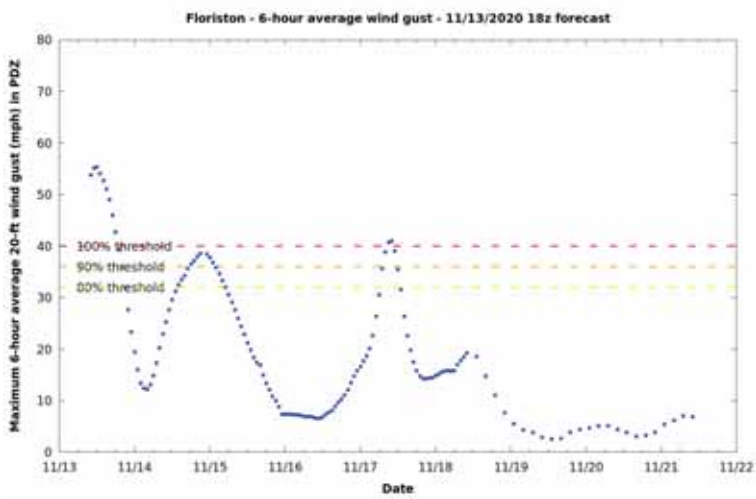
650 Line



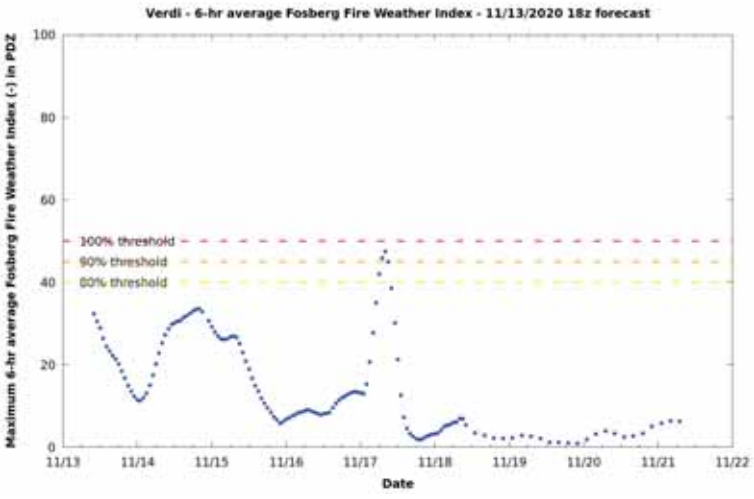


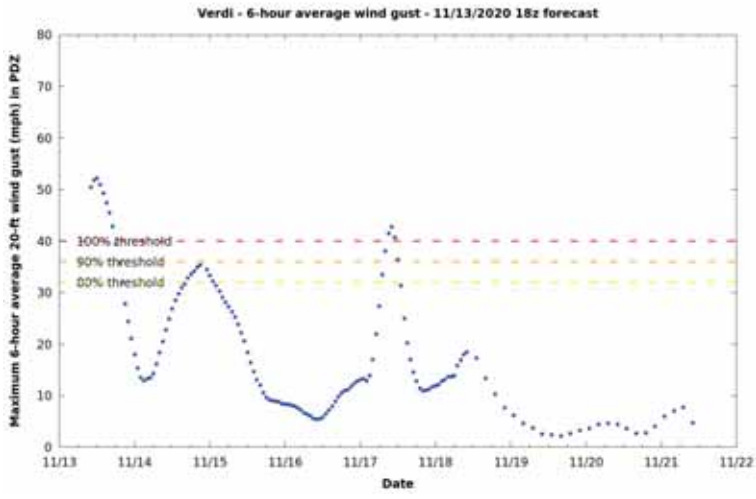
Floriston



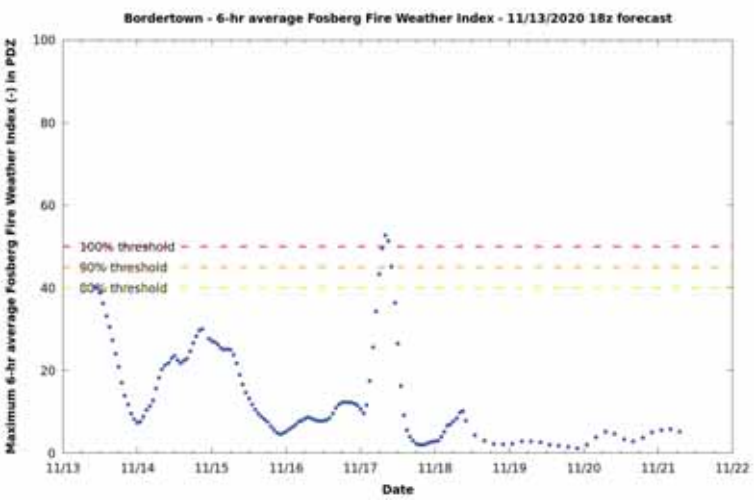


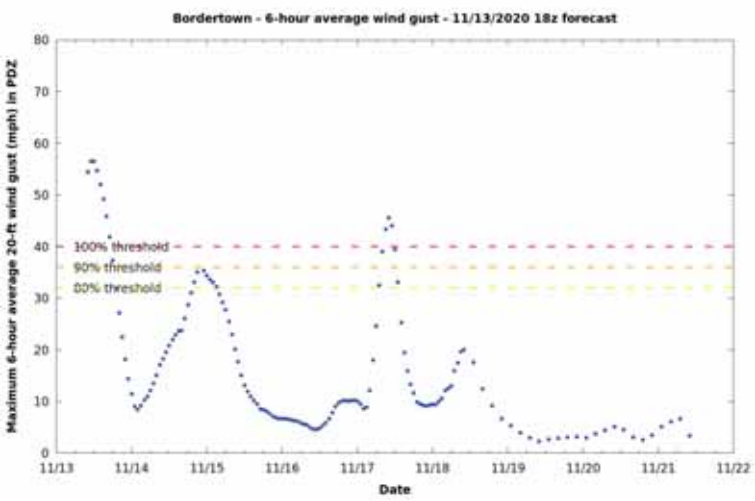
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/13/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/13/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/14/20 - 11/20/20

Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

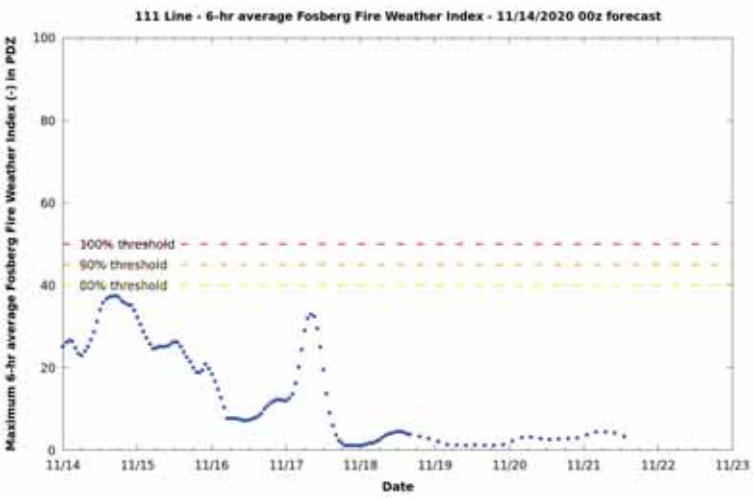
Liberty Utilities Energy Release Component Forecast for 11/14/20 - 11/20/20

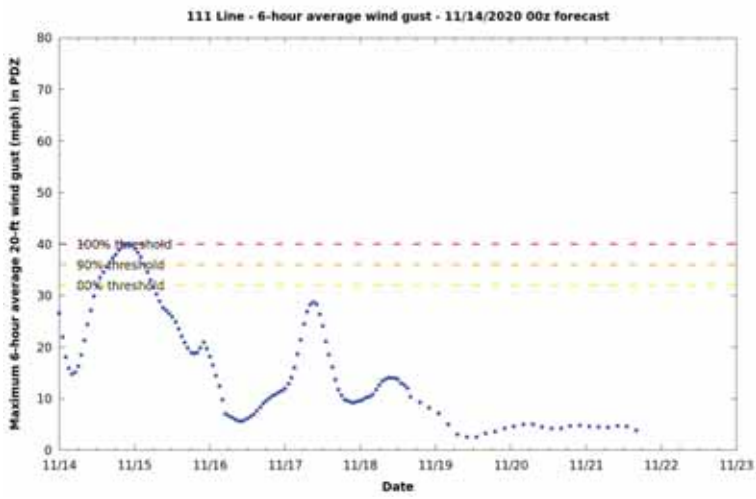
Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	57.0	55.0	51.0	56.0	58.0	55.0
Sierra Brooks	58.0	61.0	58.0	55.0	61.0	62.0	62.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	51.0	43.0	48.0	42.0	35.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	56.0	56.0	53.0	50.0	56.0	57.0	57.0

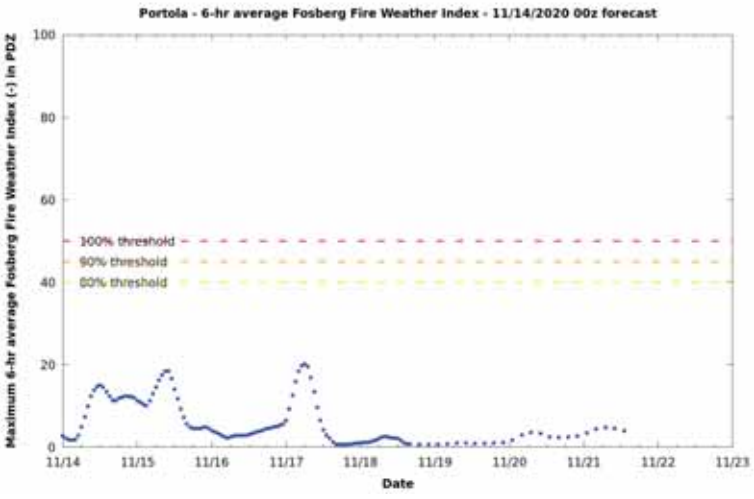
Liberty Utilities Fire Weather Summary Plots - 11/14/2020 00z forecast

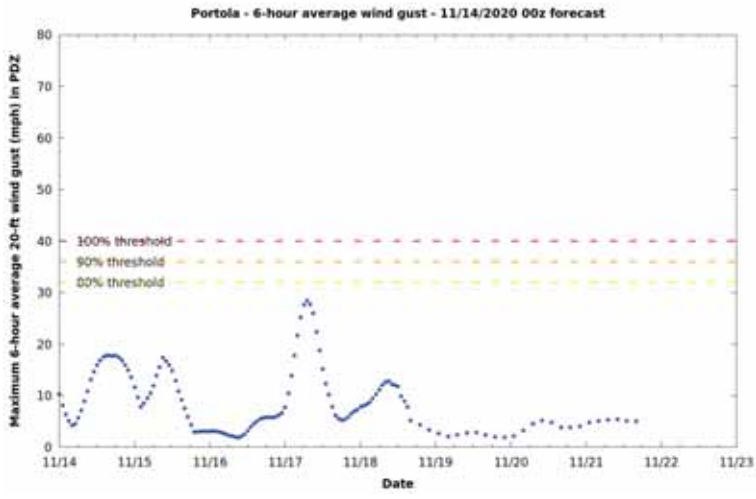
111 Line



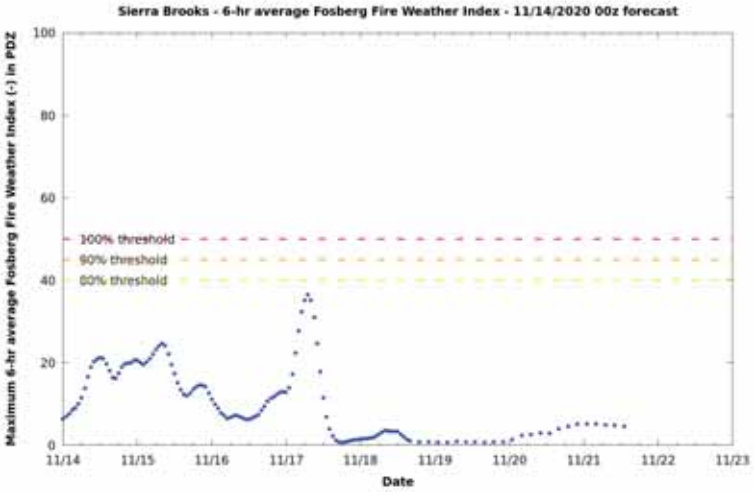


Portola



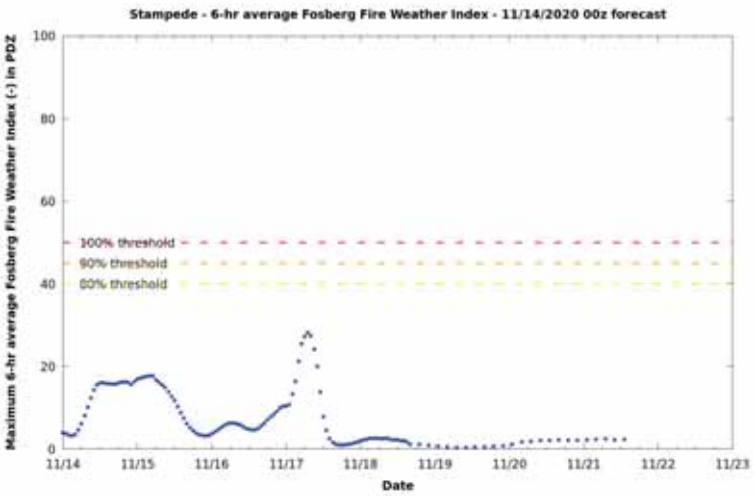


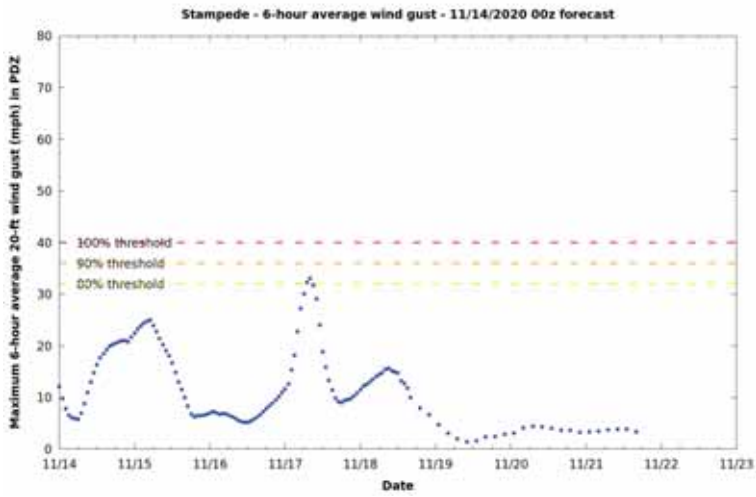
Sierra Brooks



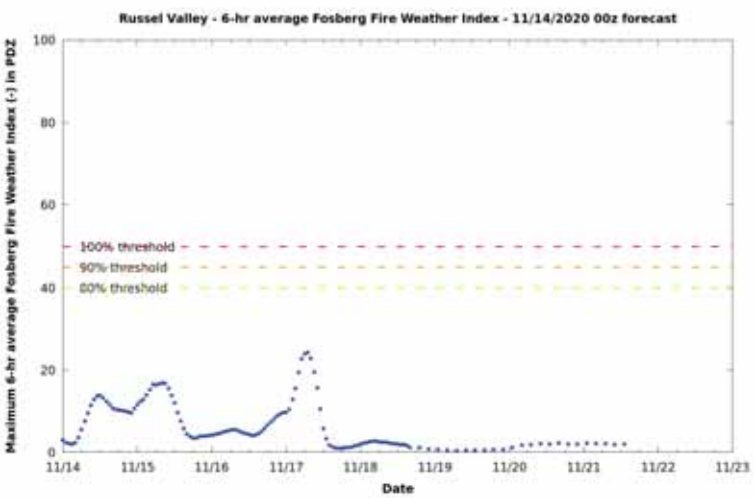


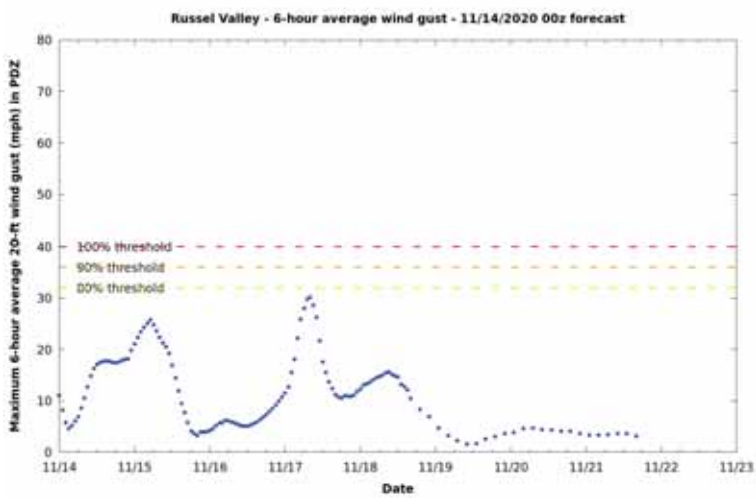
Stampede



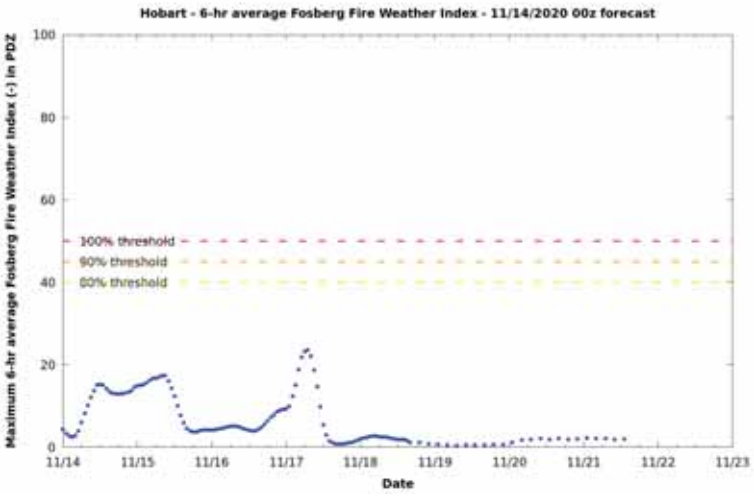


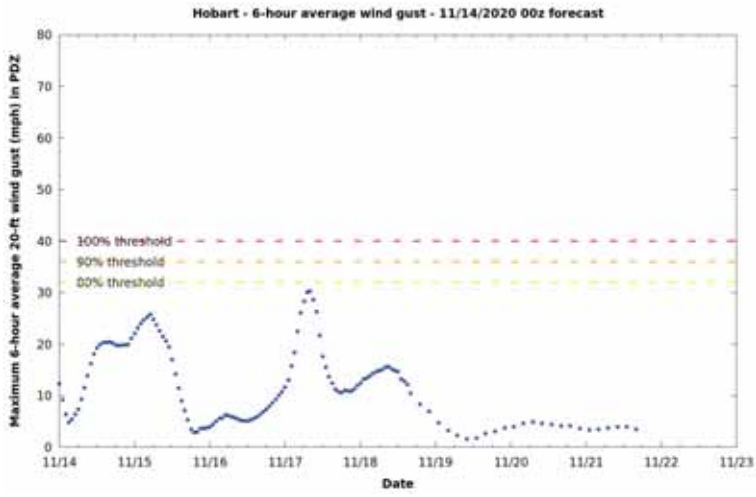
Russell Valley



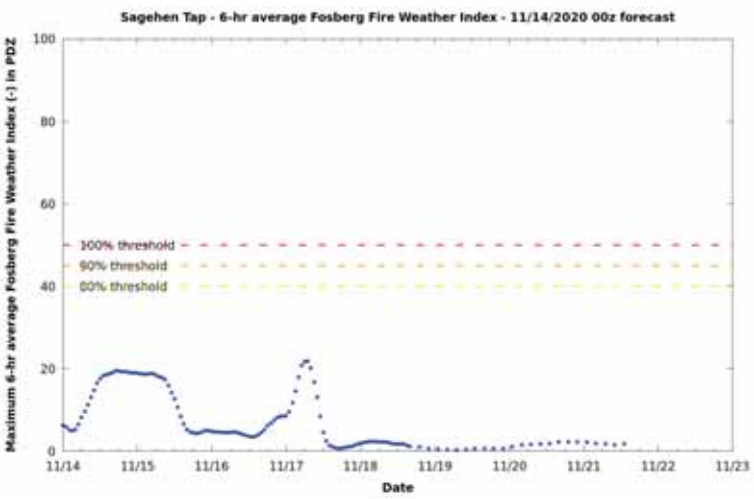


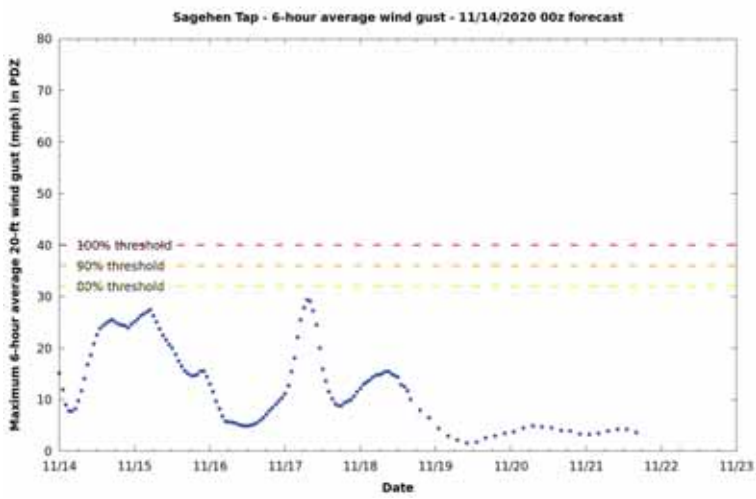
Hobart



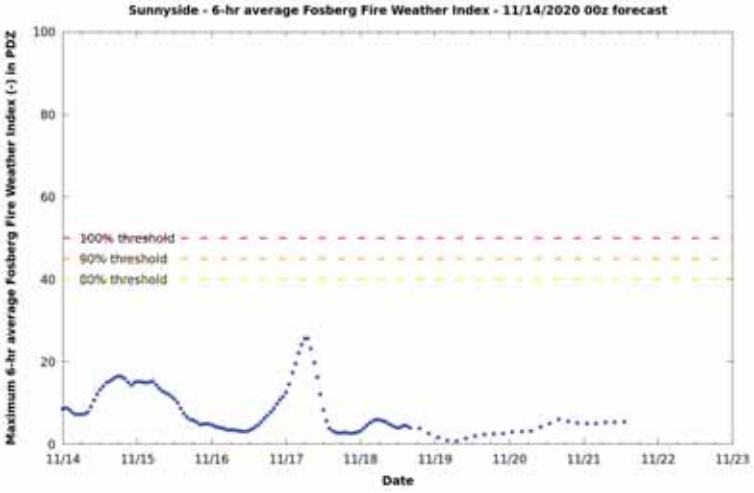


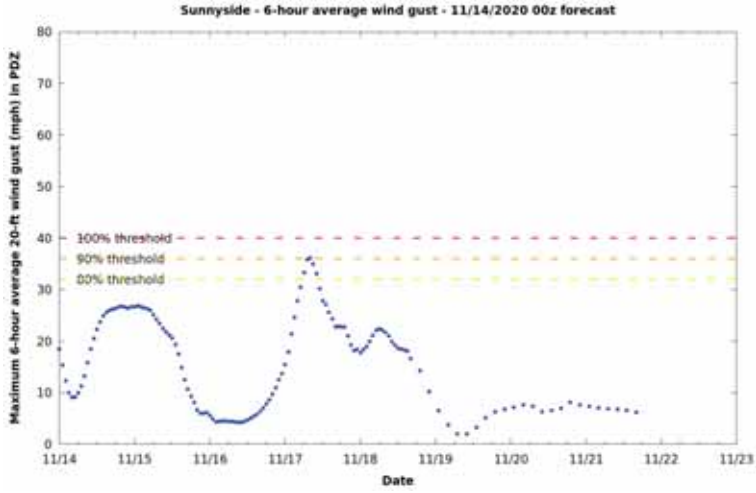
Sagehen tap



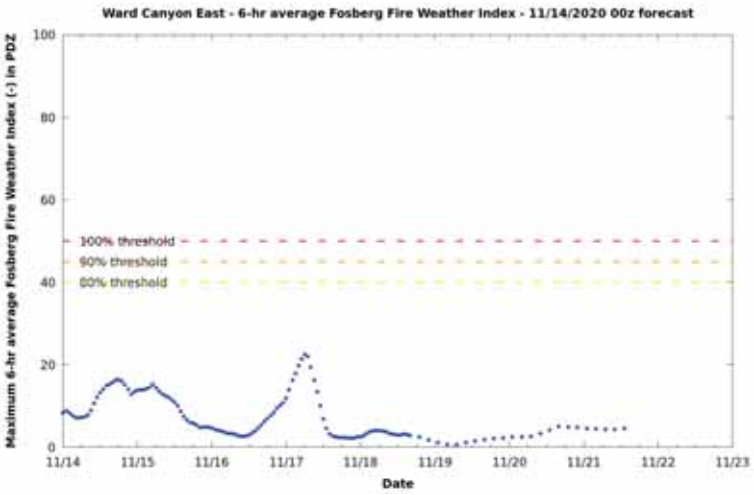


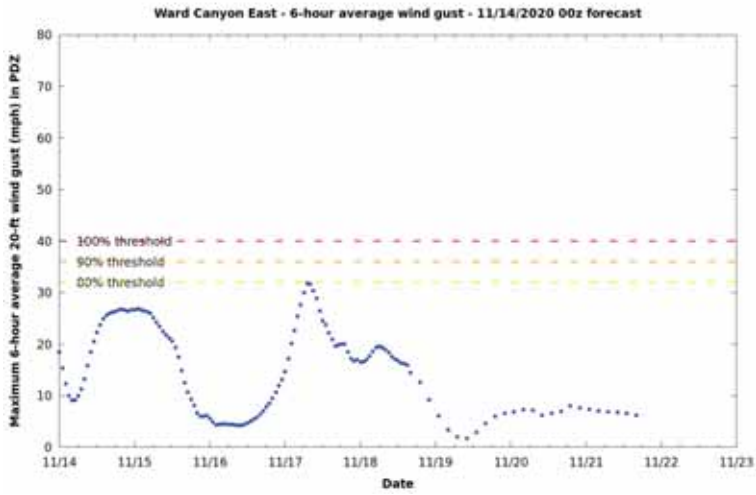
Sunnyside



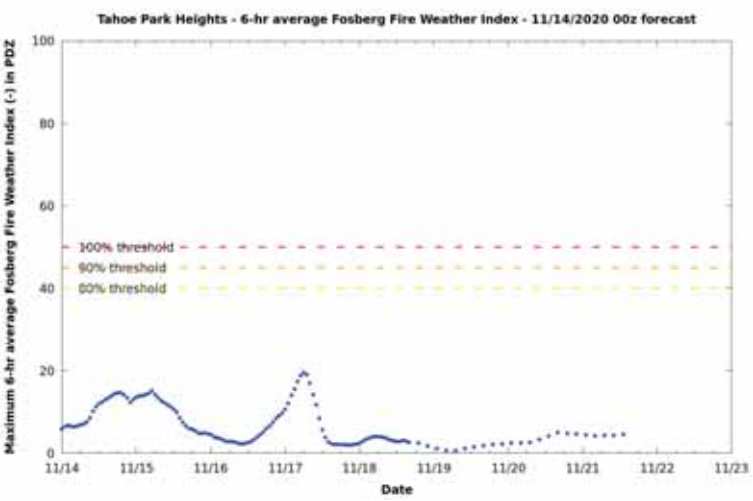


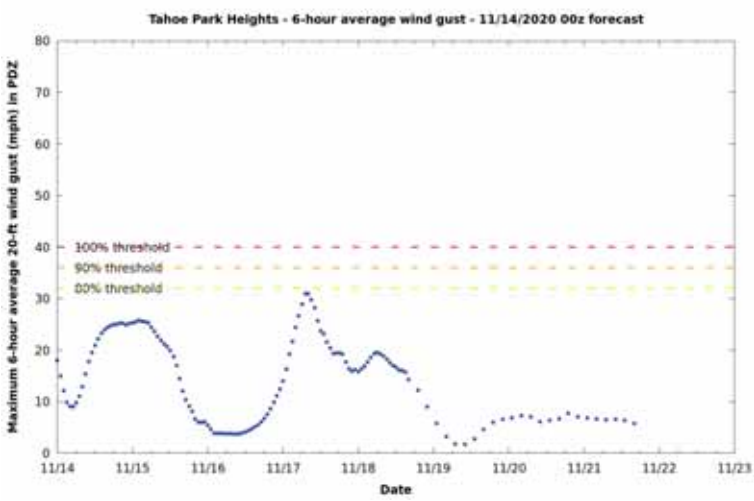
Ward Canyon East



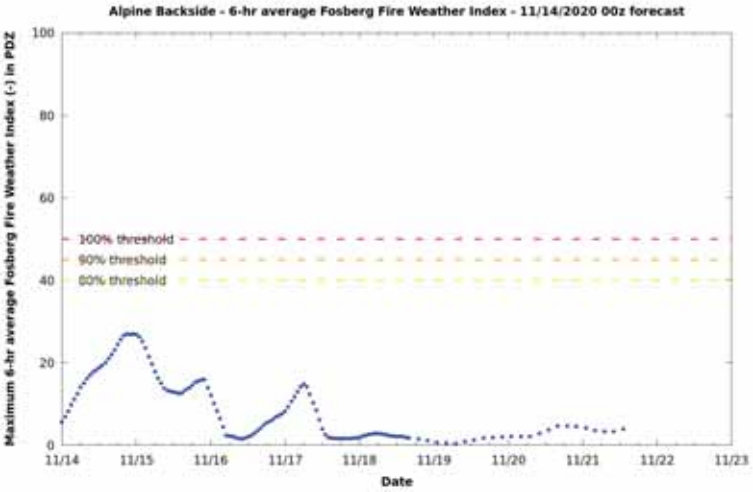


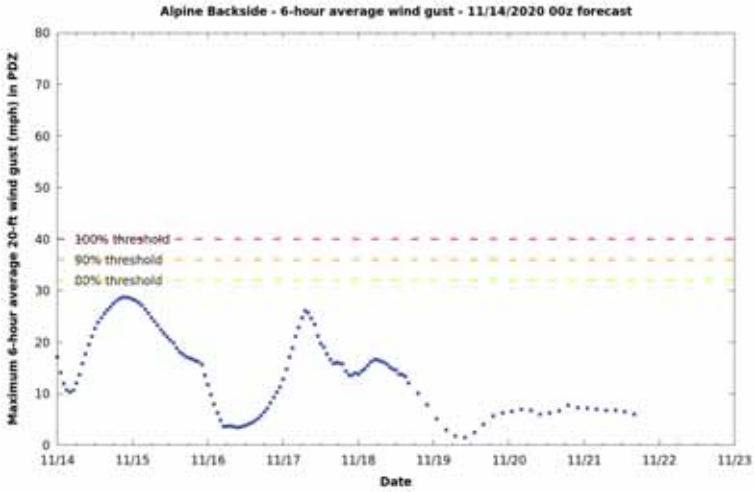
Tahoe Park Heights



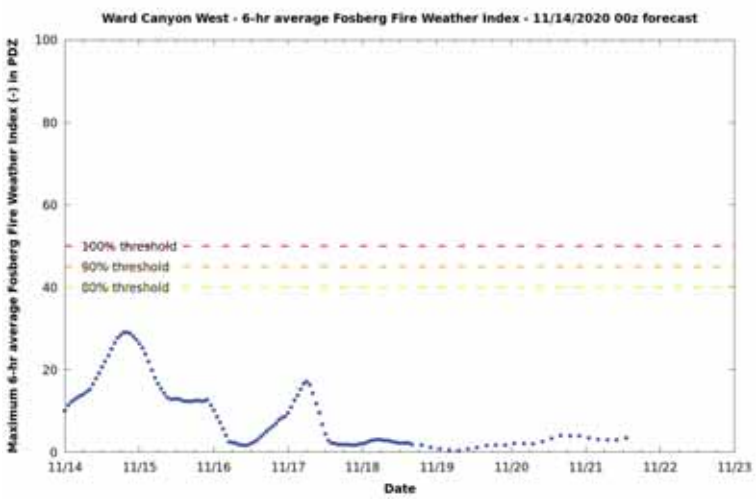


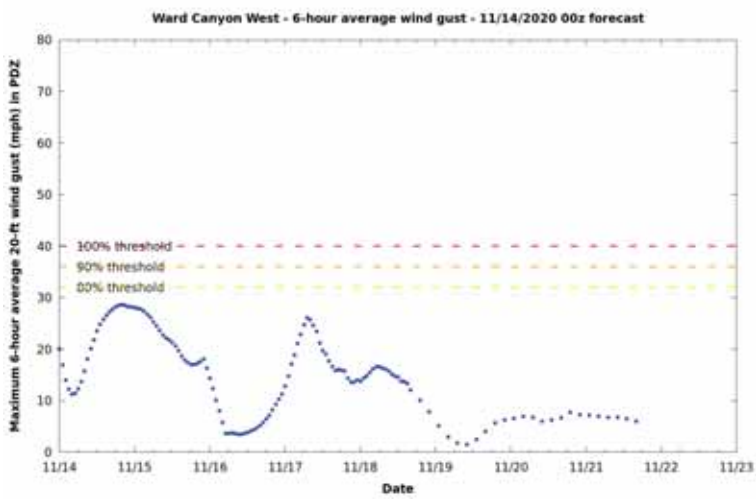
Alpine Backside



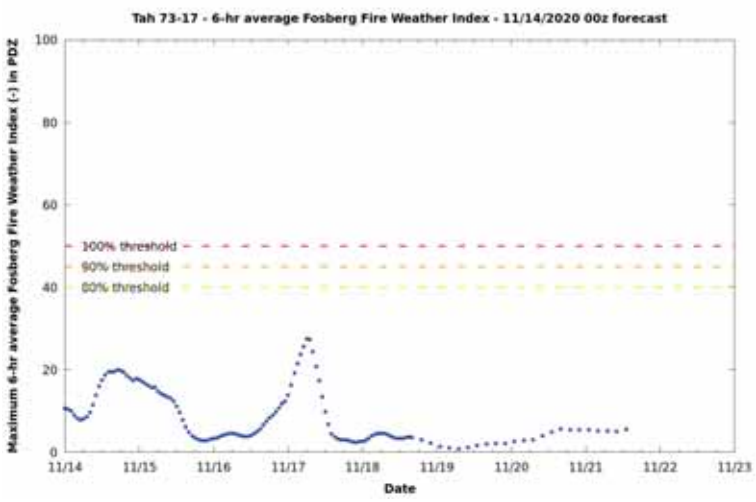


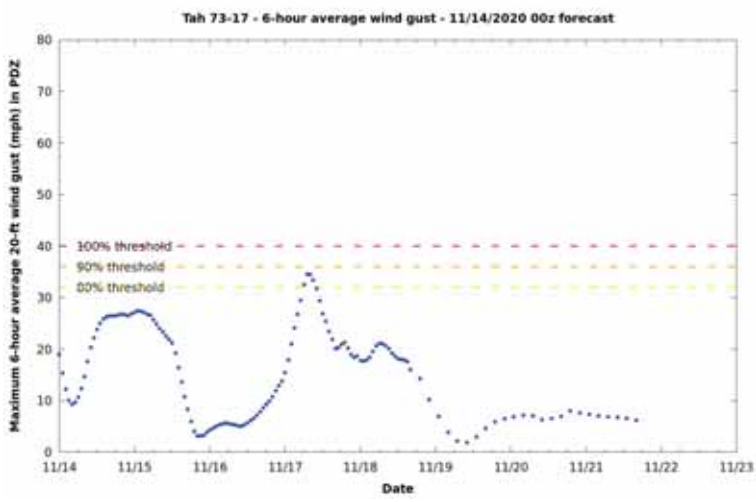
Ward Canyon West



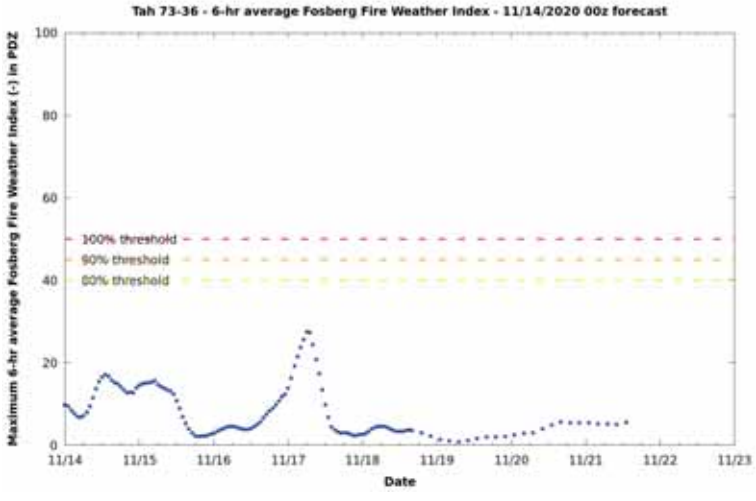


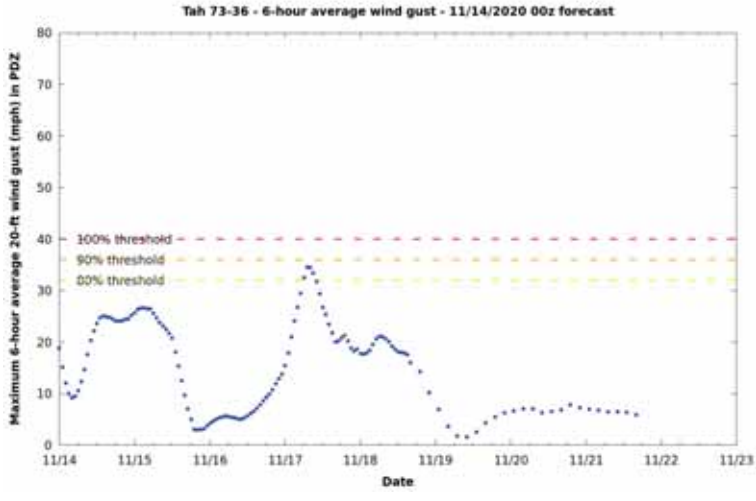
Tah 73-17



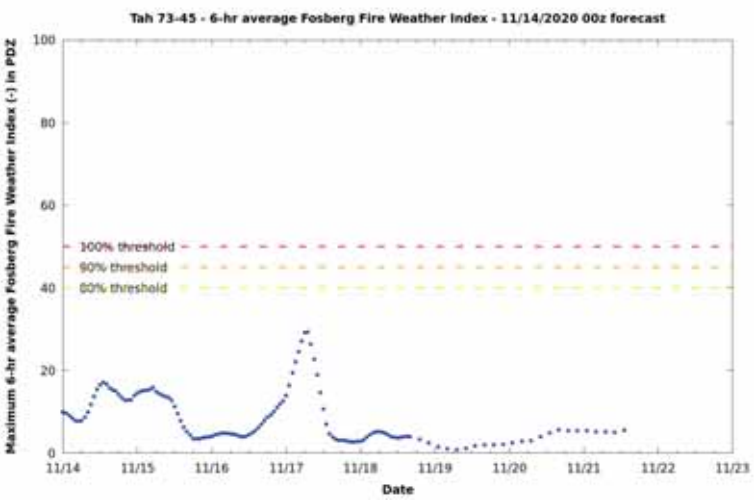


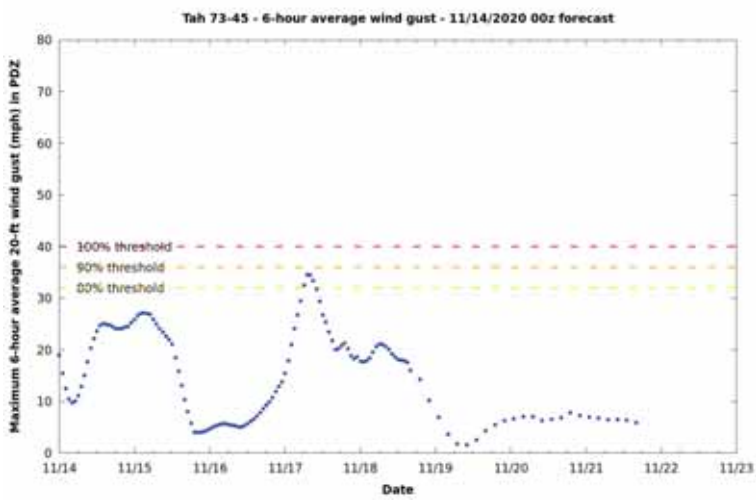
Tah 73-36



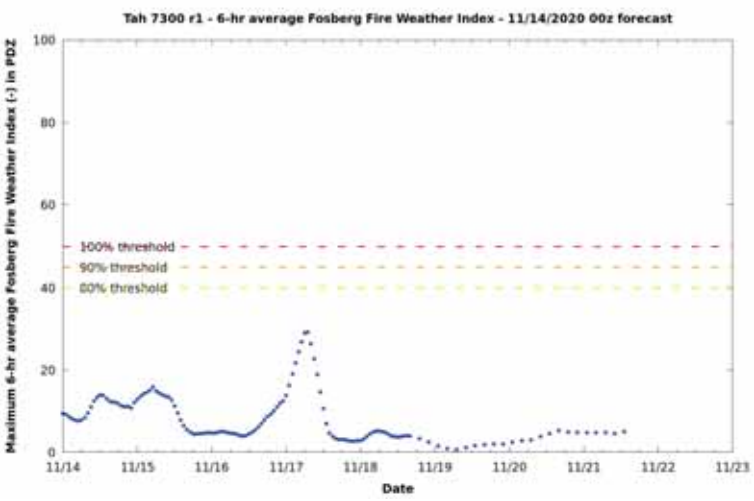


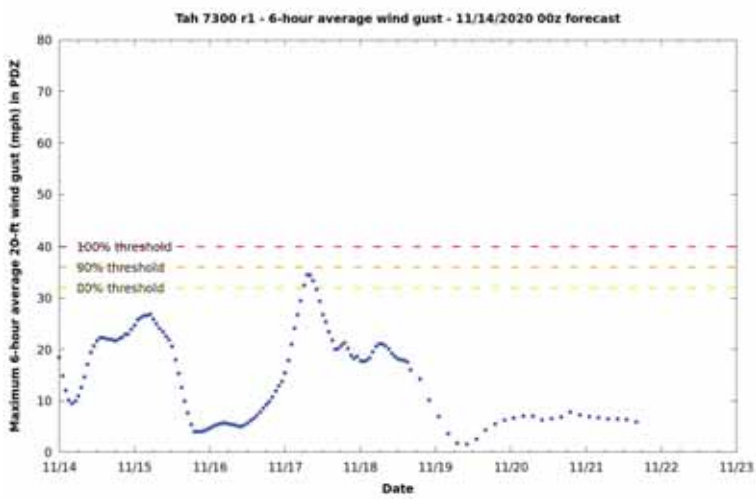
Tah 73-45



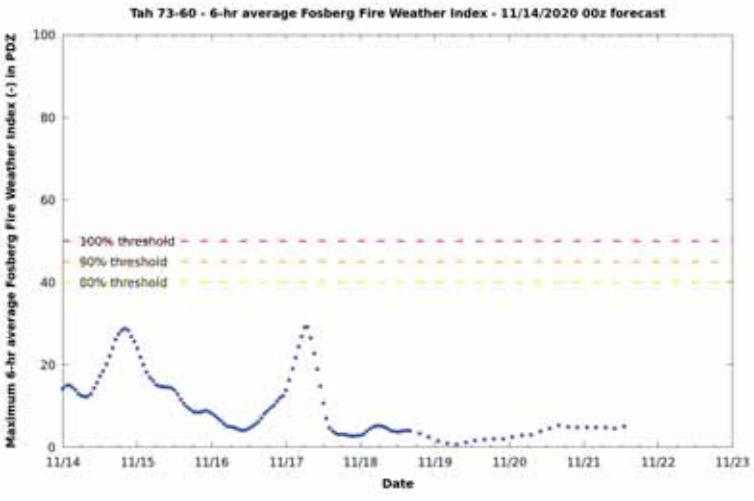


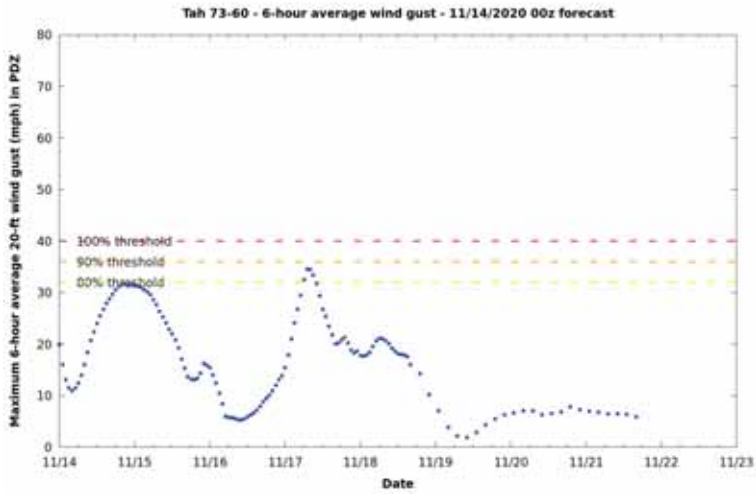
Tah 7300 r1



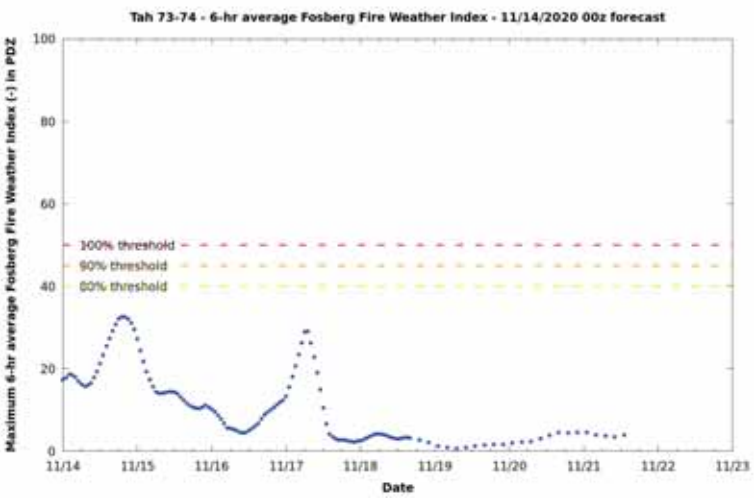


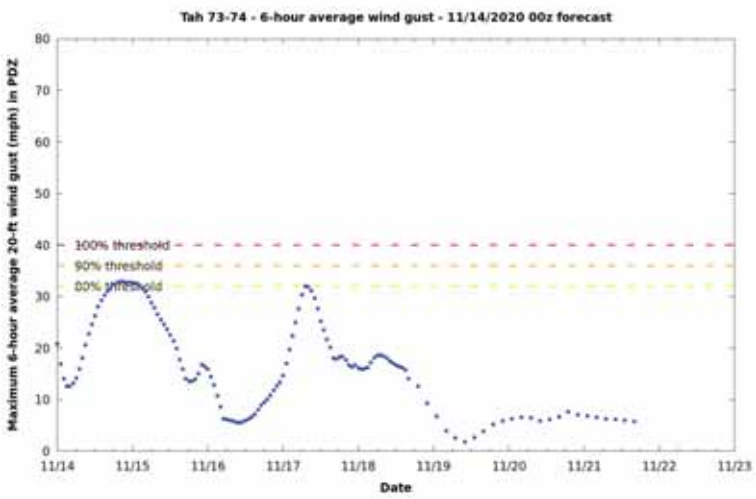
Tah 73-60



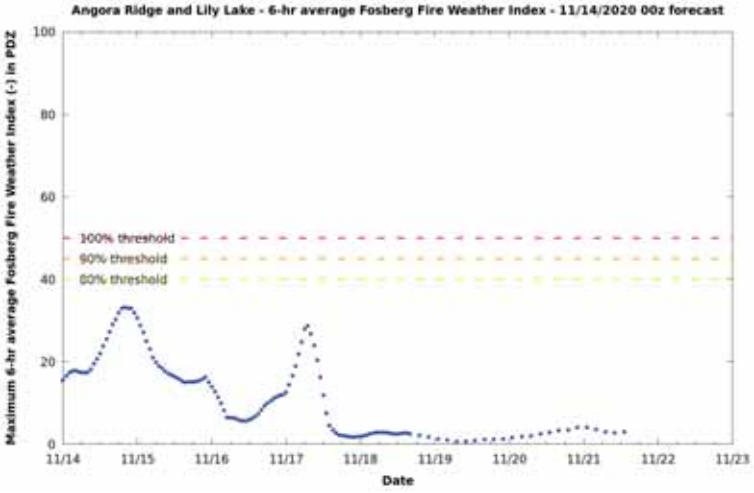


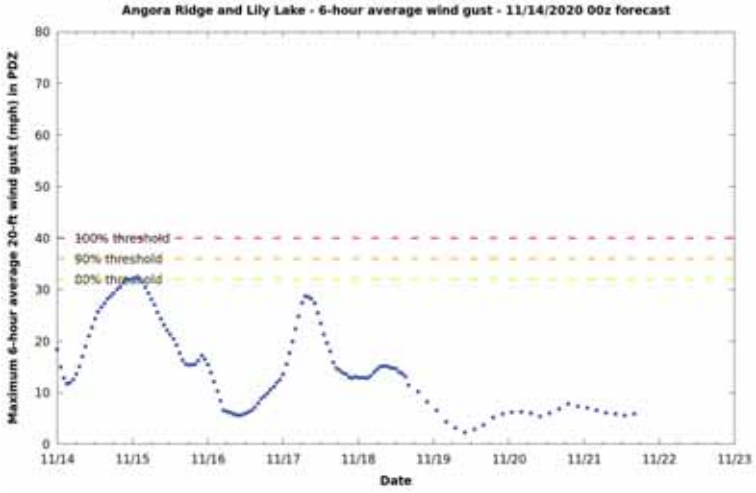
Tah 73-74



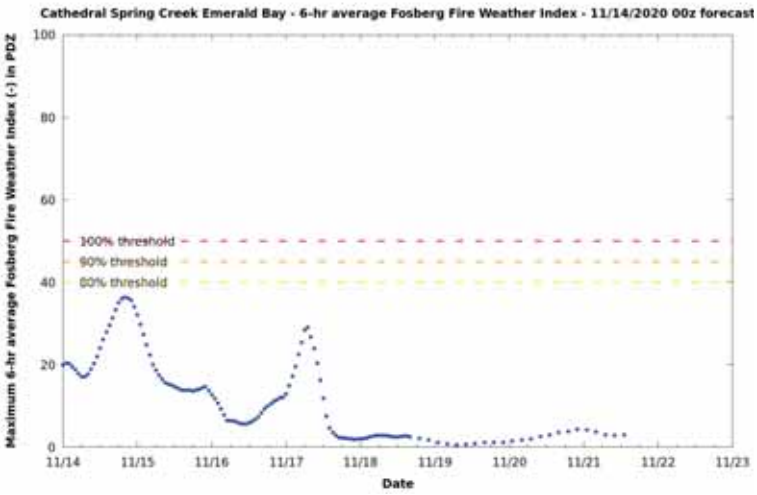


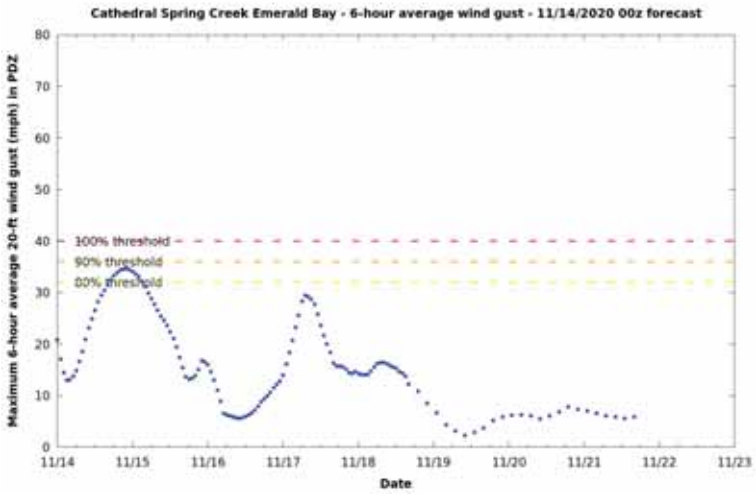
Angora Ridge and Lily Lake



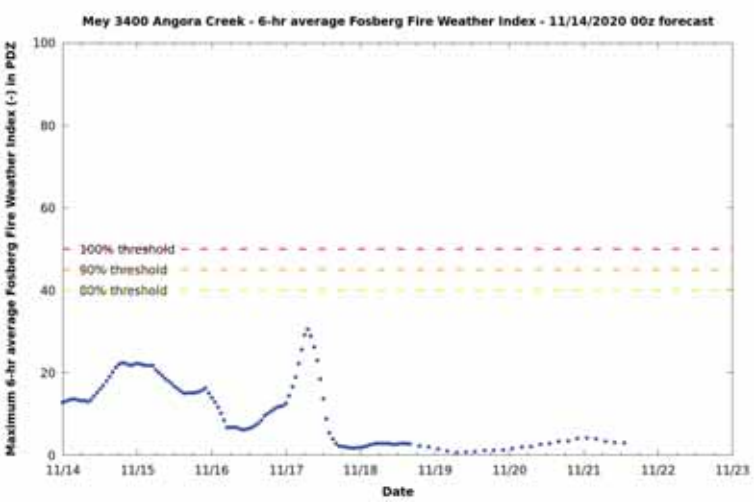


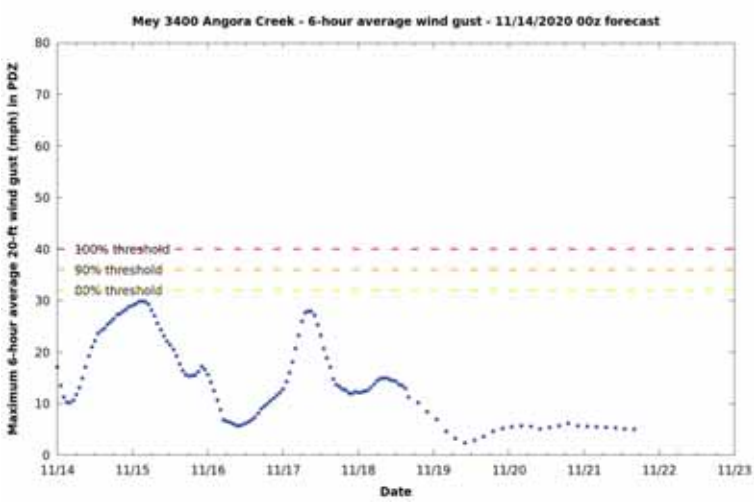
Cathedral Spring Creek Emerald Bay



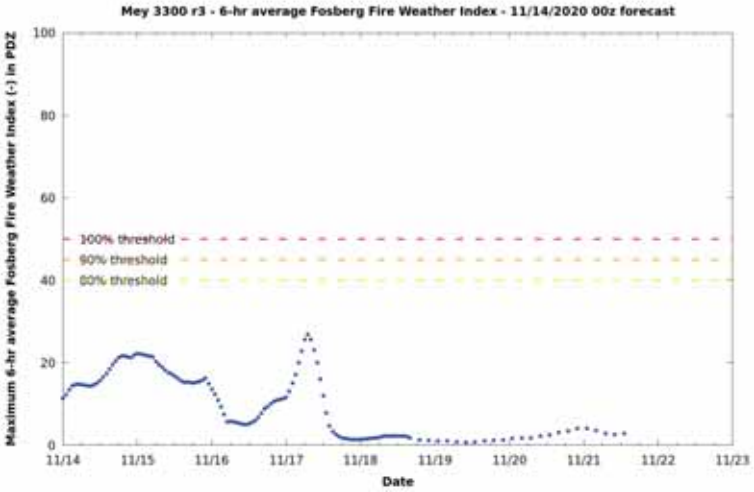


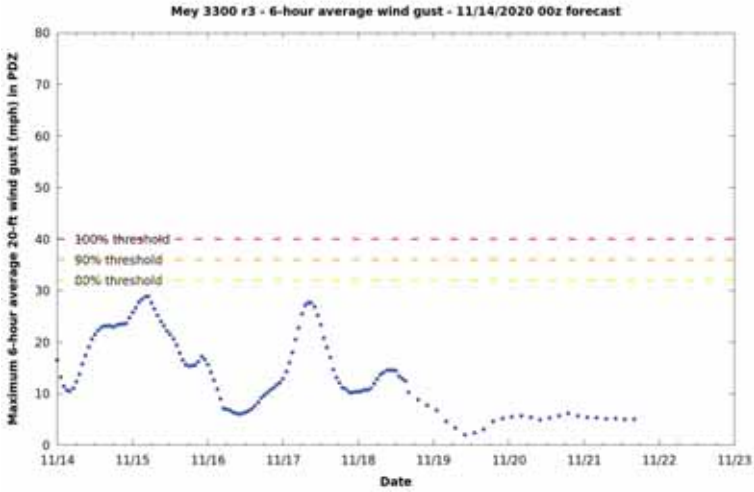
Mey 3400 Angora Creek



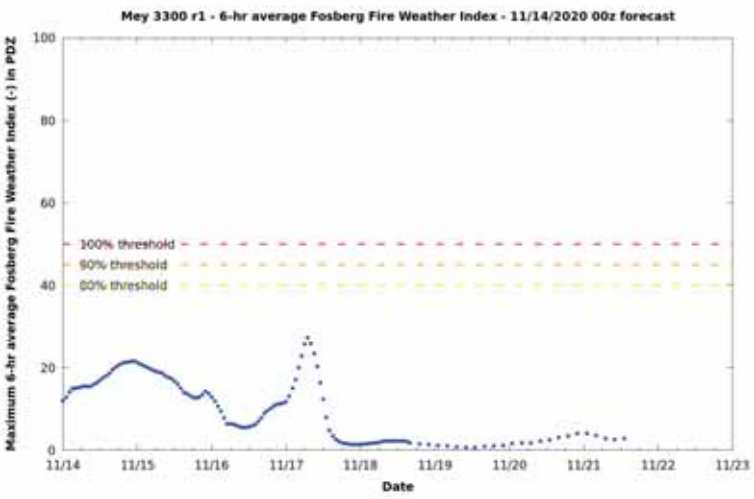


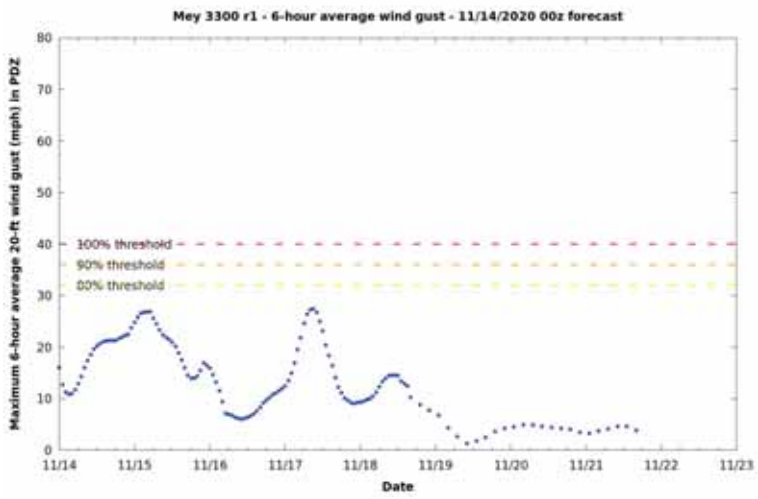
Mey 3300 r3



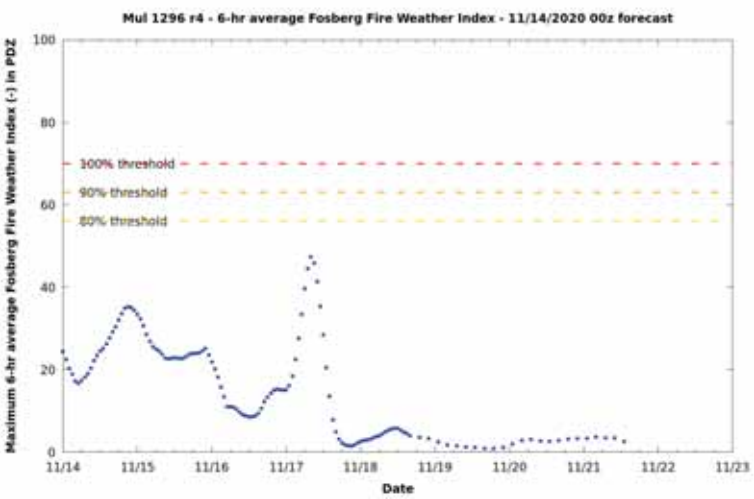


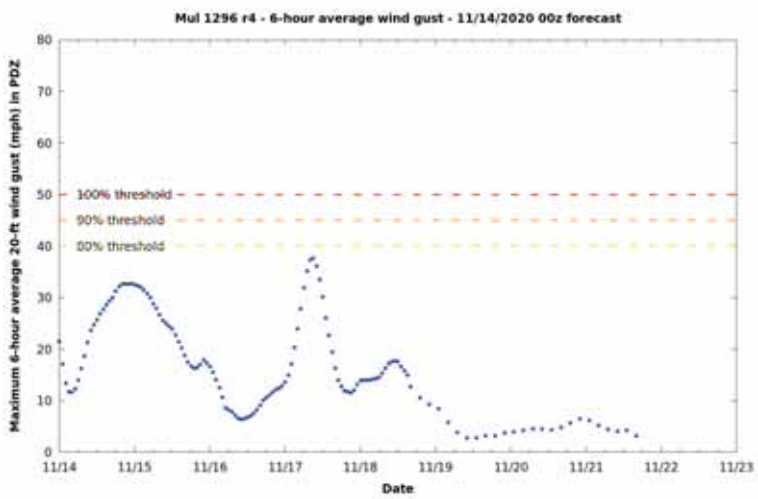
Mey 3300 r1



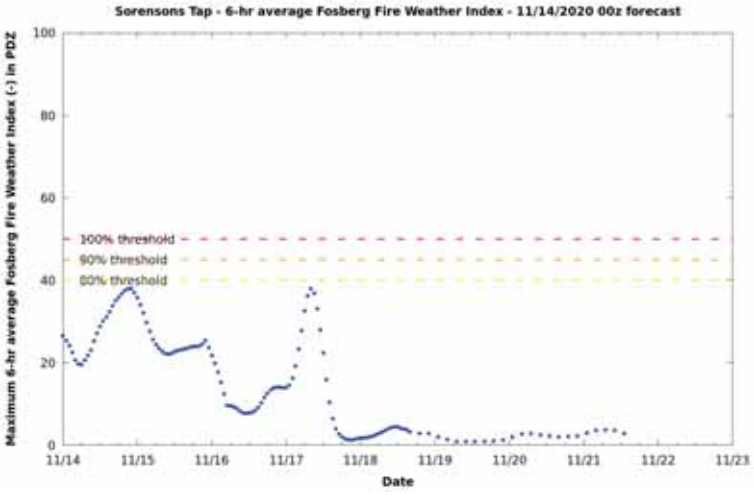


Mul 1296 r4



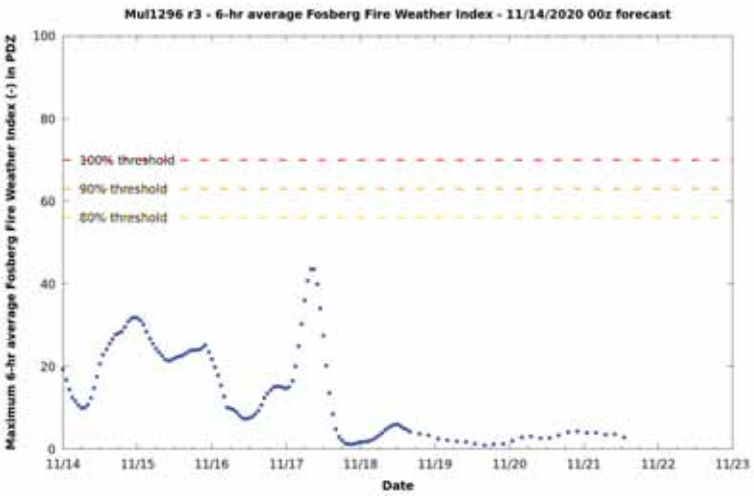


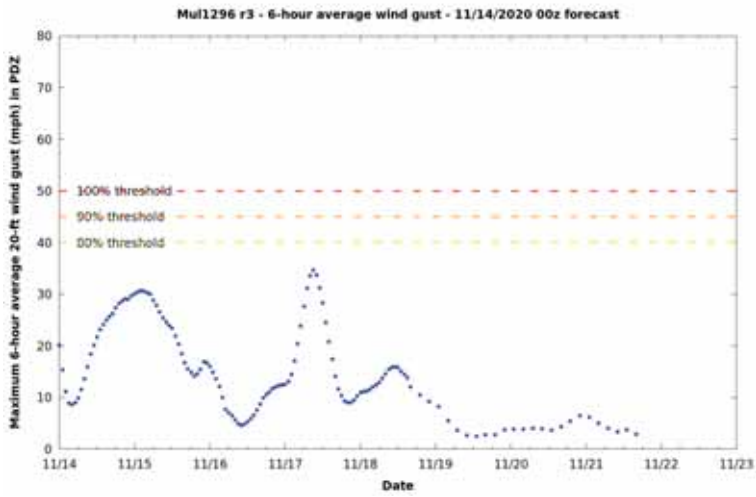
Sorensons Tap



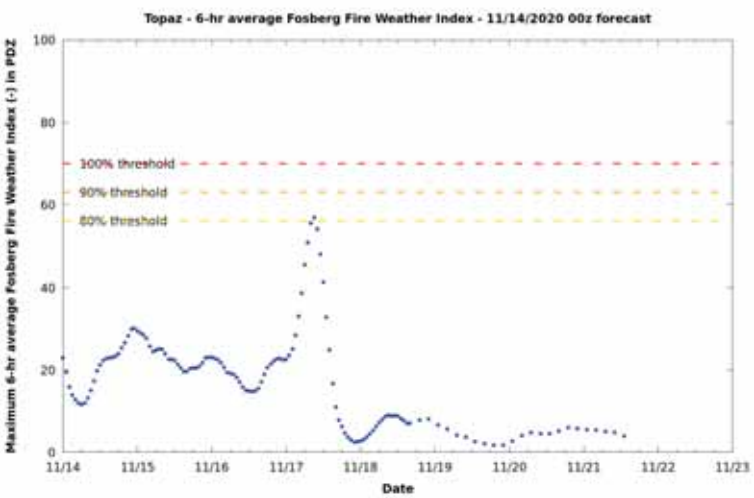


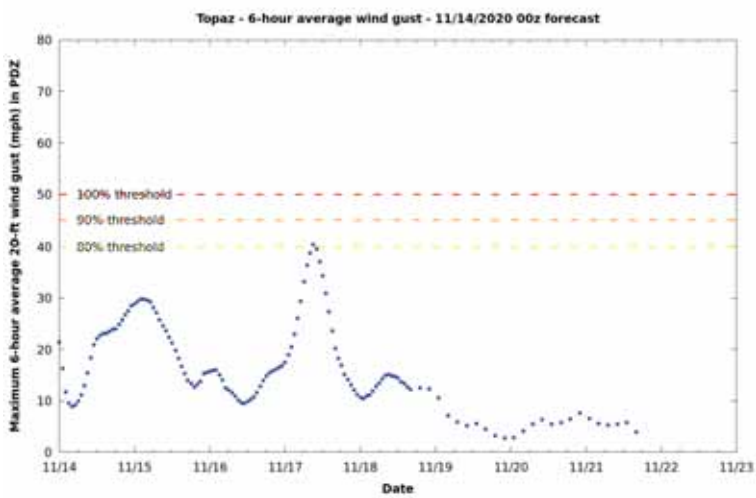
Mul 1296 r3



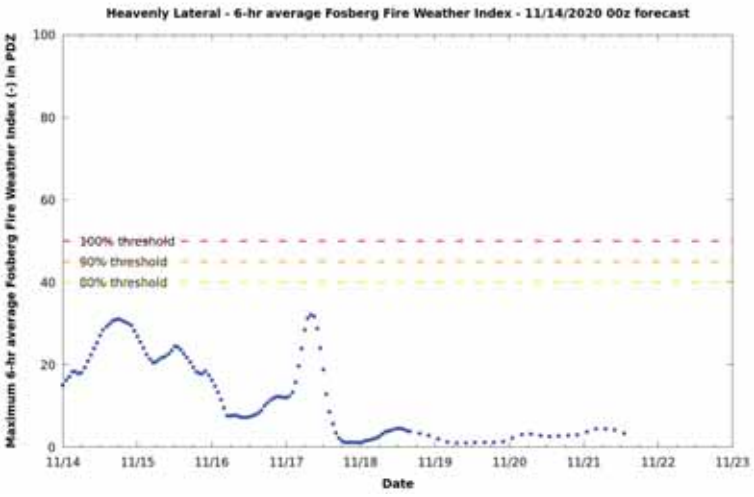


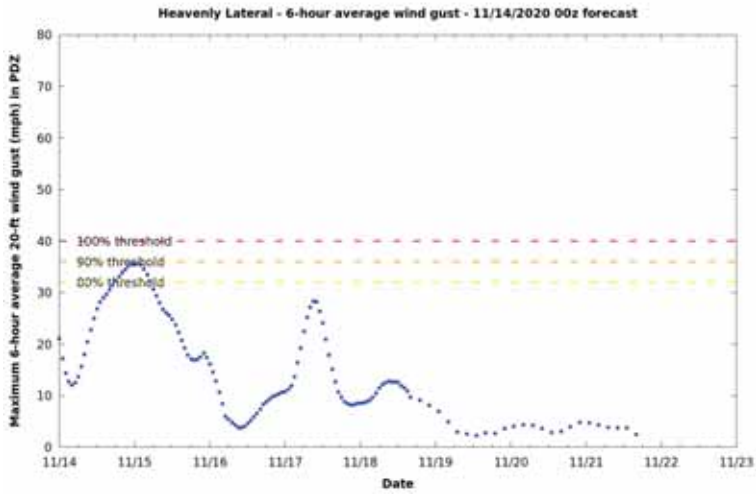
Topaz



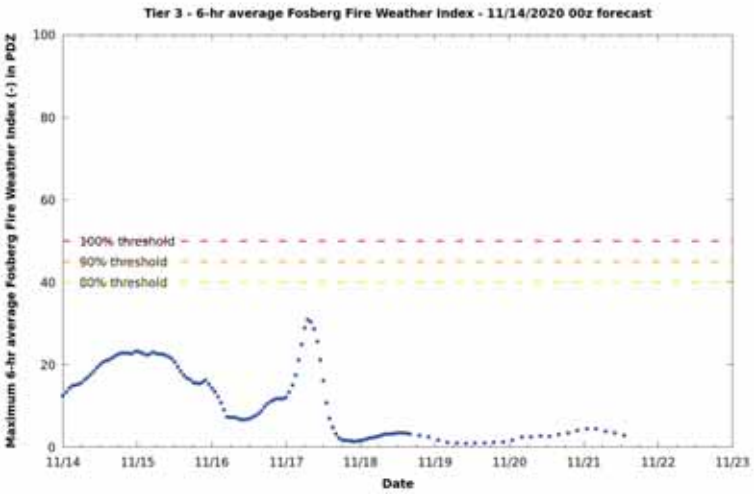


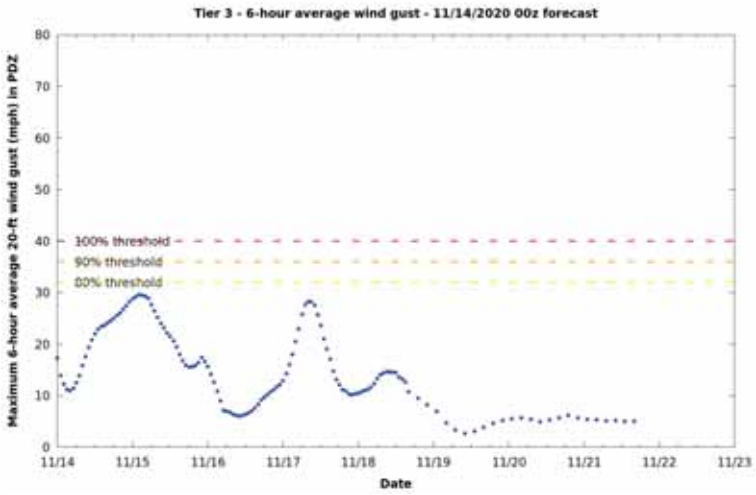
Heavenly Lateral



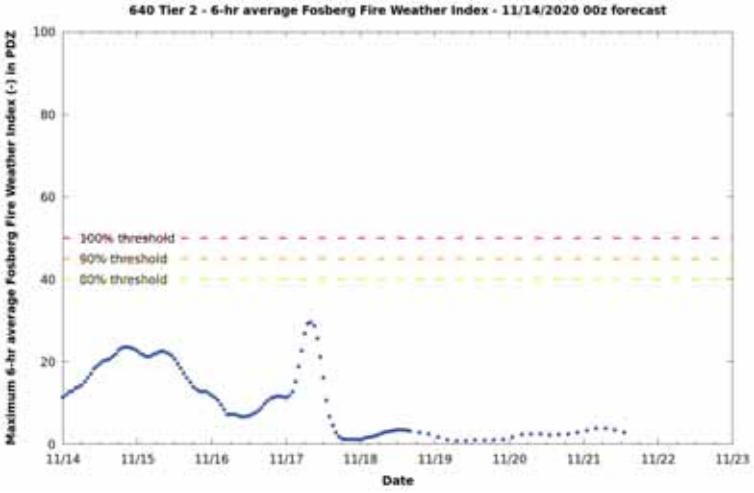


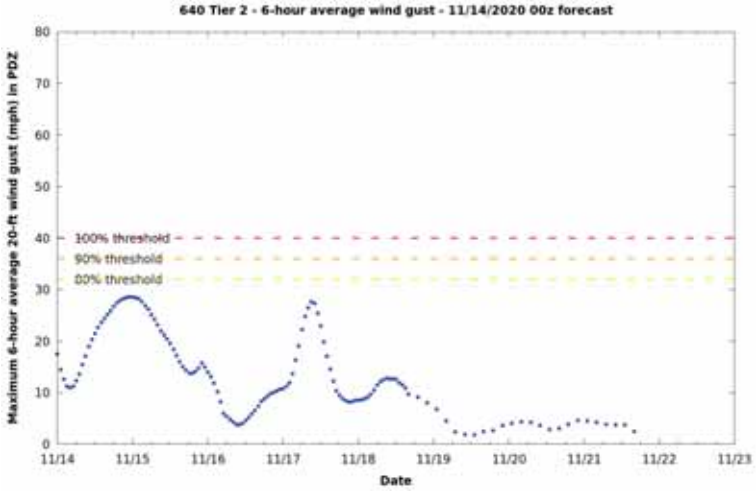
Tier 3



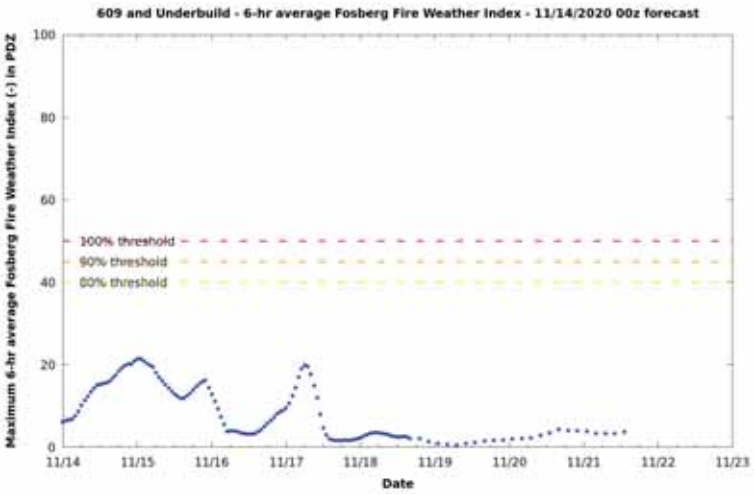


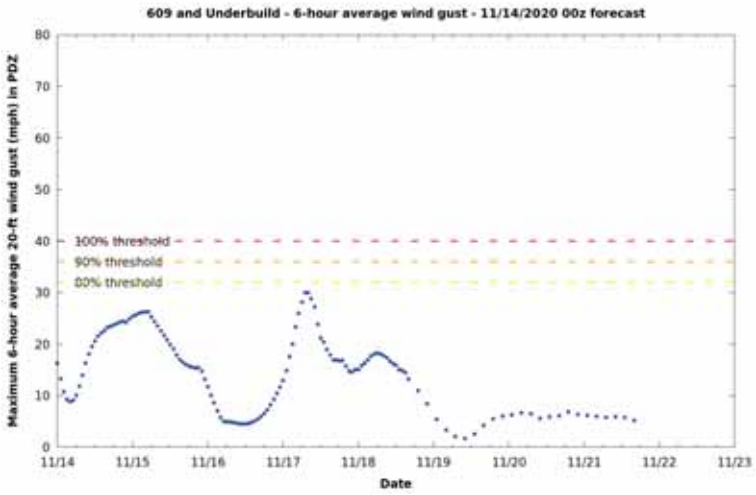
640 Tier 2



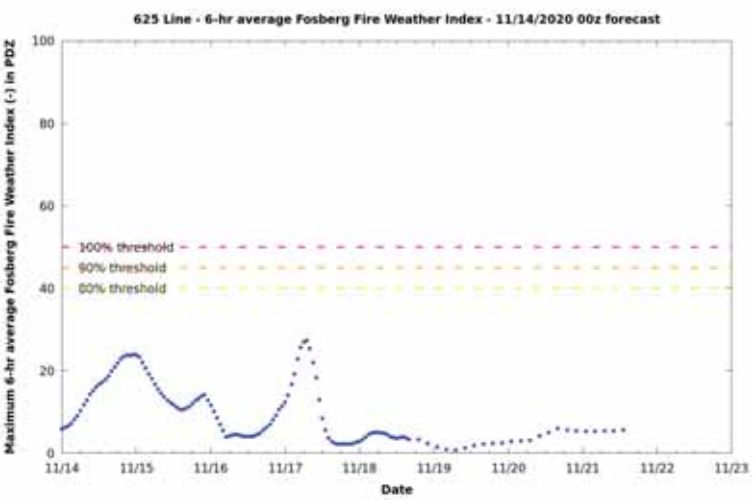


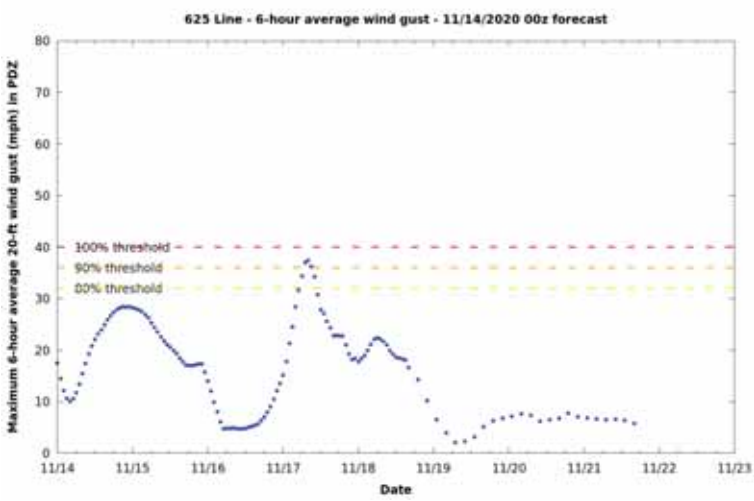
609 and Underbuild



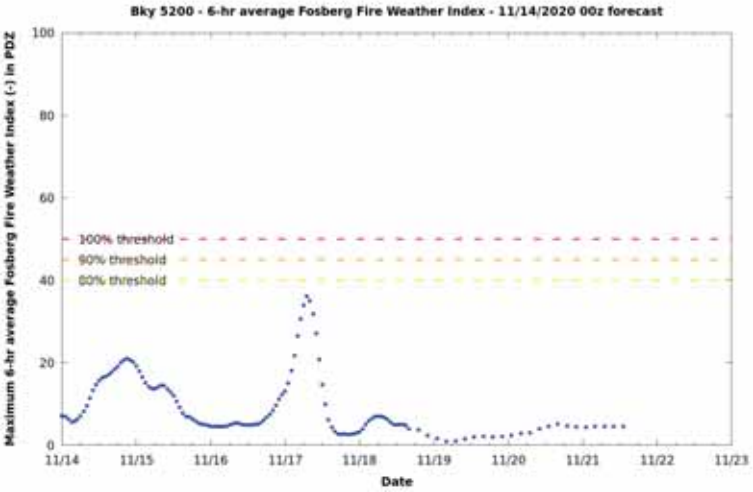


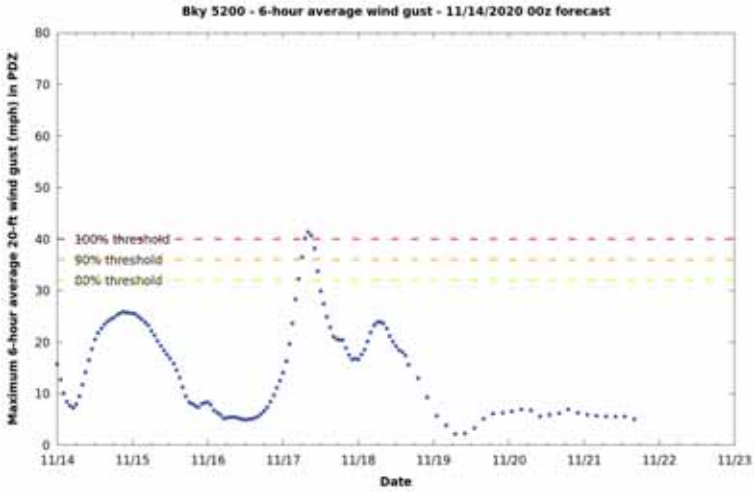
625 Line



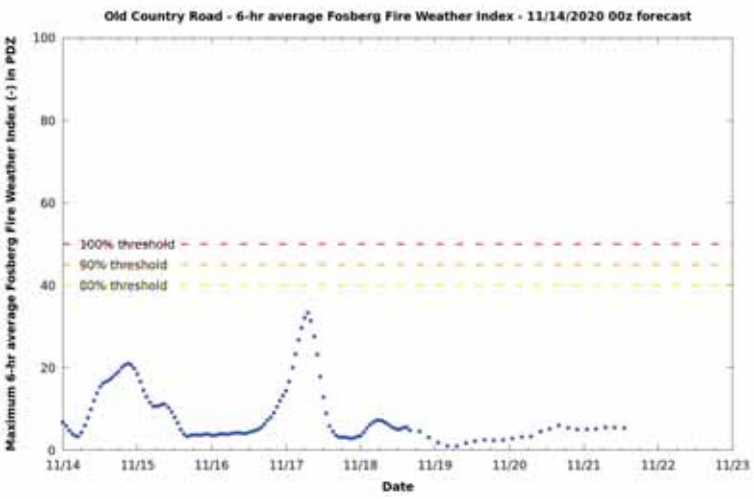


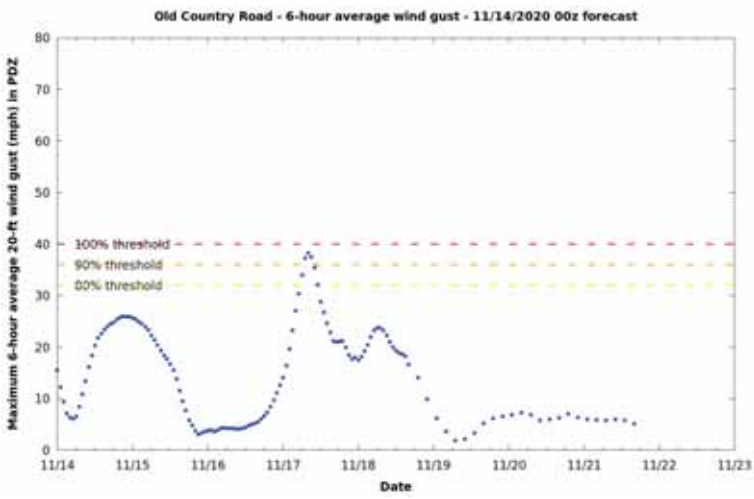
Bky 5200



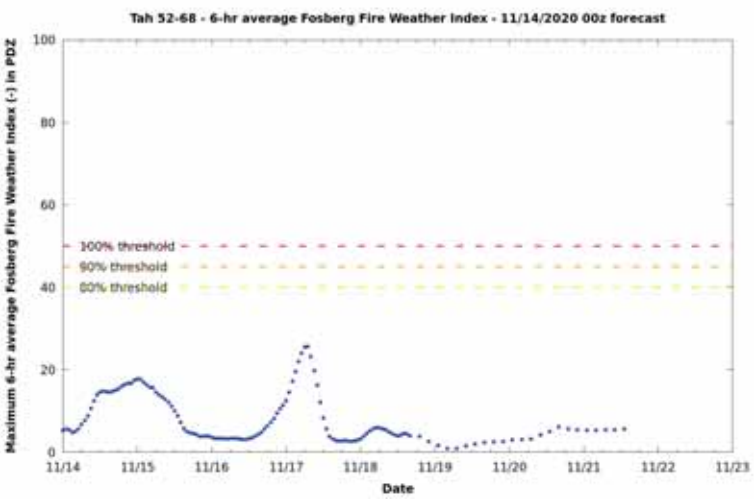


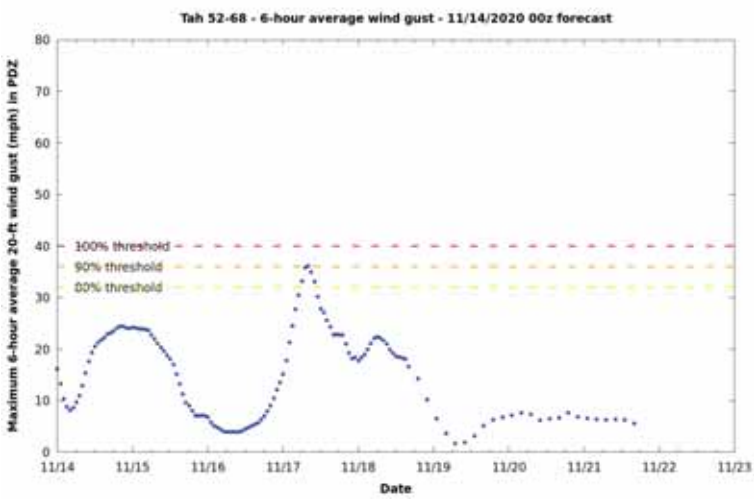
Old Country Road



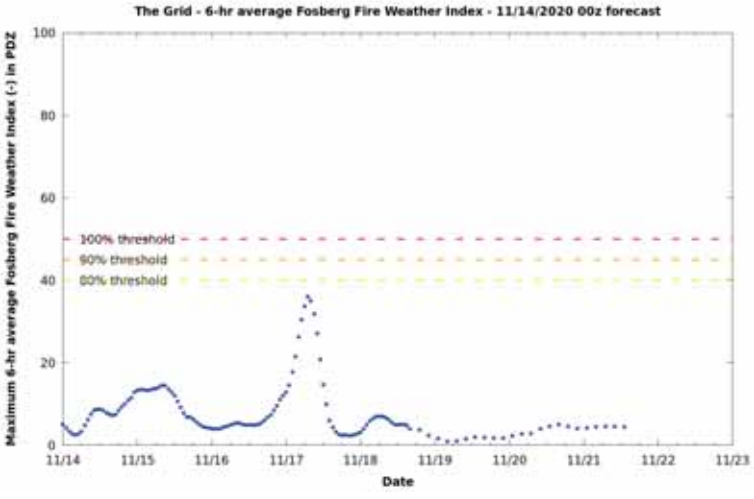


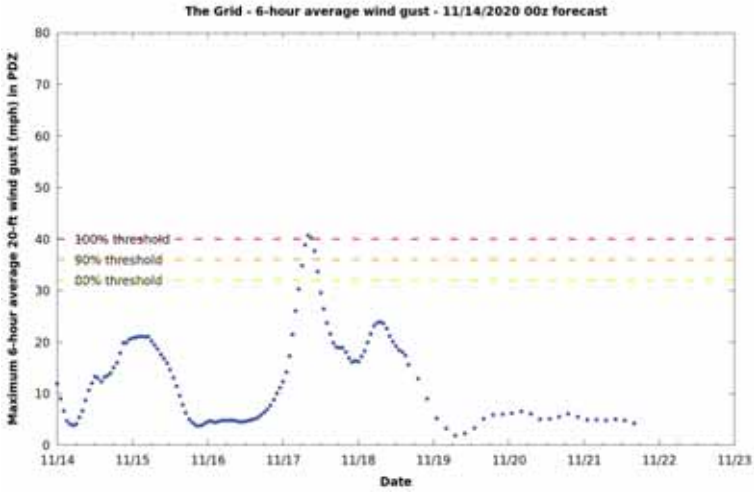
Tah 52-68



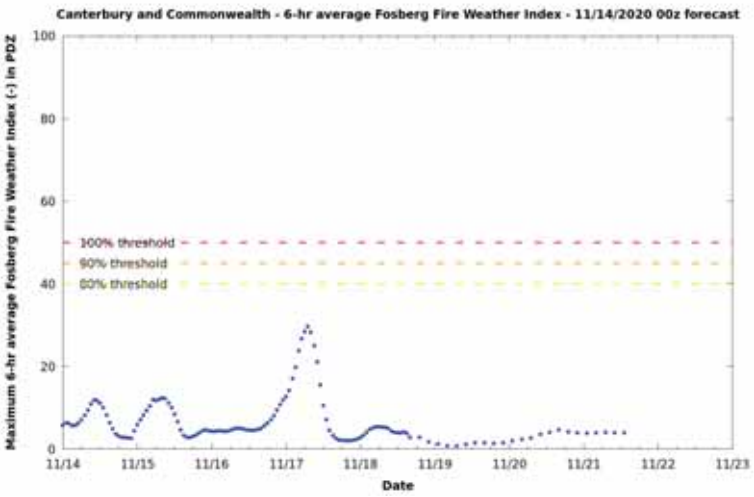


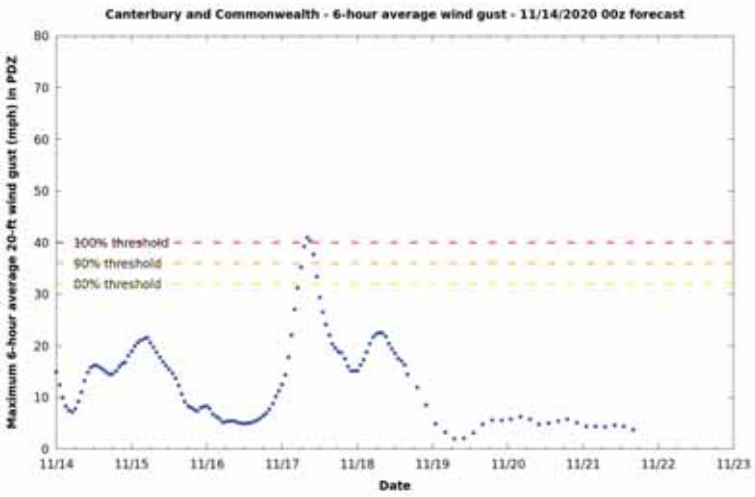
The Grid



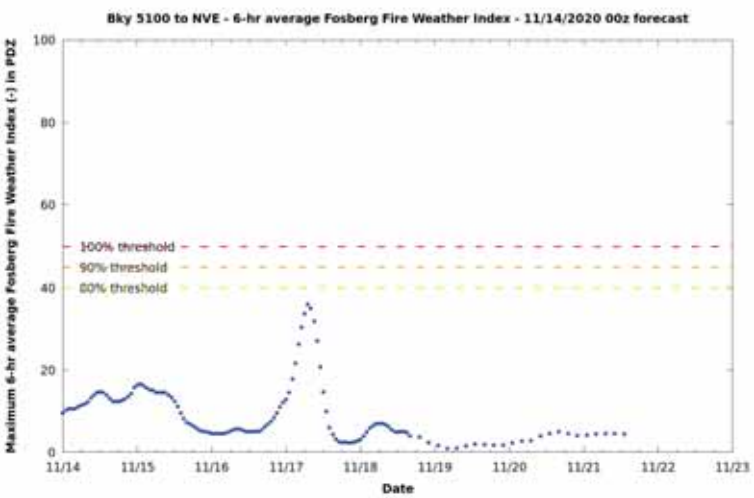


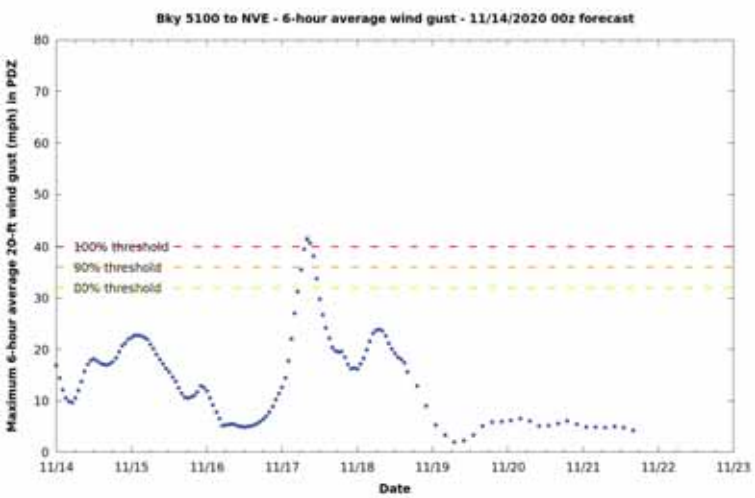
Canterbuy and Commonwealth



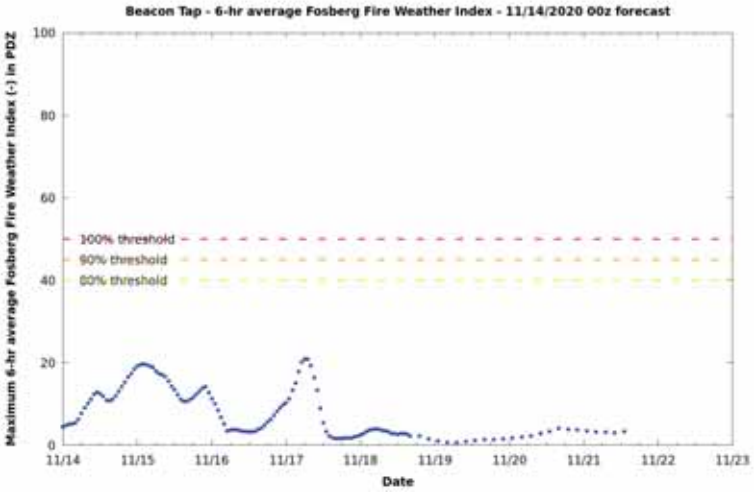


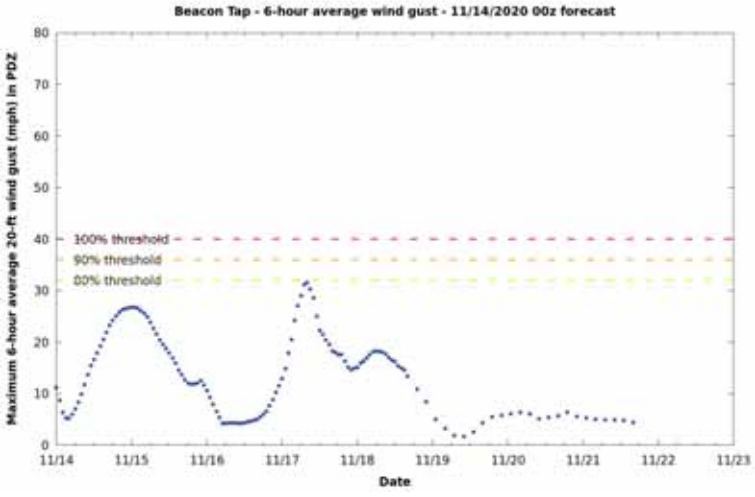
Bky 5100 to NVE



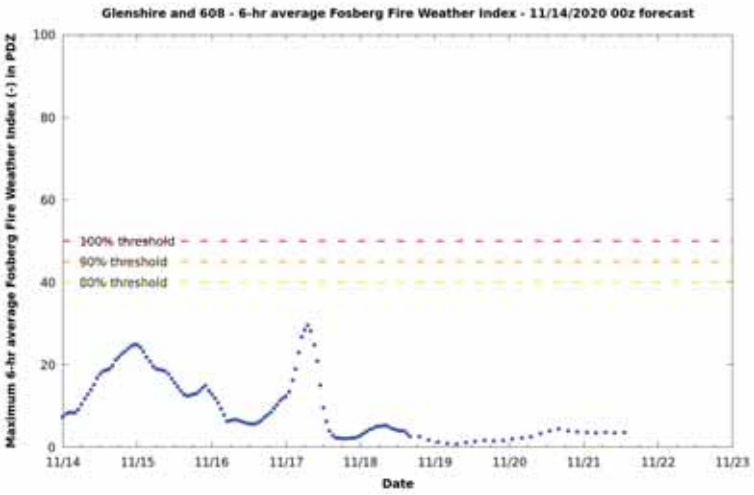


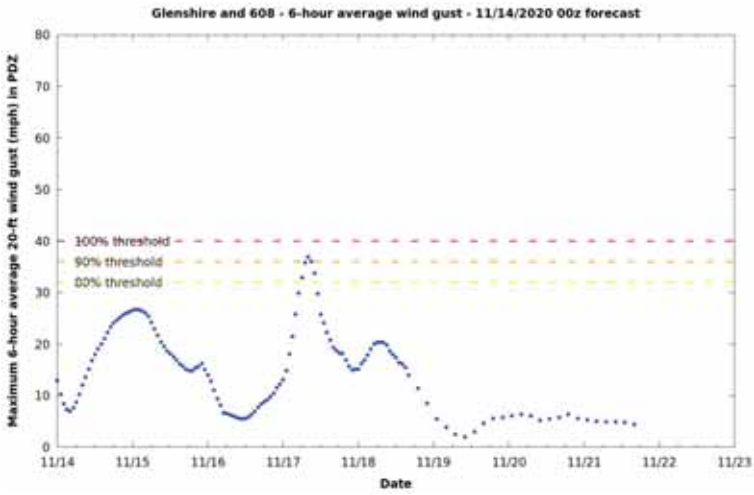
Beacon Tap



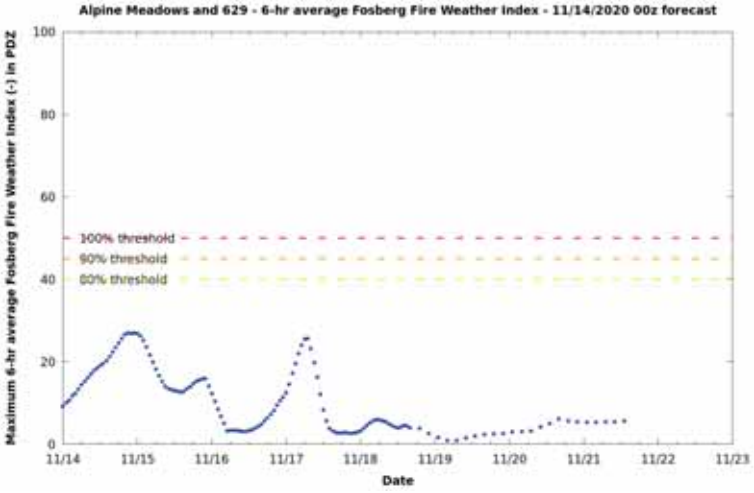


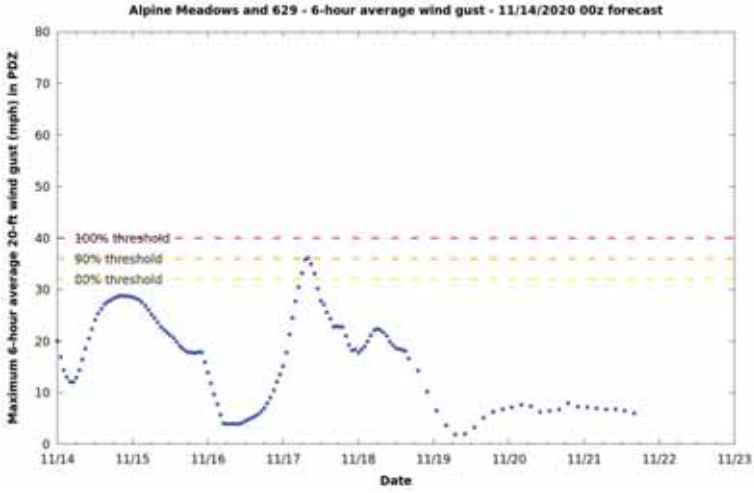
Glenshire and 608



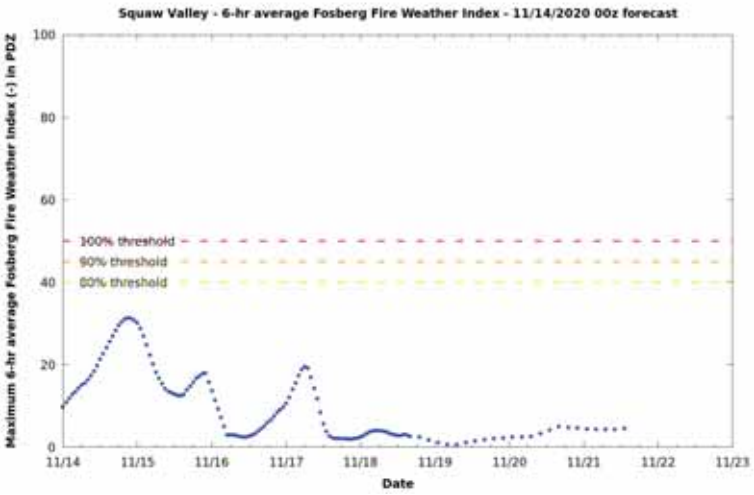


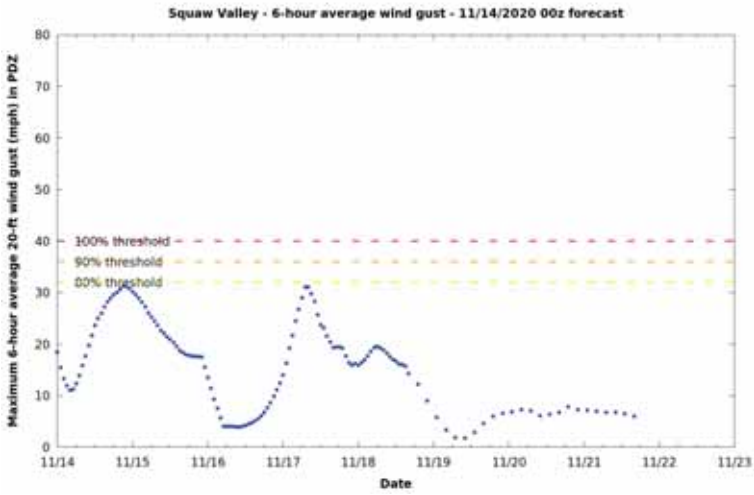
Alpine Meadows and 629



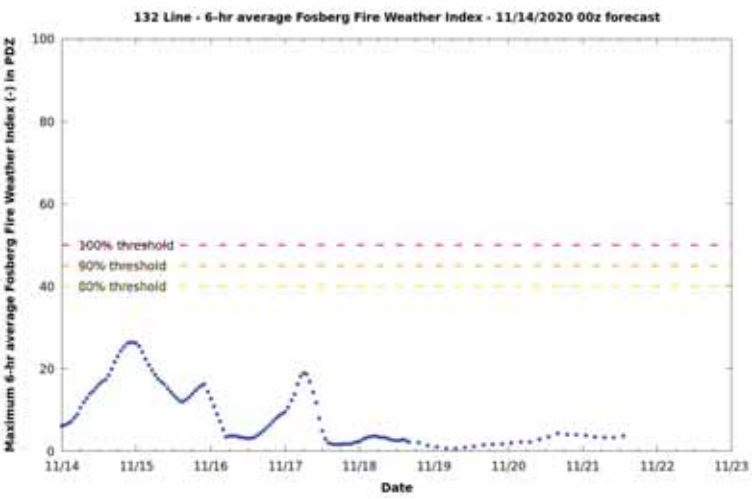


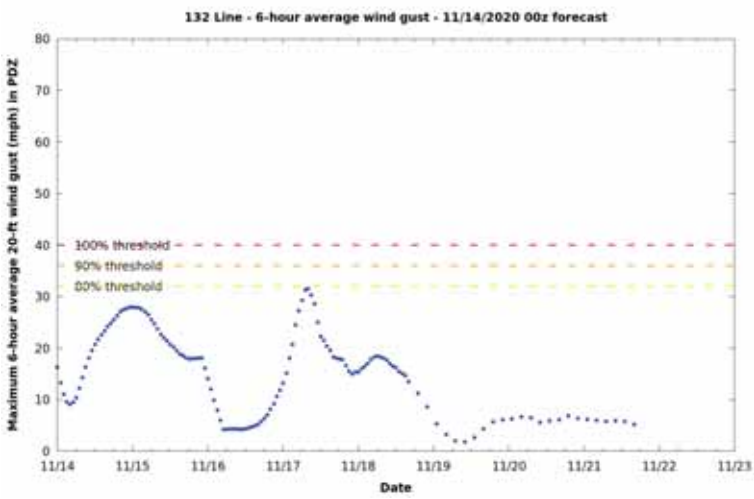
Squaw Valley



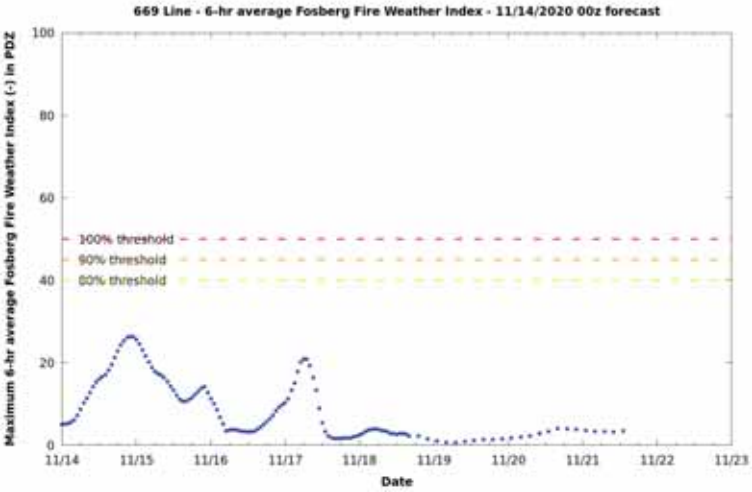


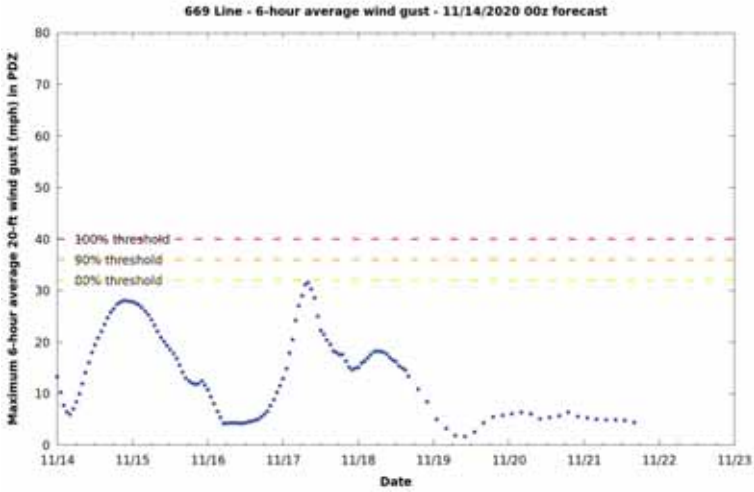
132 Line



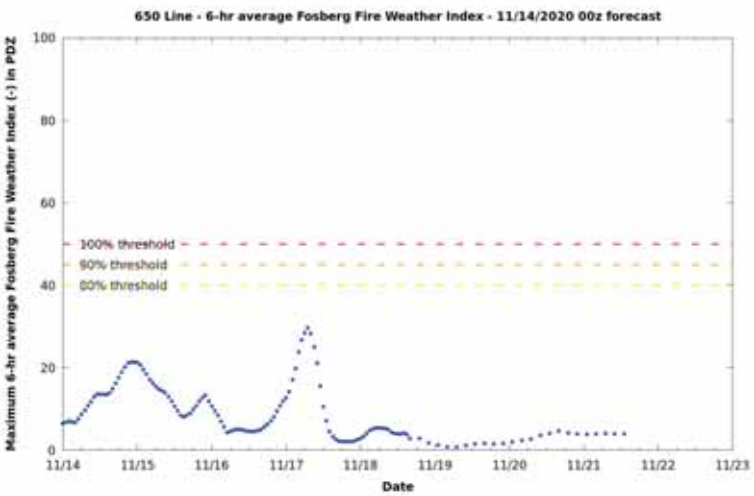


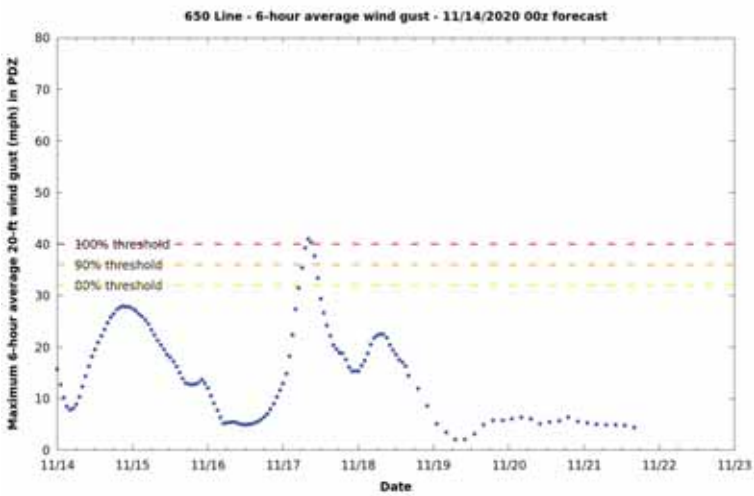
669 Line



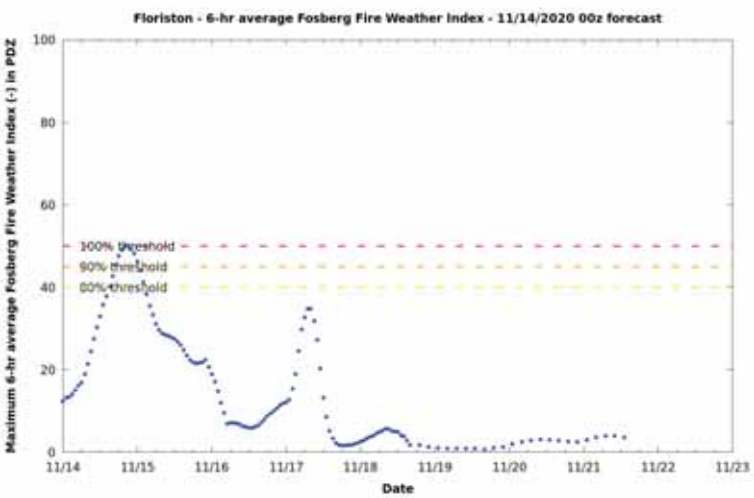


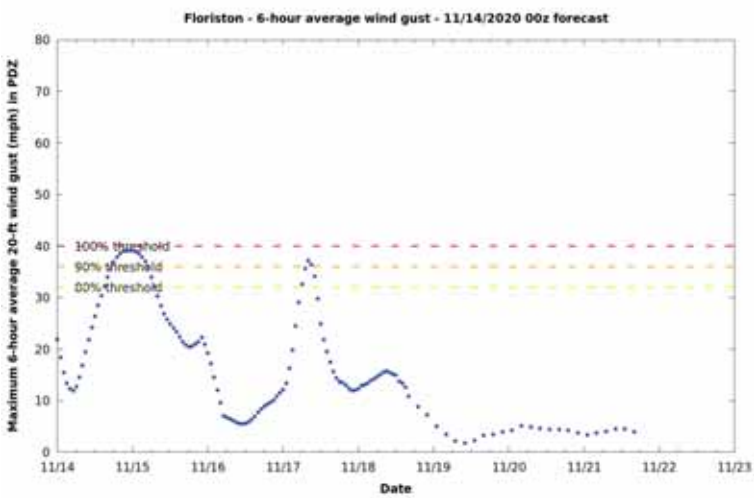
650 Line



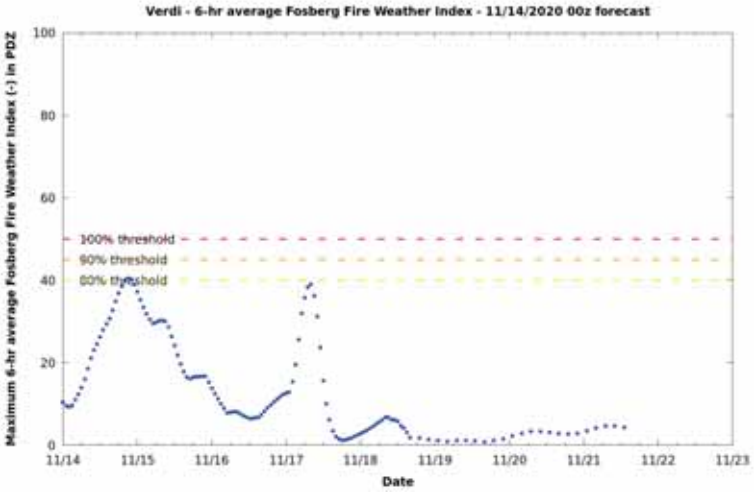


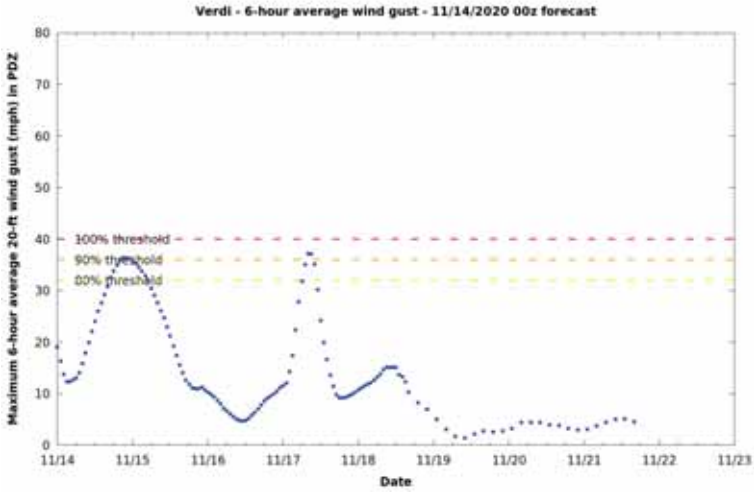
Floriston



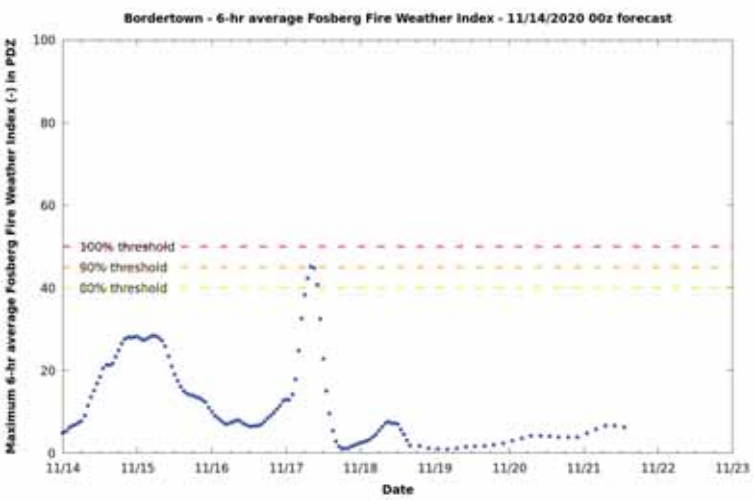


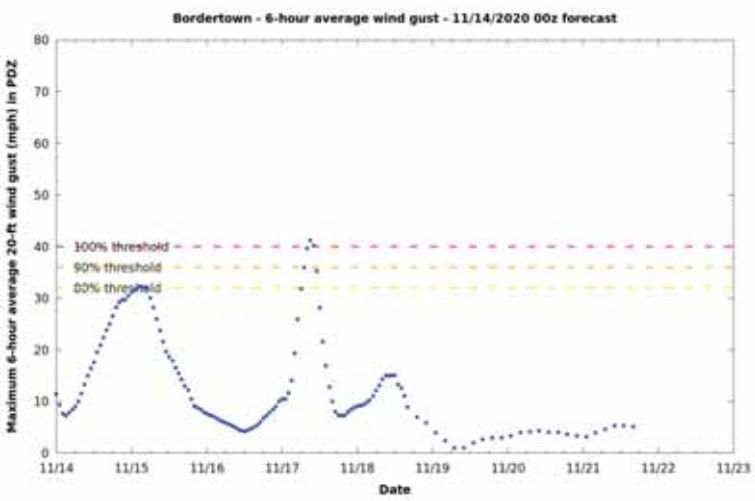
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/14/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
00% threshold
Date


Bordertown - 6-hour average wind gust - 11/14/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
00% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/14/20 - 11/20/20

Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

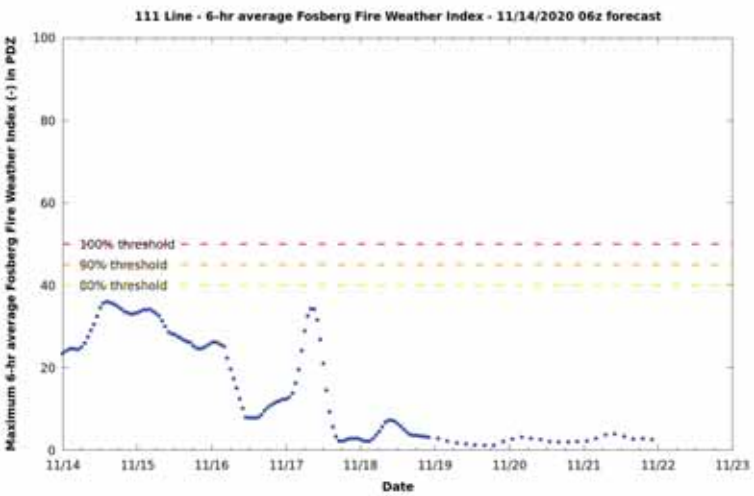
Liberty Utilities Energy Release Component Forecast for 11/14/20 - 11/20/20

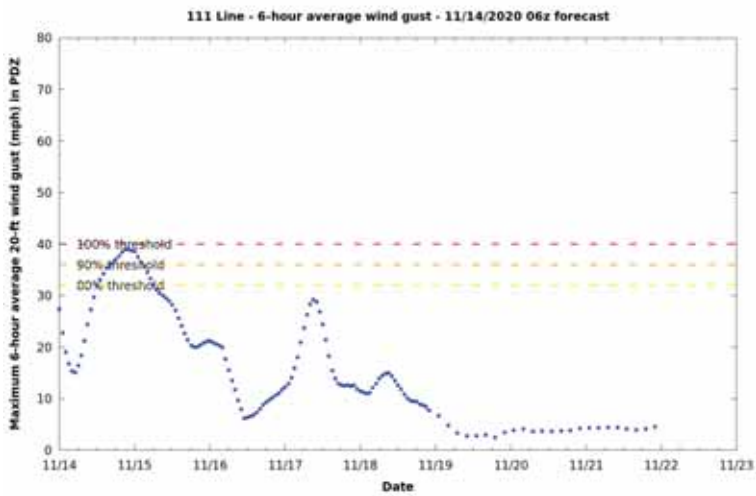
Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	57.0	55.0	51.0	56.0	58.0	55.0
Sierra Brooks	58.0	61.0	58.0	55.0	61.0	62.0	62.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	57.0	57.0	51.0	43.0	48.0	42.0	35.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	56.0	56.0	53.0	50.0	56.0	57.0	57.0

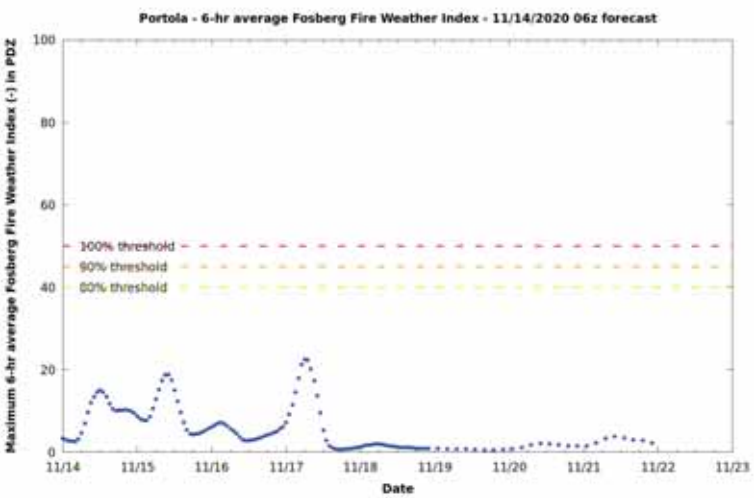
Liberty Utilities Fire Weather Summary Plots - 11/14/2020 06z forecast

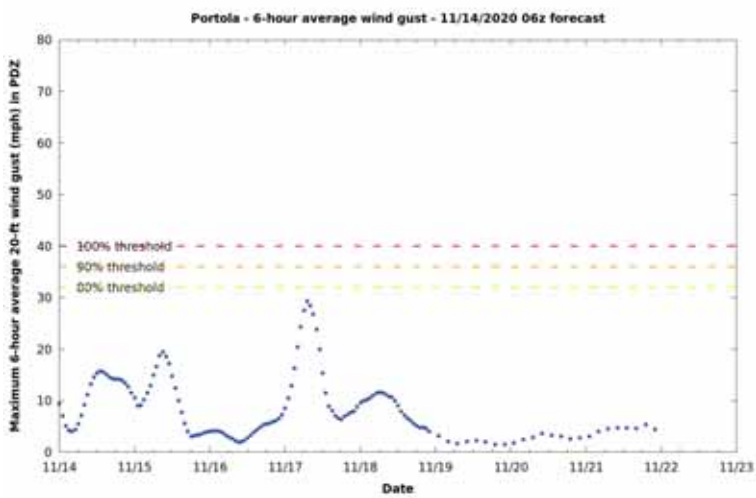
111 Line



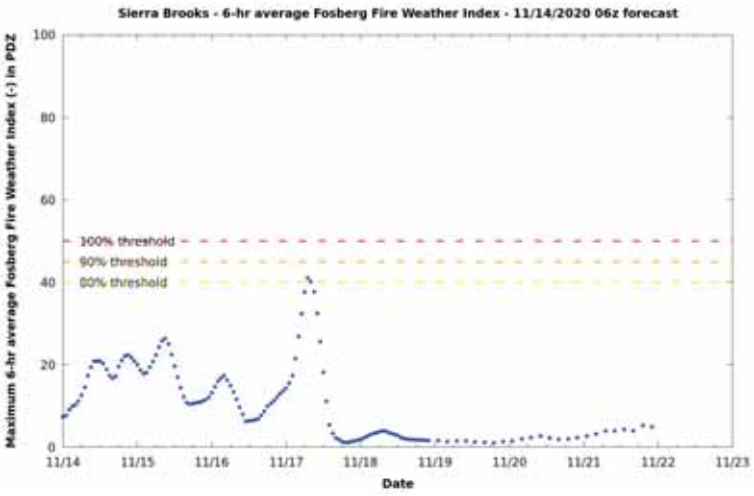


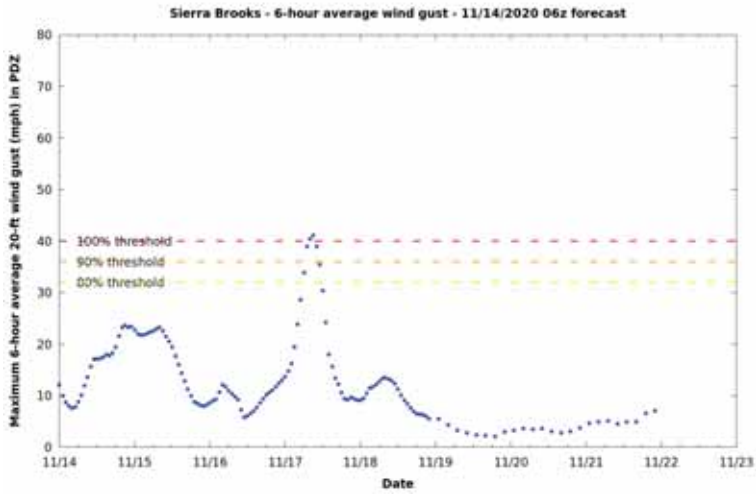
Portola



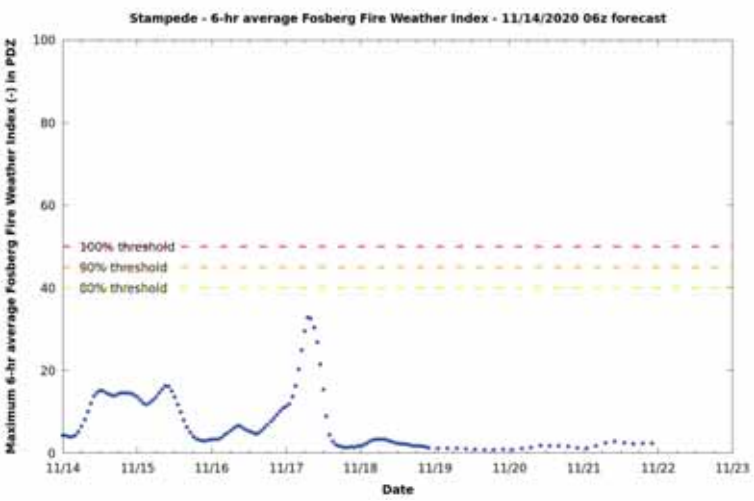


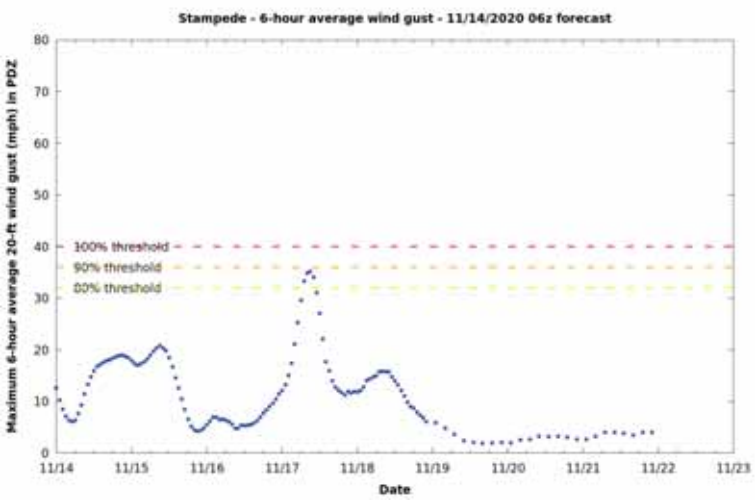
Sierra Brooks



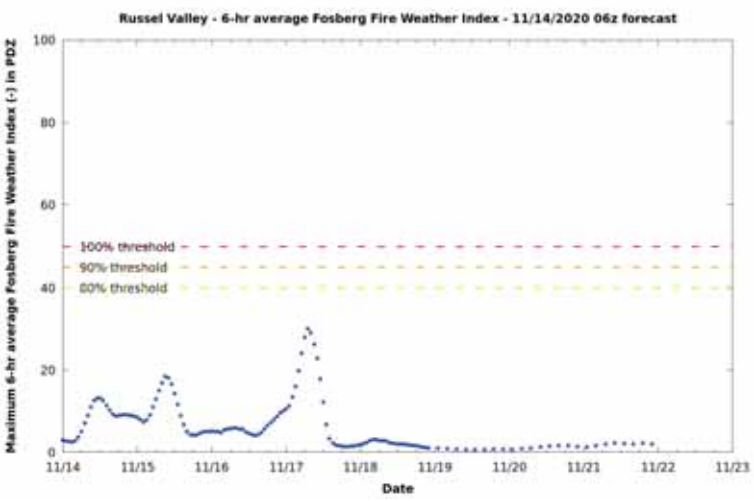


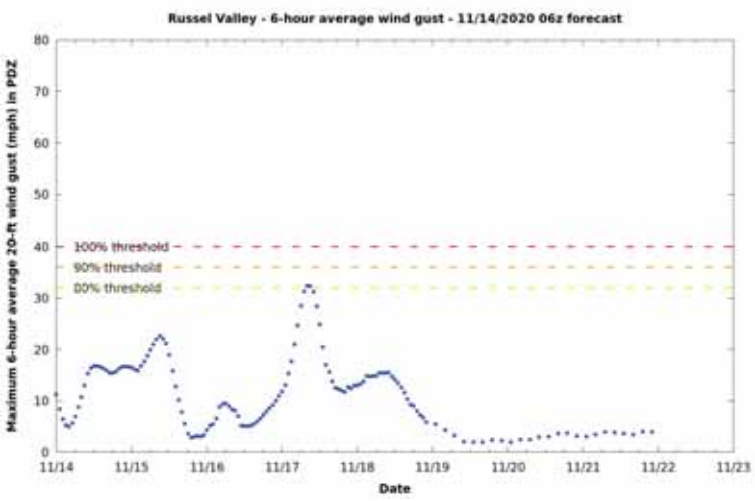
Stampede



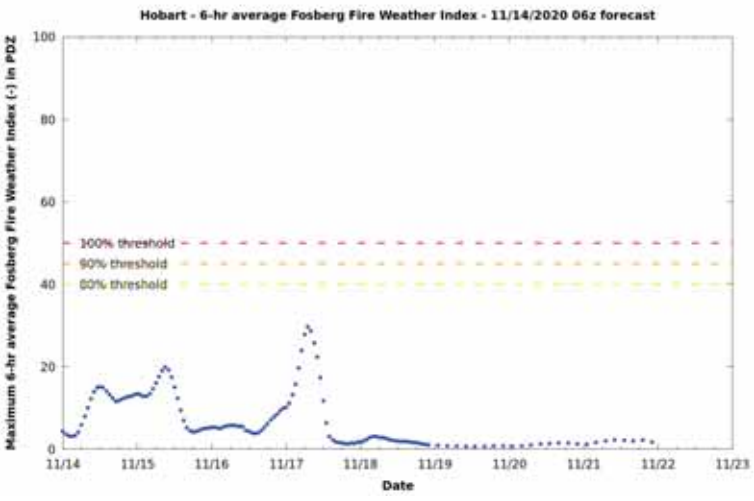


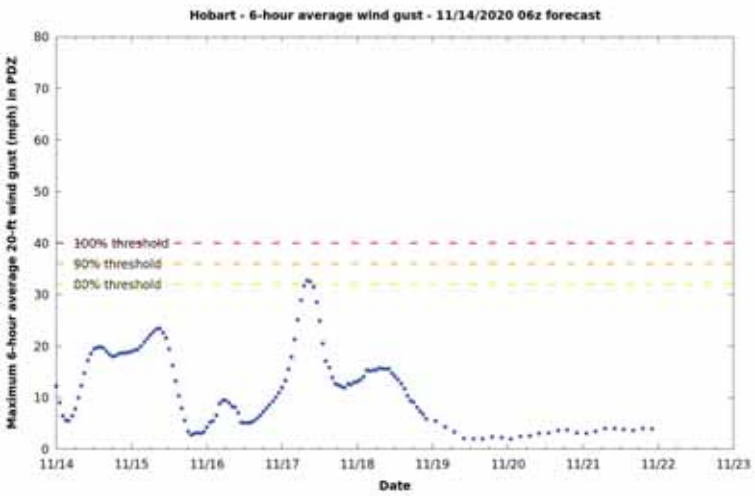
Russell Valley



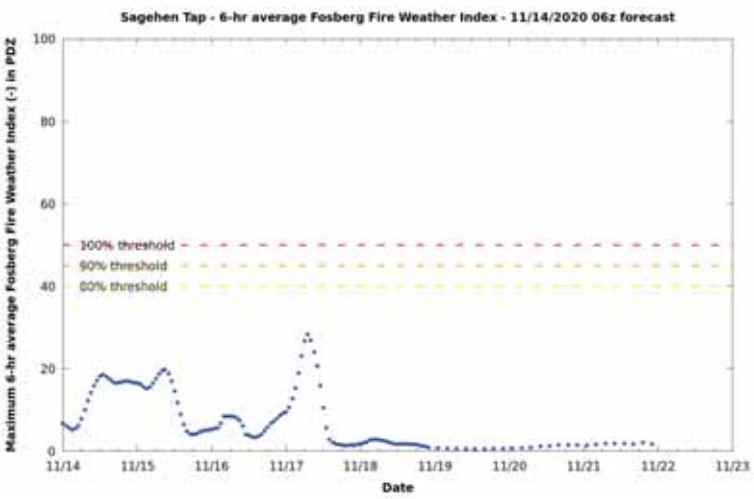


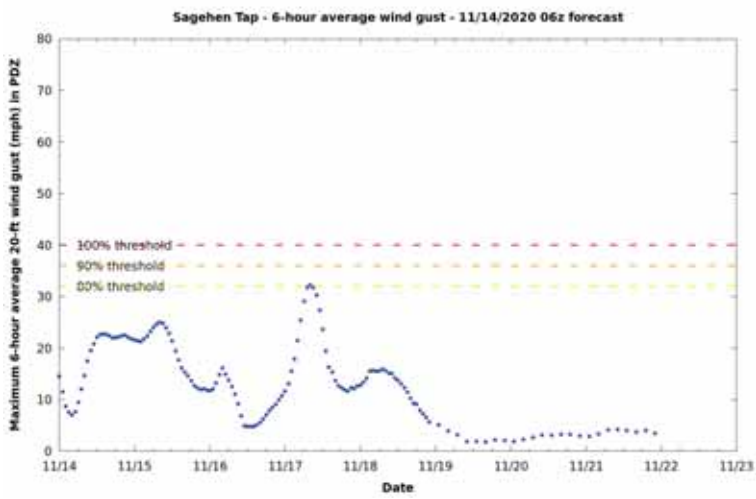
Hobart



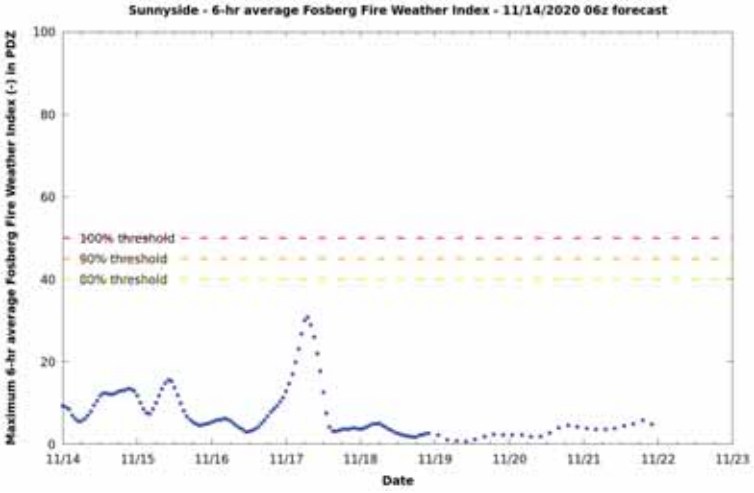


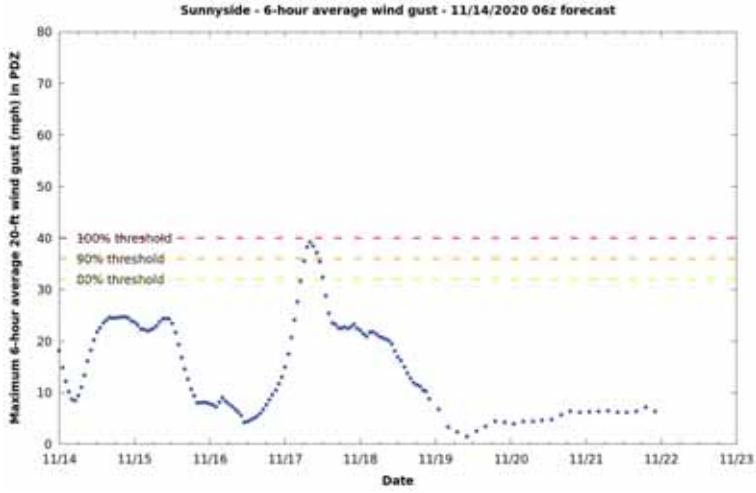
Sagehen tap



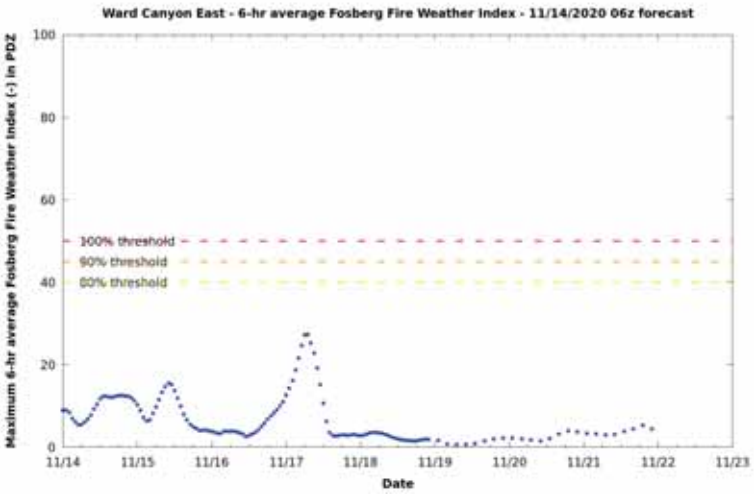


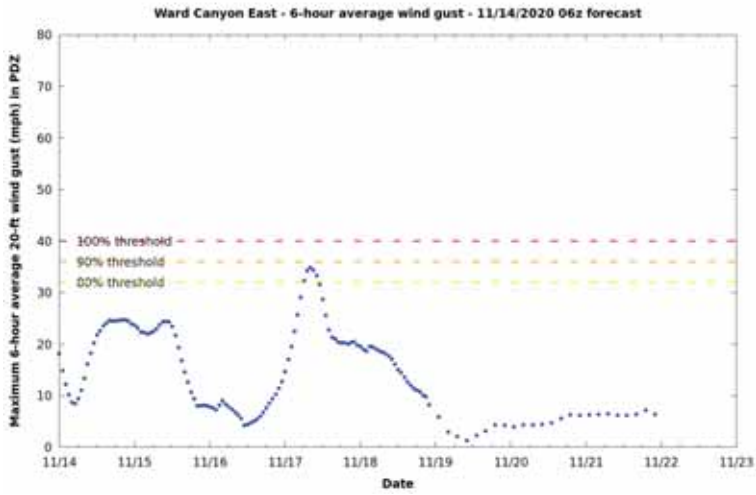
Sunnyside



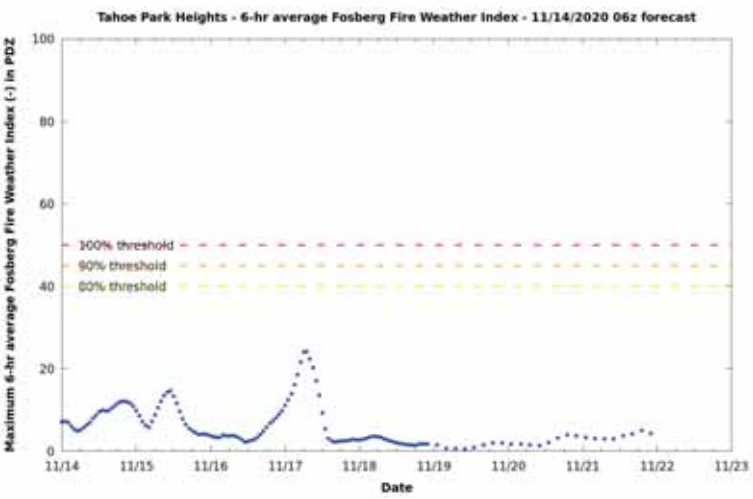


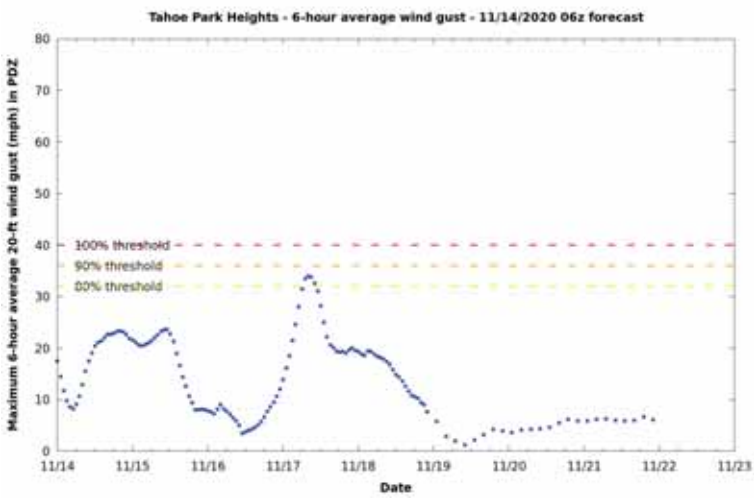
Ward Canyon East



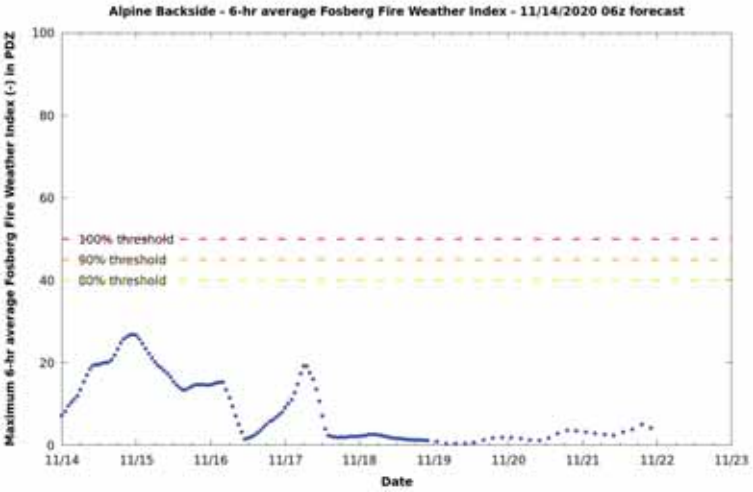


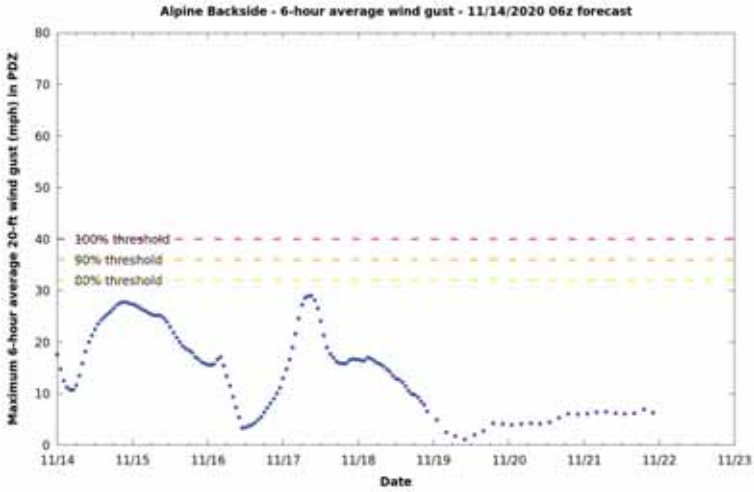
Tahoe Park Heights



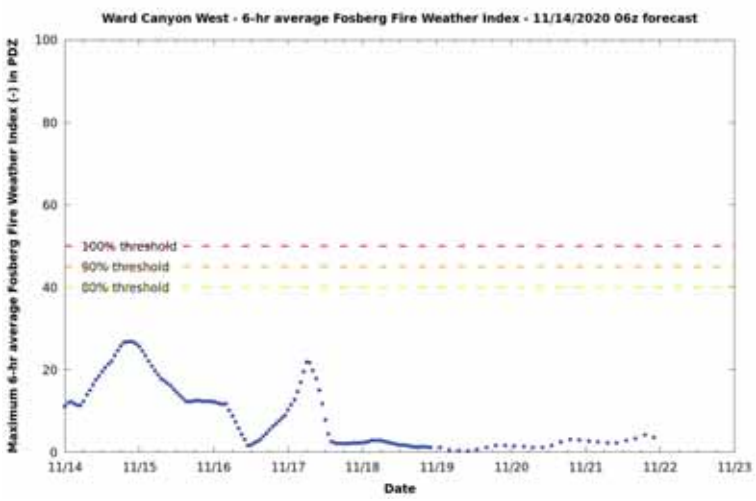


Alpine Backside



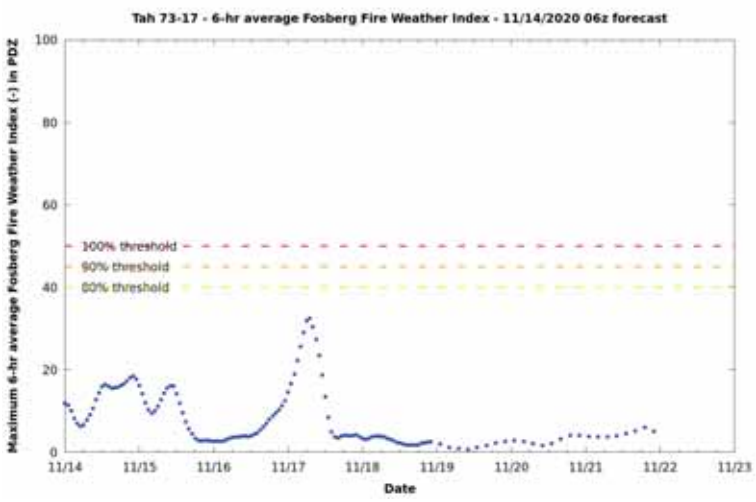


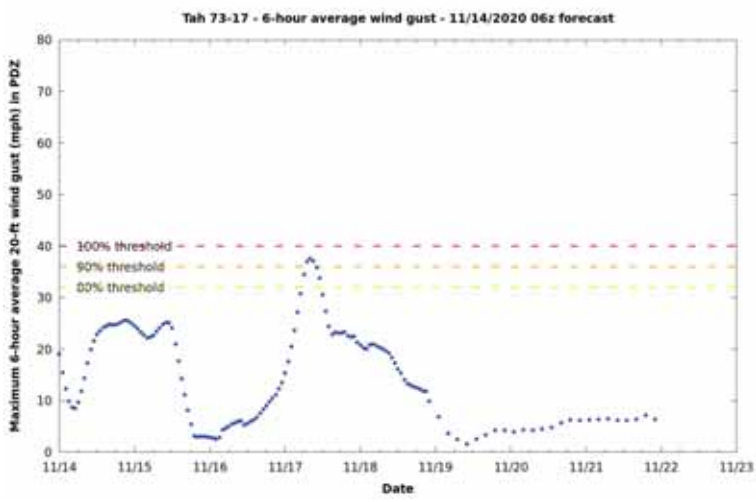
Ward Canyon West



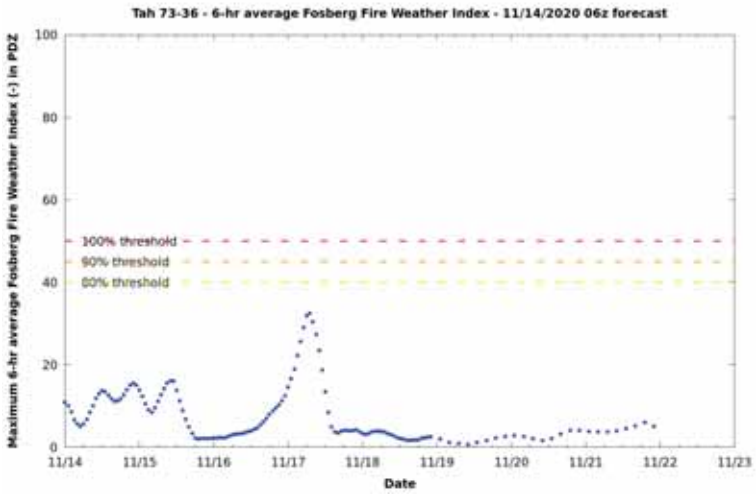


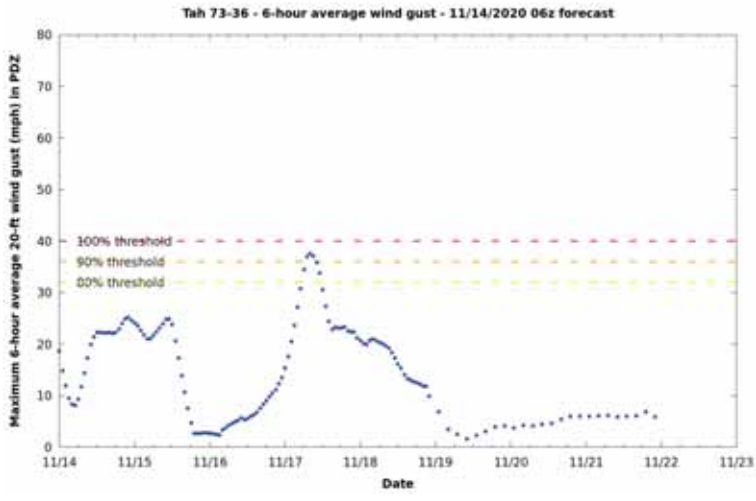
Tah 73-17



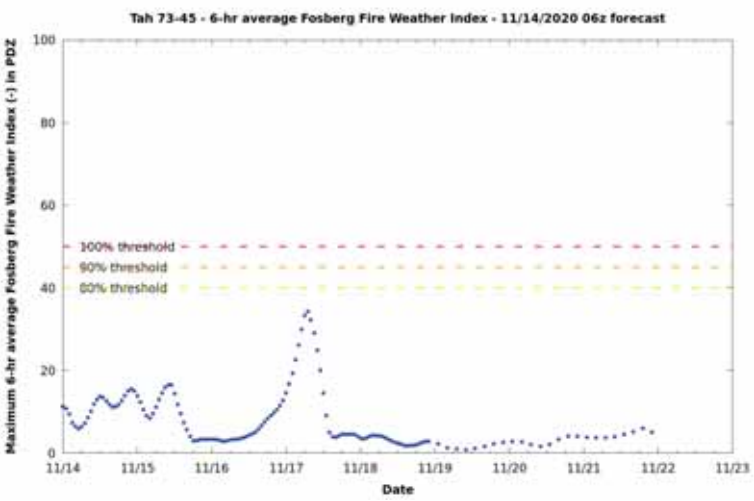


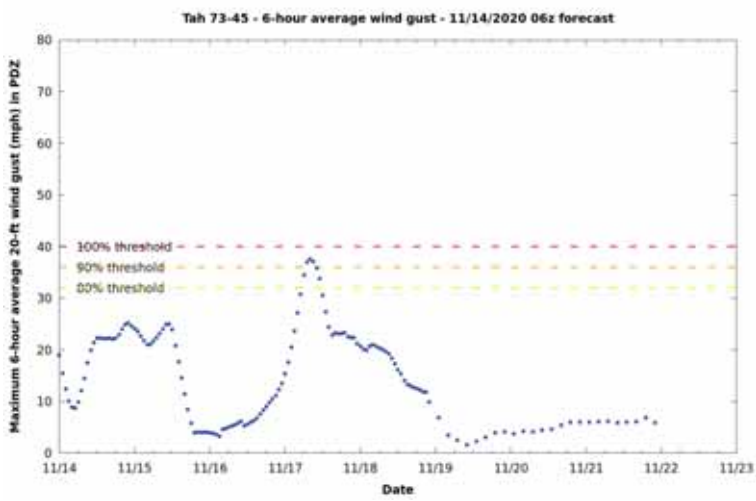
Tah 73-36



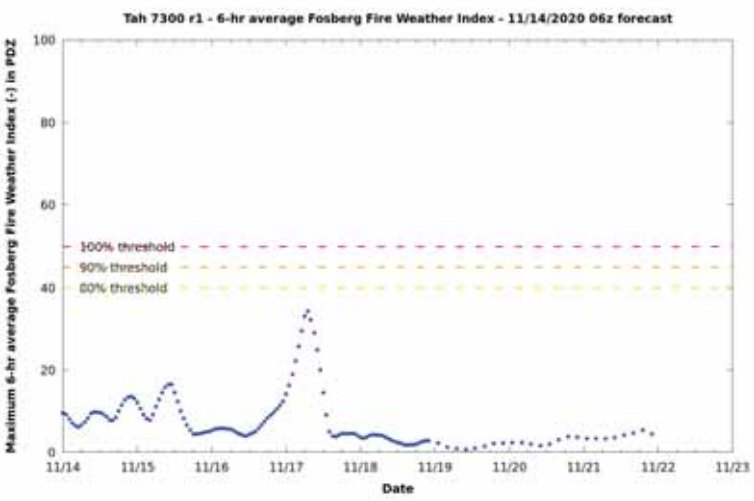


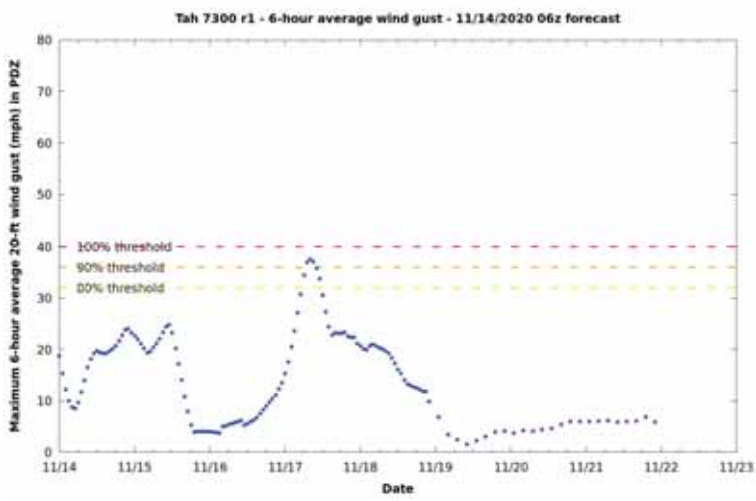
Tah 73-45



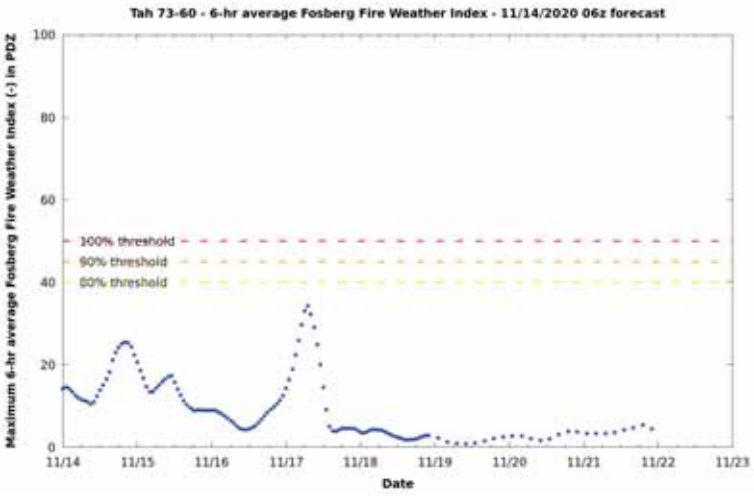


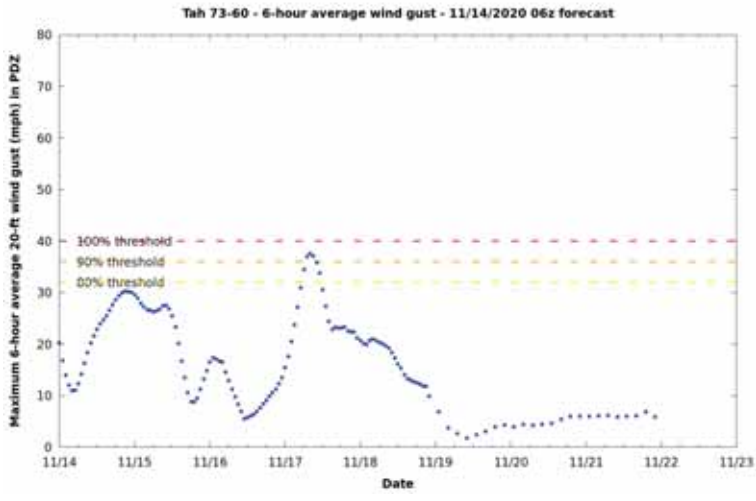
Tah 7300 r1



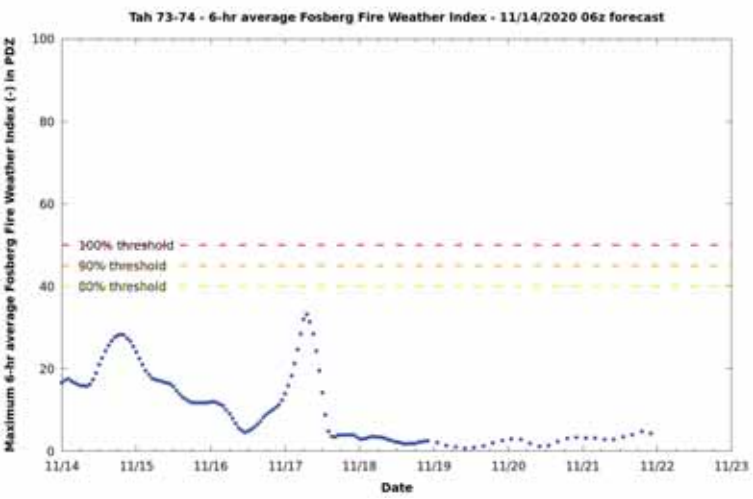


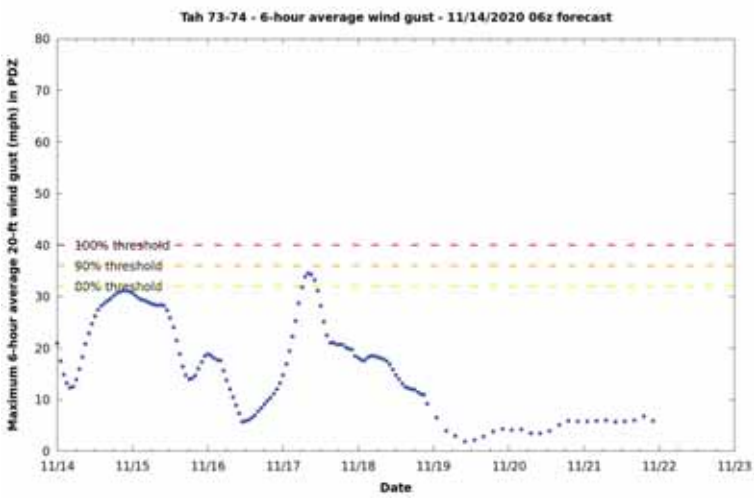
Tah 73-60



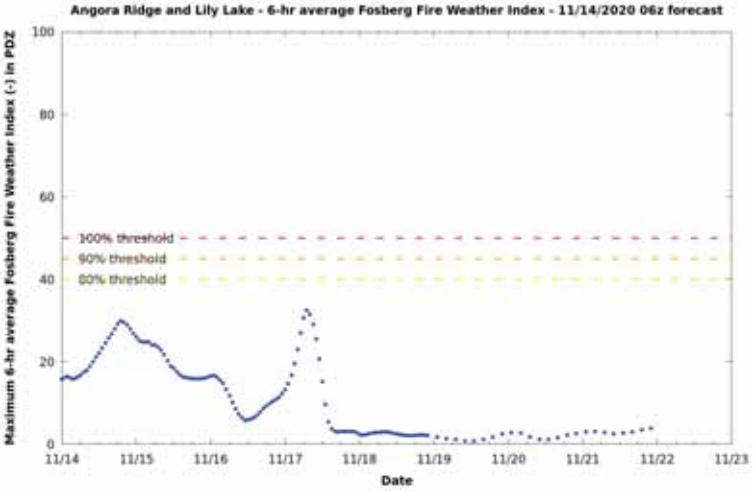


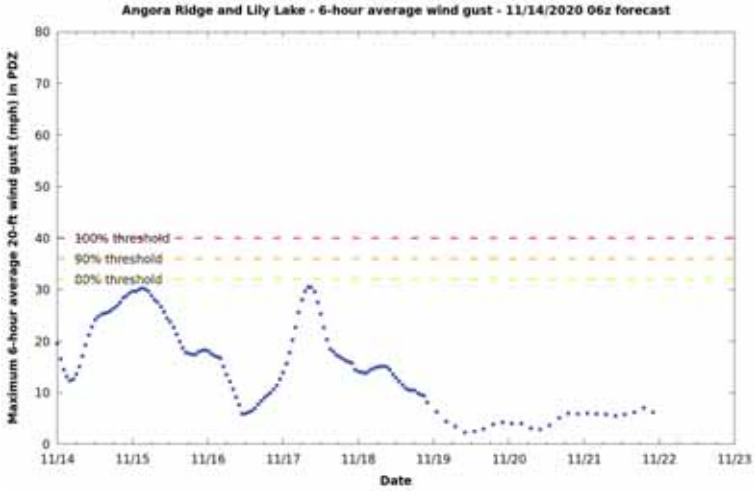
Tah 73-74



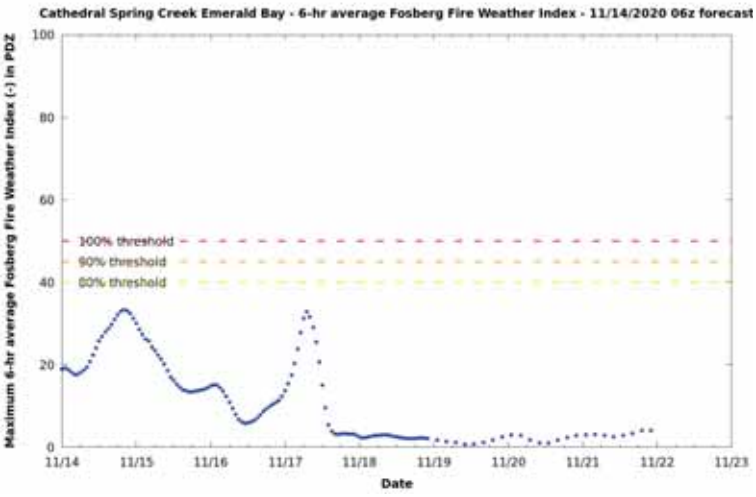


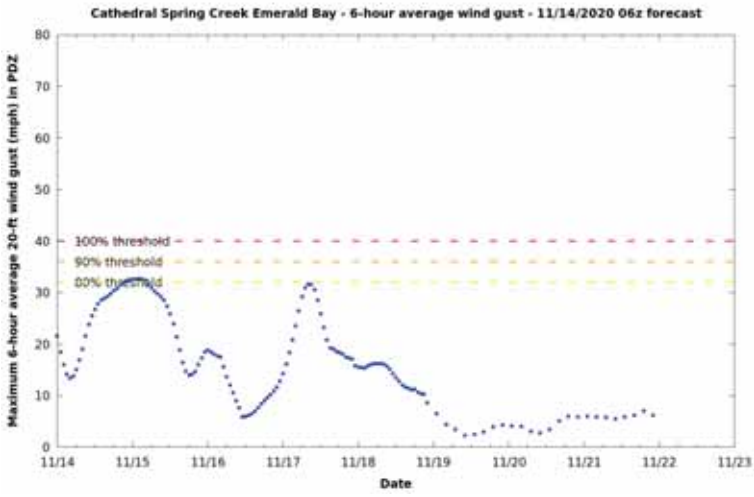
Angora Ridge and Lily Lake



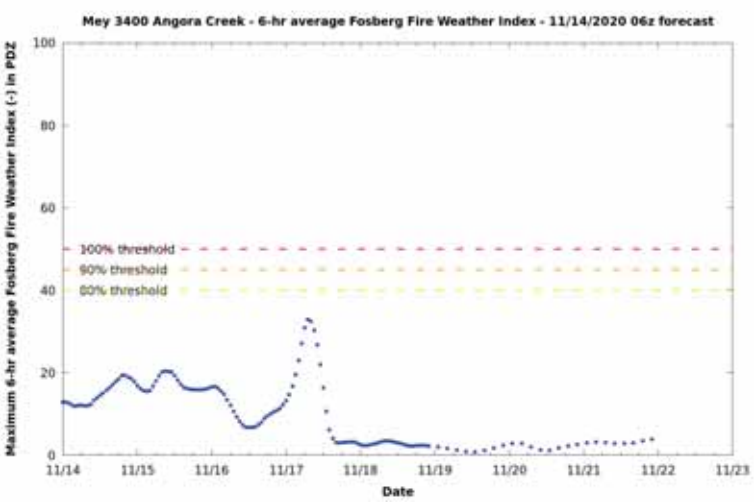


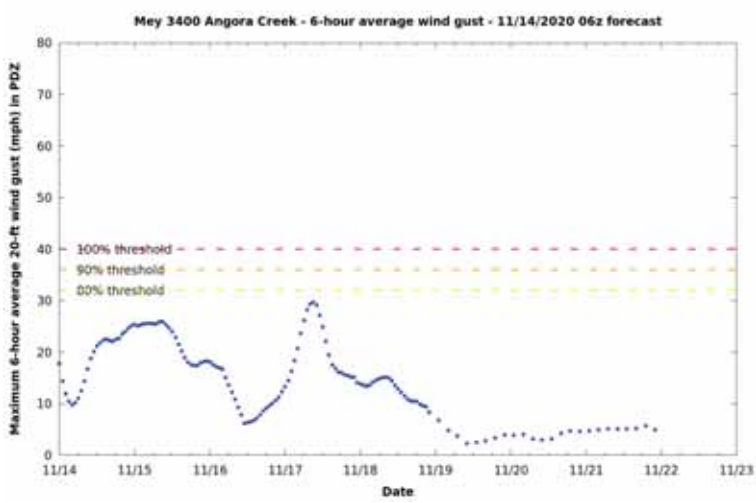
Cathedral Spring Creek Emerald Bay



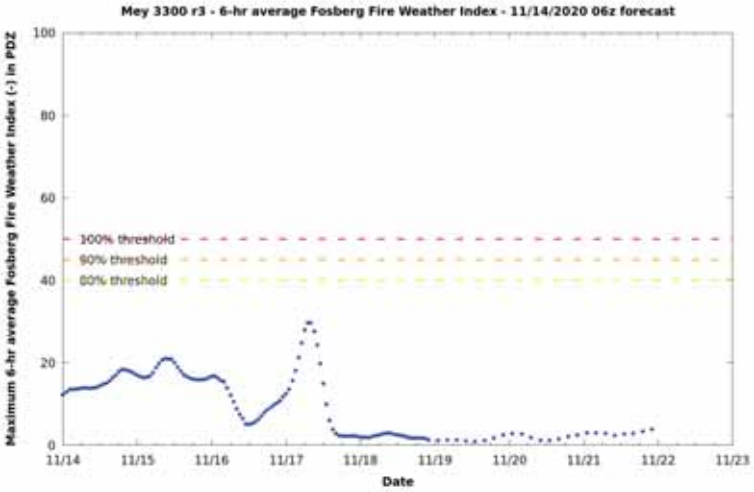


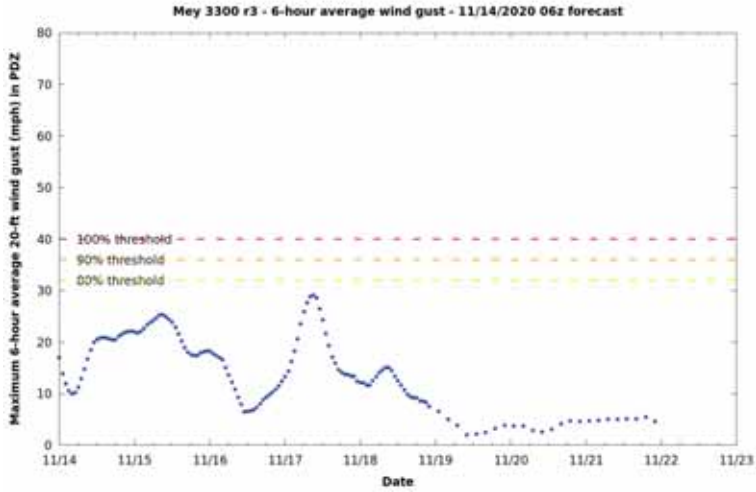
Mey 3400 Angora Creek



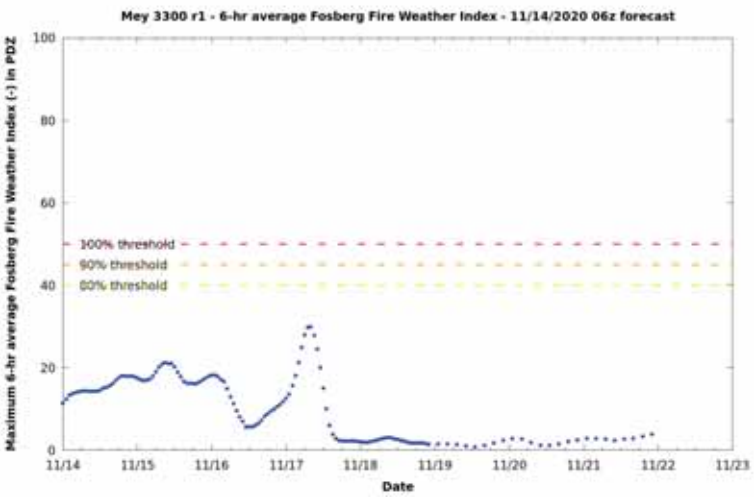


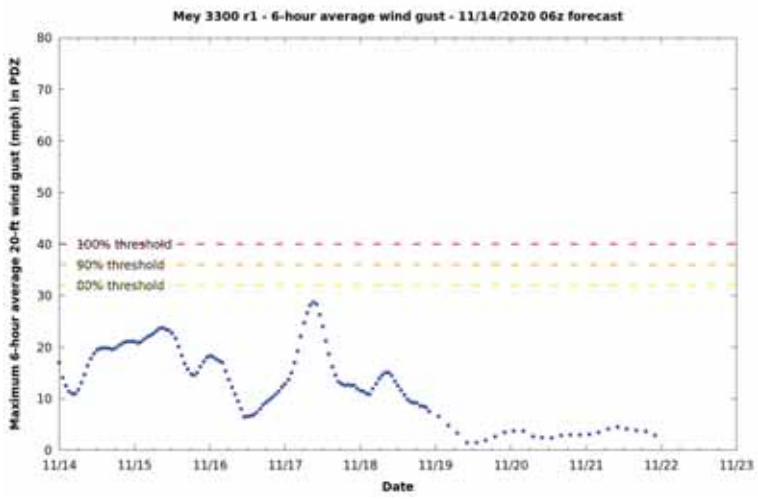
Mey 3300 r3



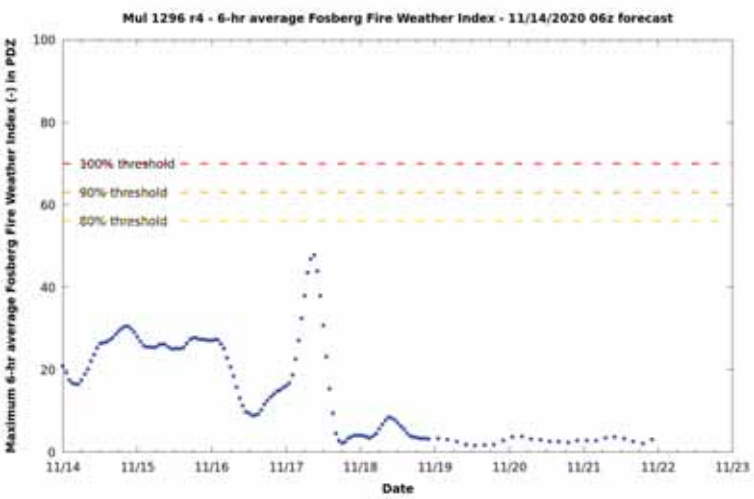


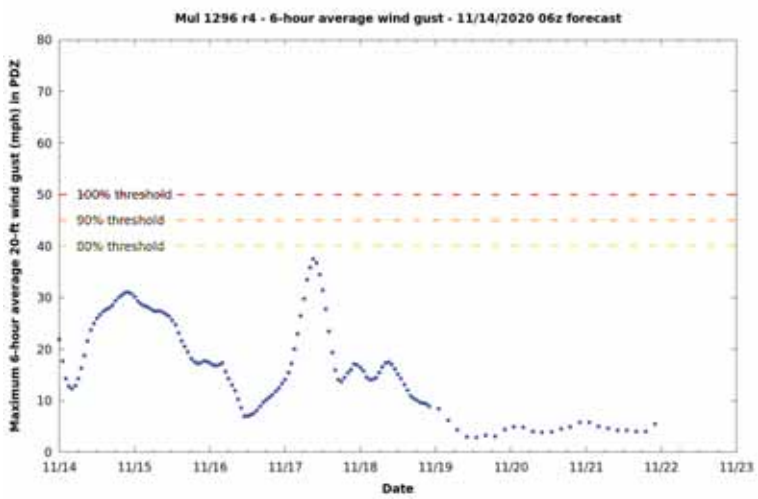
Mey 3300 r1



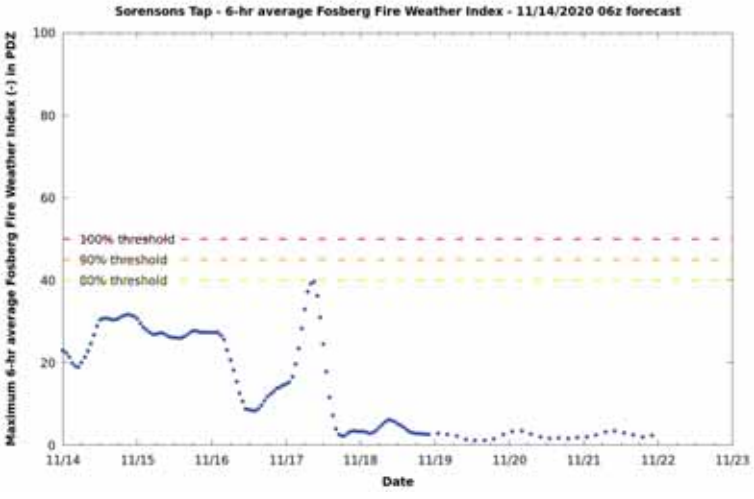


Mul 1296 r4



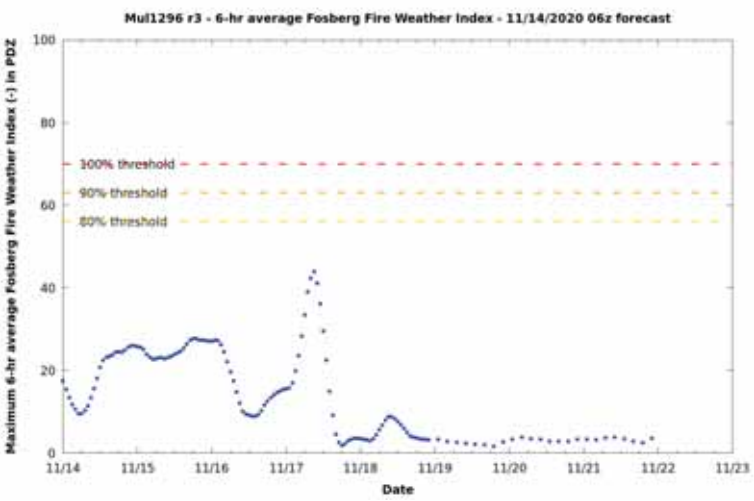


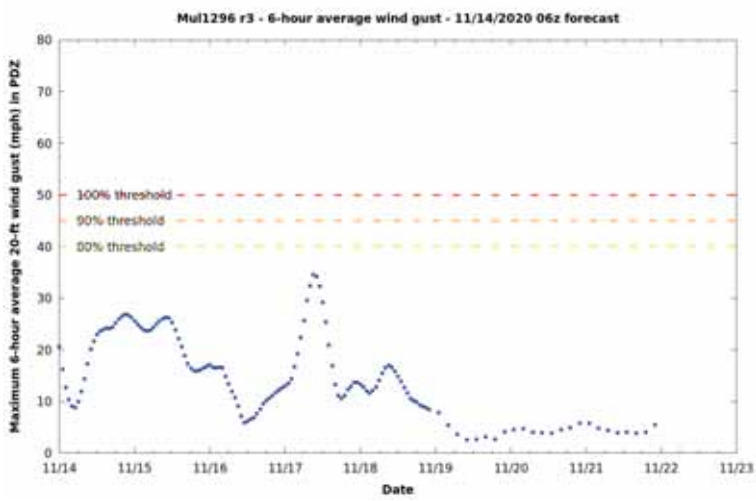
Sorensons Tap



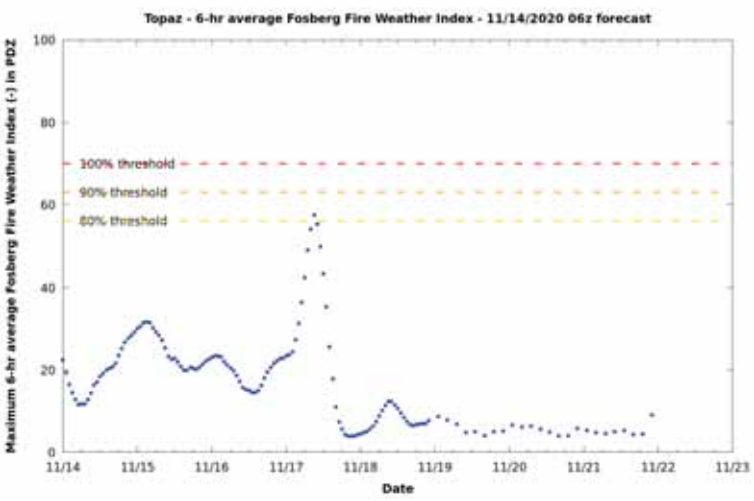


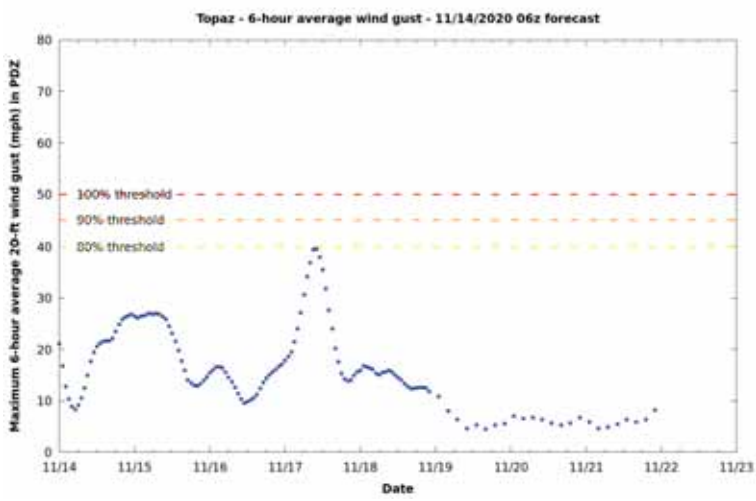
Mul 1296 r3



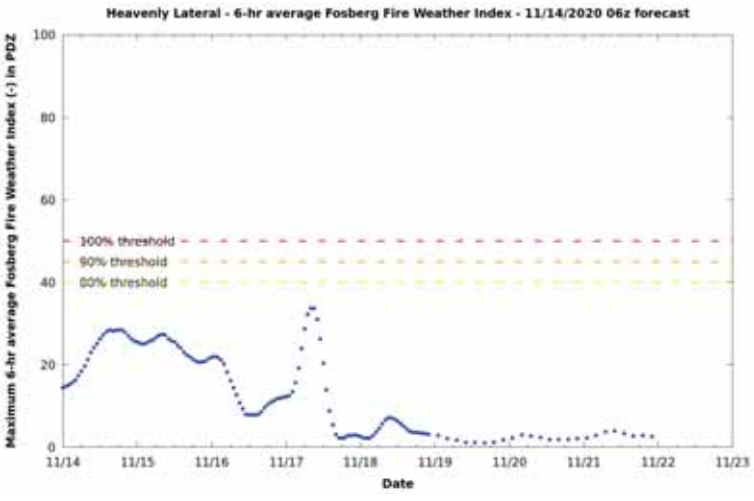


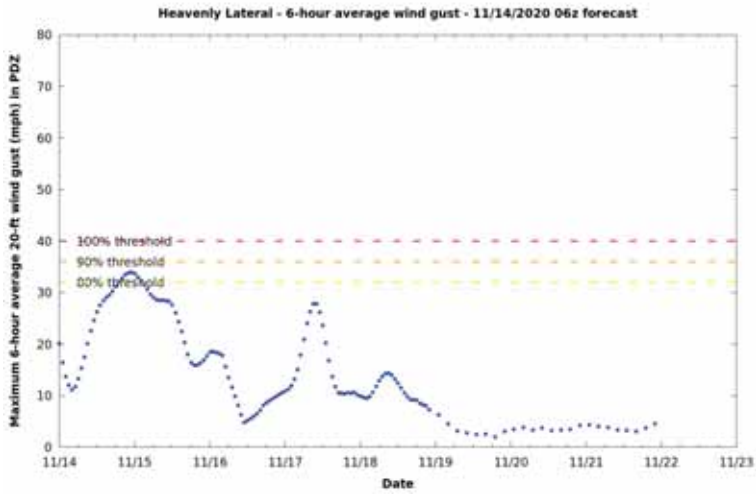
Topaz



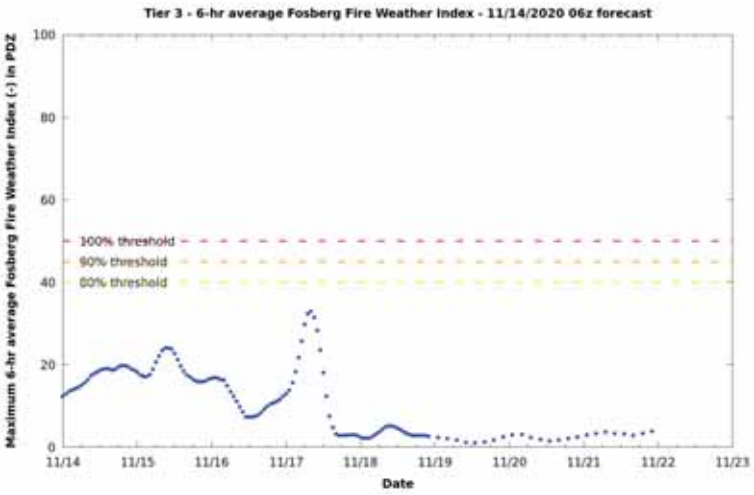


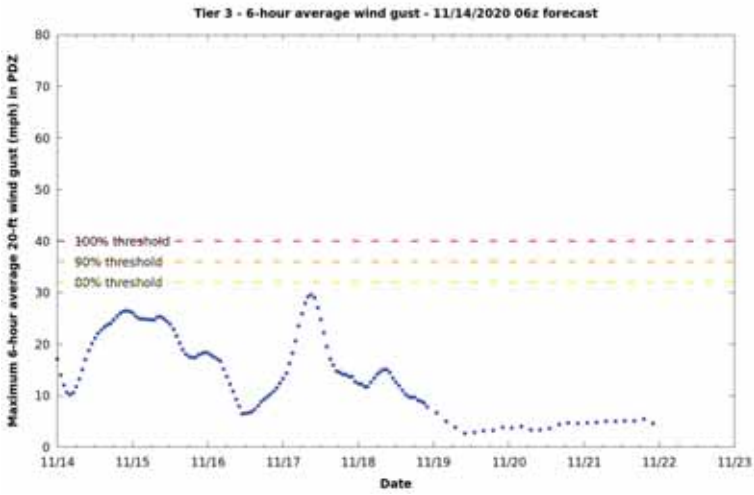
Heavenly Lateral



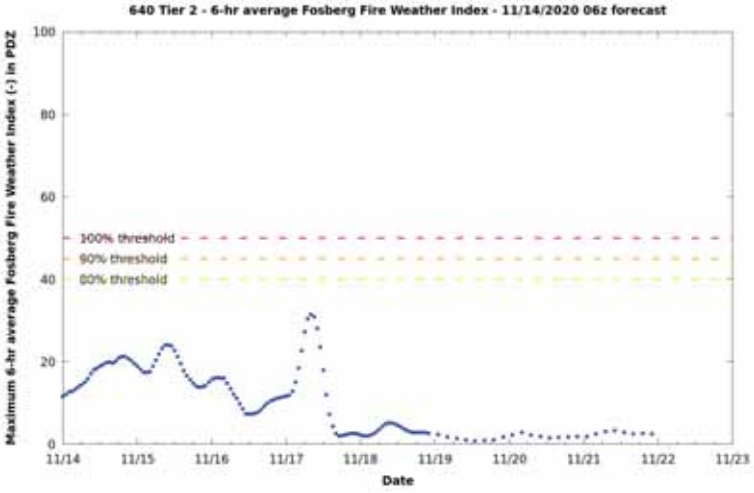


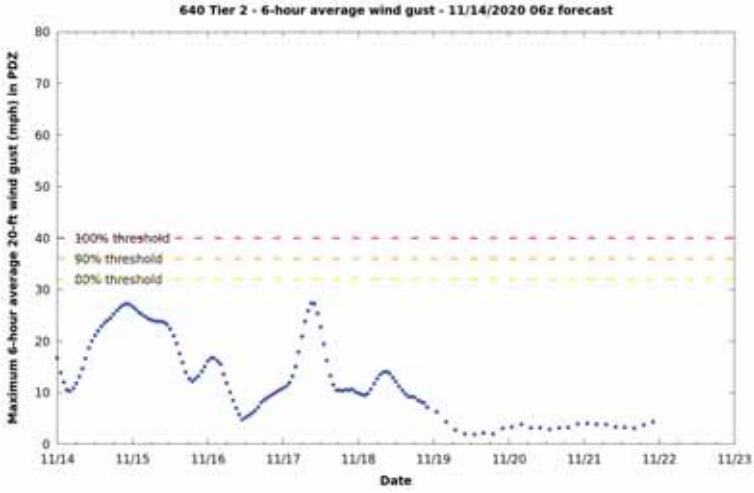
Tier 3



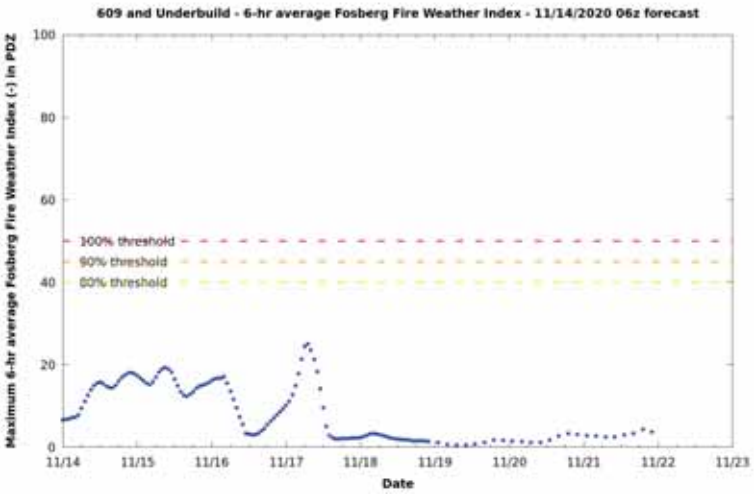


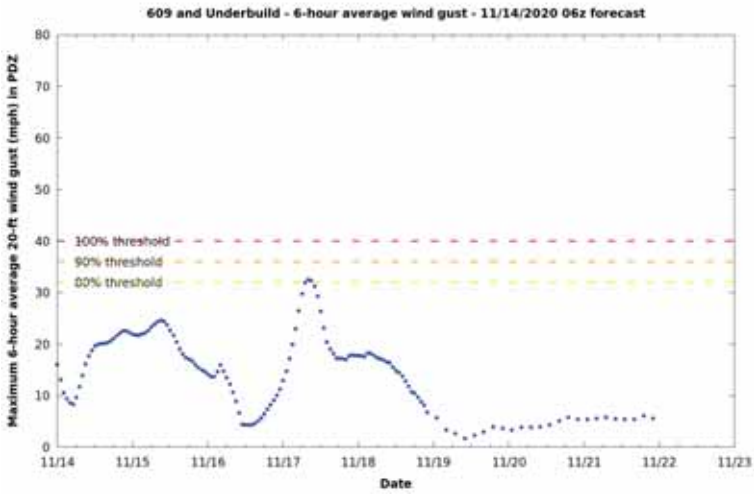
640 Tier 2



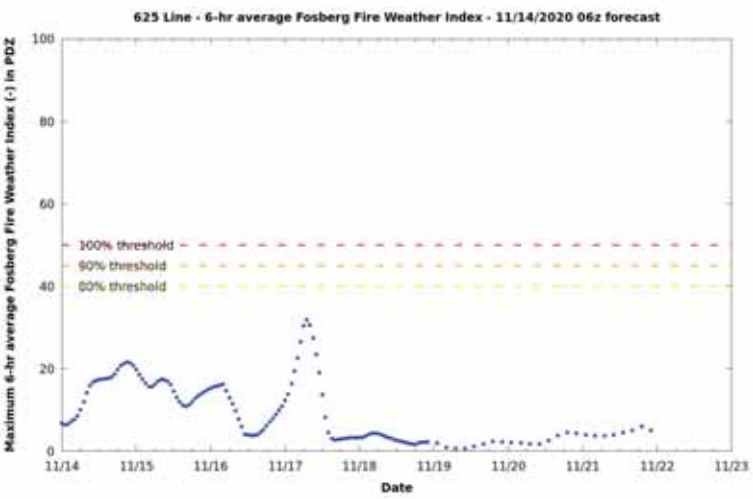


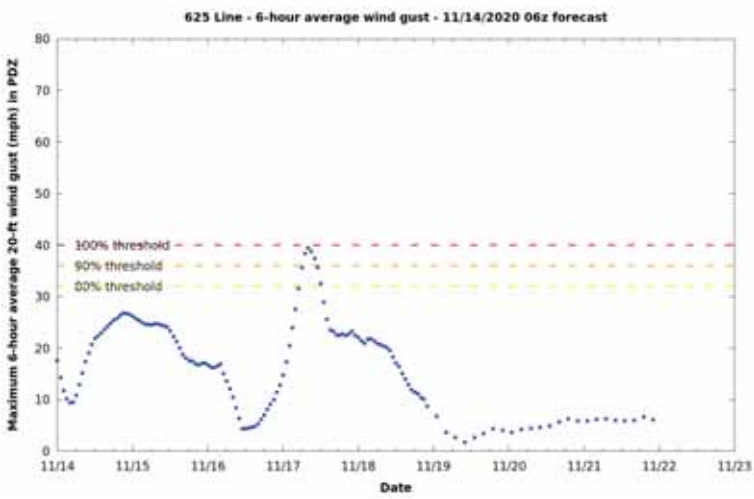
609 and Underbuild



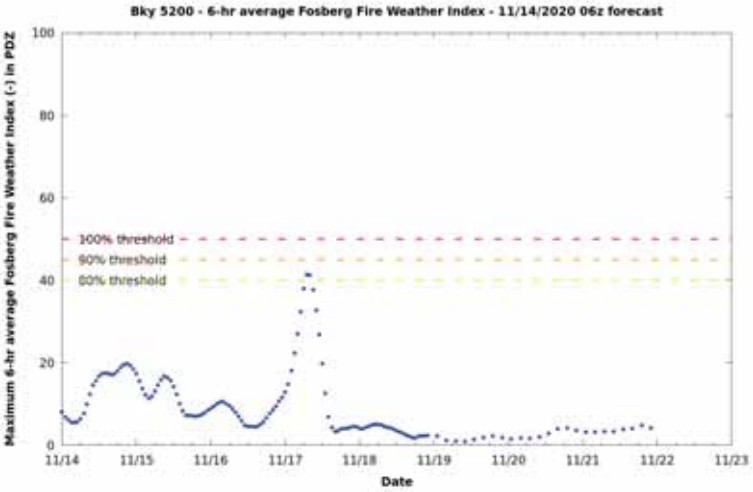


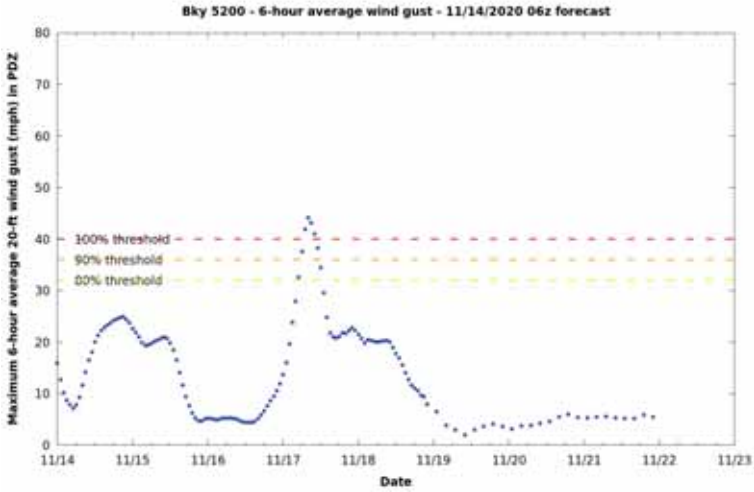
625 Line



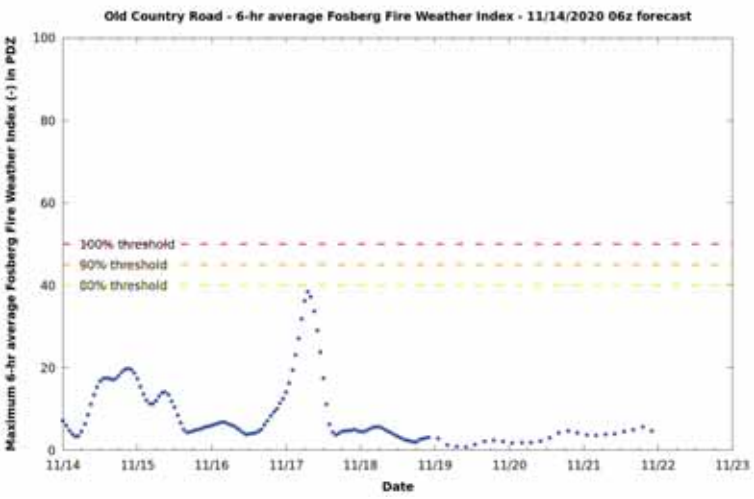


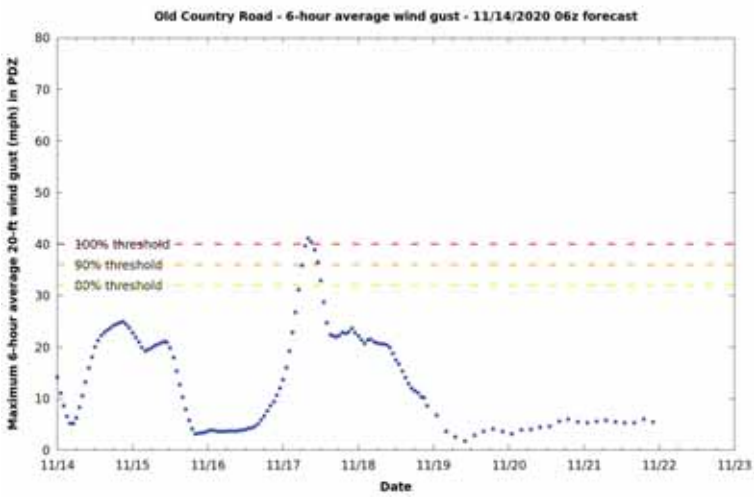
Bky 5200



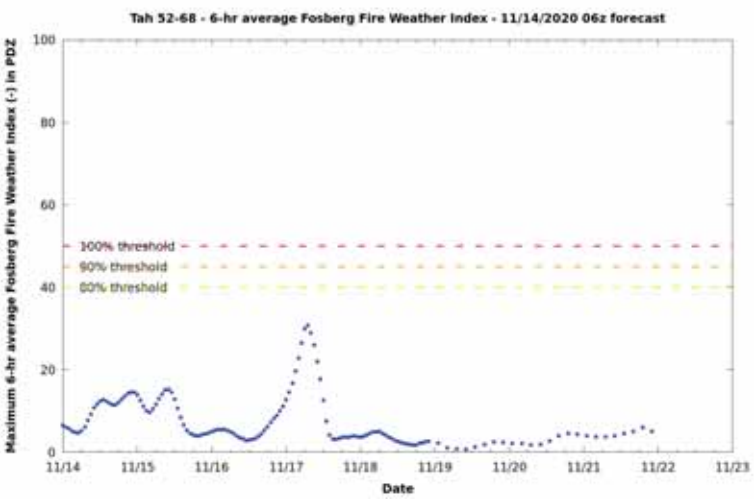


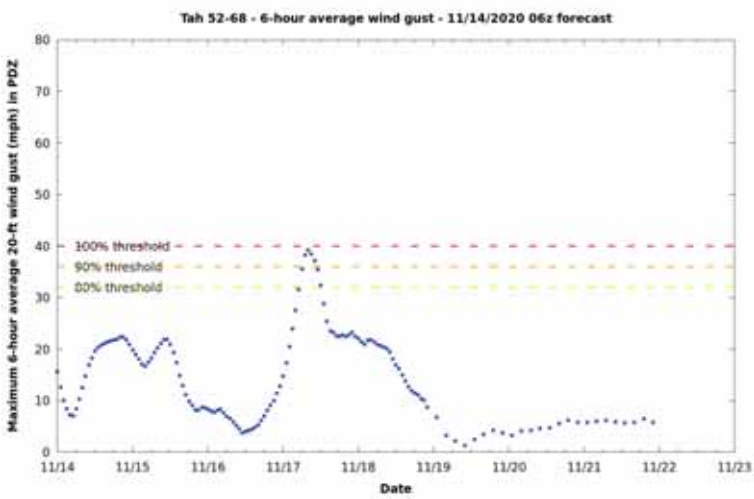
Old Country Road



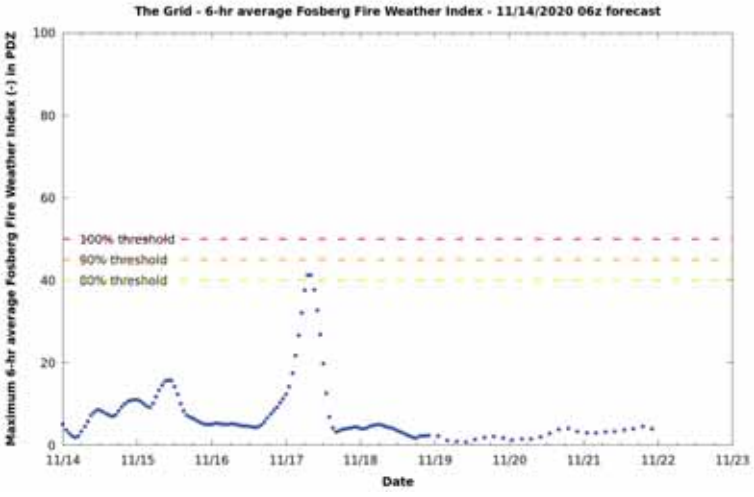


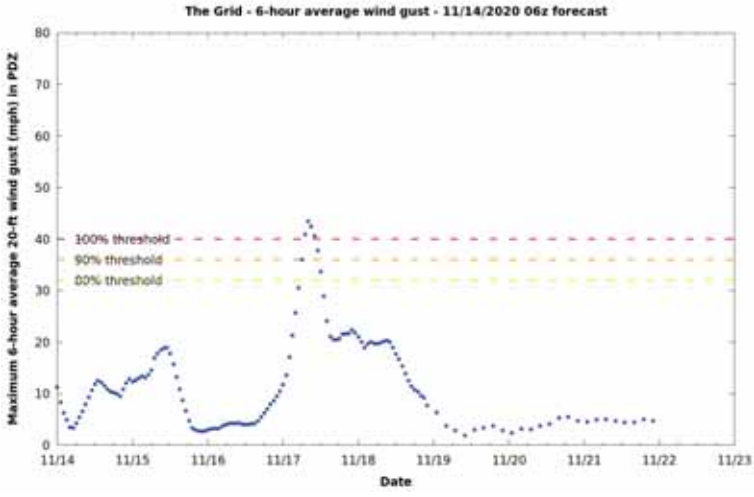
Tah 52-68



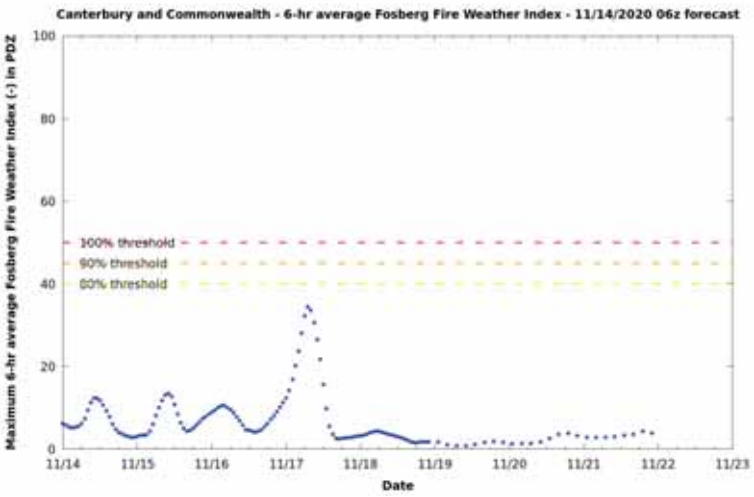


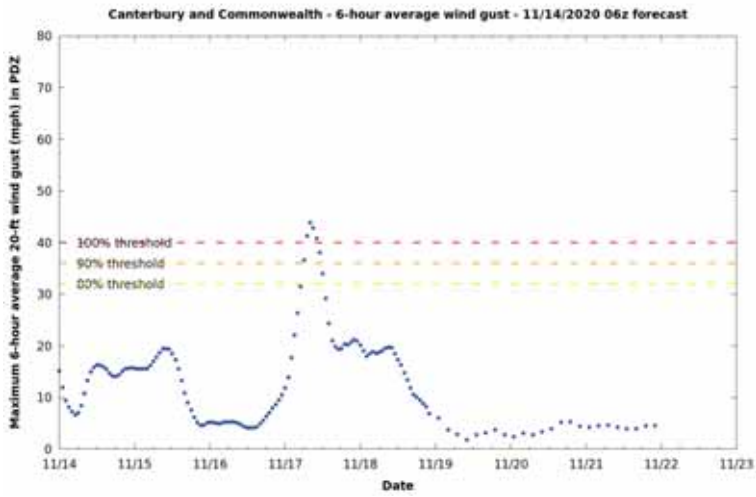
The Grid



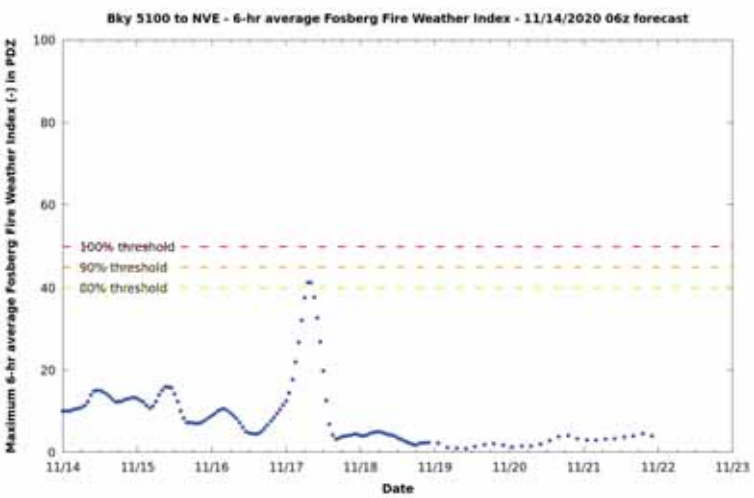


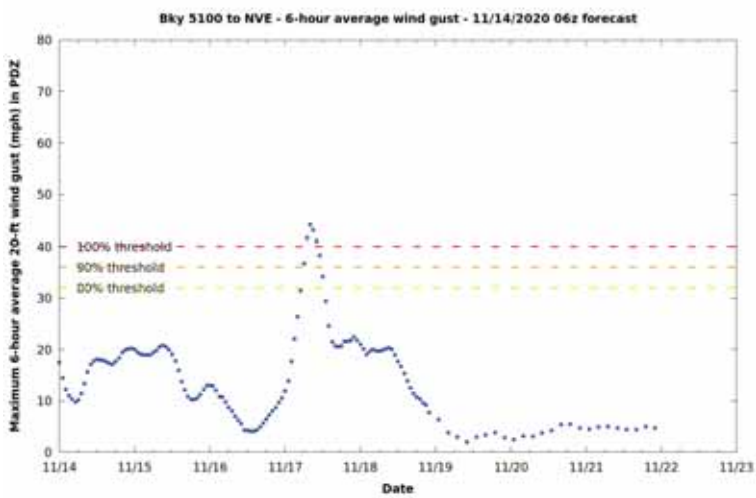
Canterbuy and Commonwealth



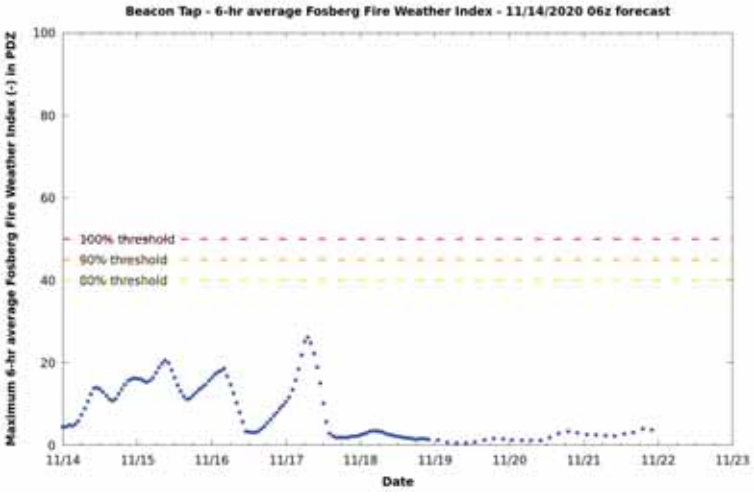


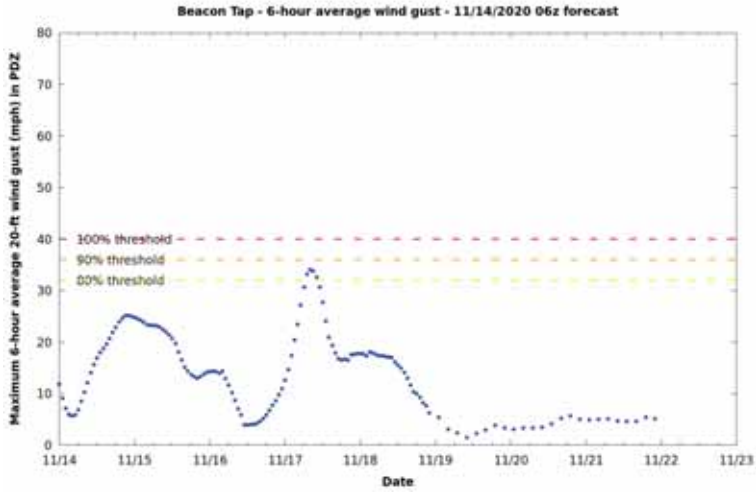
Bky 5100 to NVE



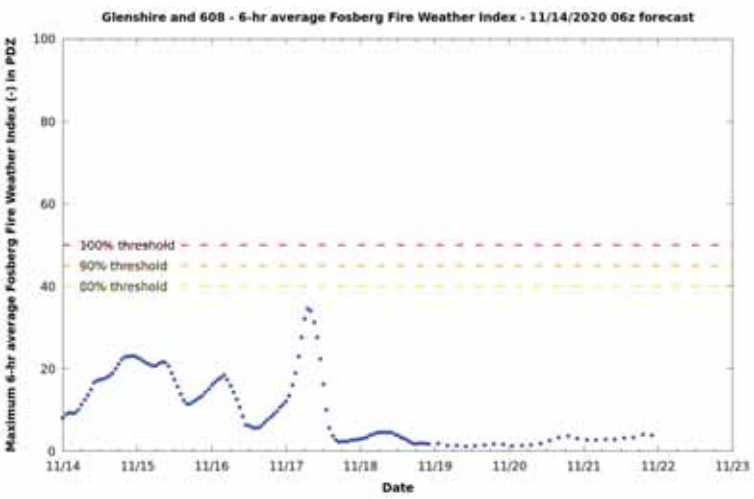


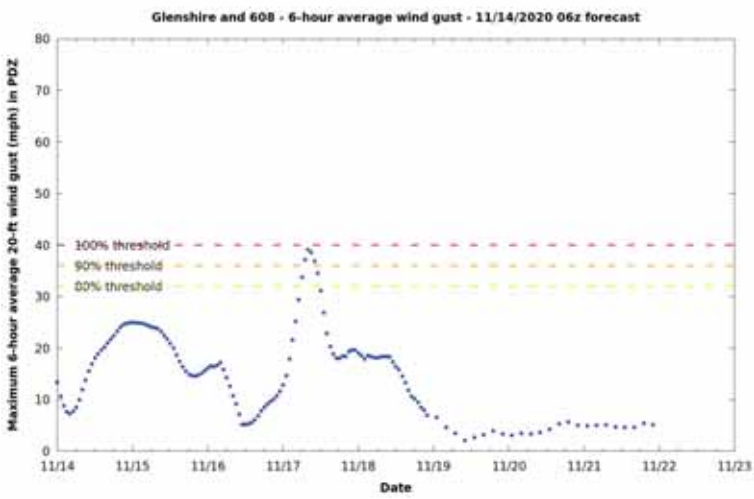
Beacon Tap



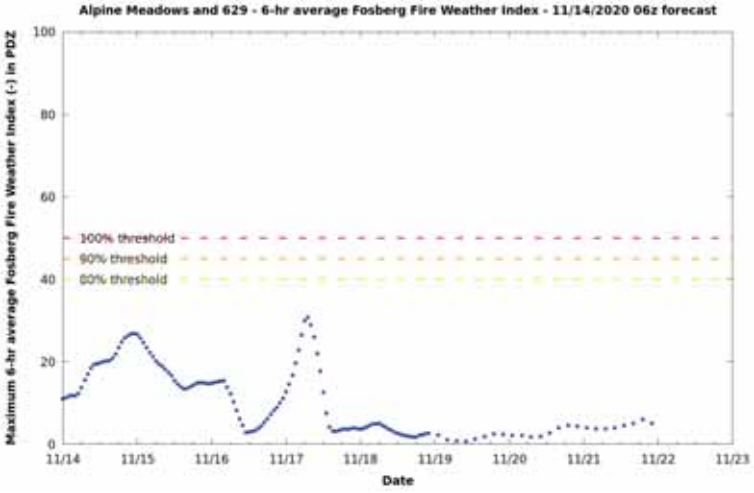


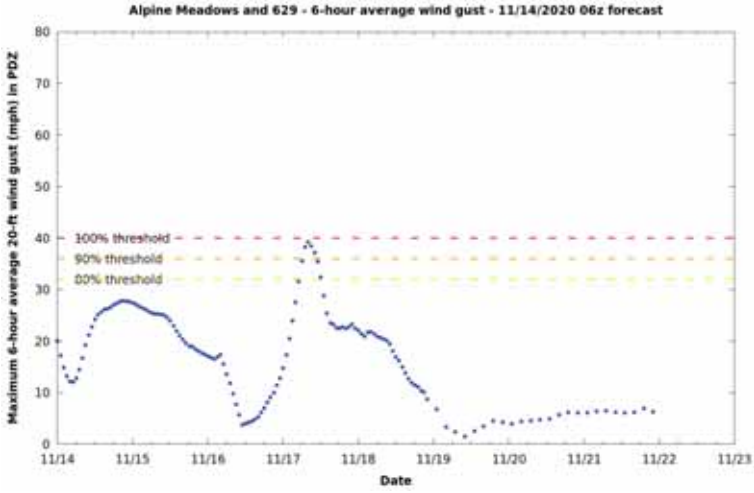
Glenshire and 608



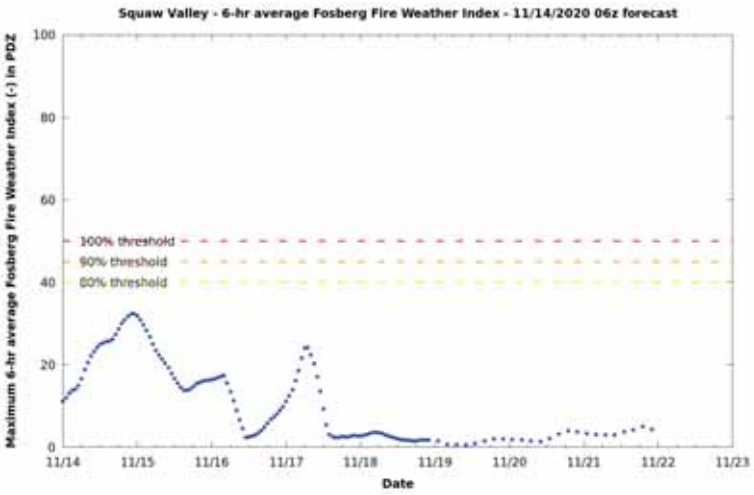


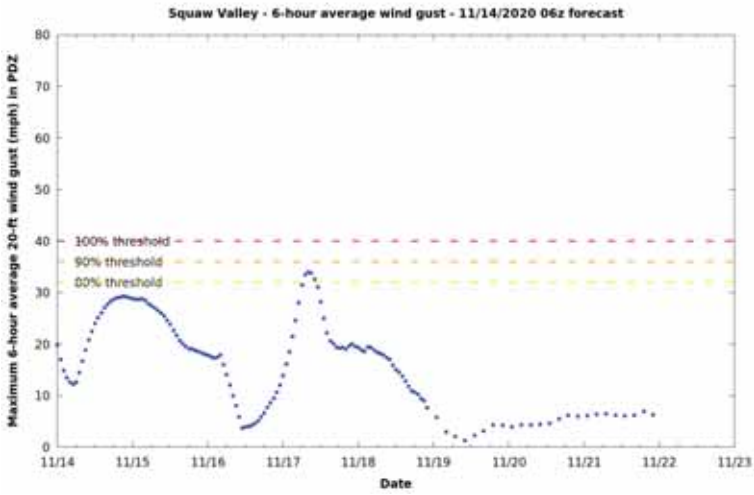
Alpine Meadows and 629



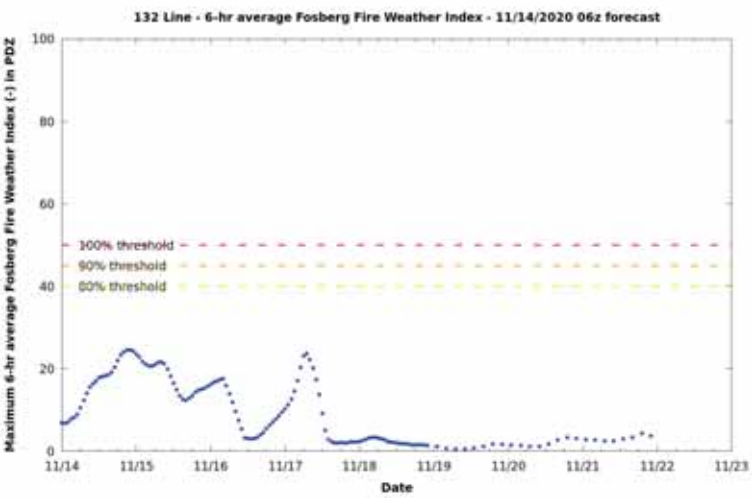


Squaw Valley



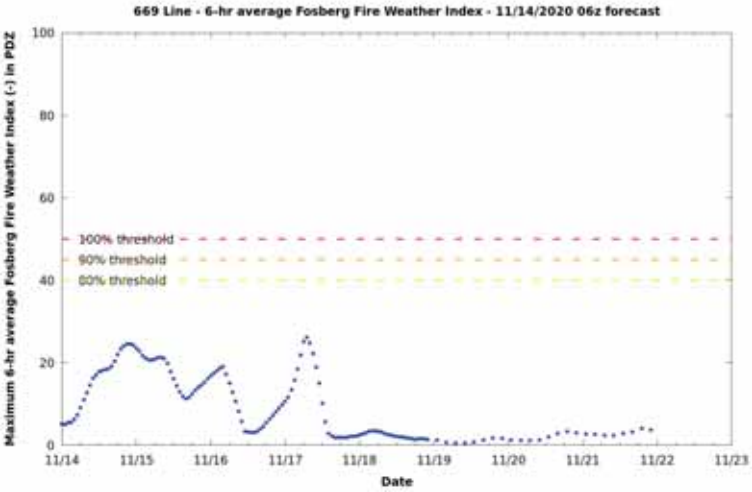


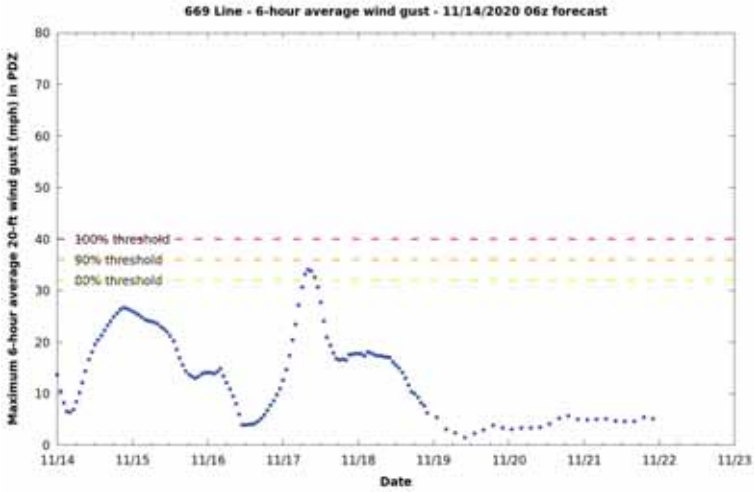
132 Line



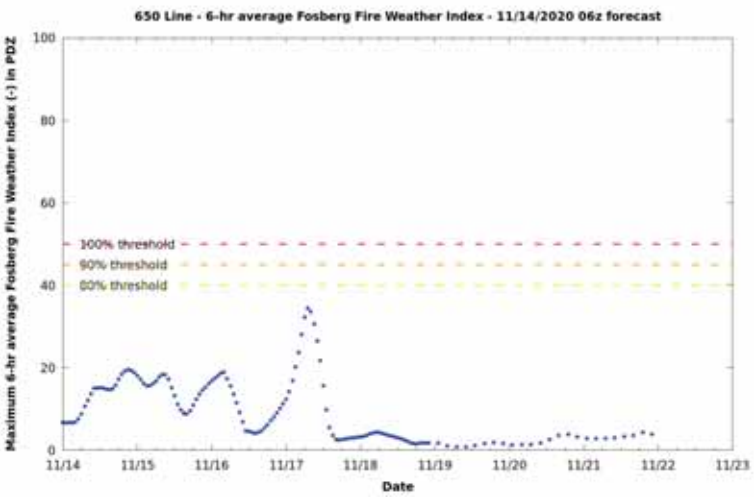


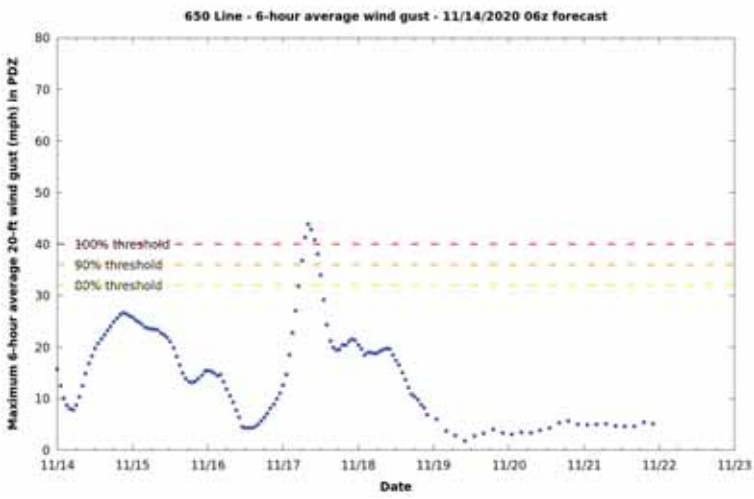
669 Line



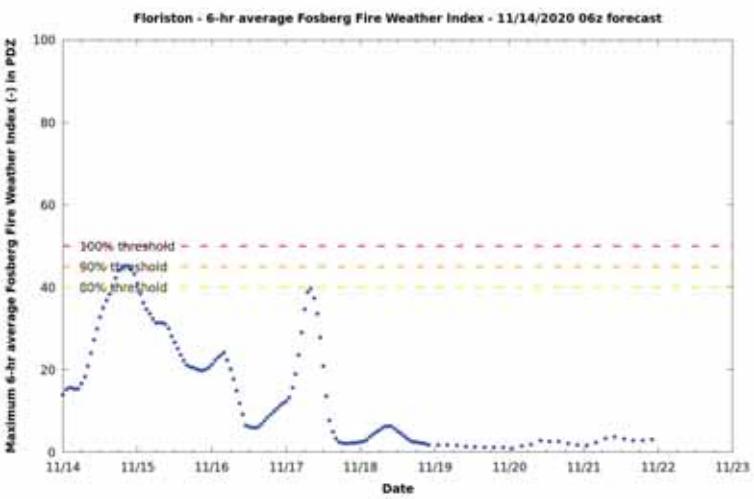


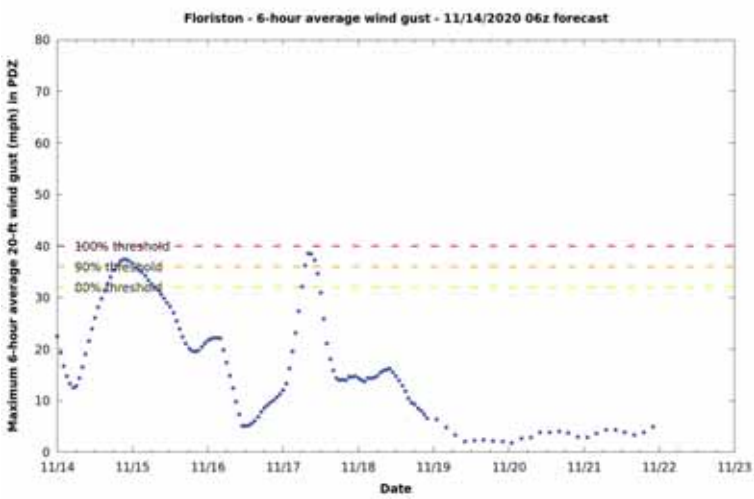
650 Line



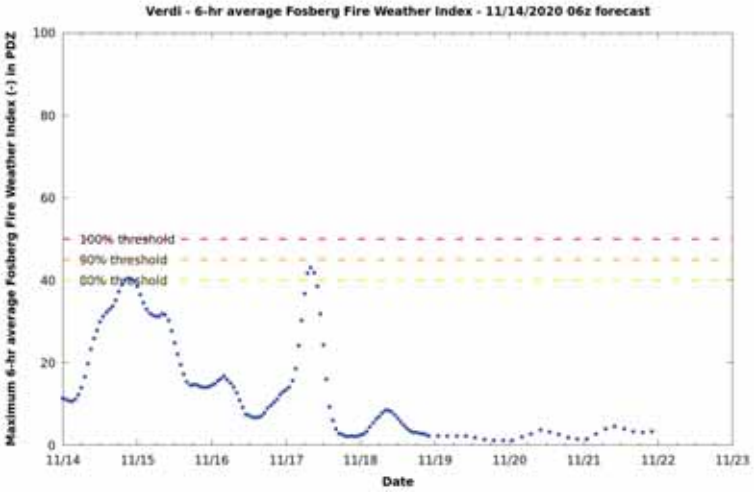


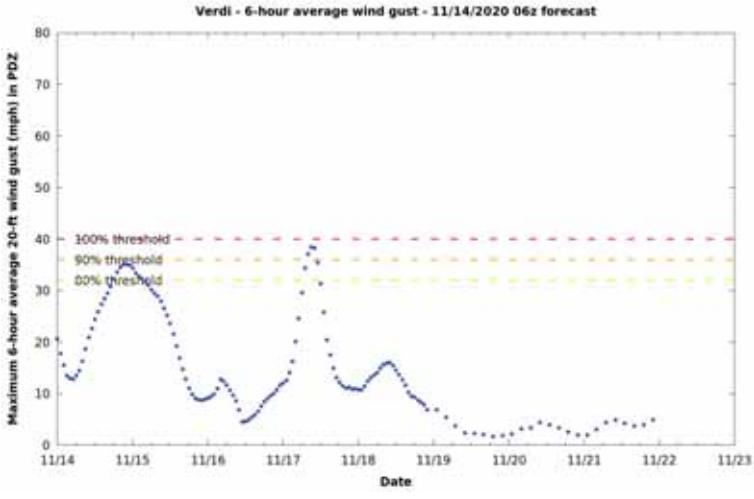
Floriston



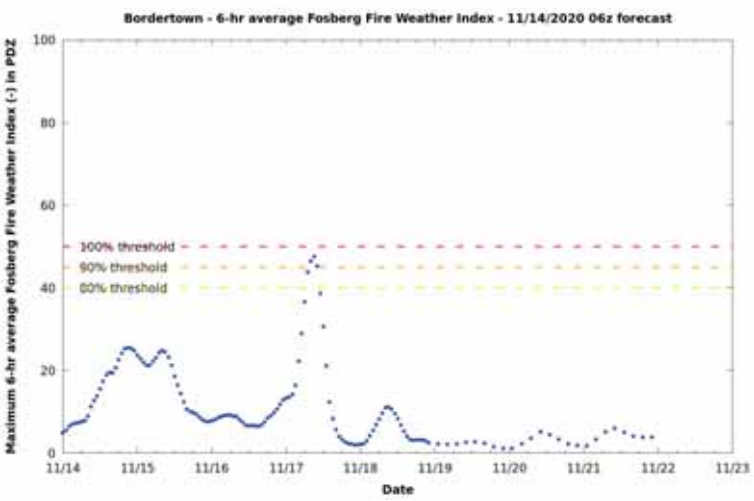


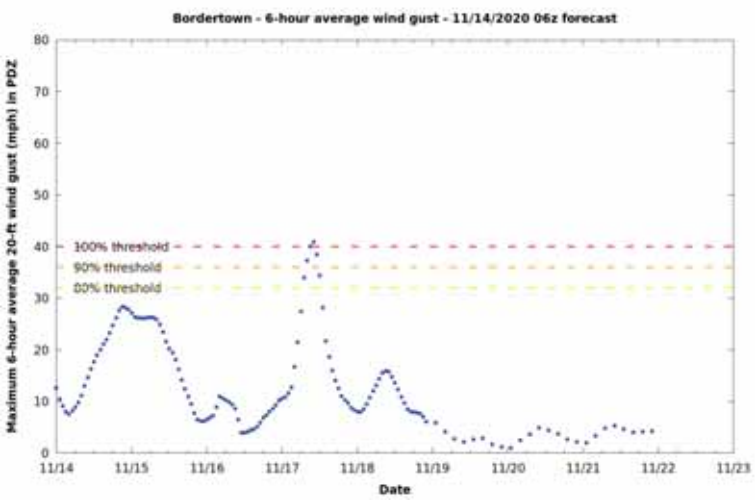
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/14/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23


Bordertown - 6-hour average wind gust - 11/14/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/14
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23

Liberty Utilities Fire Potential Index Forecast for 11/14/20 - 11/20/20

Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

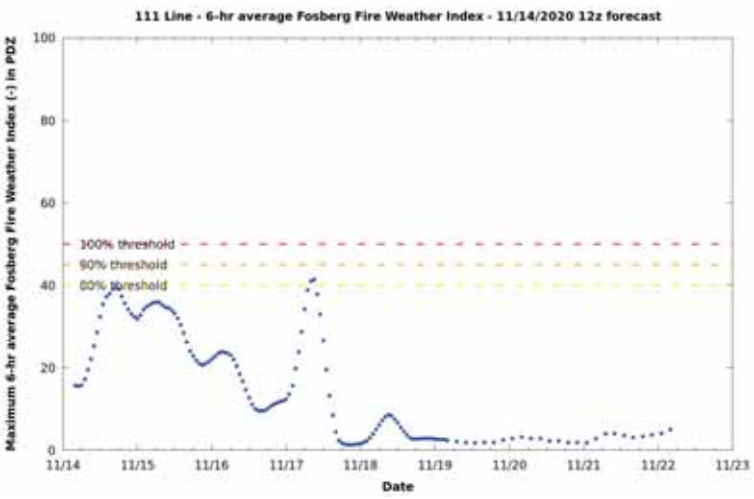
Liberty Utilities Energy Release Component Forecast for 11/14/20 - 11/20/20

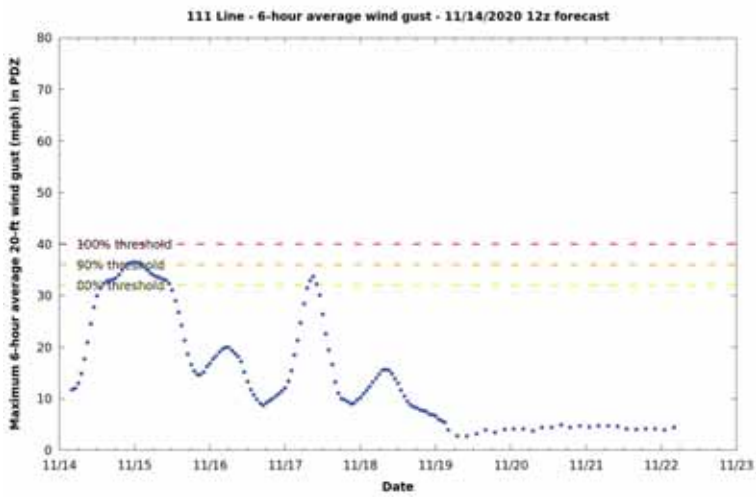
Zone	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	56.0	56.0	49.0	40.0	38.0	40.0
Sierra Brooks	61.0	61.0	63.0	58.0	48.0	48.0	49.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	61.0	57.0	59.0	51.0	39.0	35.0	37.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	53.0	53.0	57.0	53.0	42.0	43.0	45.0

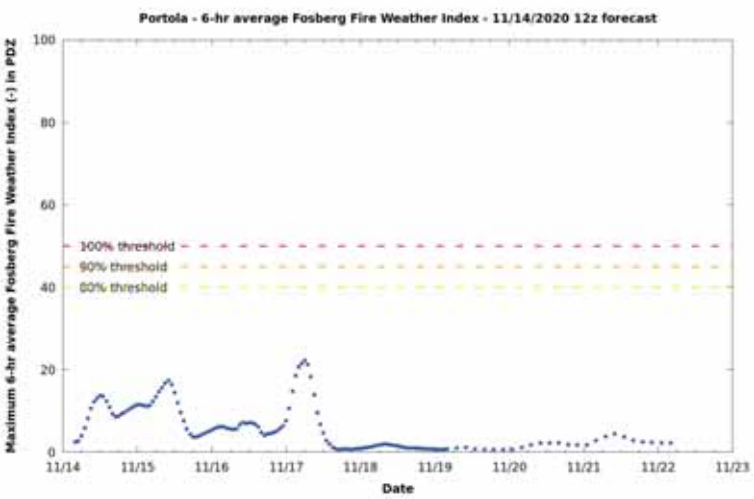
Liberty Utilities Fire Weather Summary Plots - 11/14/2020 12z forecast

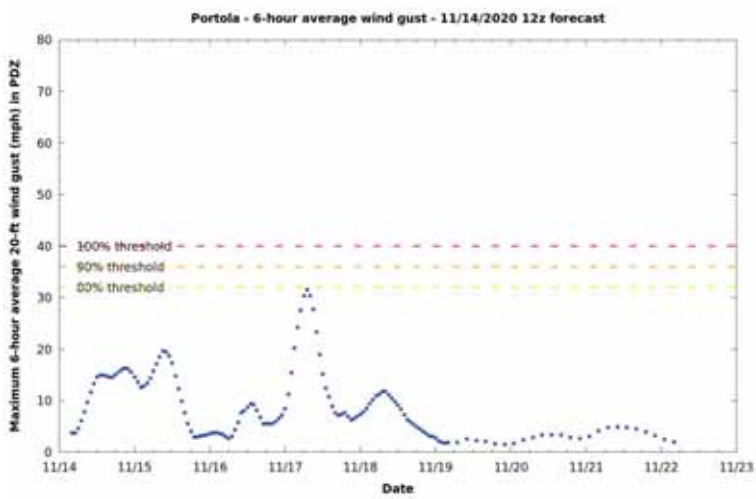
111 Line



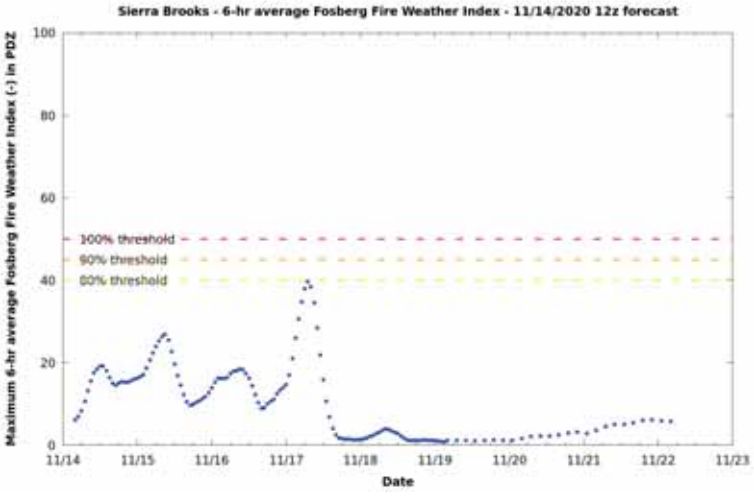


Portola



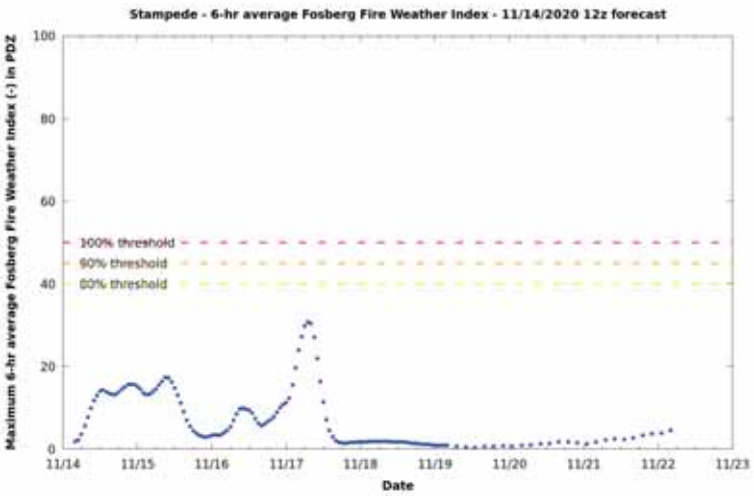


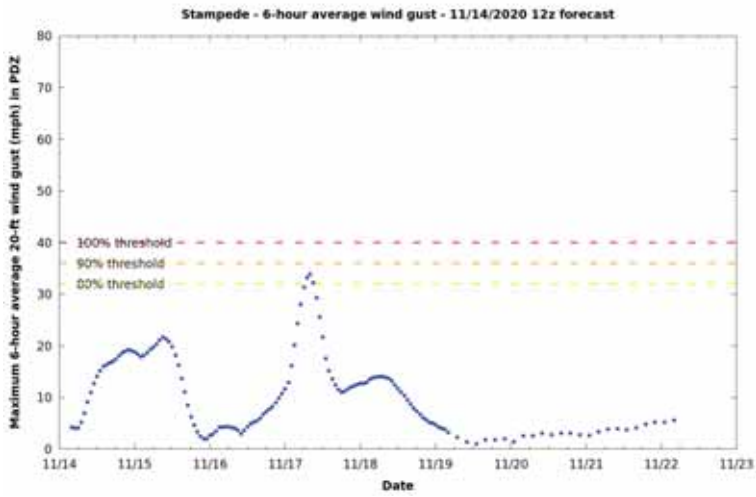
Sierra Brooks



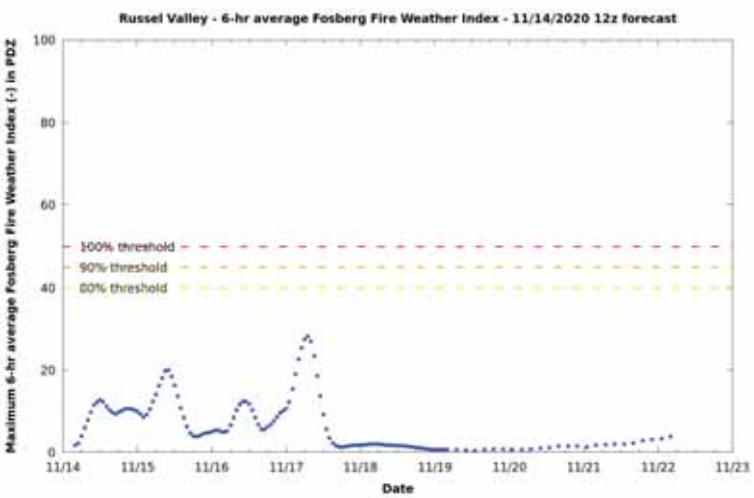


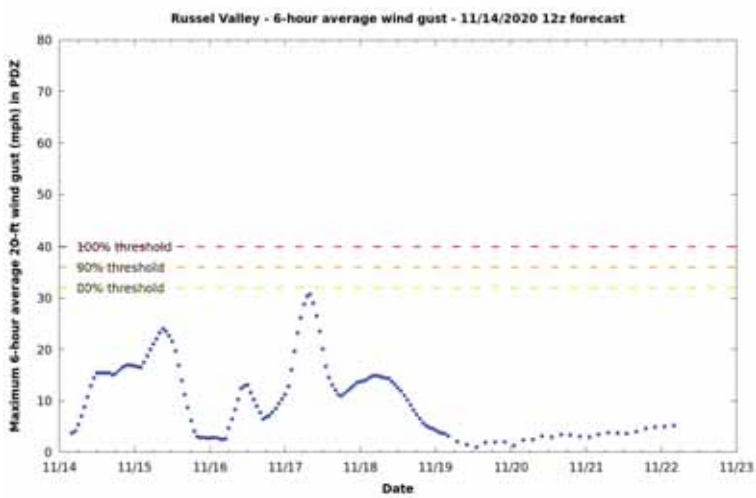
Stampede



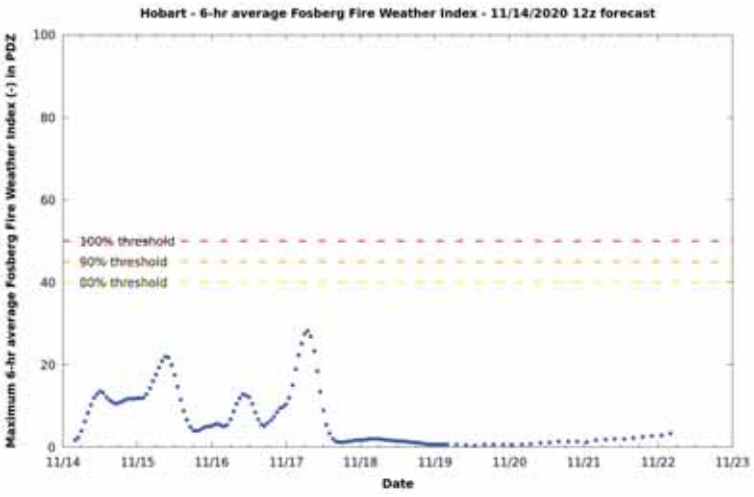


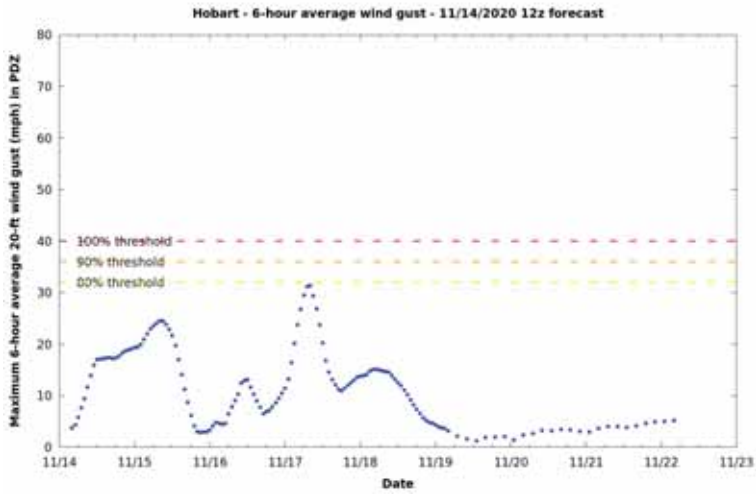
Russell Valley



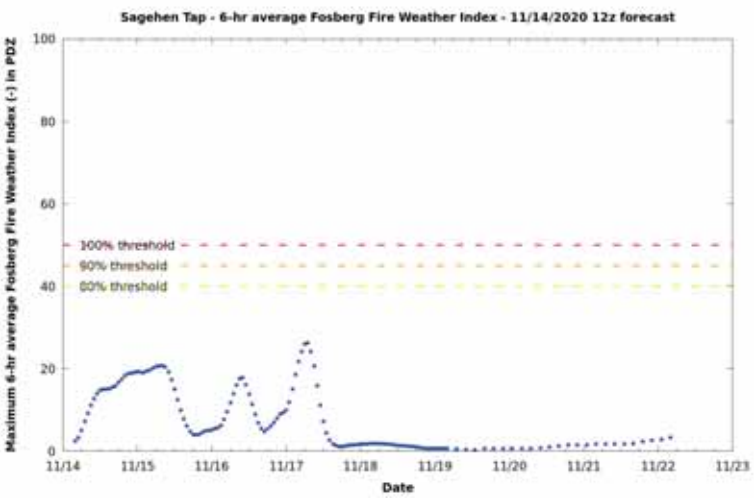


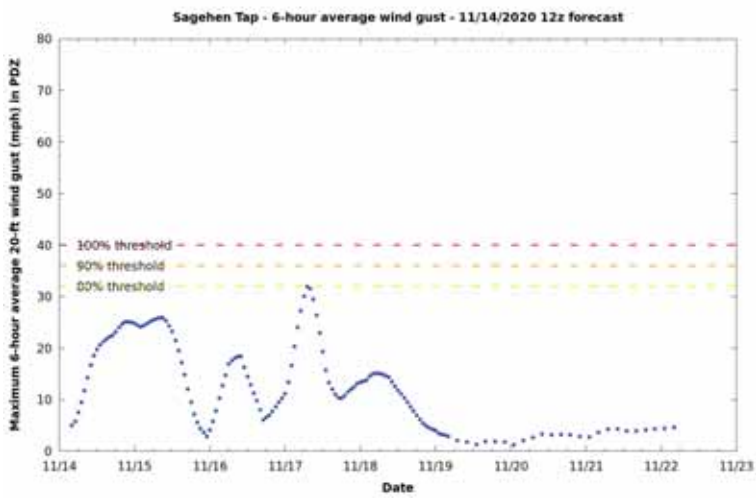
Hobart



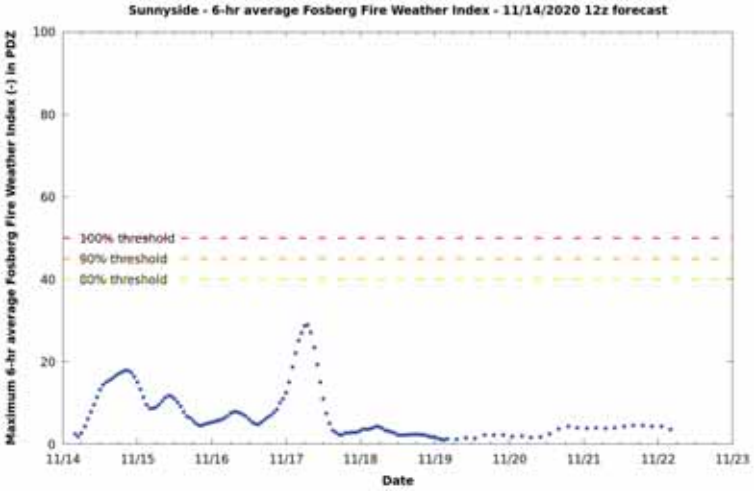


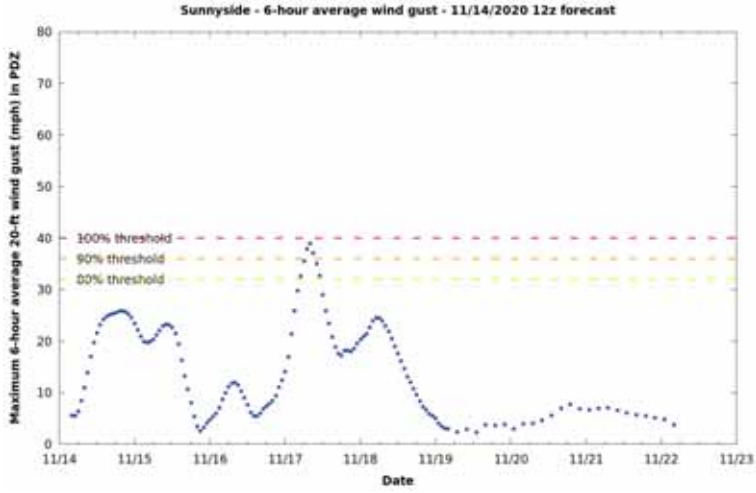
Sagehen tap



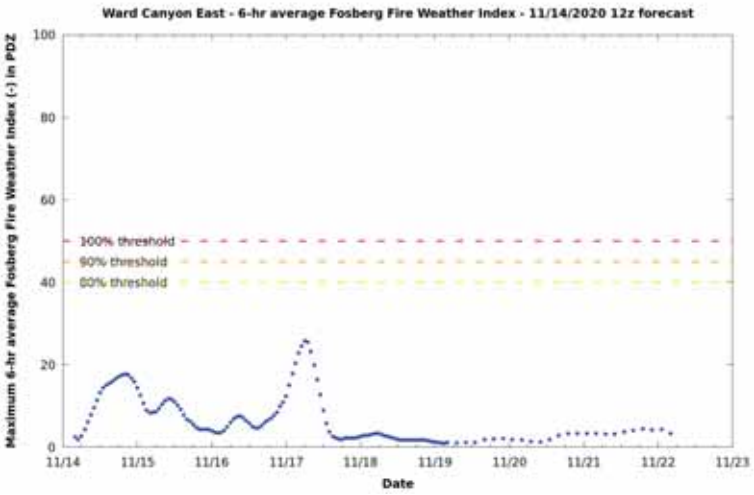


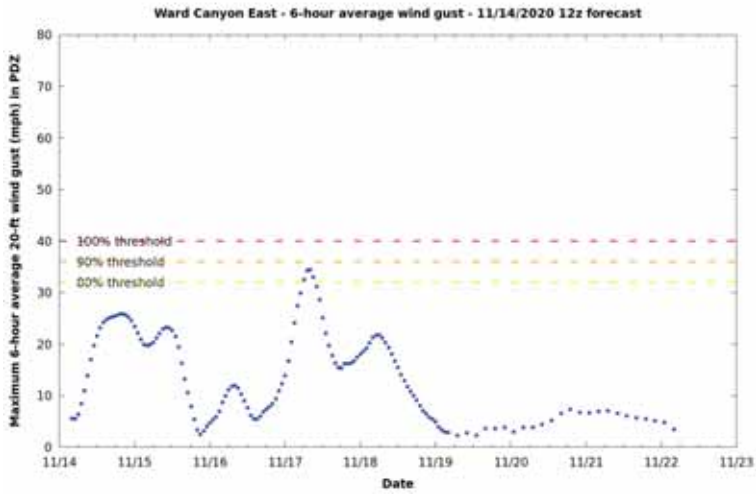
Sunnyside



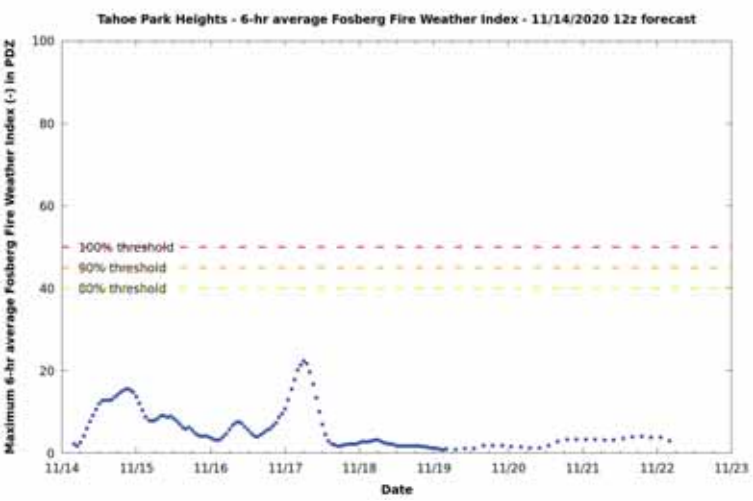


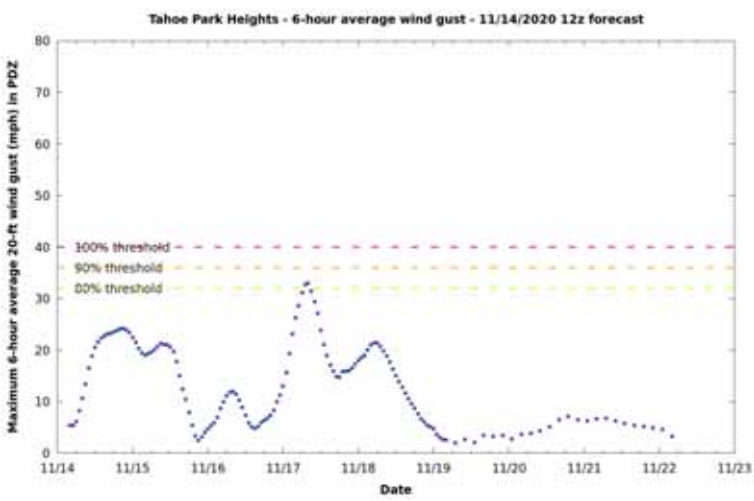
Ward Canyon East



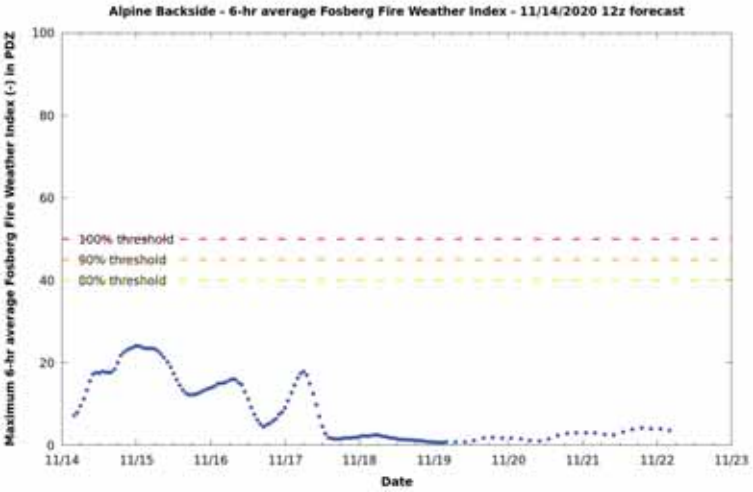


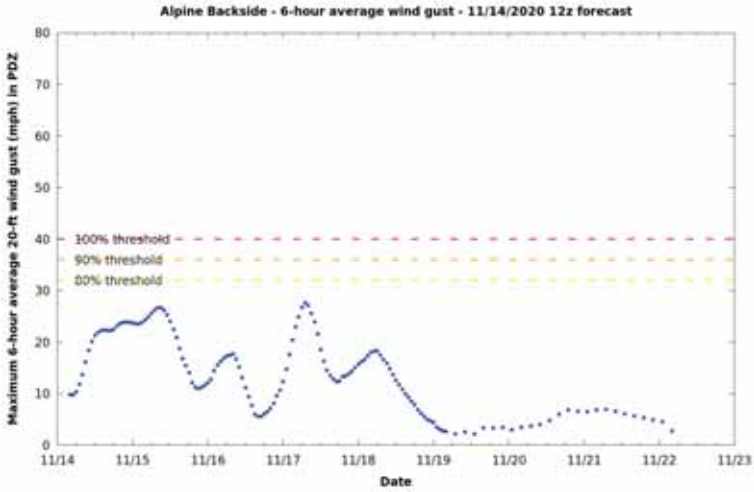
Tahoe Park Heights



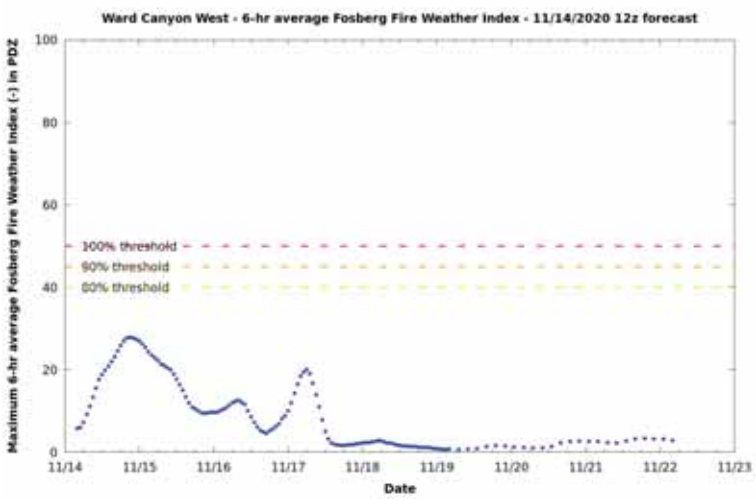


Alpine Backside



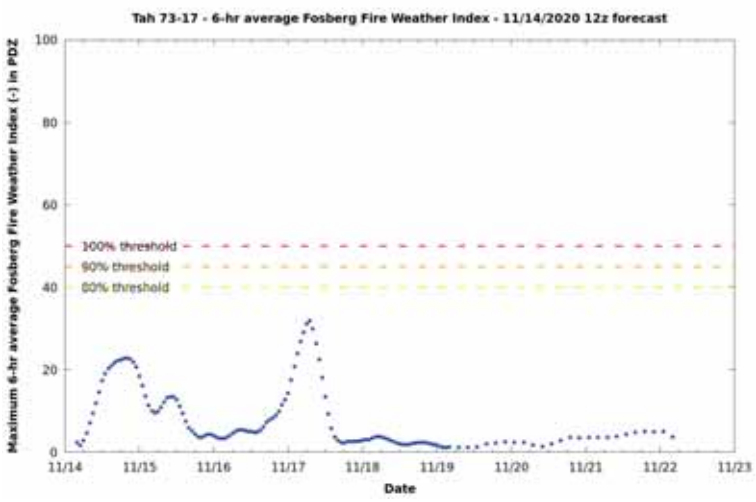


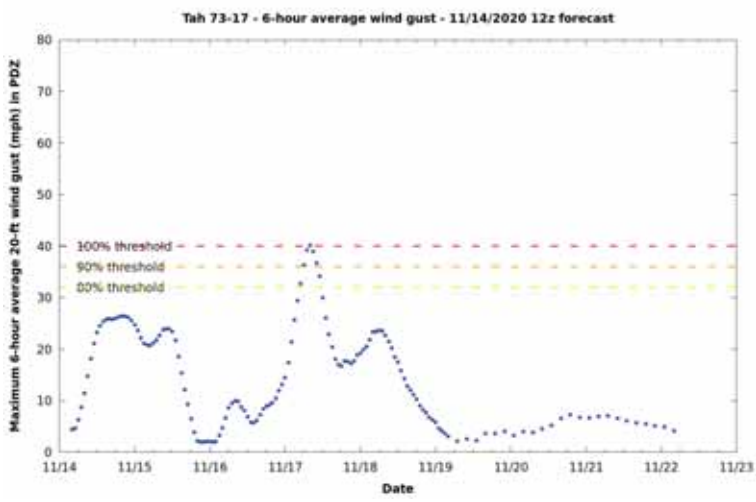
Ward Canyon West



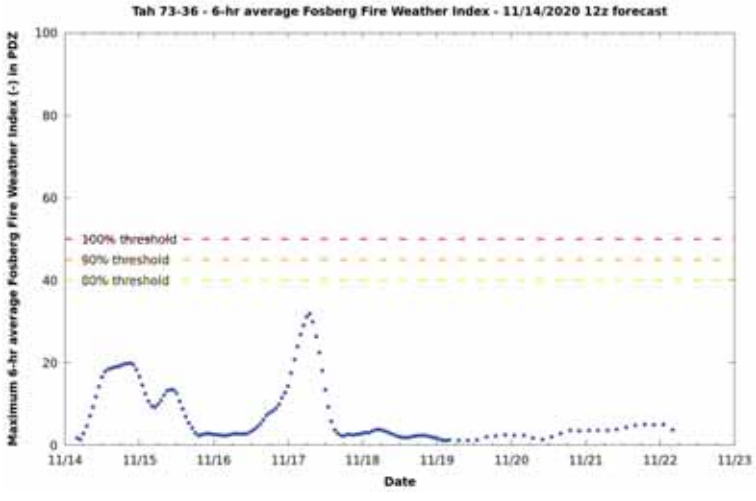


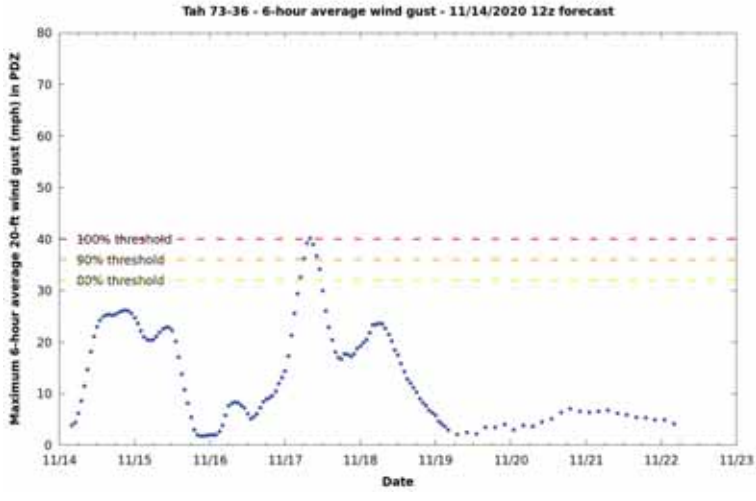
Tah 73-17



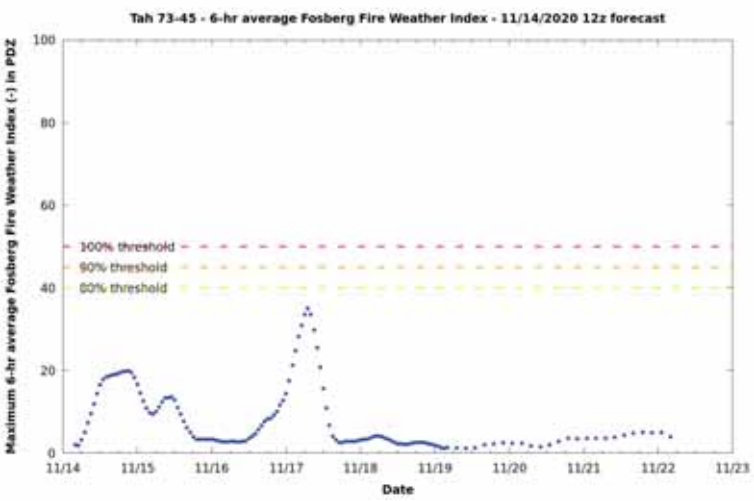


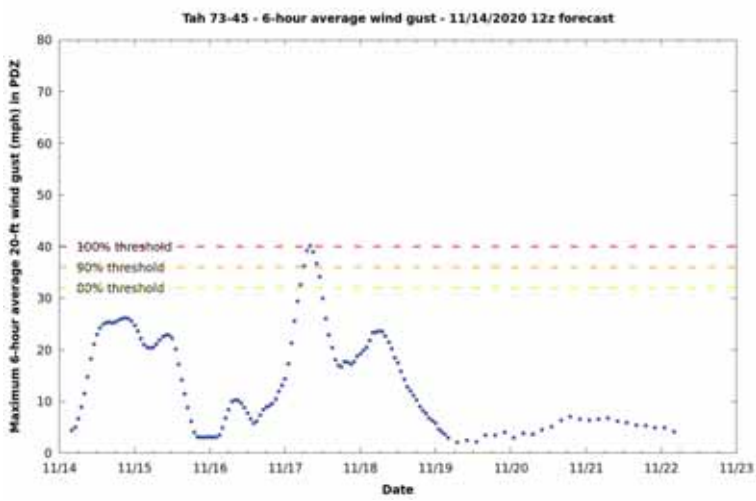
Tah 73-36



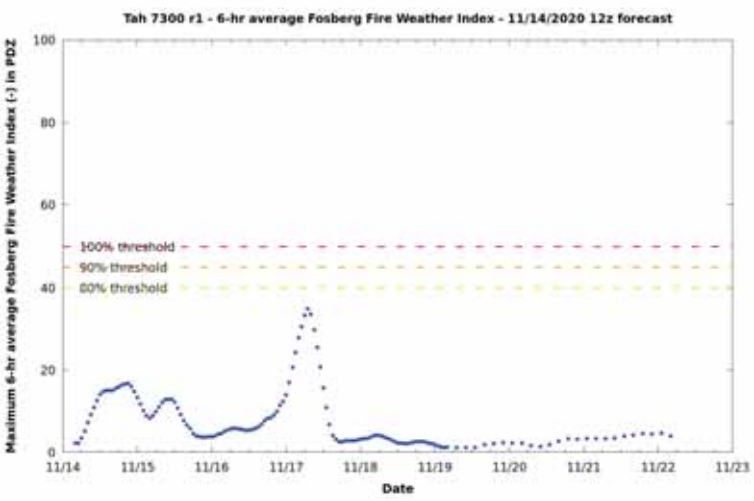


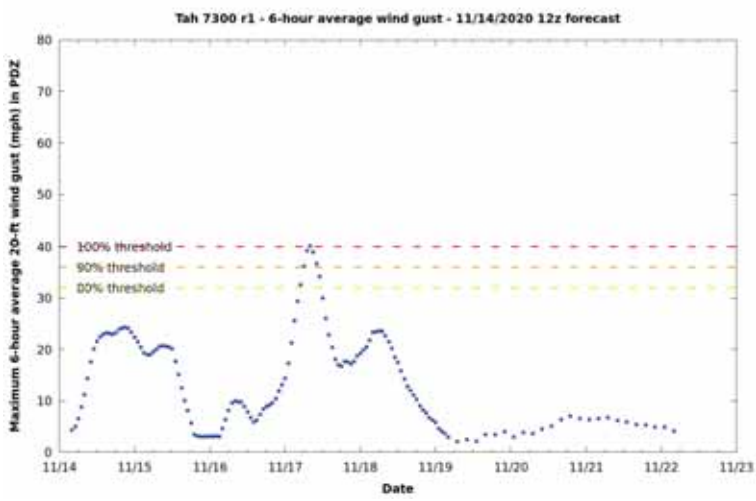
Tah 73-45



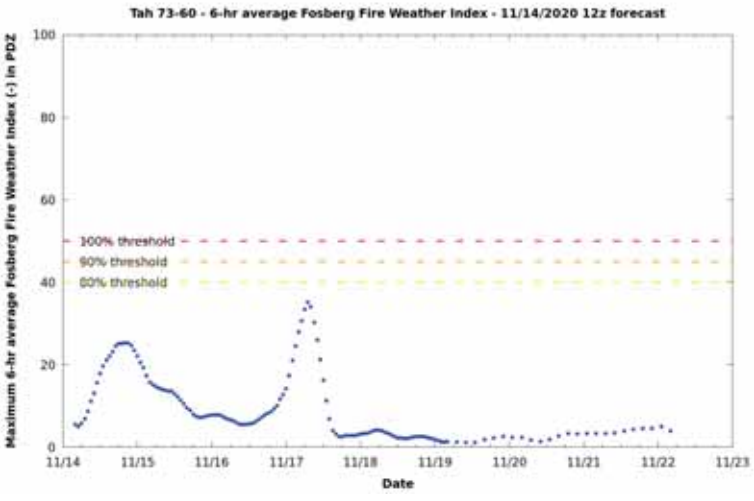


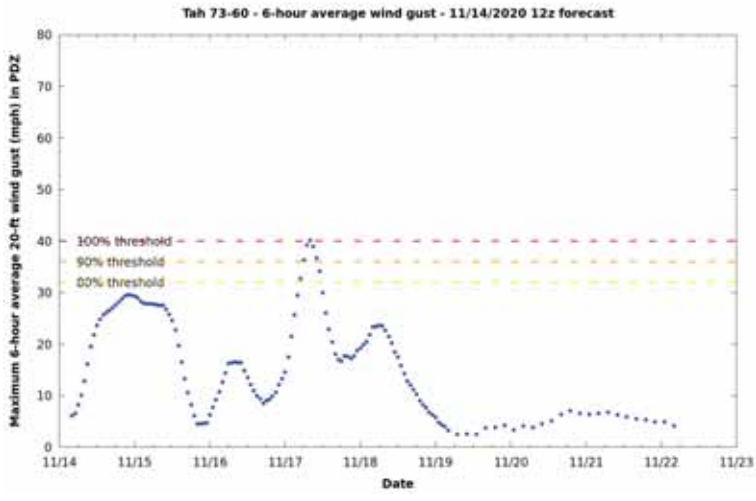
Tah 7300 r1



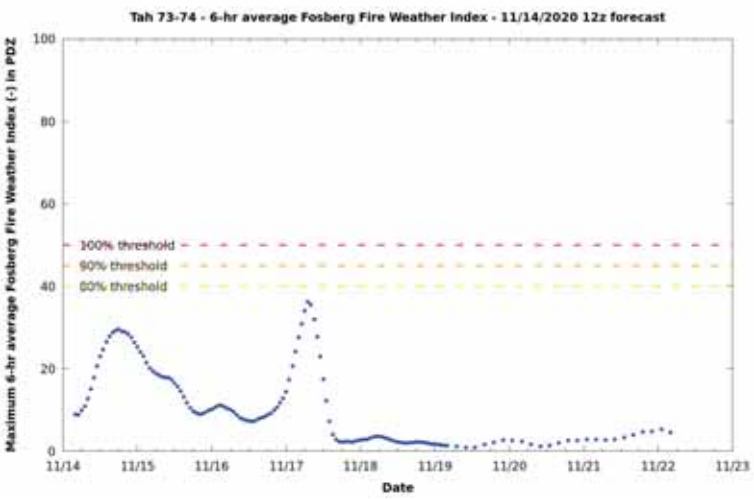


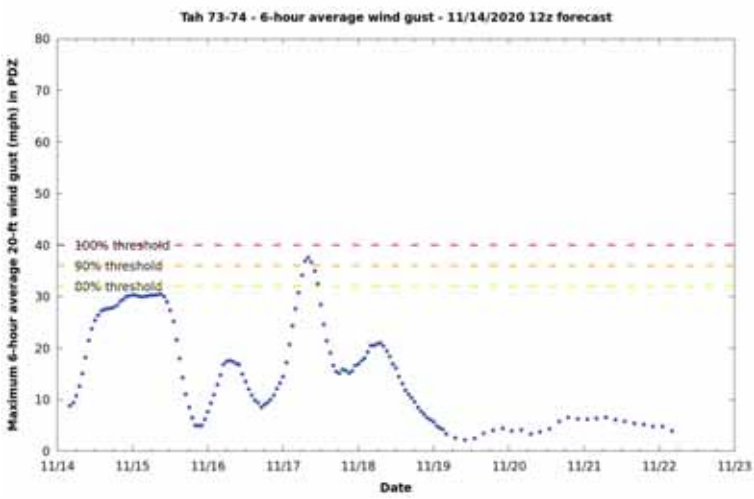
Tah 73-60



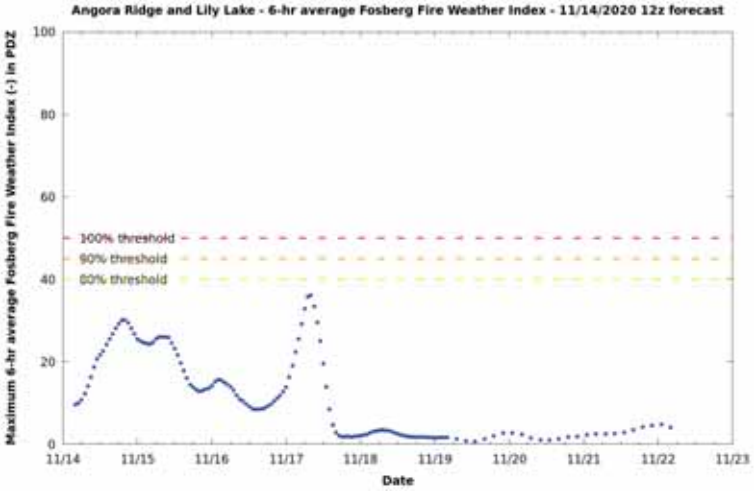


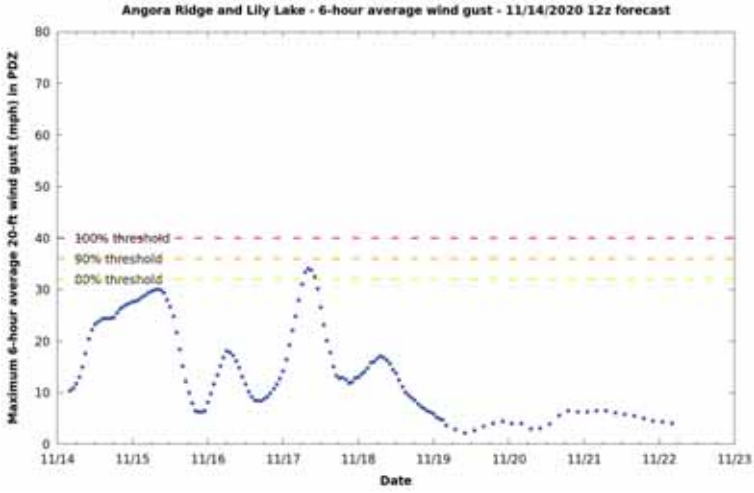
Tah 73-74



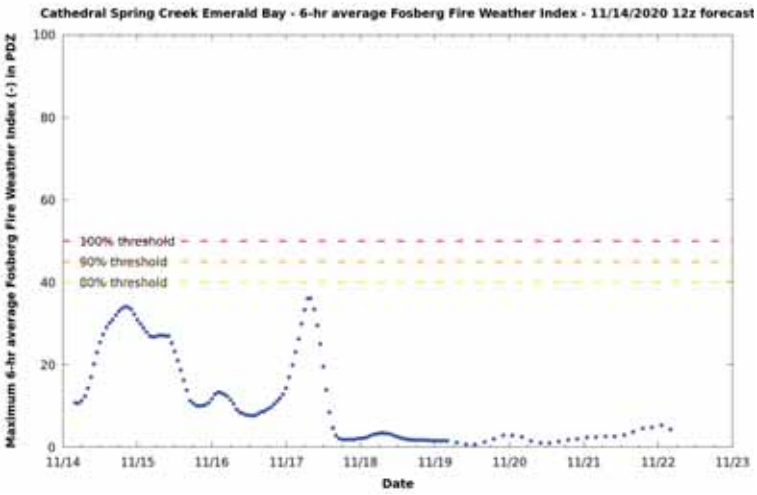


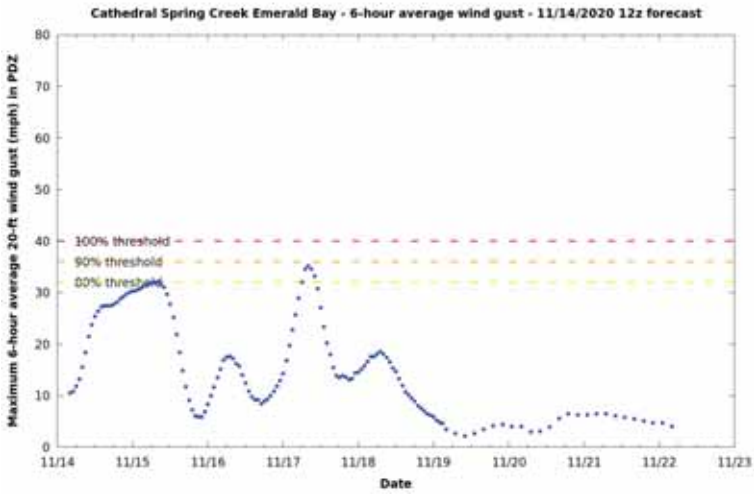
Angora Ridge and Lily Lake



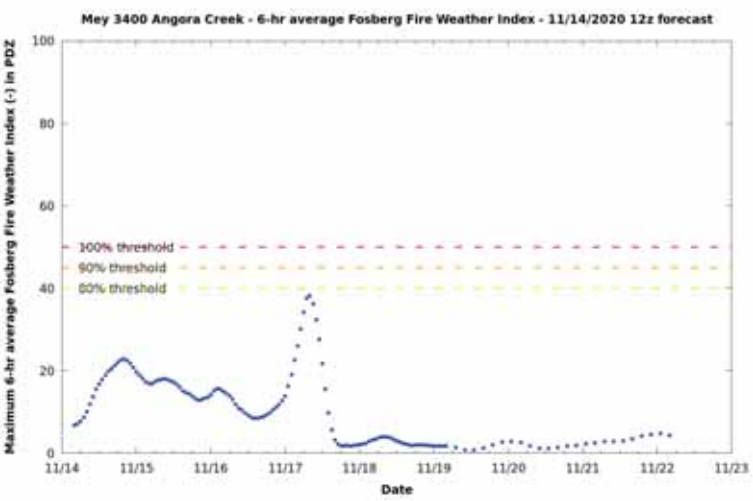


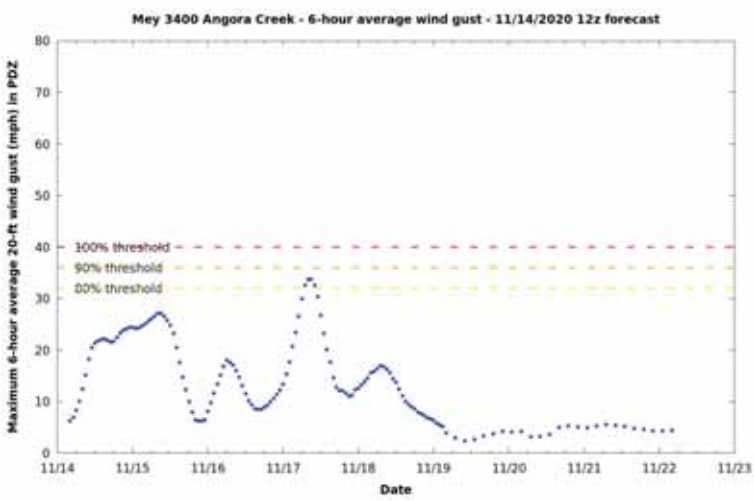
Cathedral Spring Creek Emerald Bay



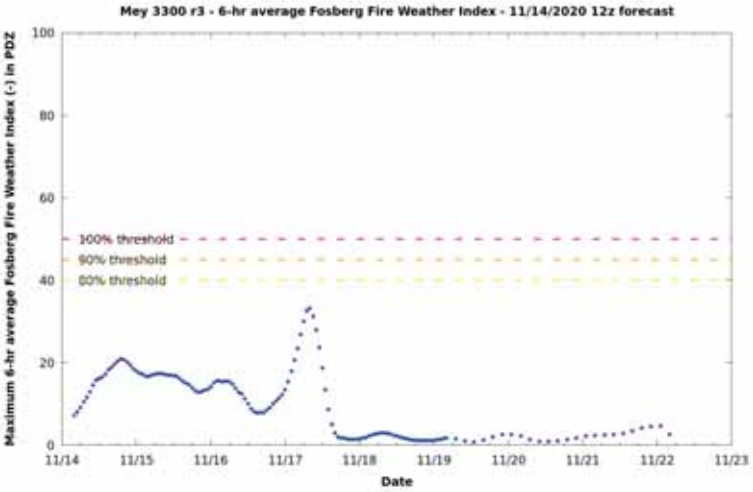


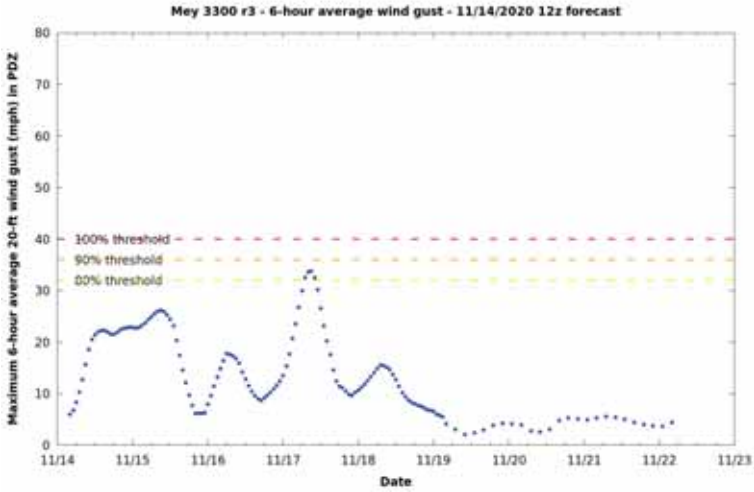
Mey 3400 Angora Creek



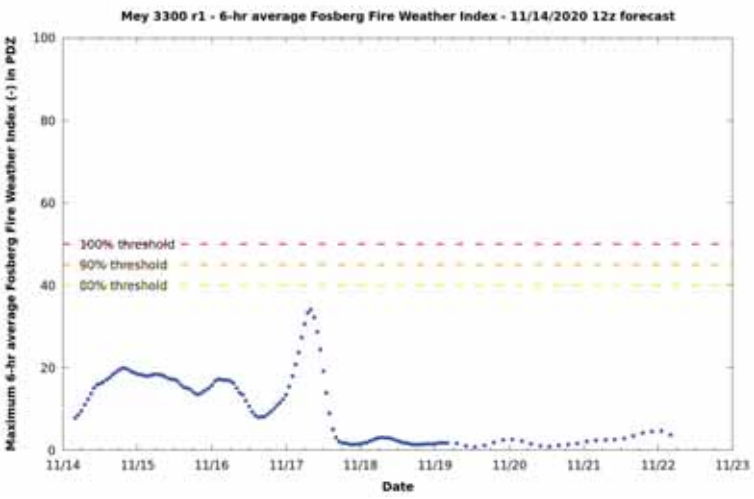


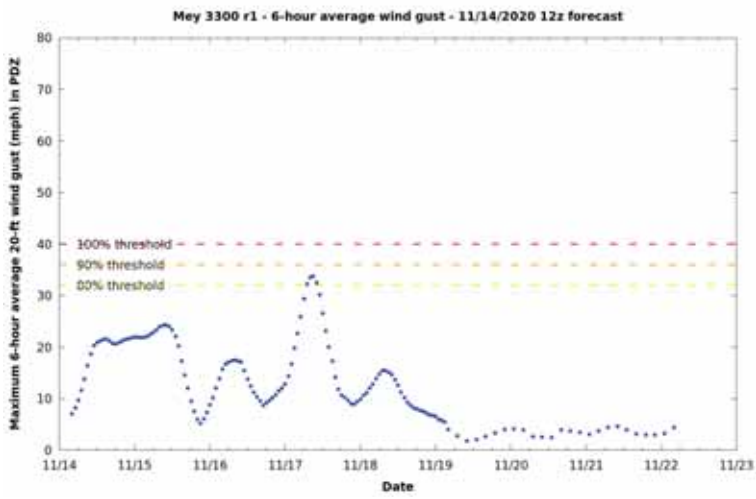
Mey 3300 r3



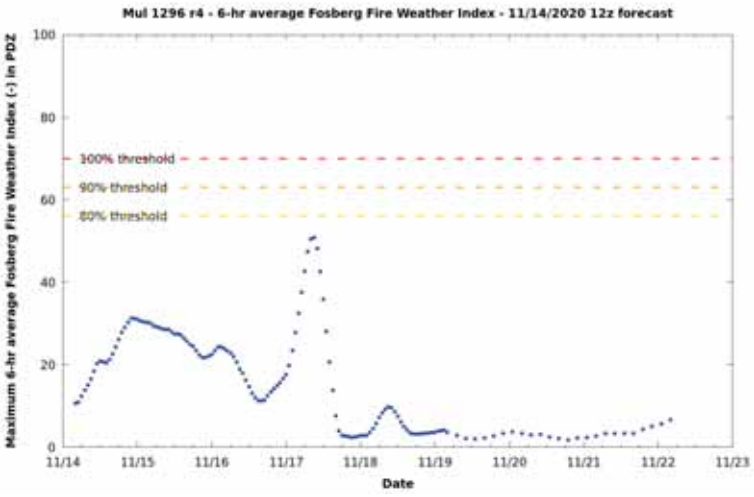


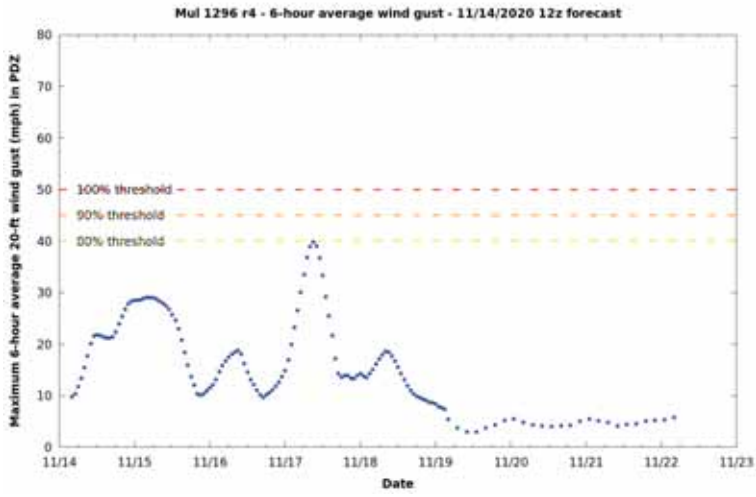
Mey 3300 r1



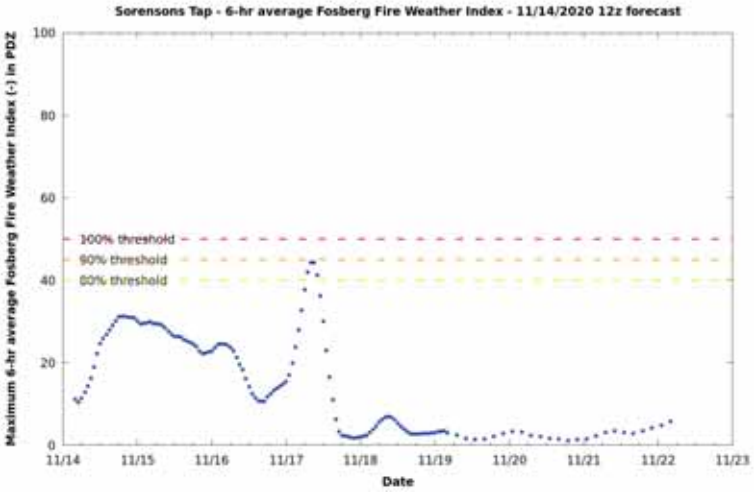


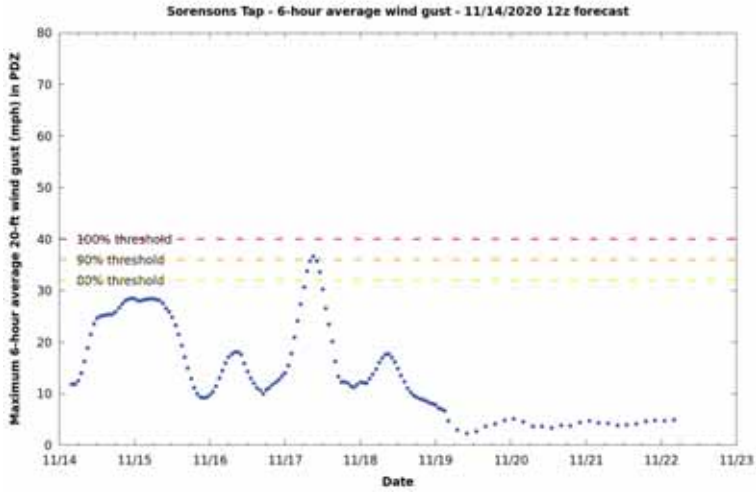
Mul 1296 r4



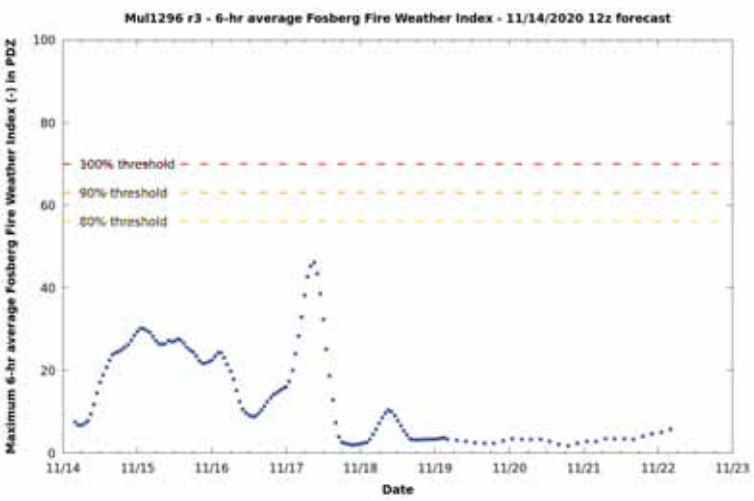


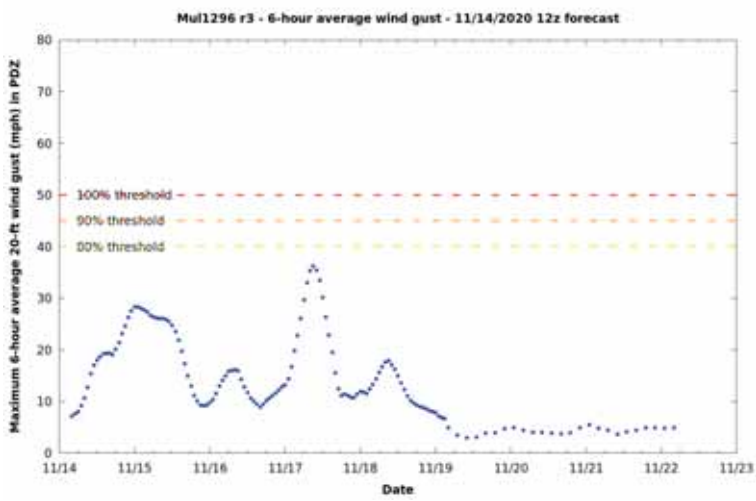
Sorensons Tap



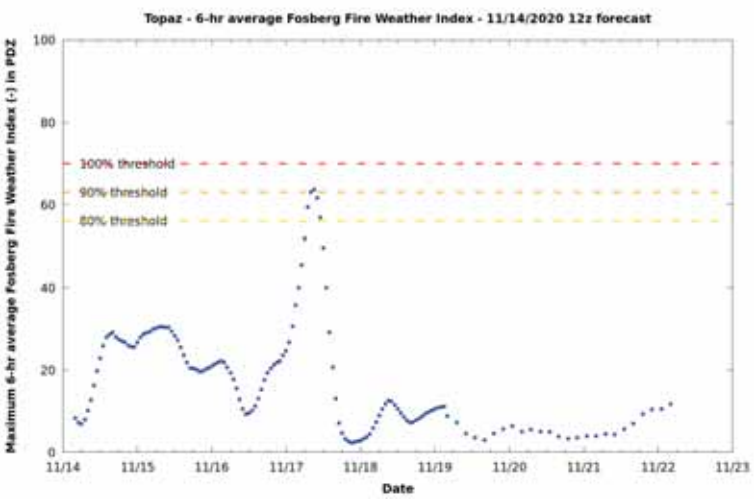


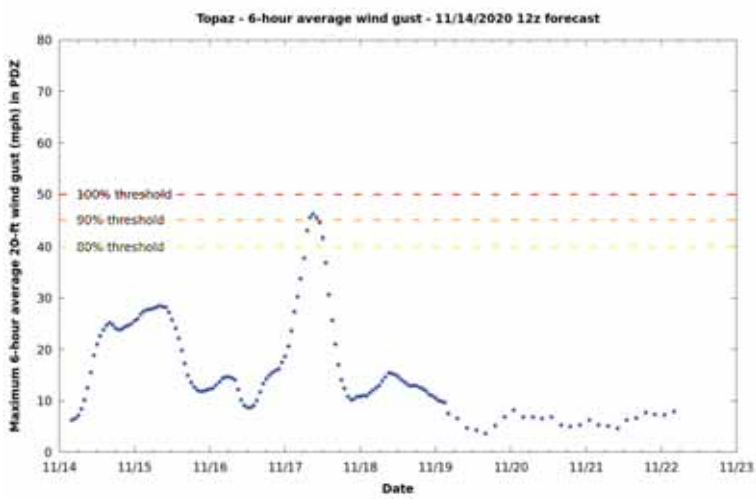
Mul 1296 r3



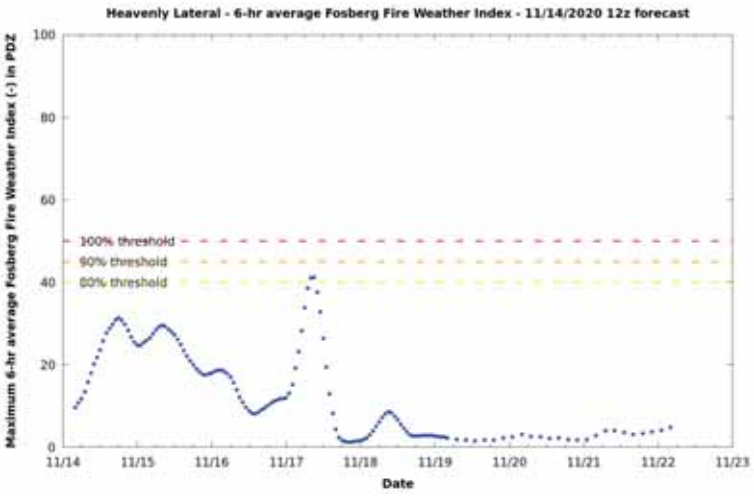


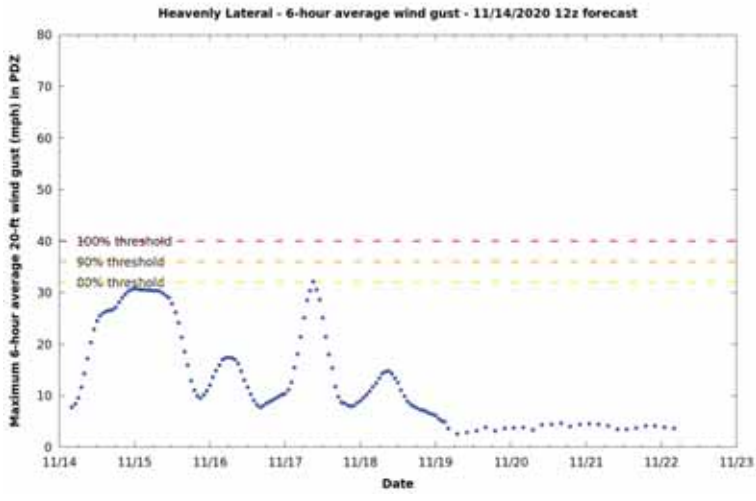
Topaz



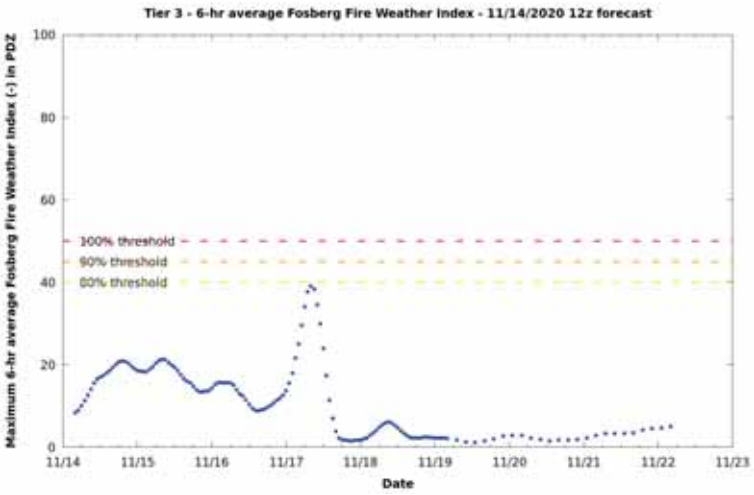


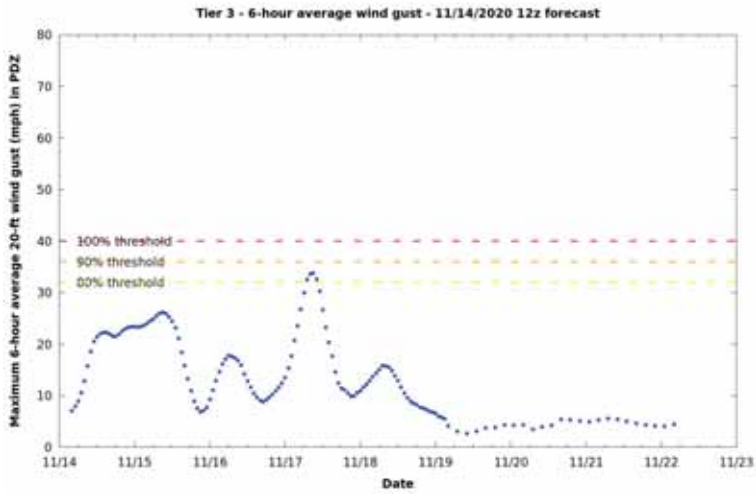
Heavenly Lateral



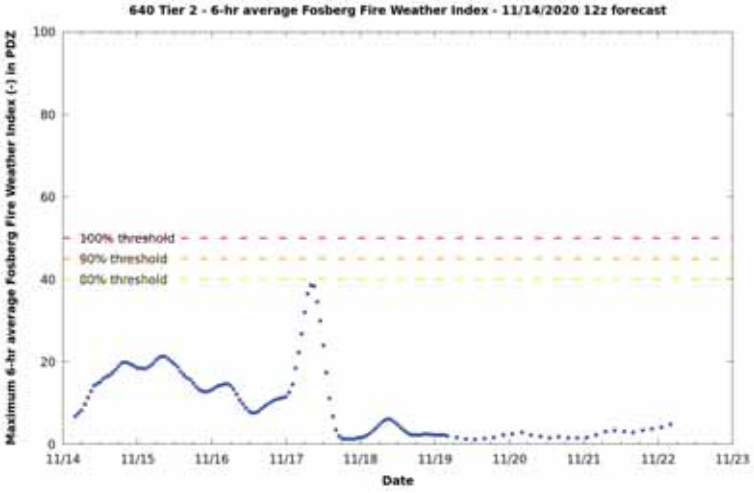


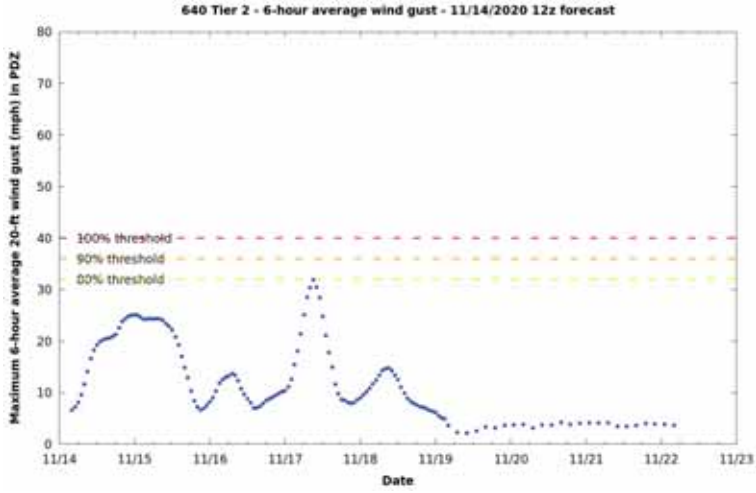
Tier 3



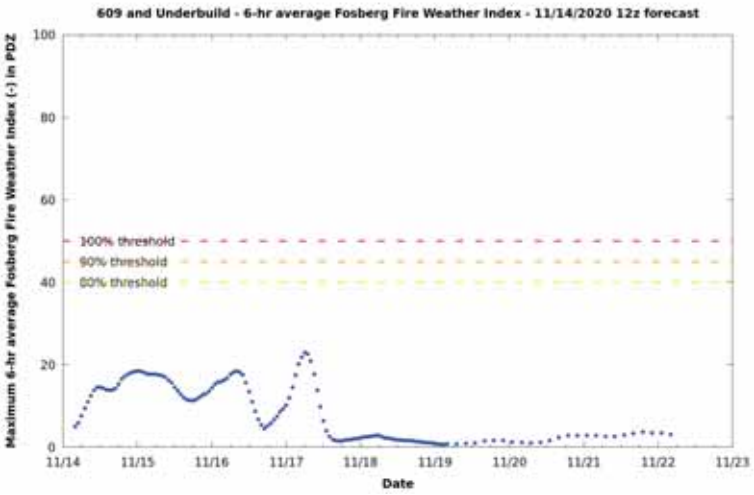


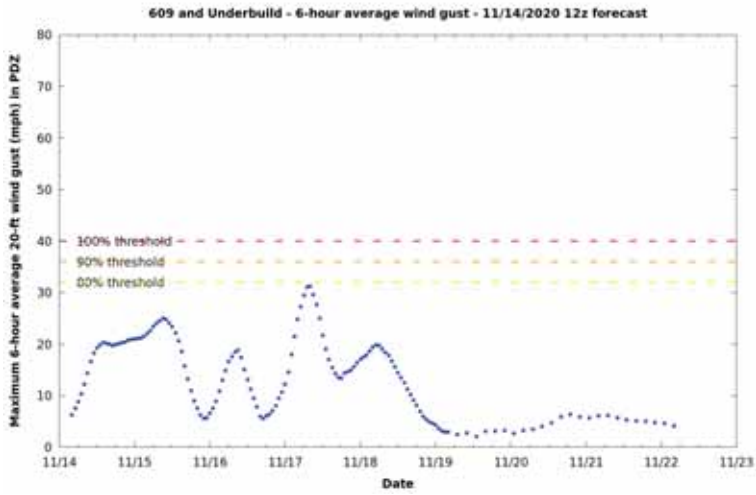
640 Tier 2



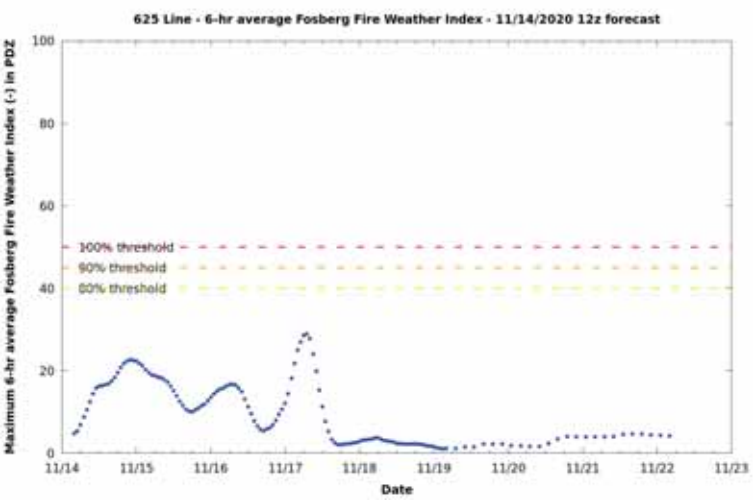


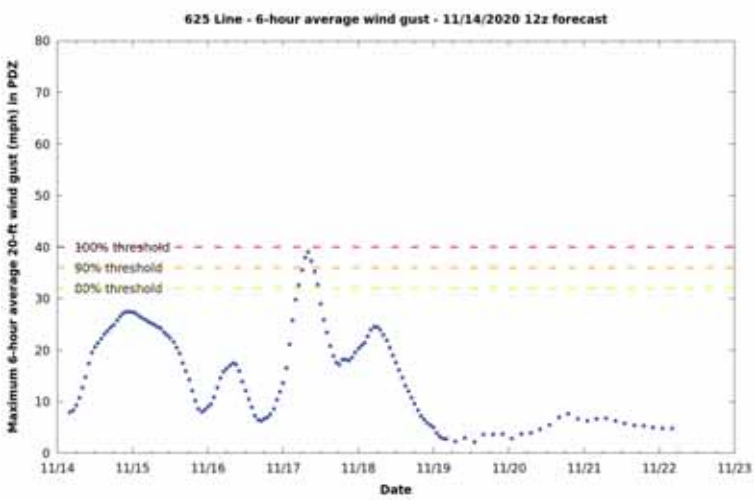
609 and Underbuild



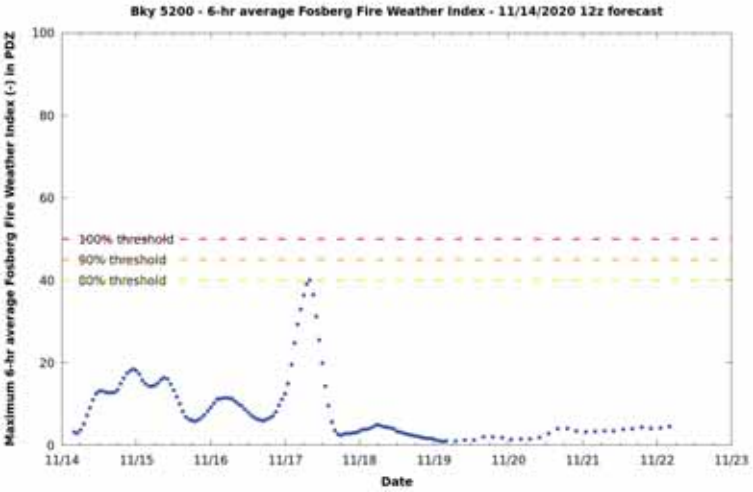


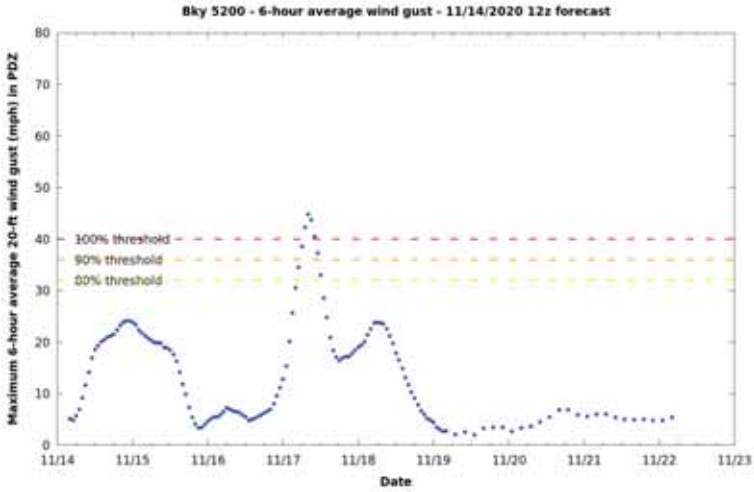
625 Line



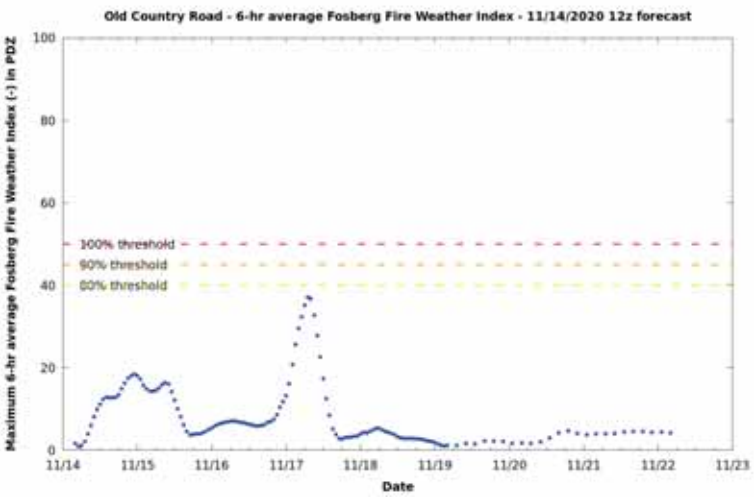


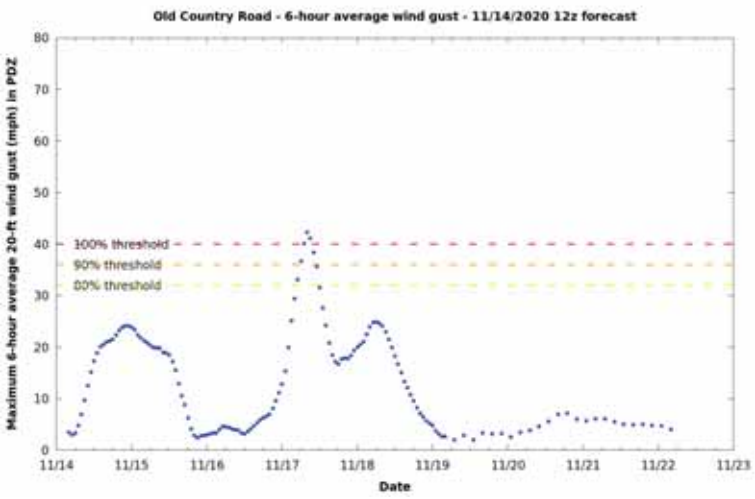
Bky 5200



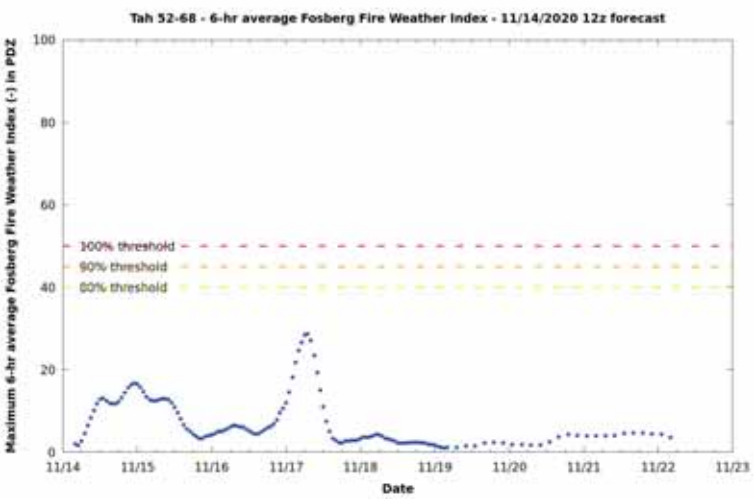


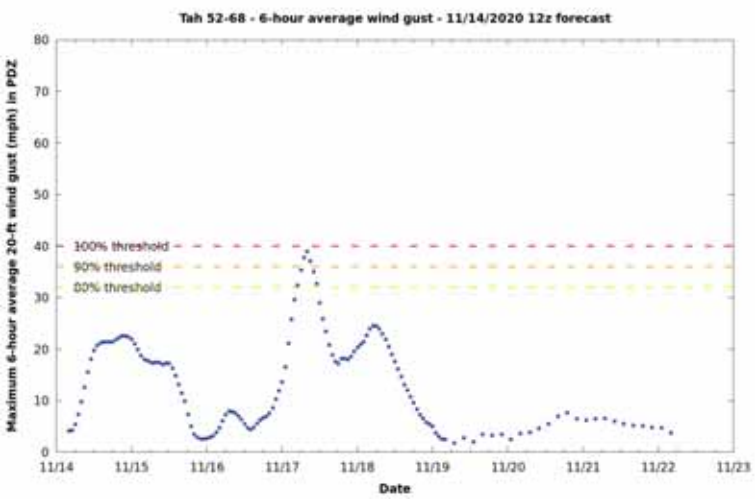
Old Country Road



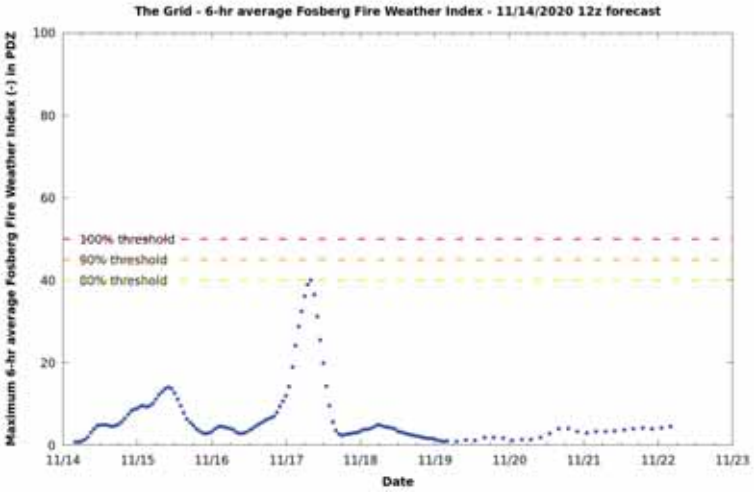


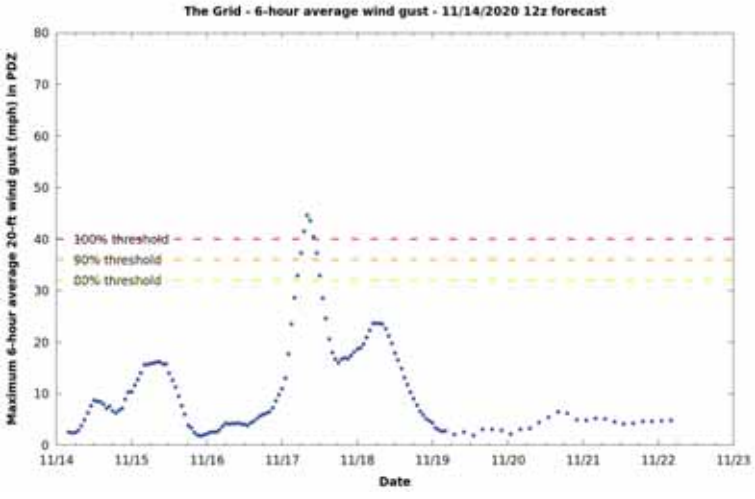
Tah 52-68



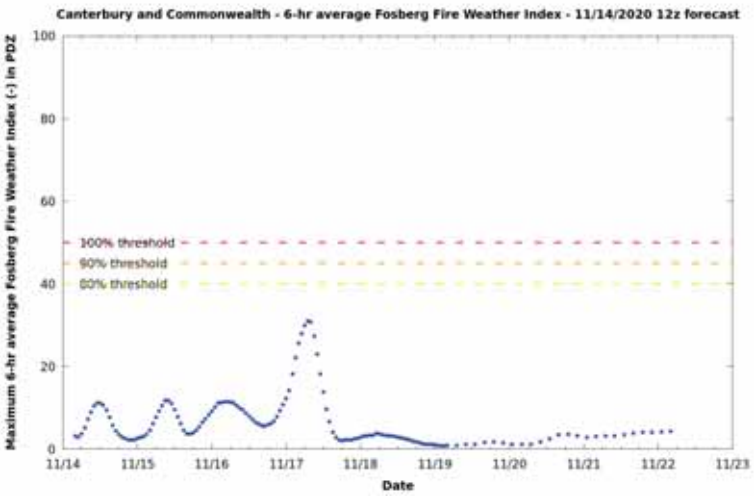


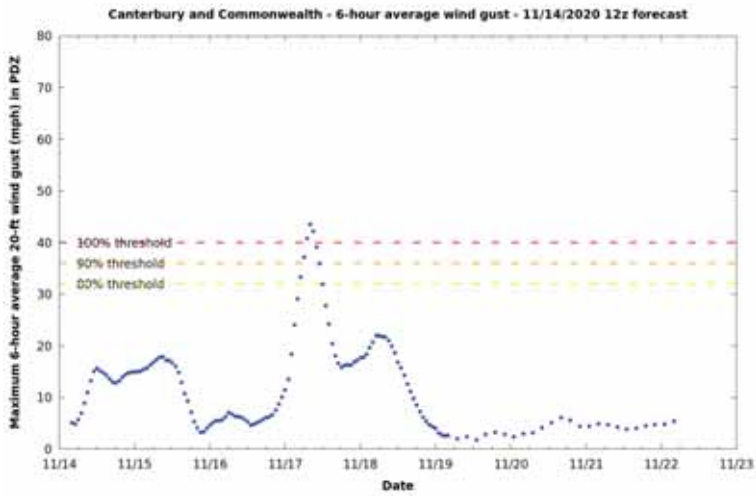
The Grid



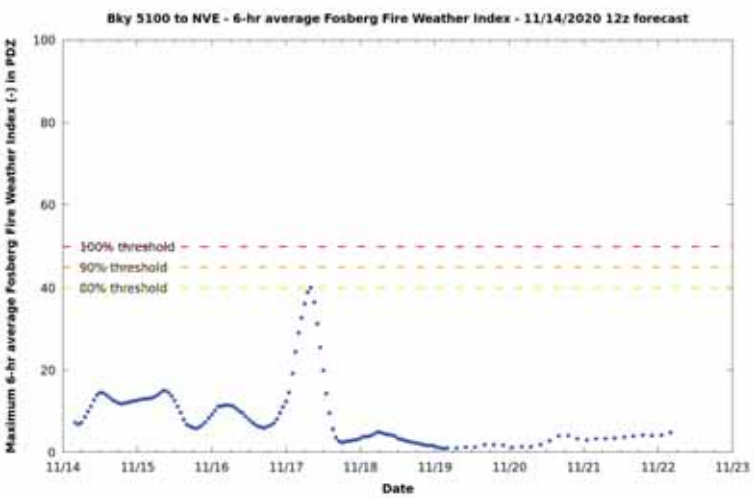


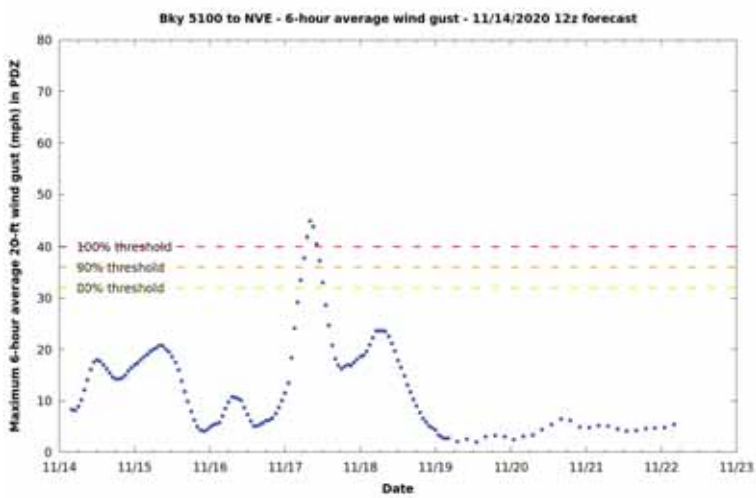
Canterbuy and Commonwealth



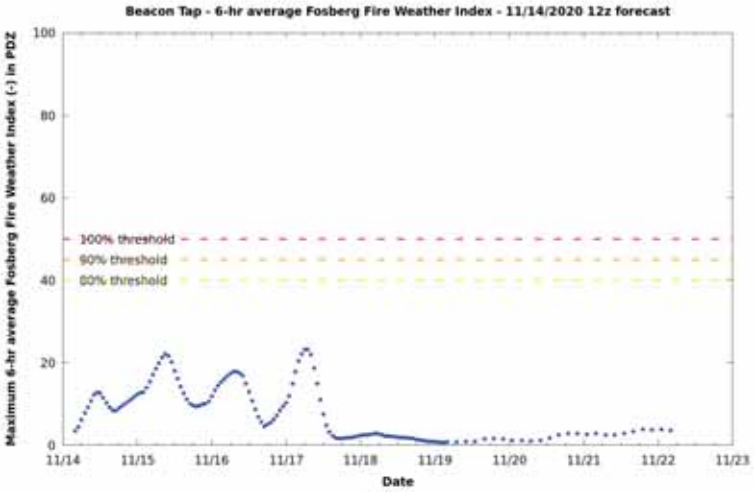


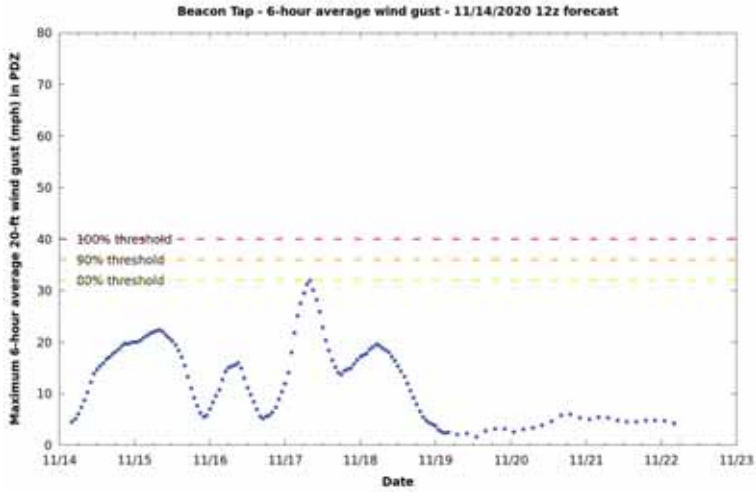
Bky 5100 to NVE



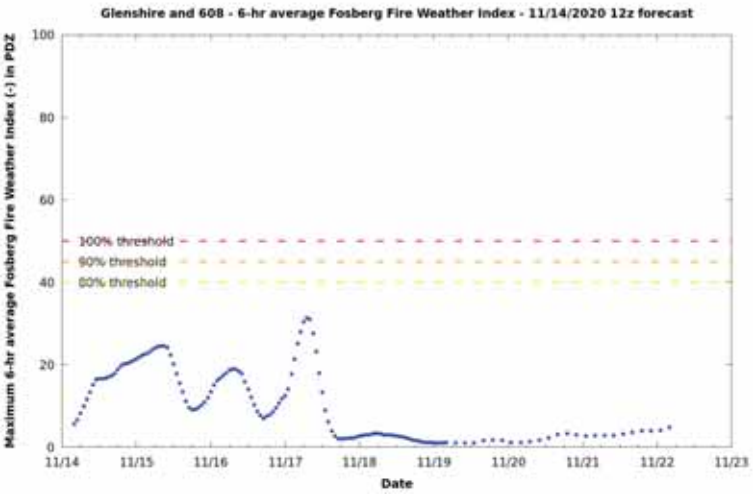


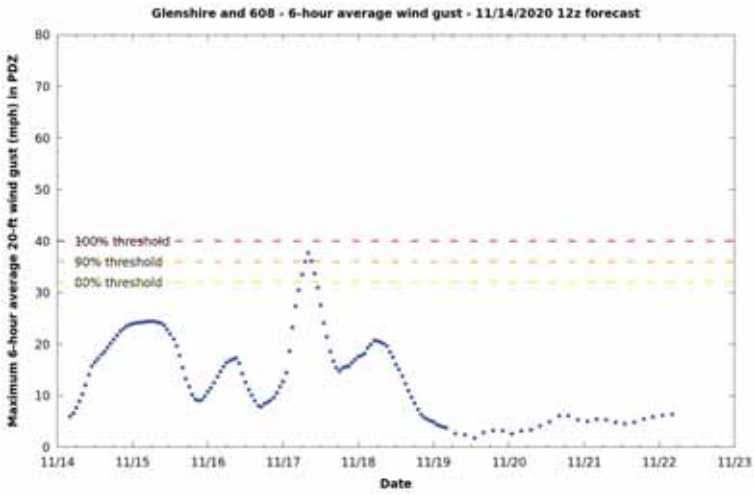
Beacon Tap



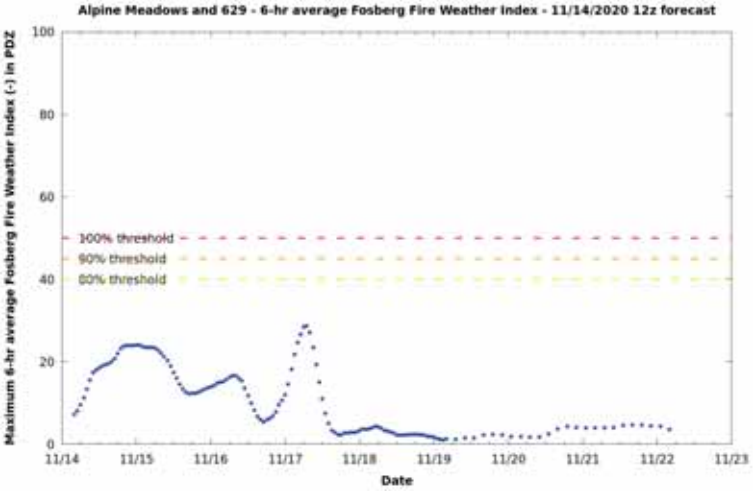


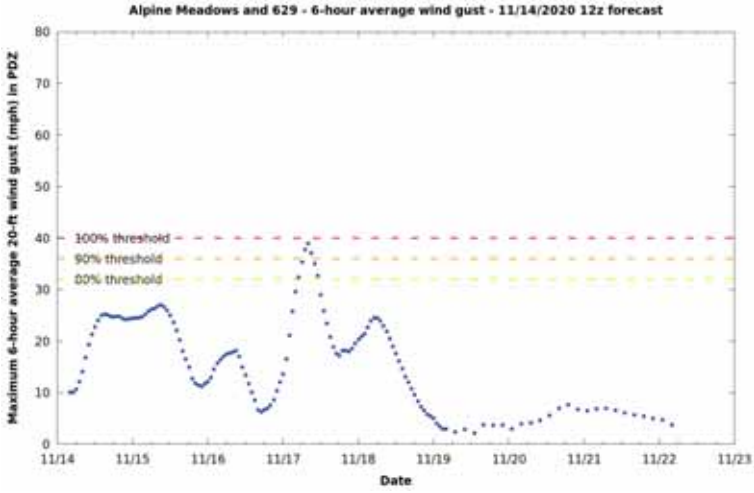
Glenshire and 608



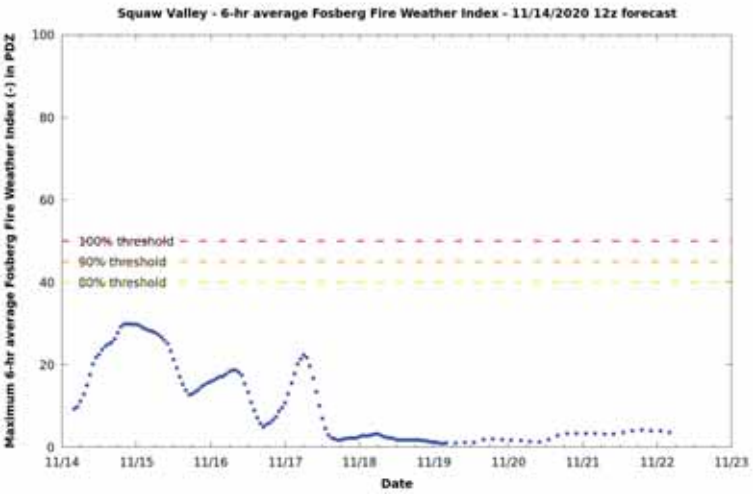


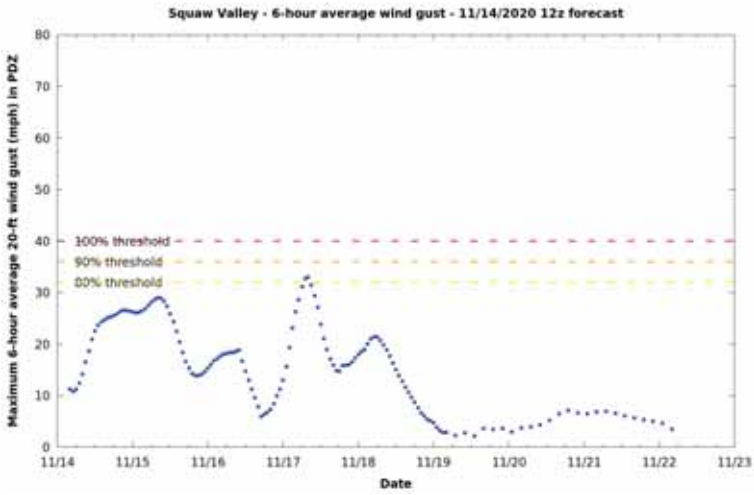
Alpine Meadows and 629



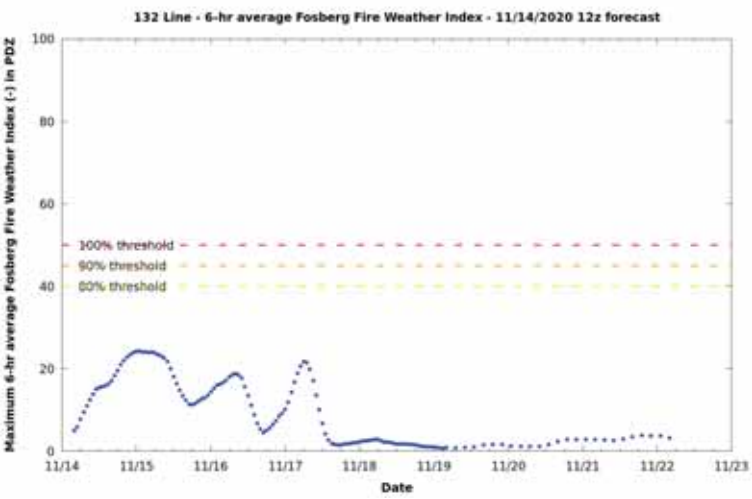


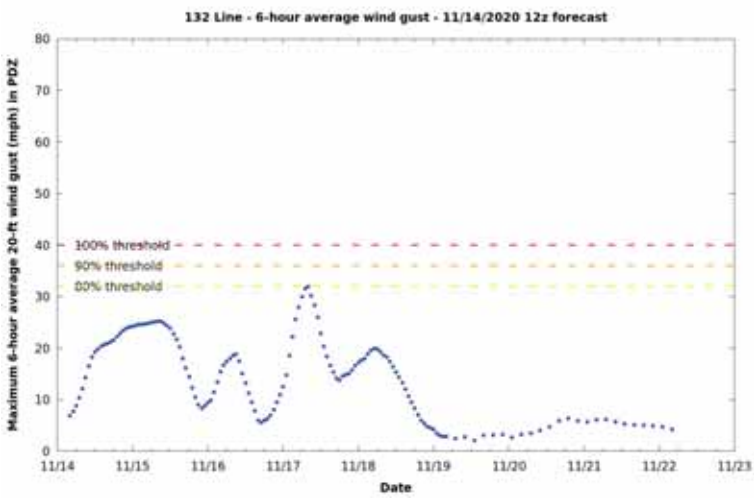
Squaw Valley



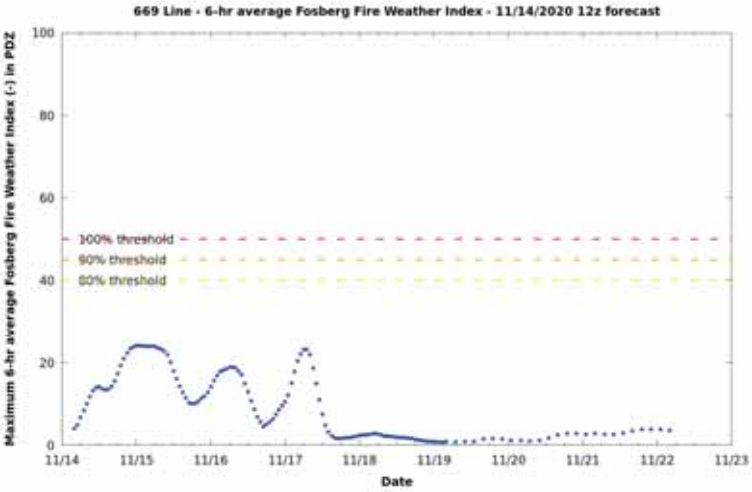


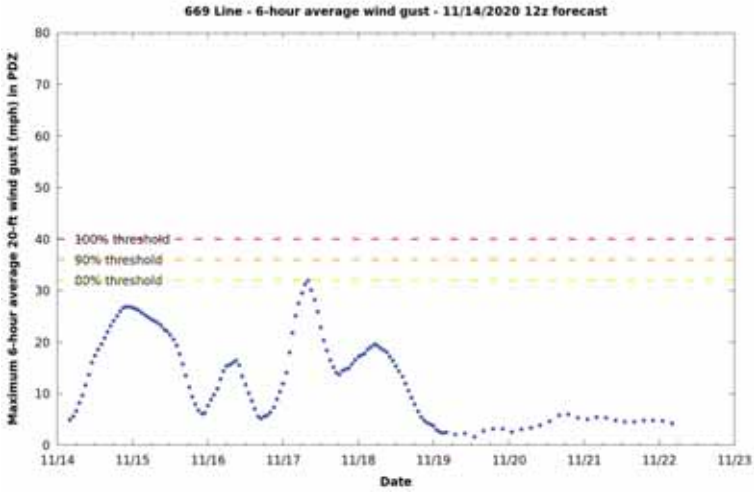
132 Line



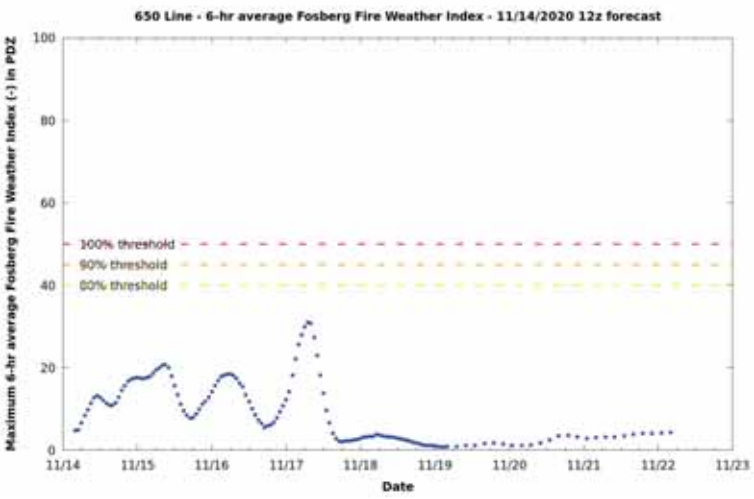


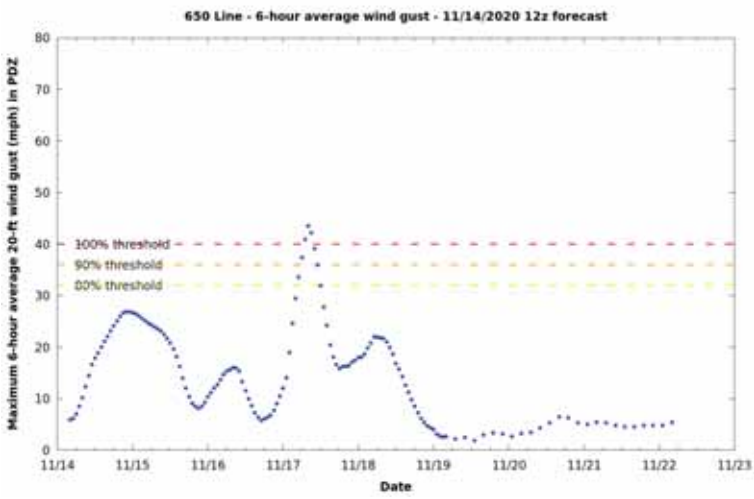
669 Line



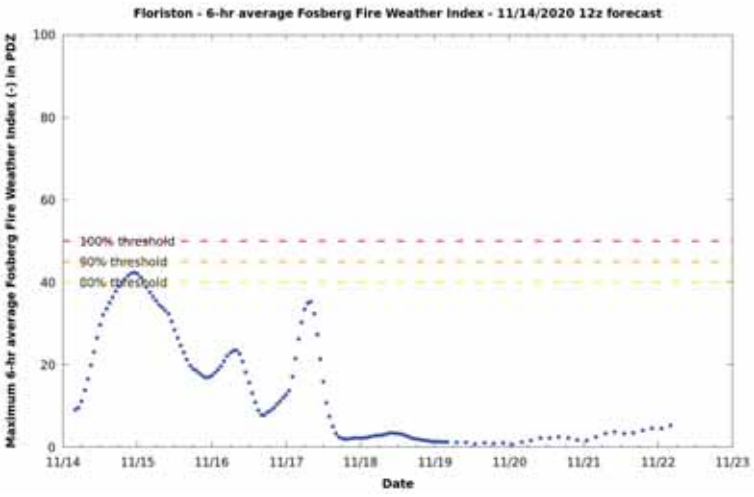


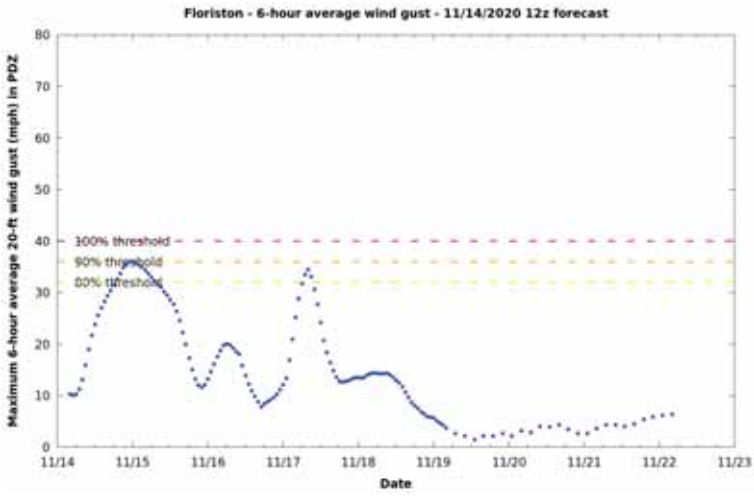
650 Line



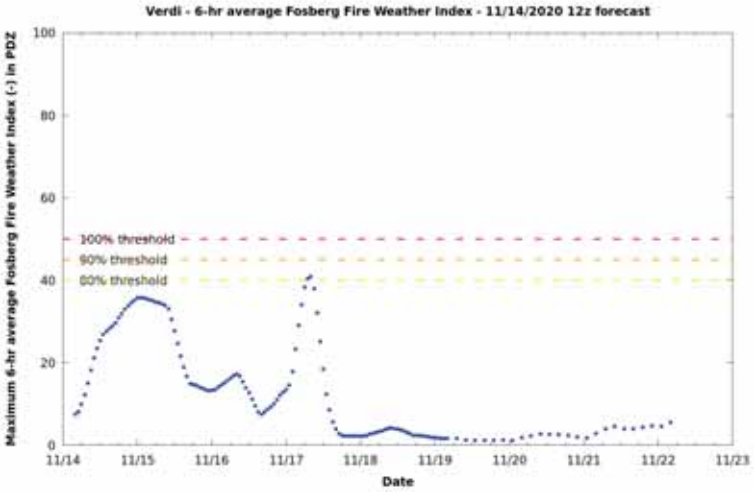


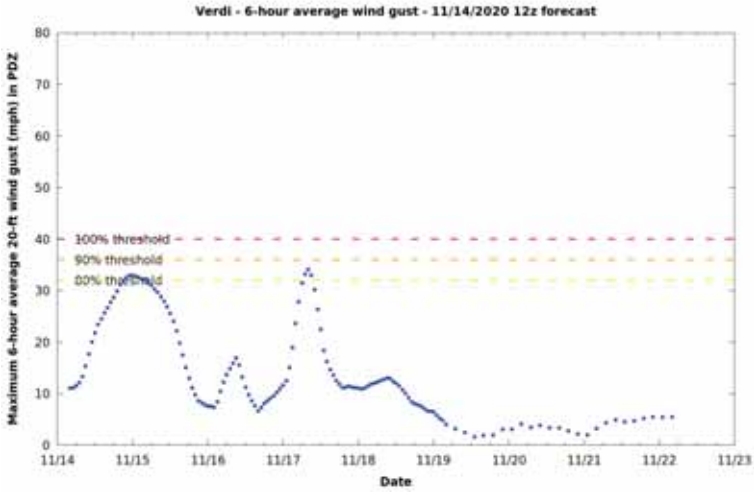
Floriston



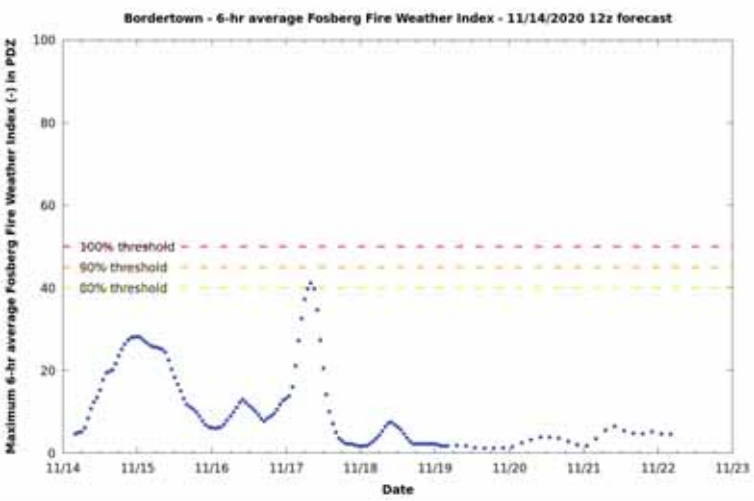


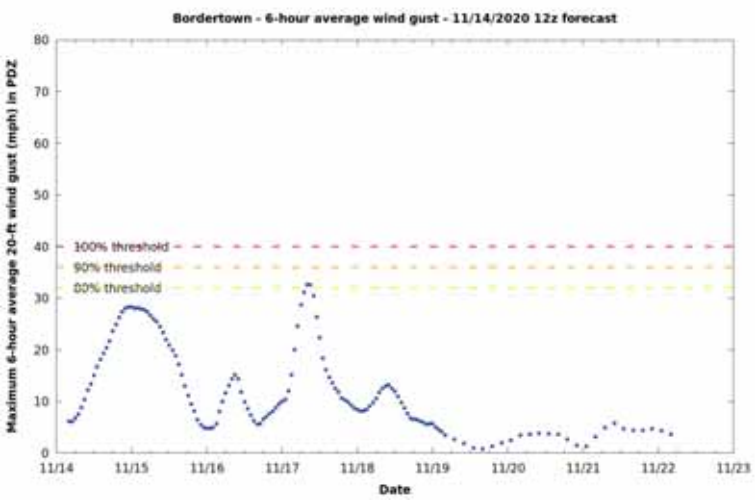
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/14/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/14/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/15/20 - 11/21/20

Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

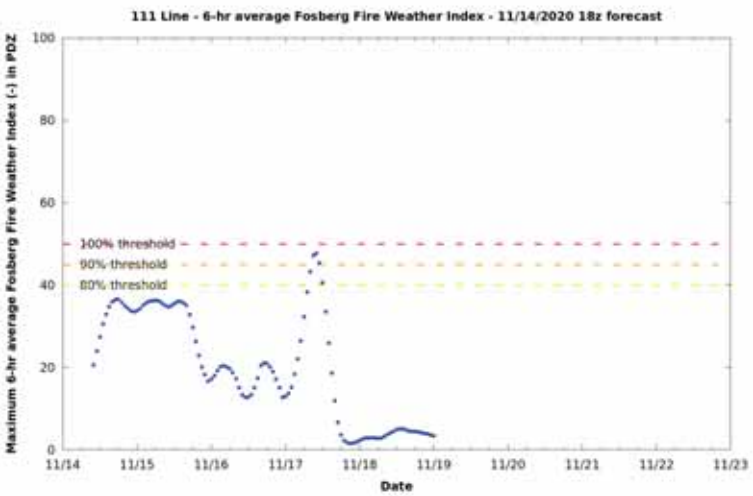
Liberty Utilities Energy Release Component Forecast for 11/15/20 - 11/21/20

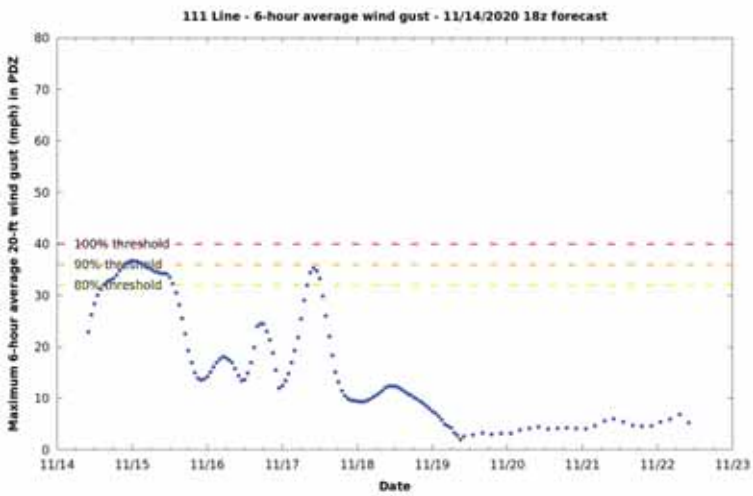
Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	57.0	56.0	56.0	49.0	40.0	38.0	40.0
Sierra Brooks	61.0	61.0	63.0	58.0	48.0	48.0	49.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

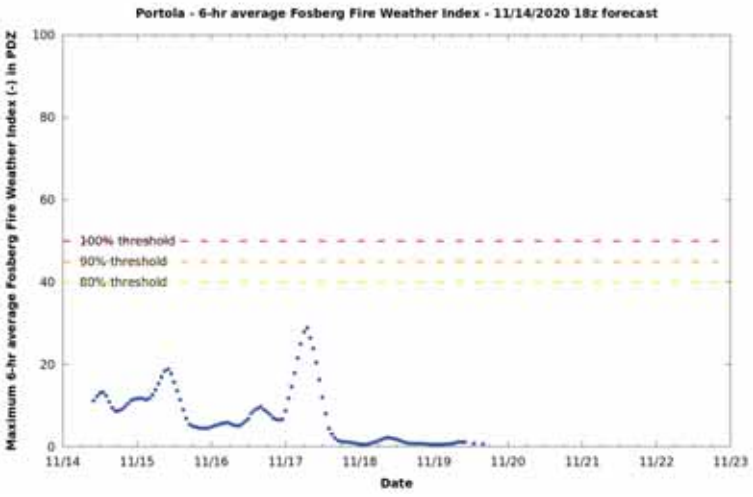
Liberty Utilities Fire Weather Summary Plots - 11/14/2020 18z forecast

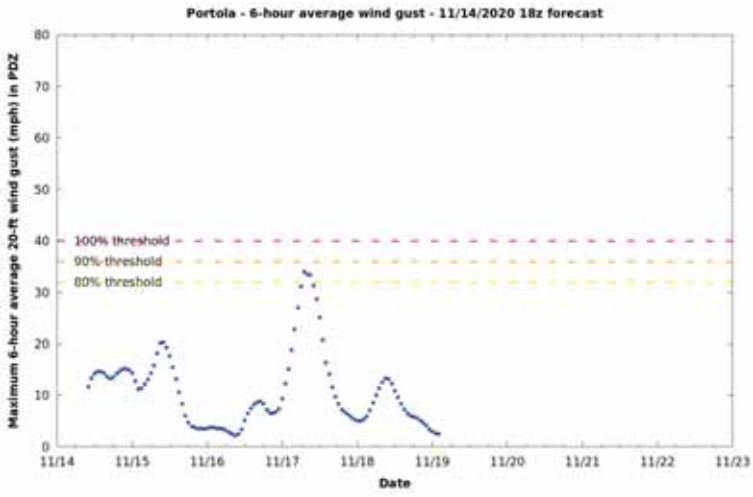
111 Line



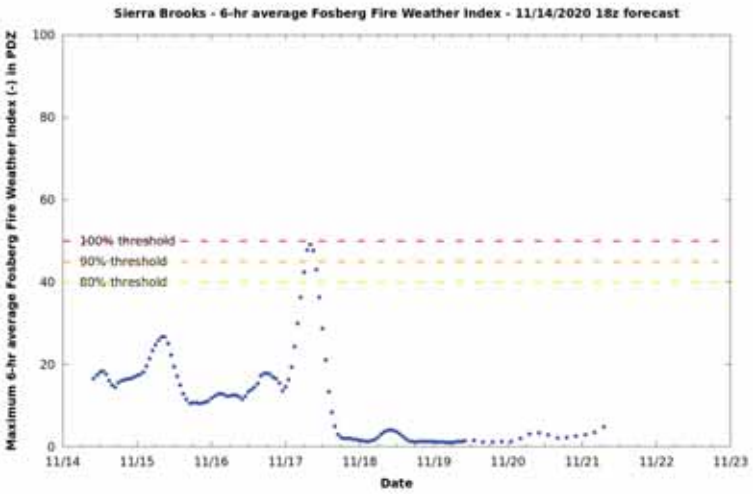


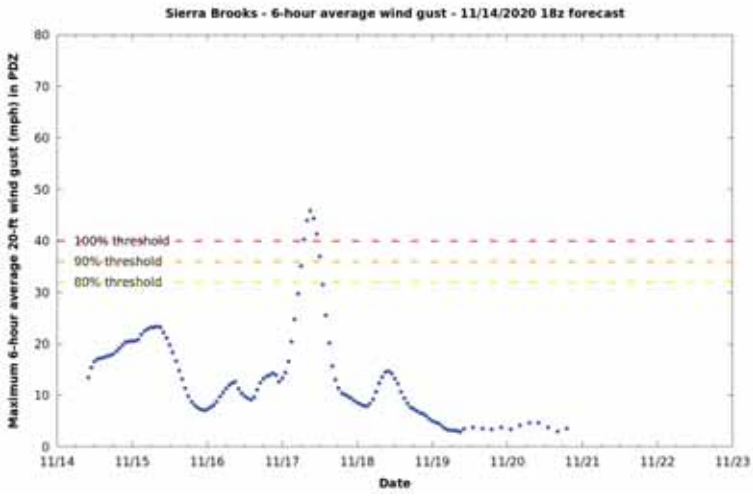
Portola



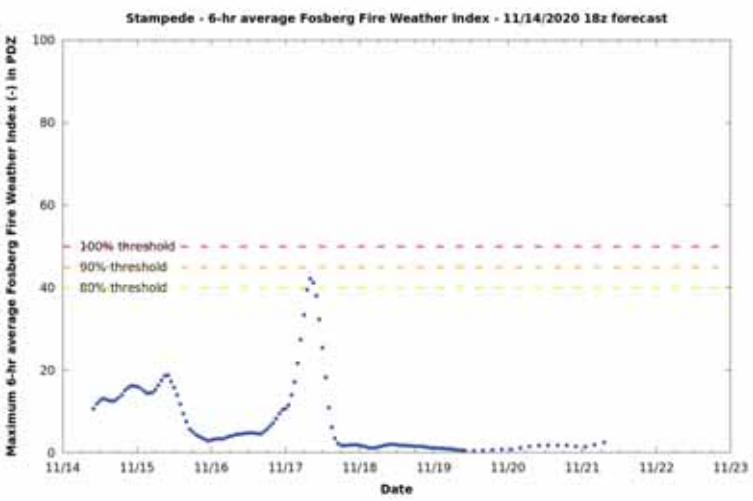


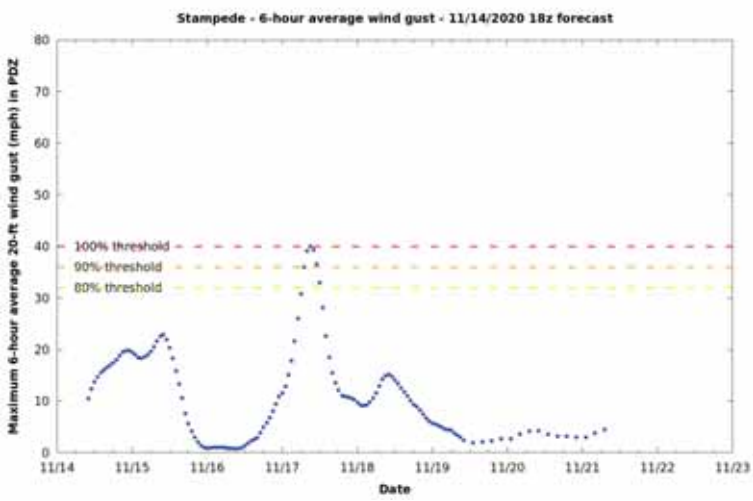
Sierra Brooks



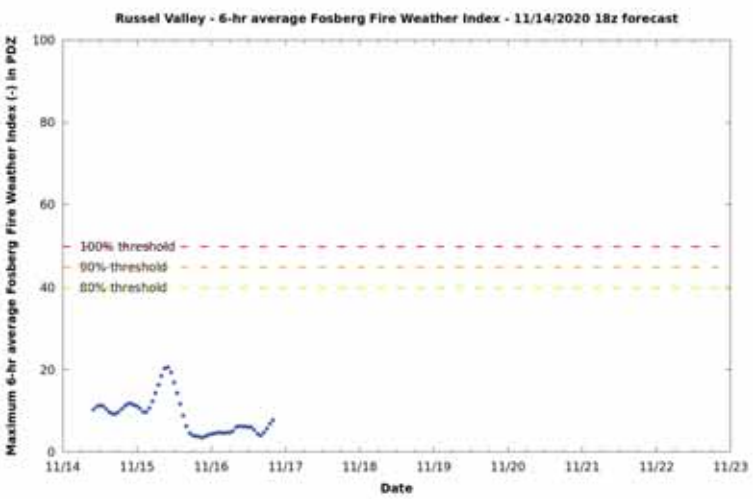


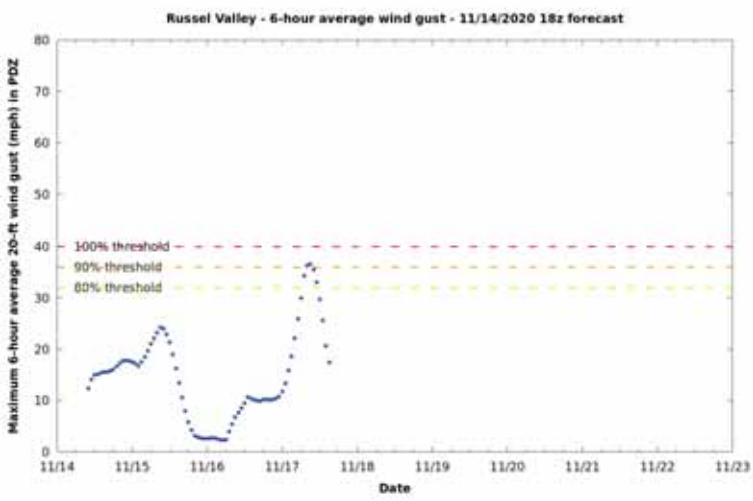
Stampede





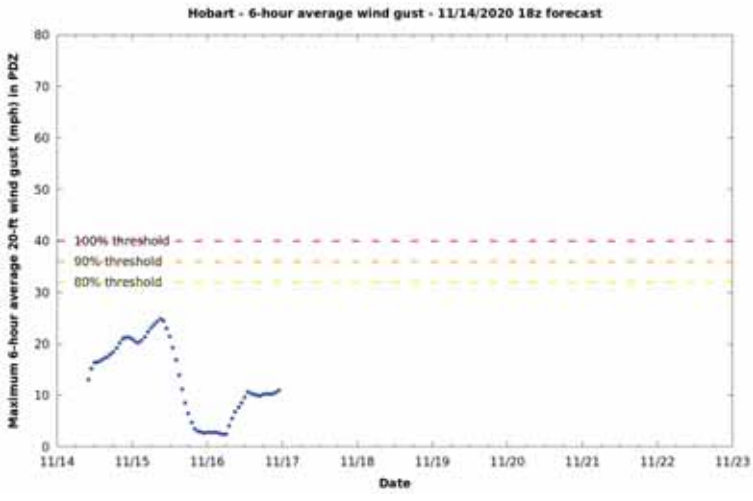
Russell Valley



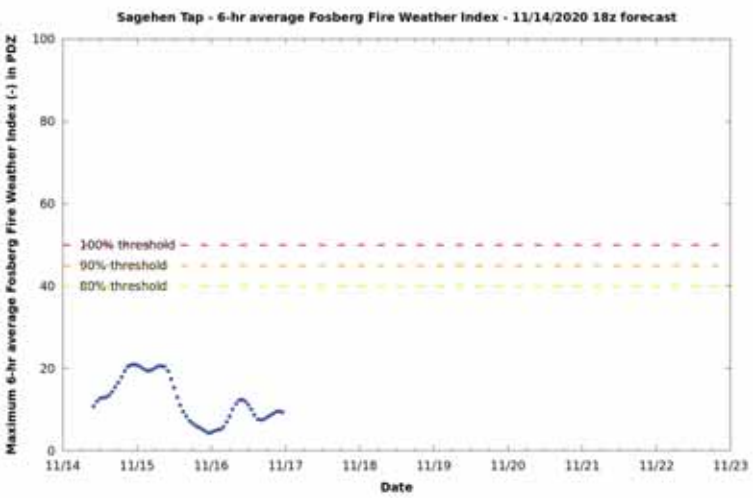


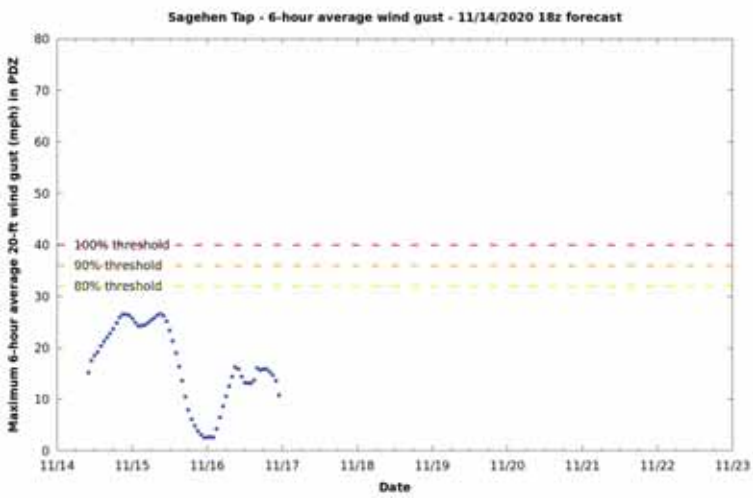
Hobart



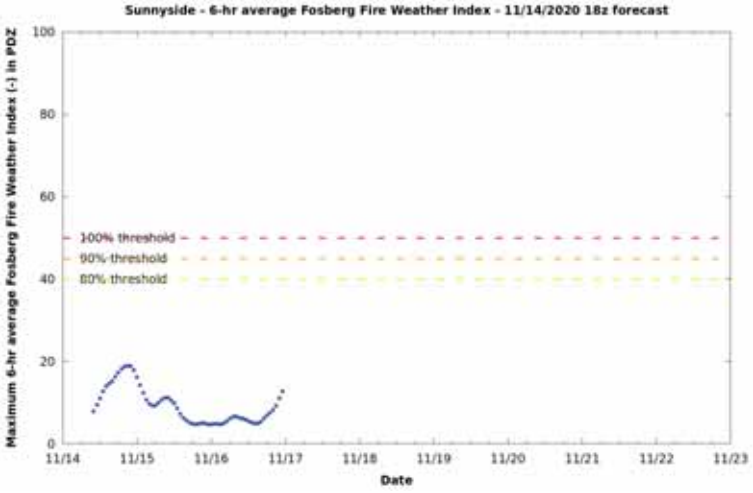


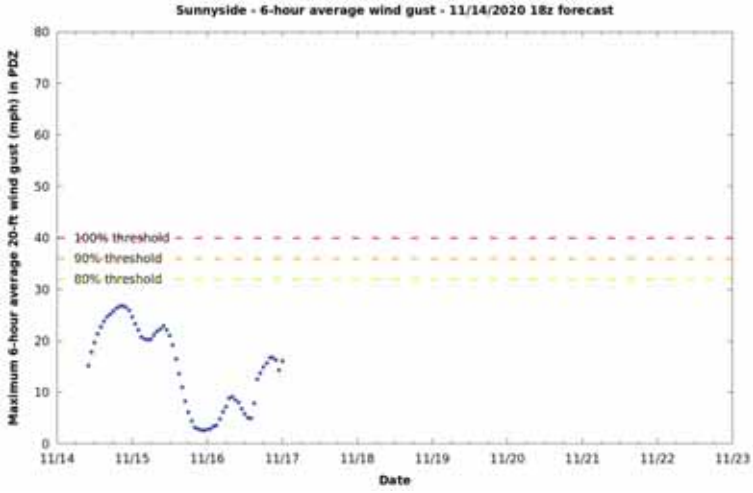
Sagehen tap



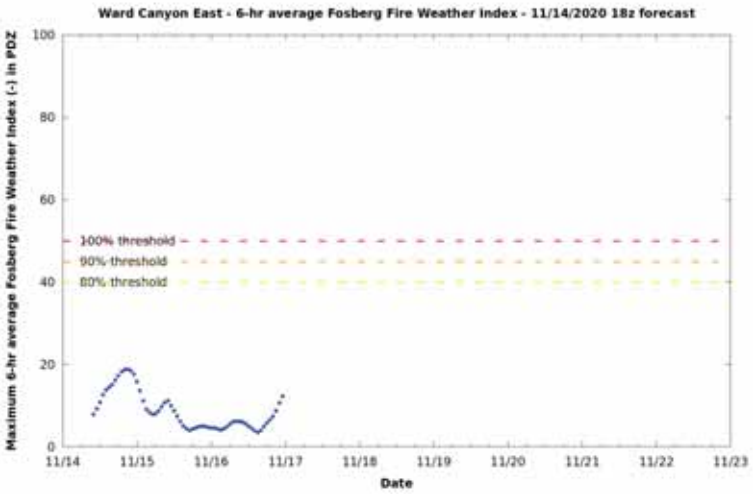


Sunnyside



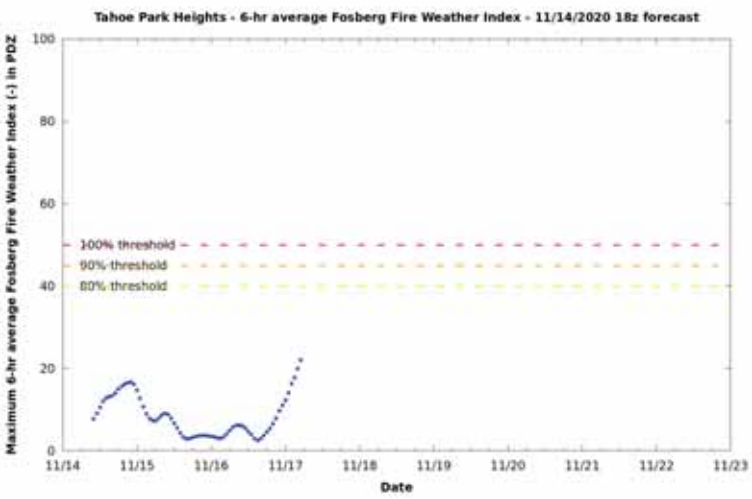


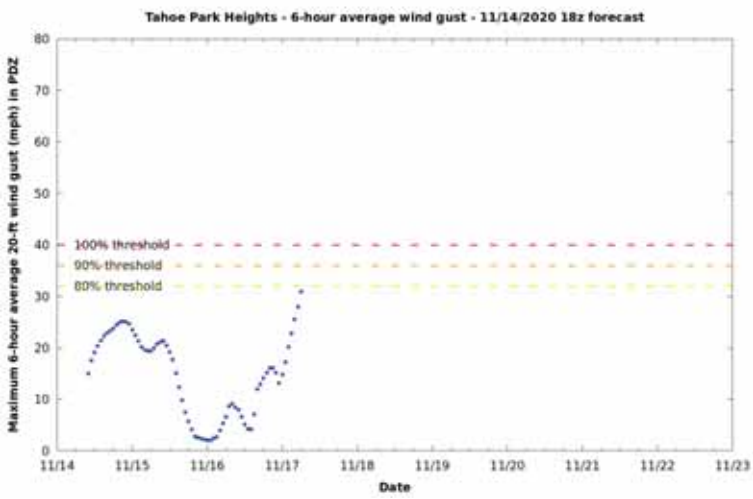
Ward Canyon East



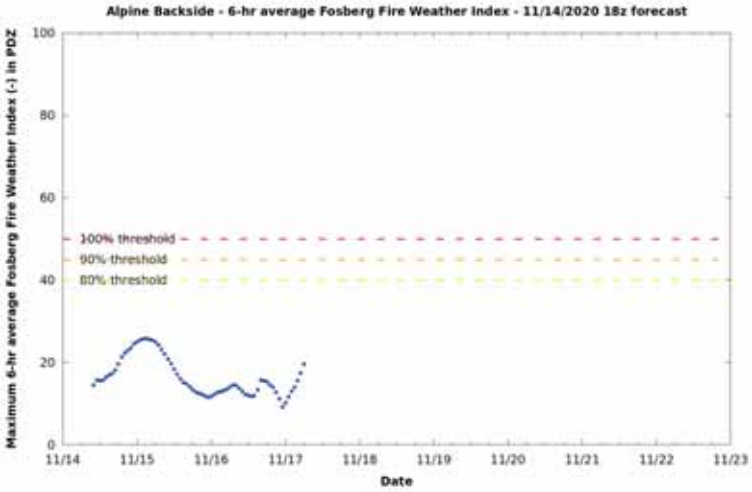


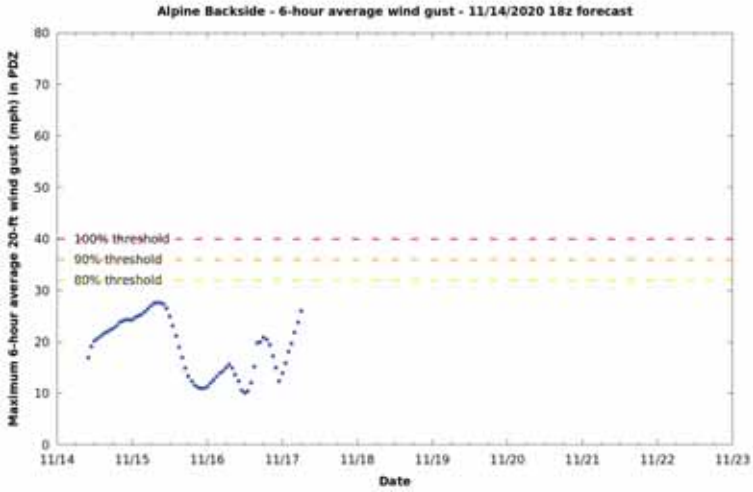
Tahoe Park Heights



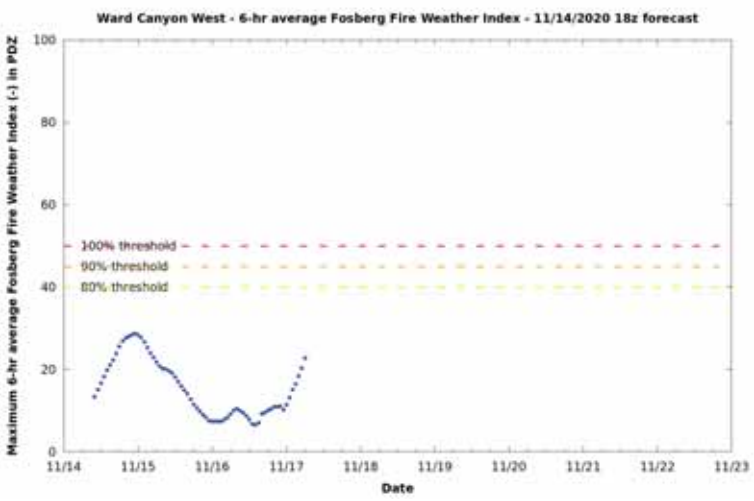


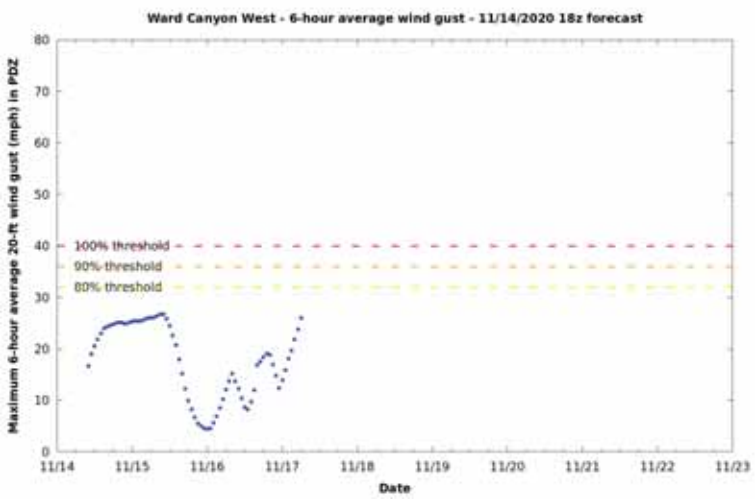
Alpine Backside



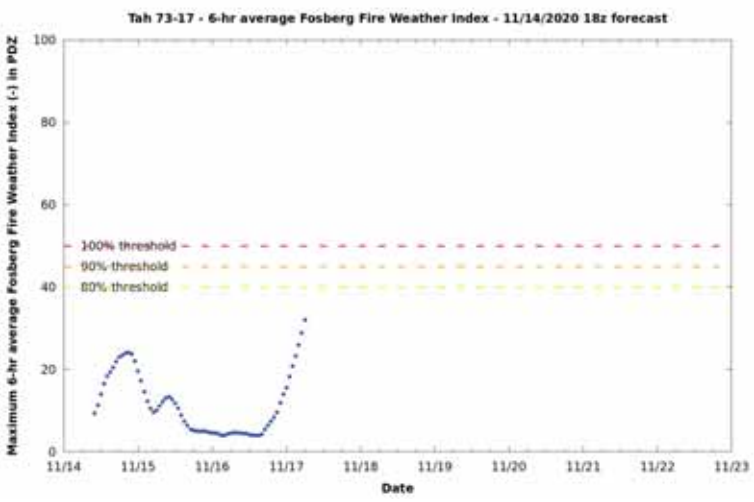


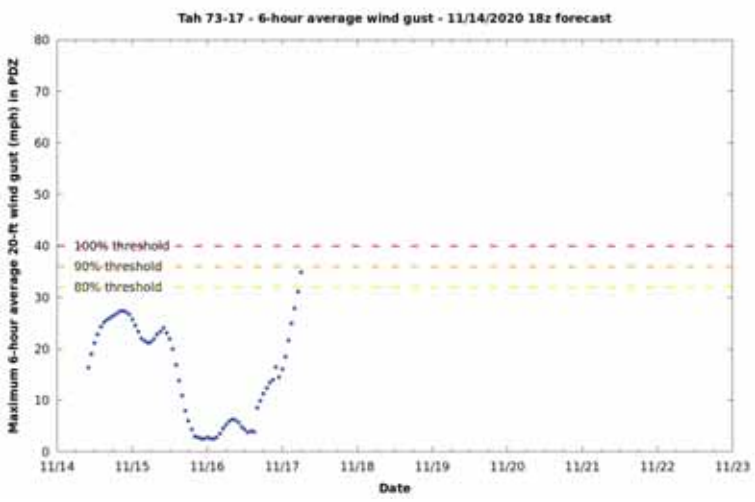
Ward Canyon West



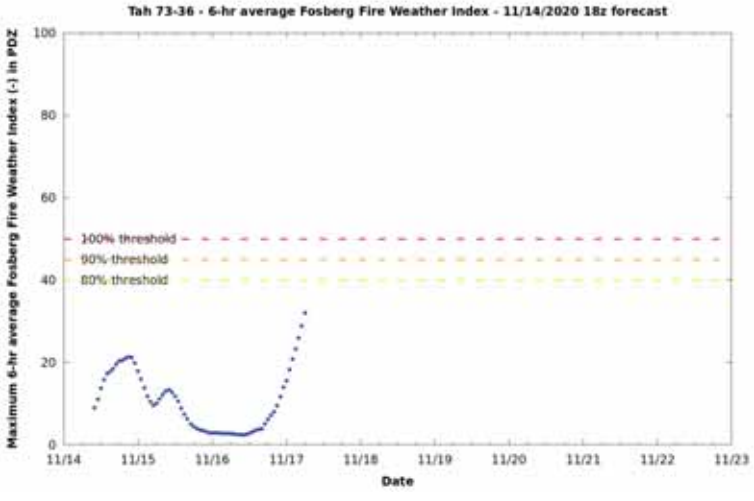


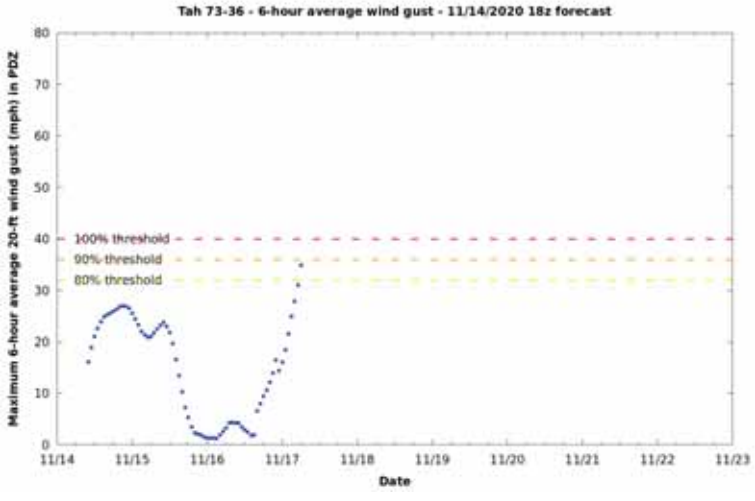
Tah 73-17



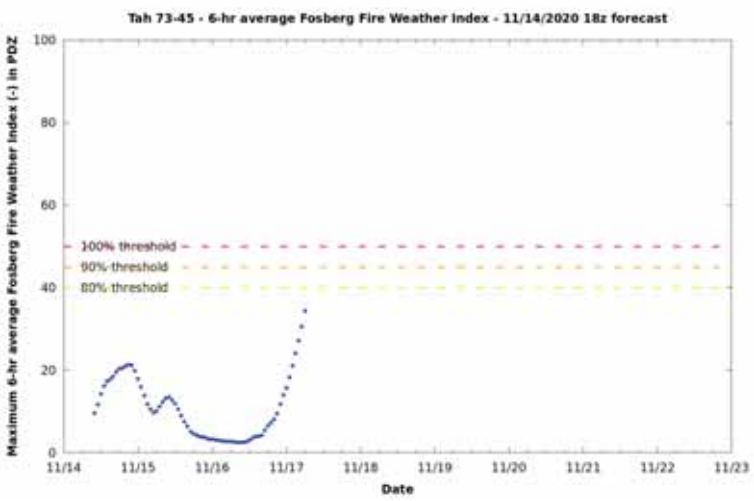


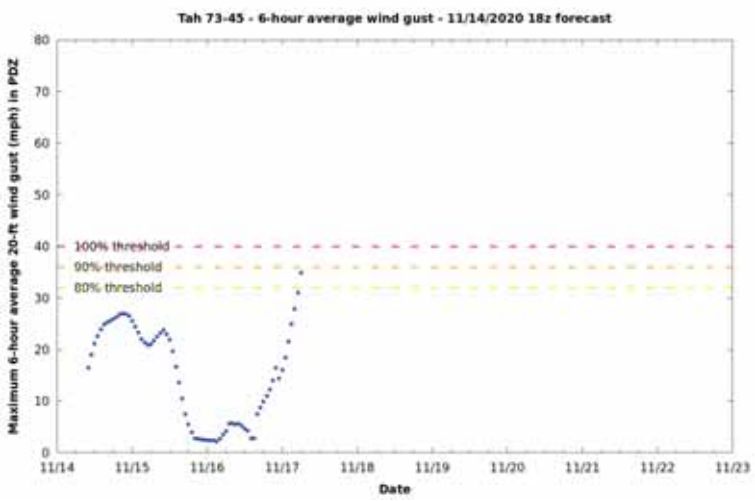
Tah 73-36



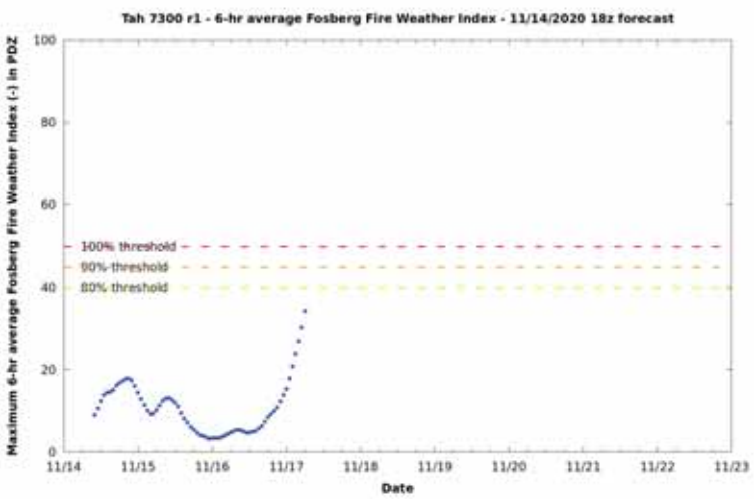


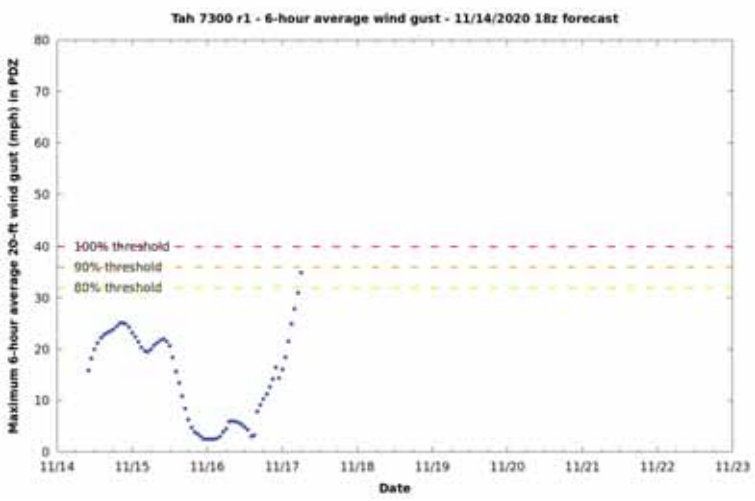
Tah 73-45



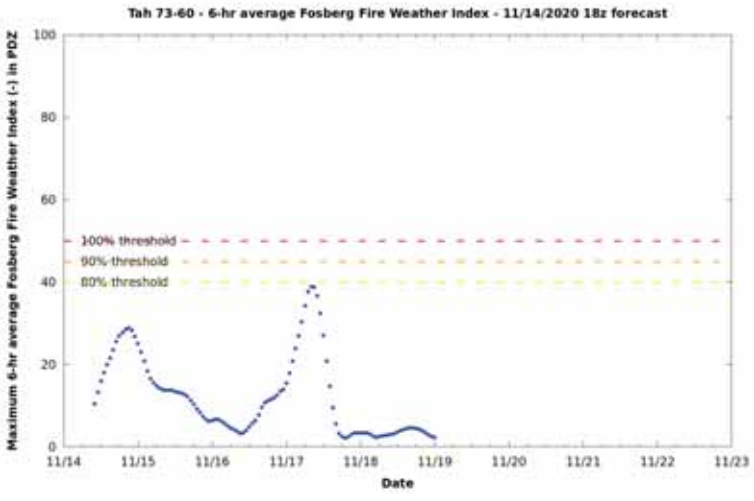


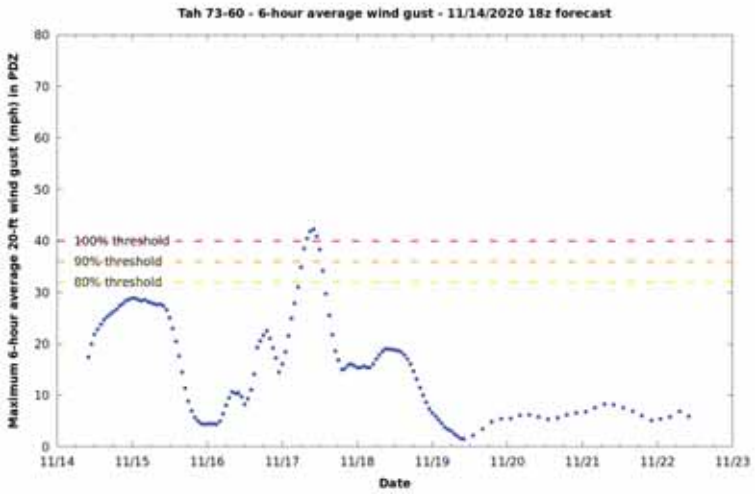
Tah 7300 r1



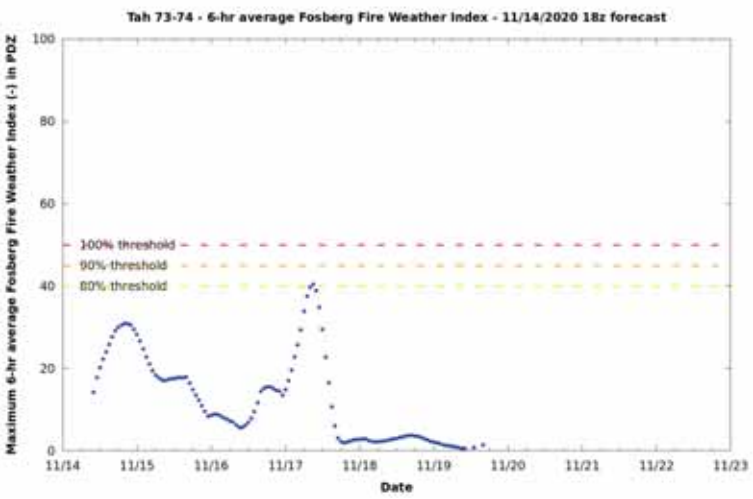


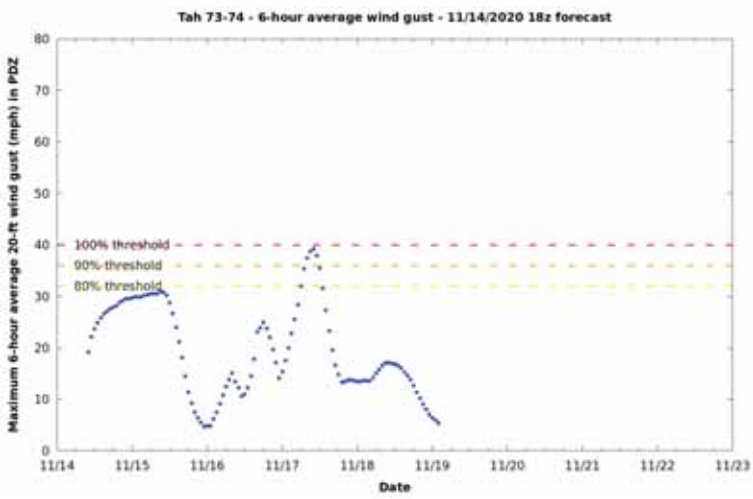
Tah 73-60



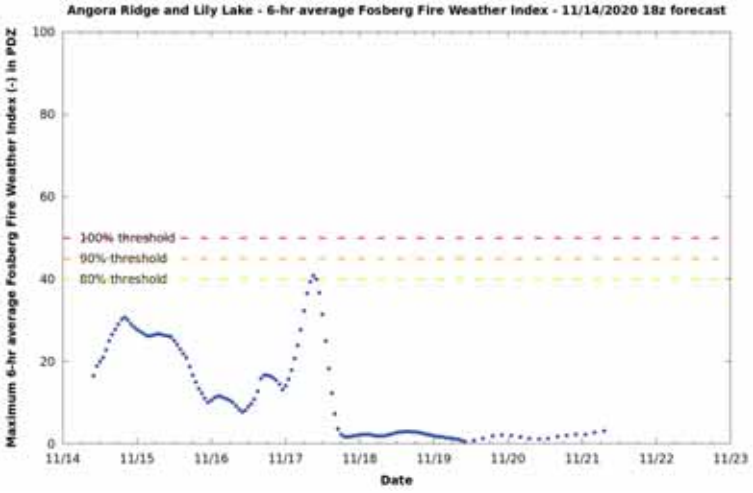


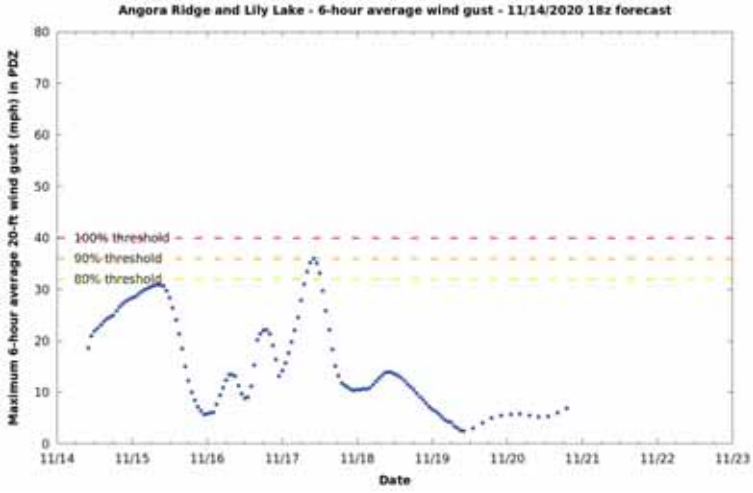
Tah 73-74



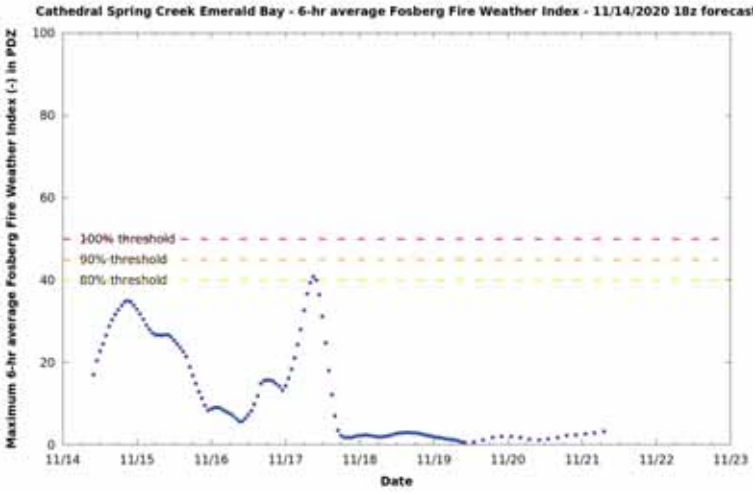


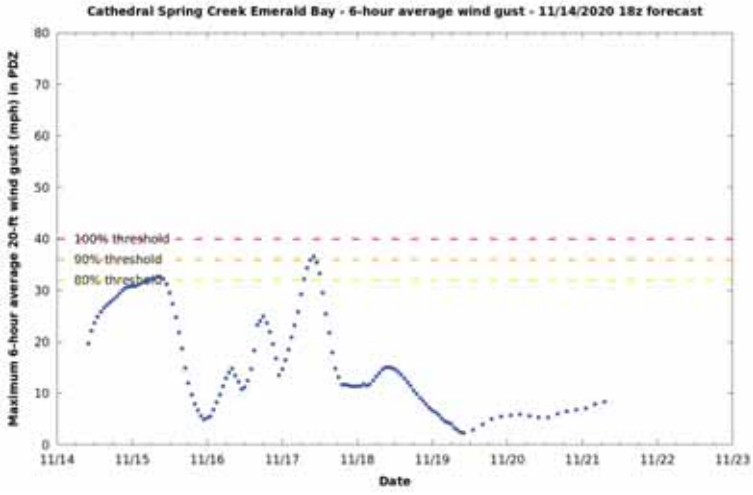
Angora Ridge and Lily Lake



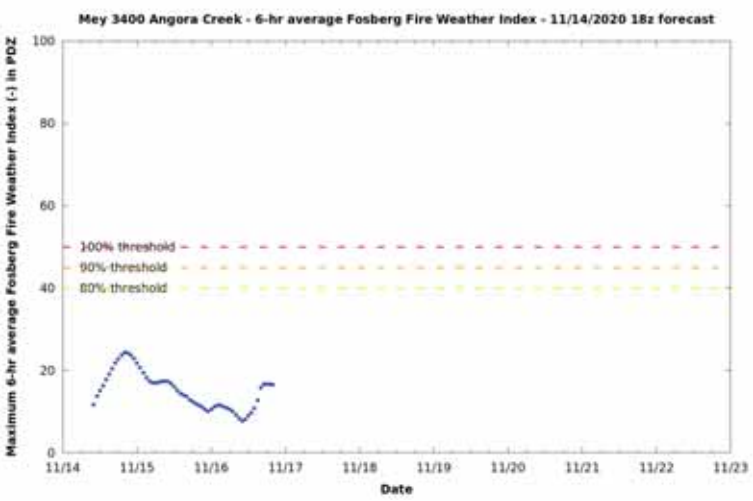


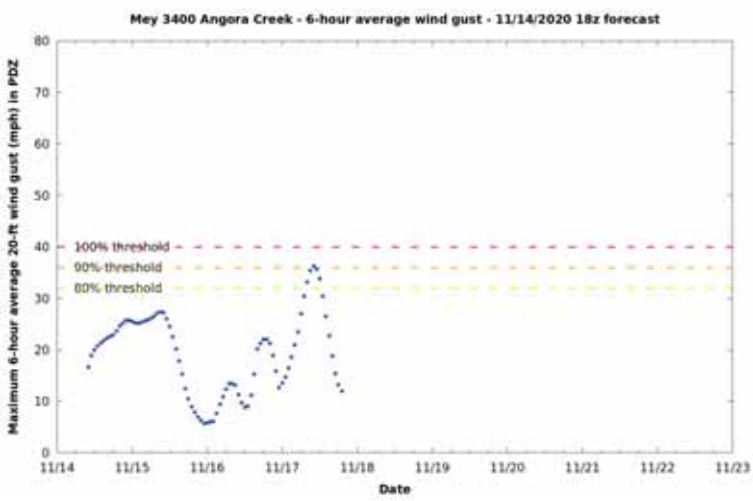
Cathedral Spring Creek Emerald Bay



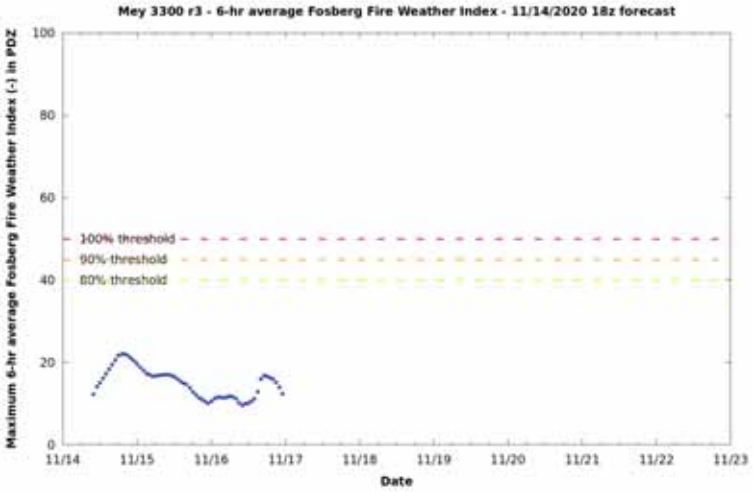


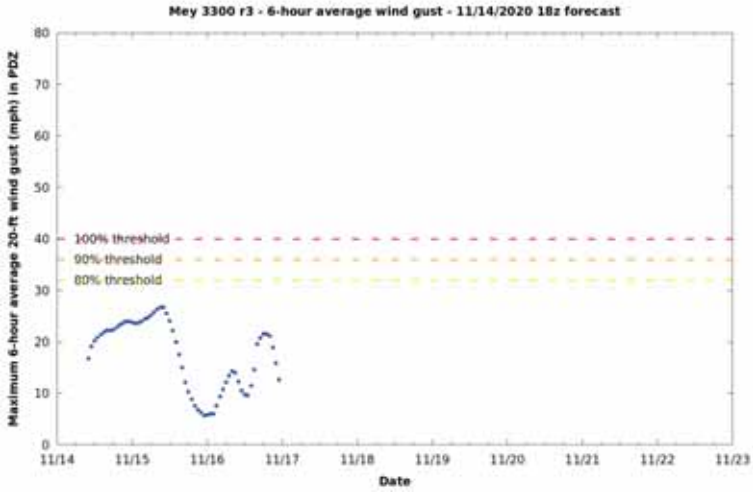
Mey 3400 Angora Creek



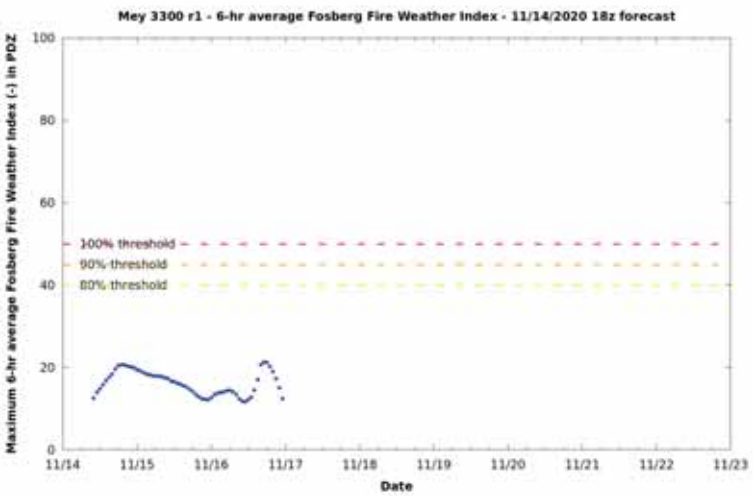


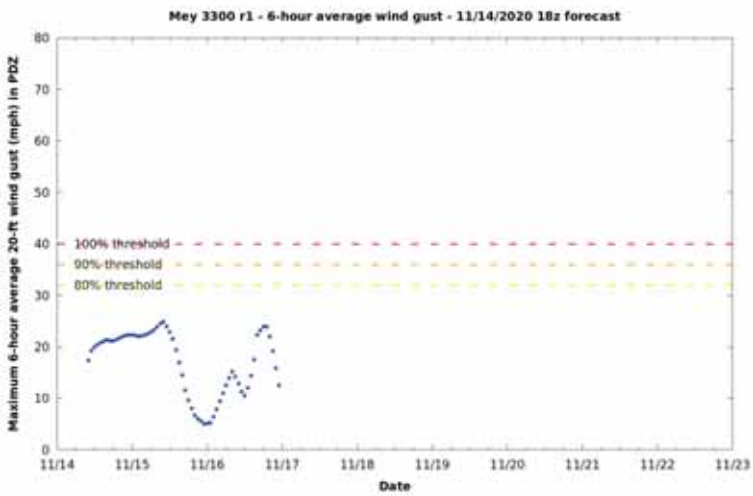
Mey 3300 r3



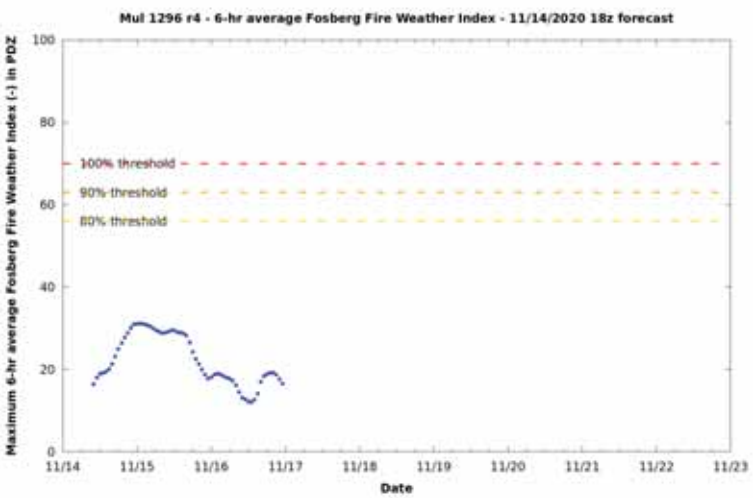


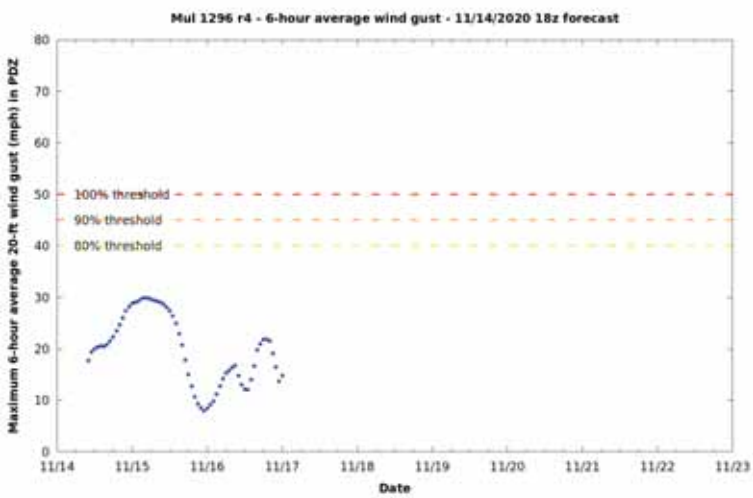
Mey 3300 r1



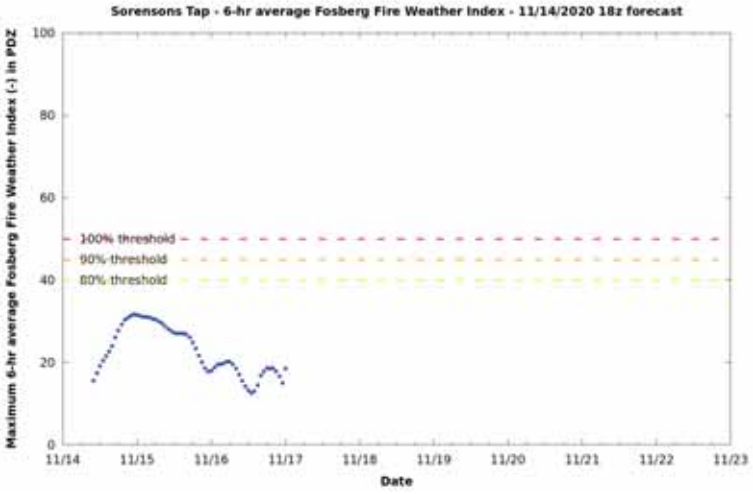


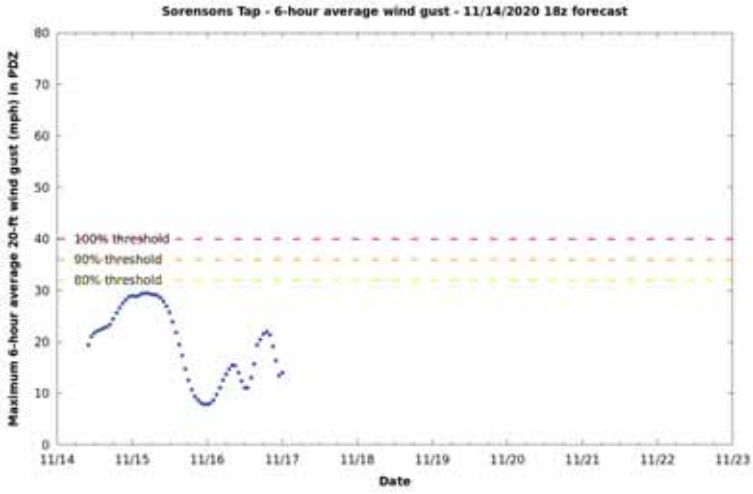
Mul 1296 r4



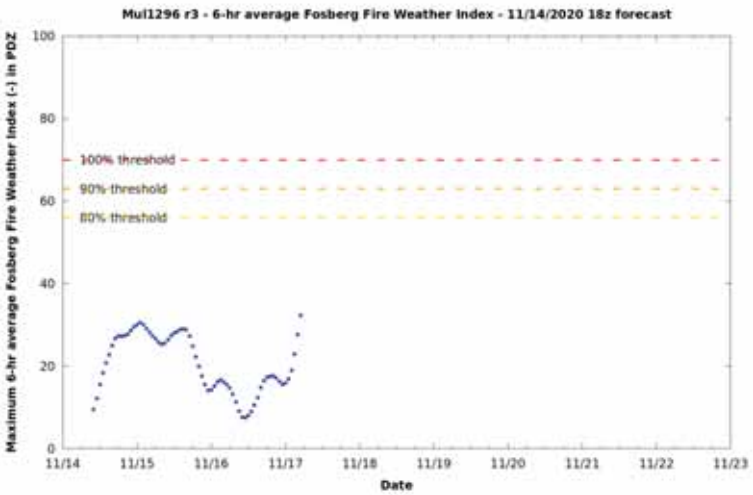


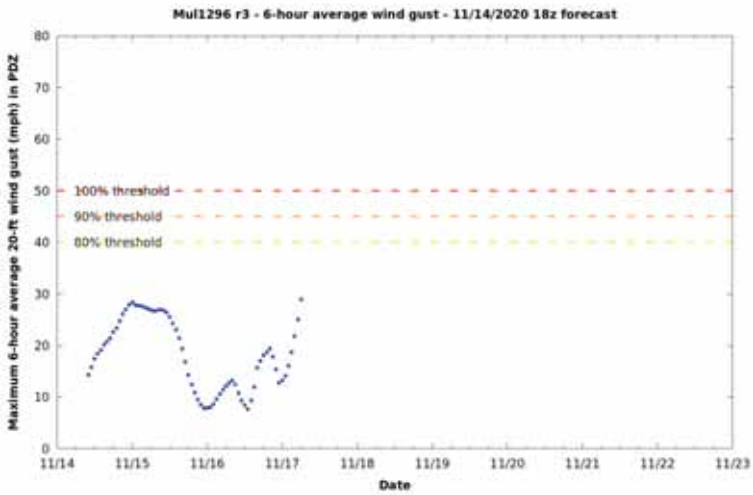
Sorensons Tap



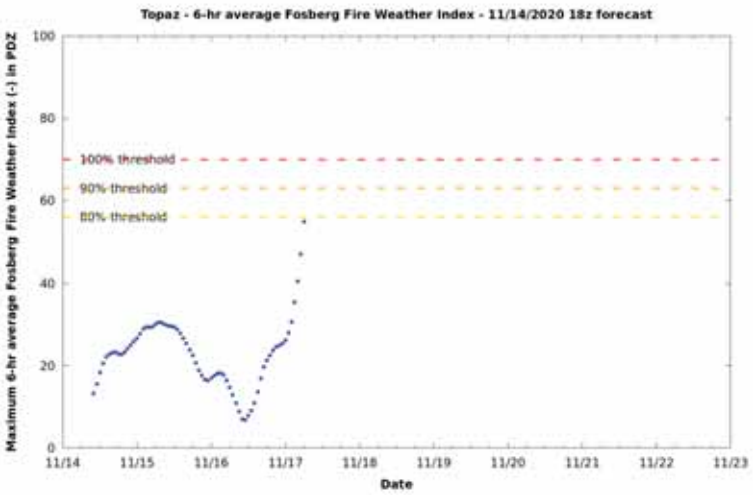


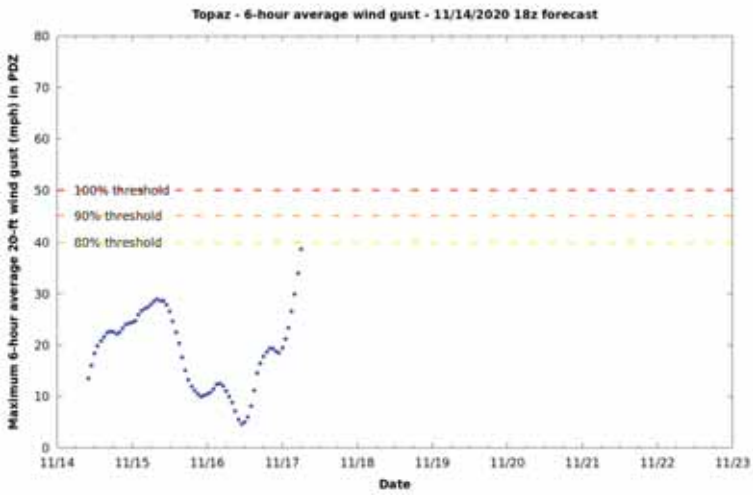
Mul 1296 r3



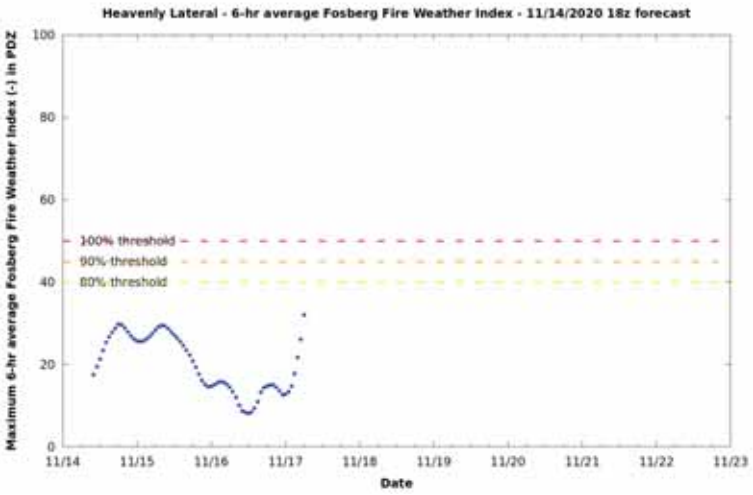


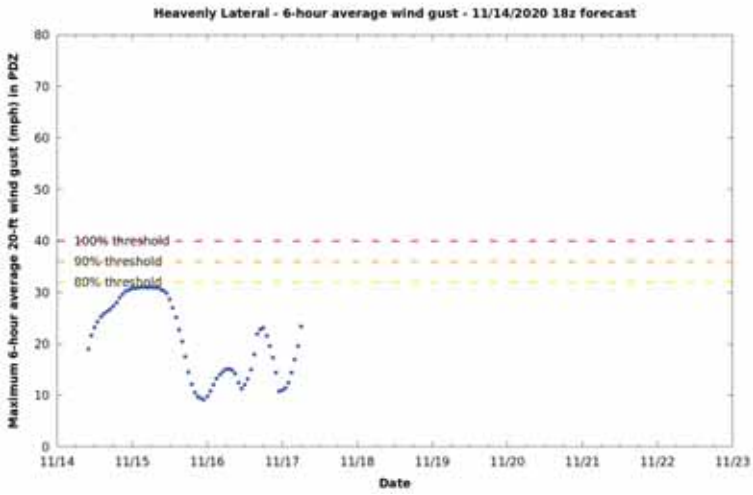
Topaz





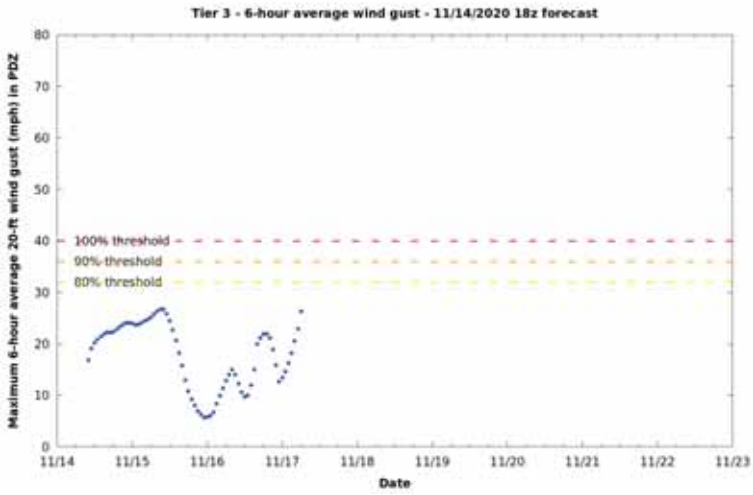
Heavenly Lateral





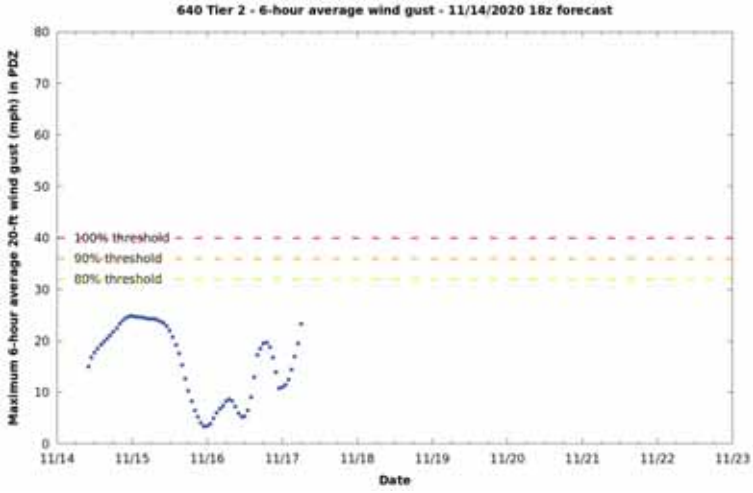
Tier 3



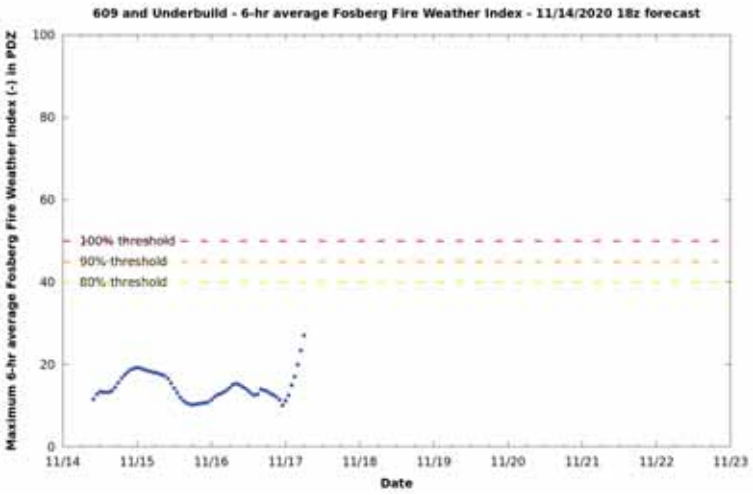


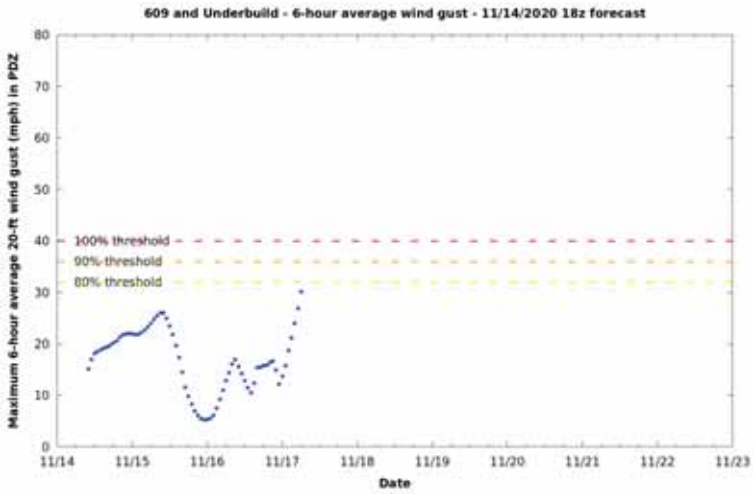
640 Tier 2



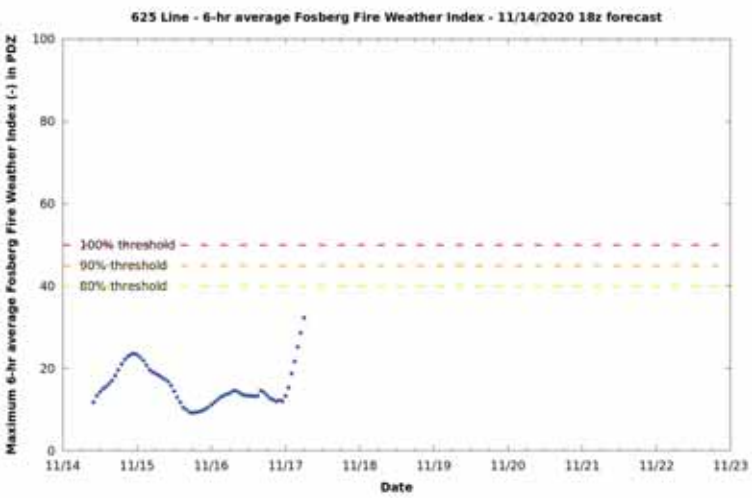


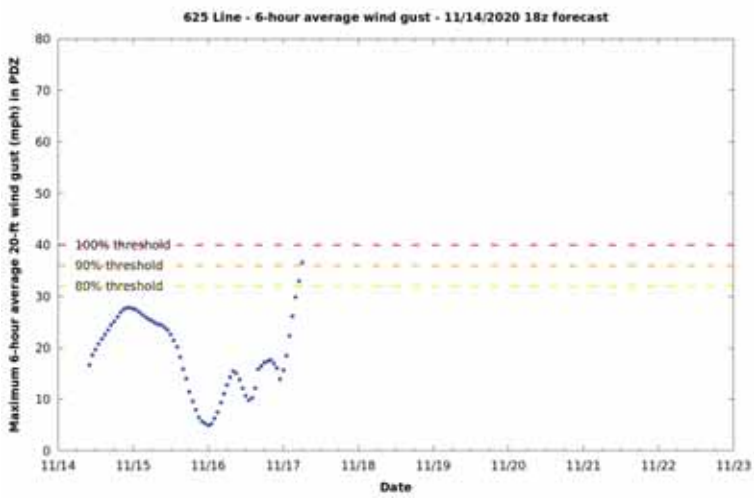
609 and Underbuild



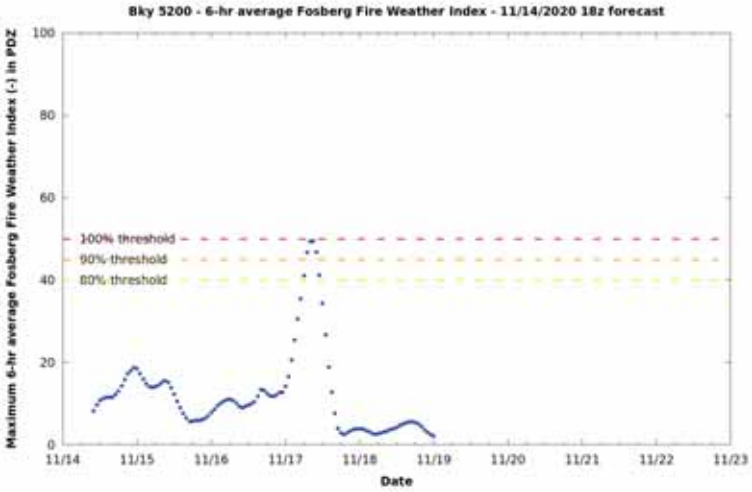


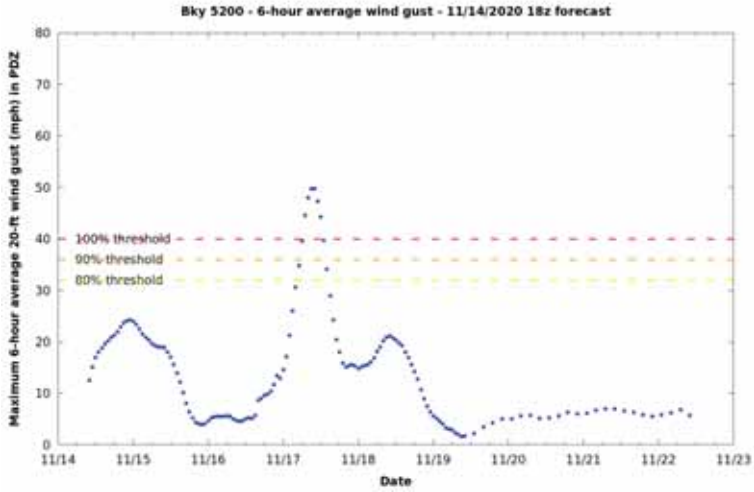
625 Line



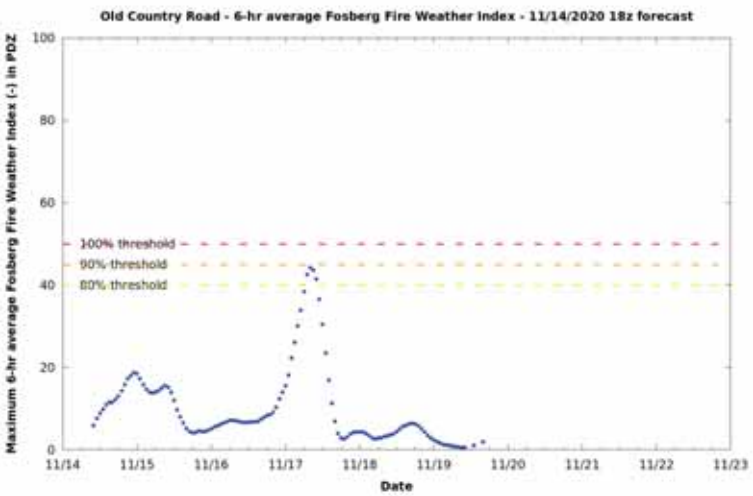


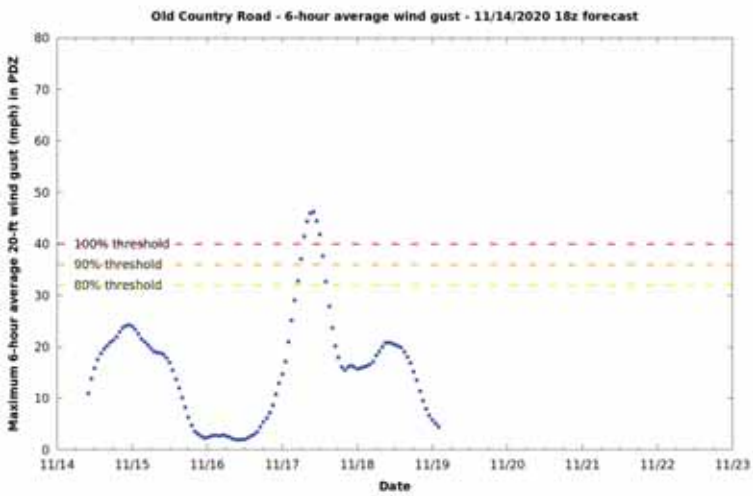
Bky 5200



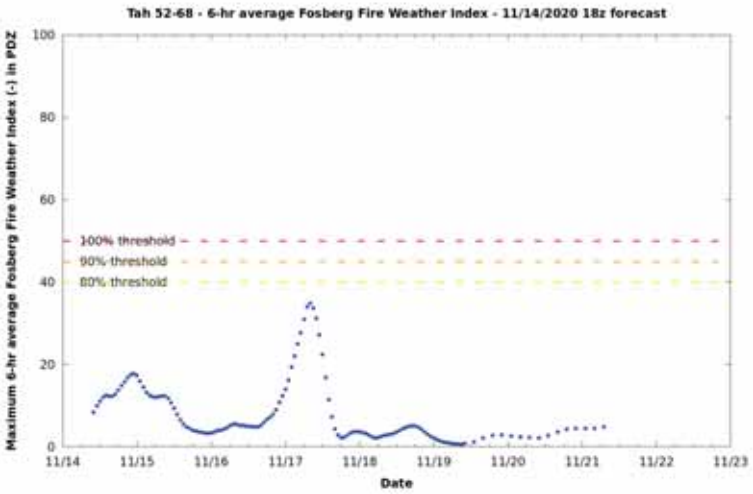


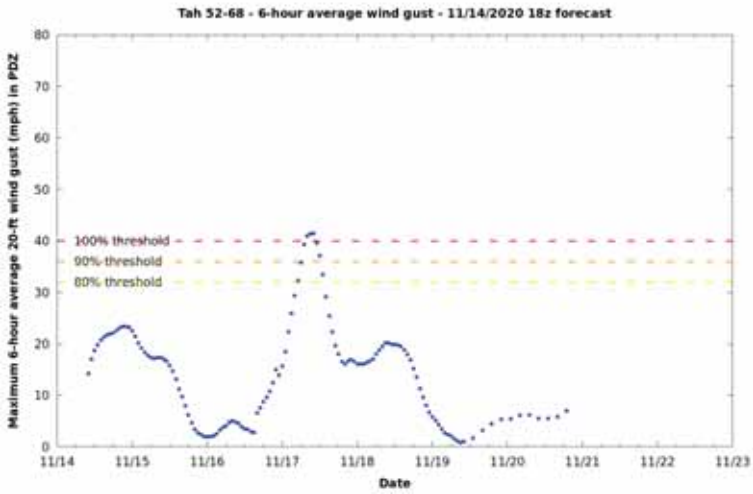
Old Country Road



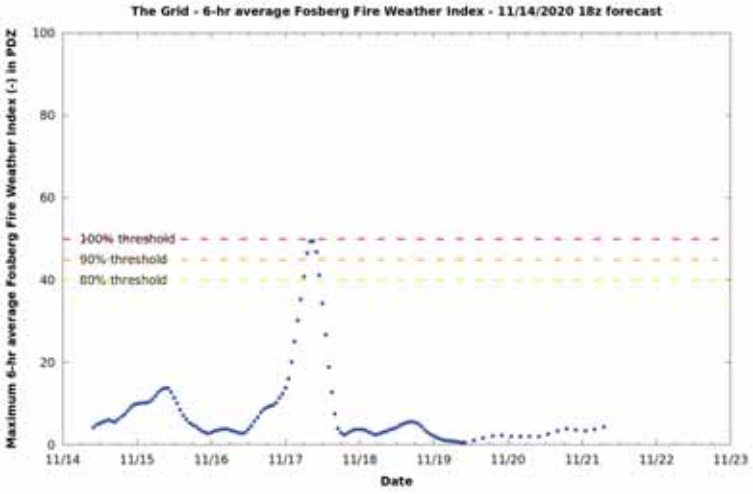


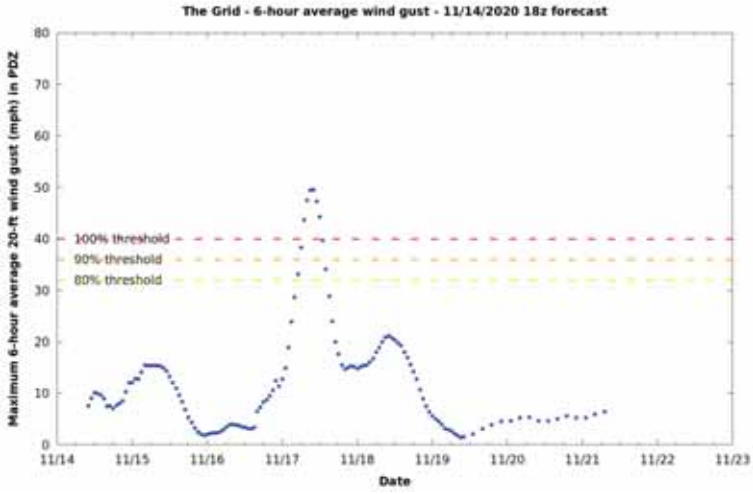
Tah 52-68





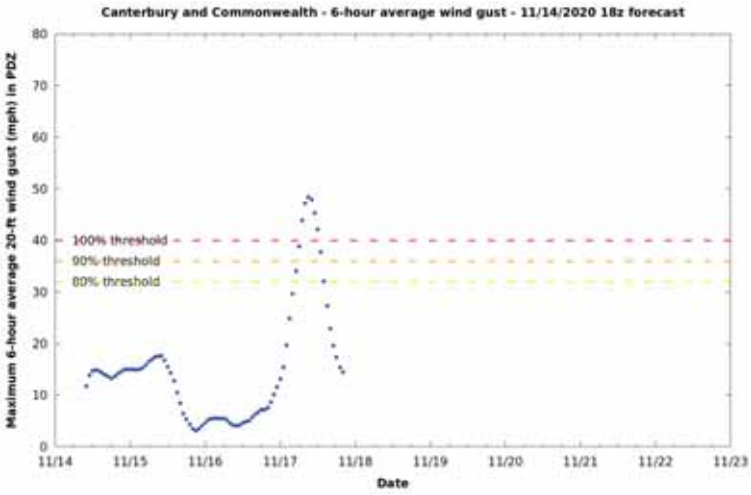
The Grid



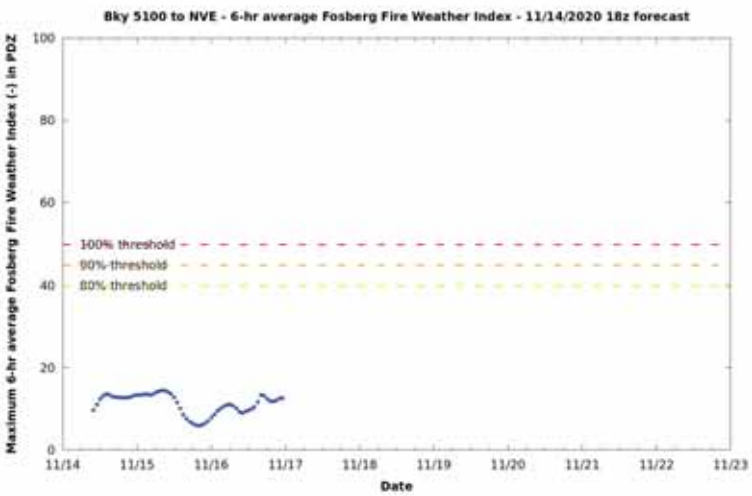


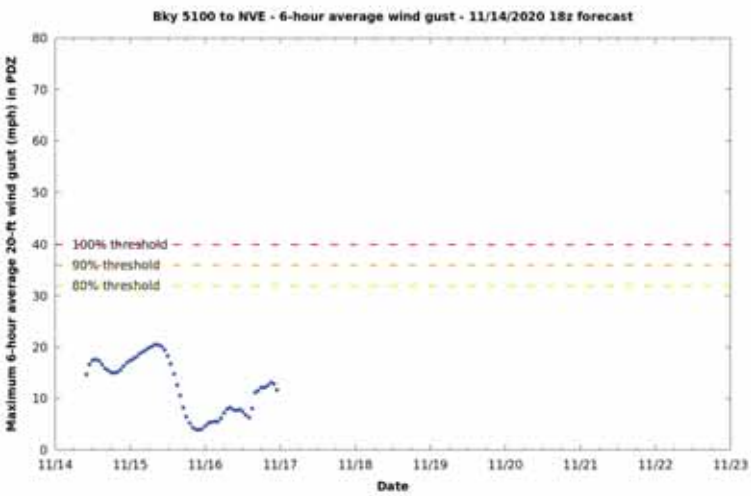
Canterbuy and Commonwealth





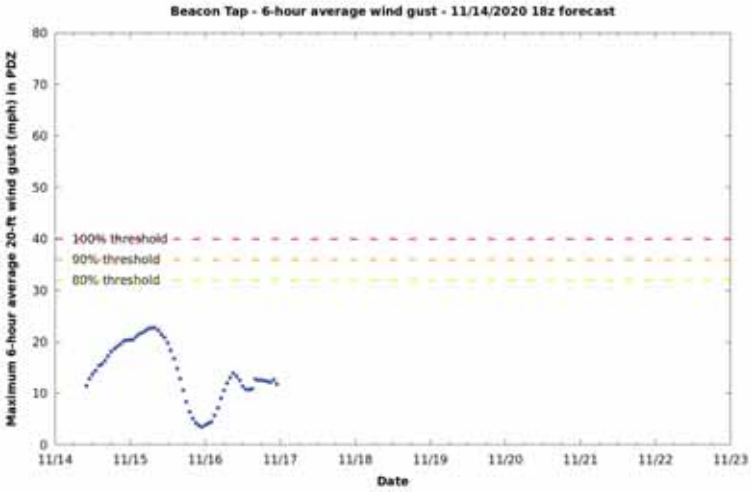
Bky 5100 to NVE



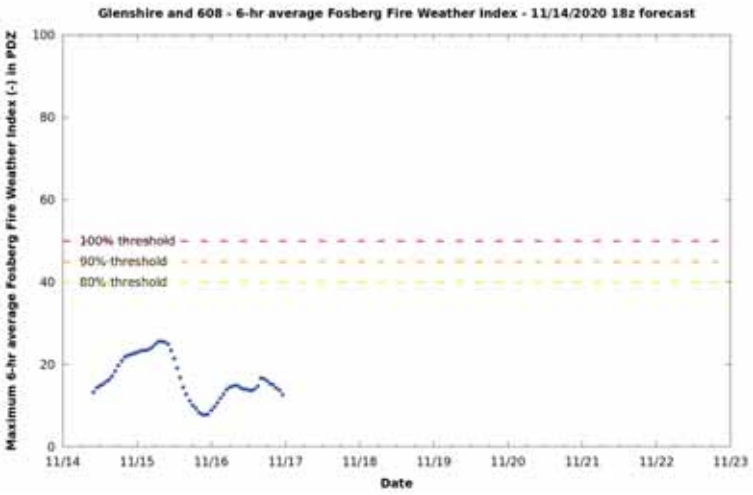


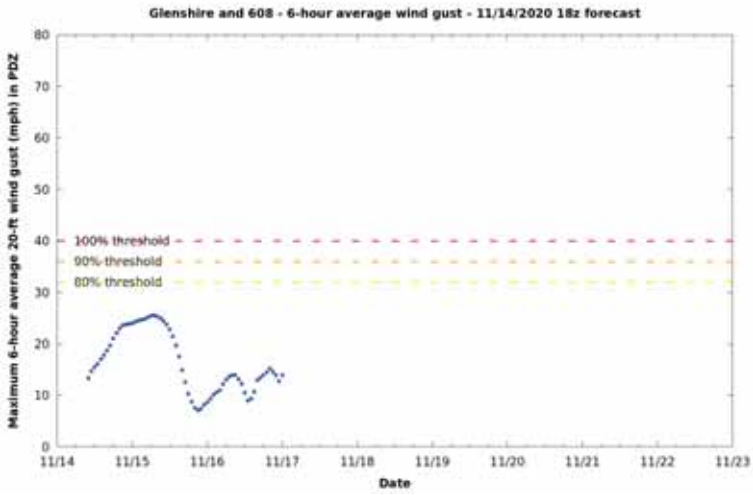
Beacon Tap



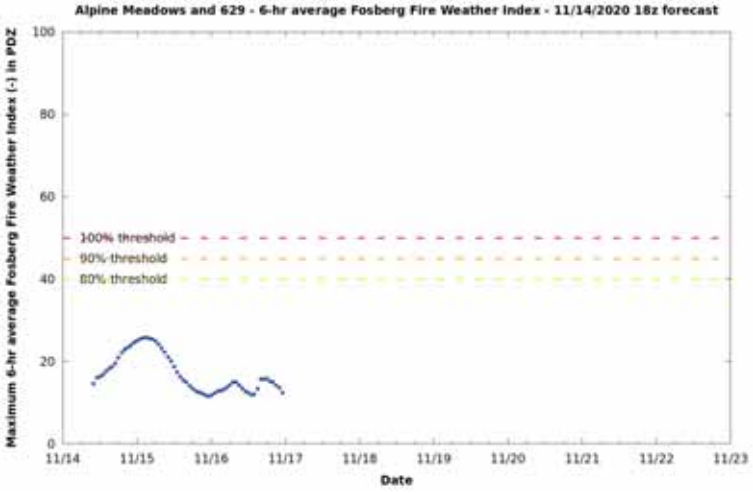


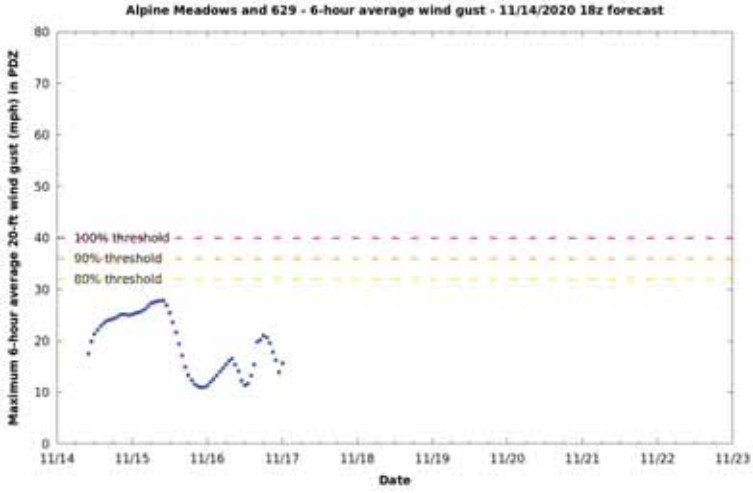
Glenshire and 608



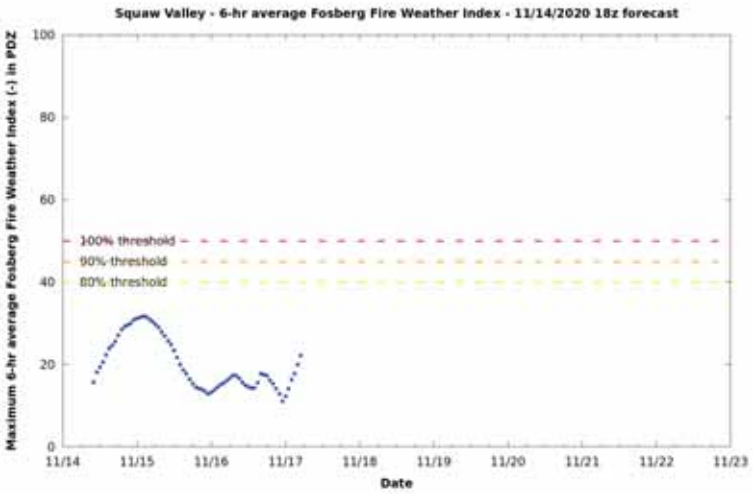


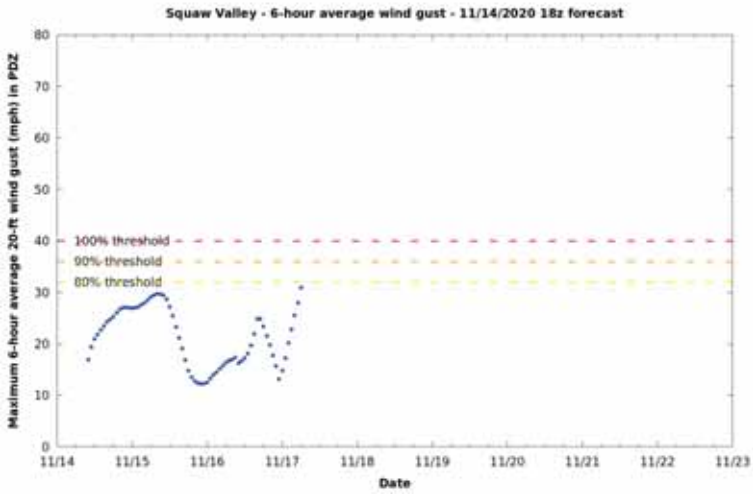
Alpine Meadows and 629



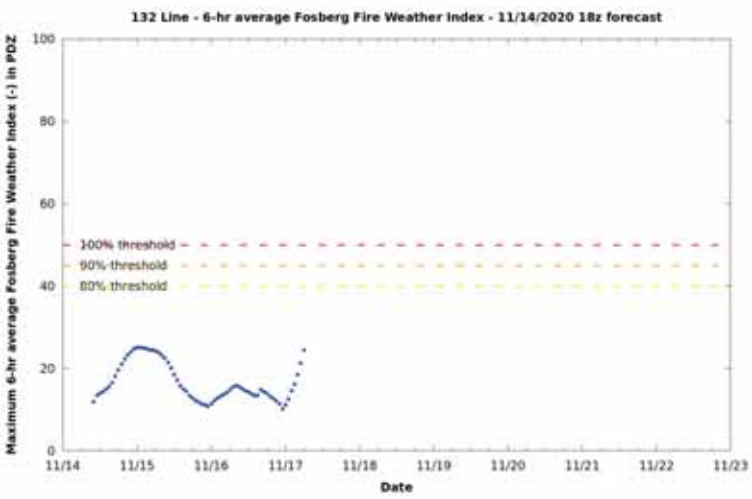


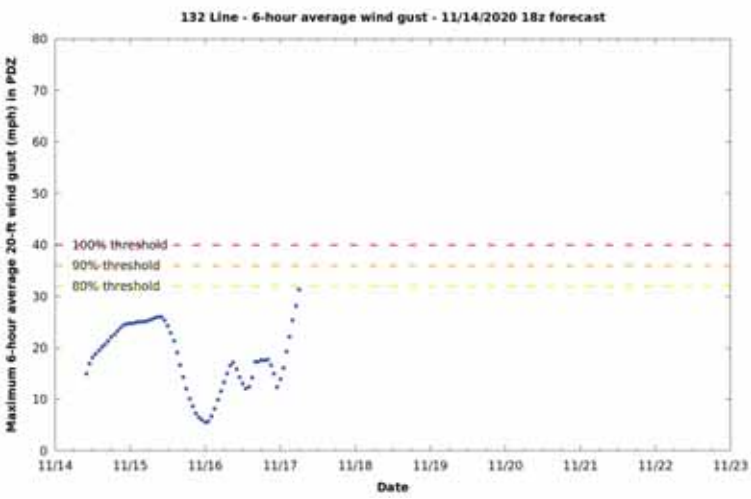
Squaw Valley



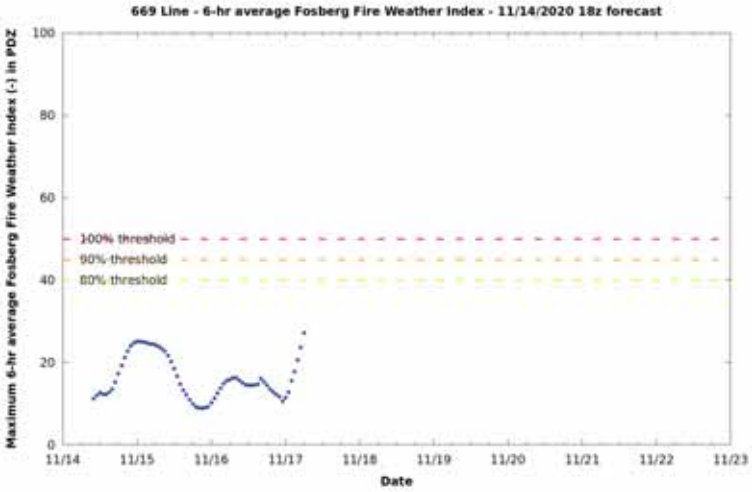


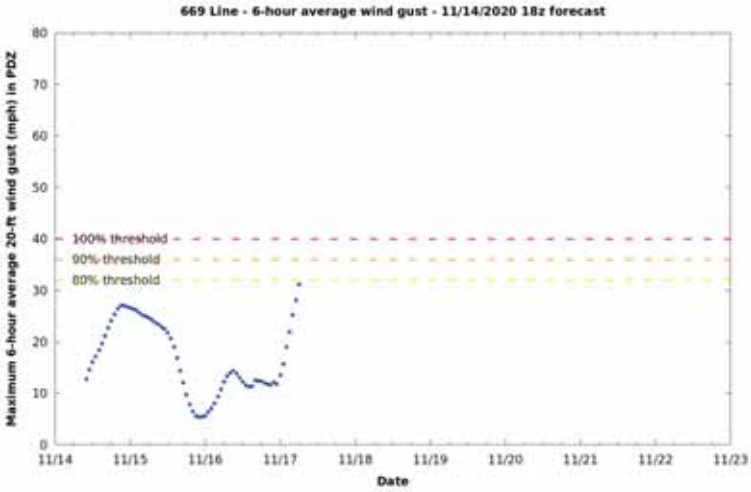
132 Line



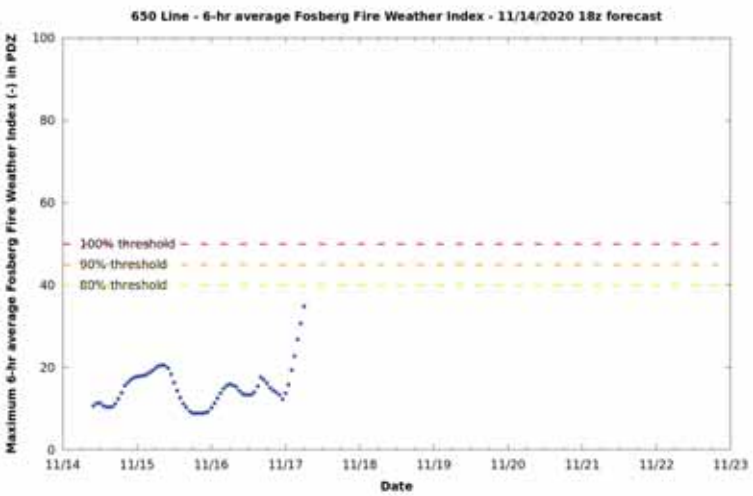


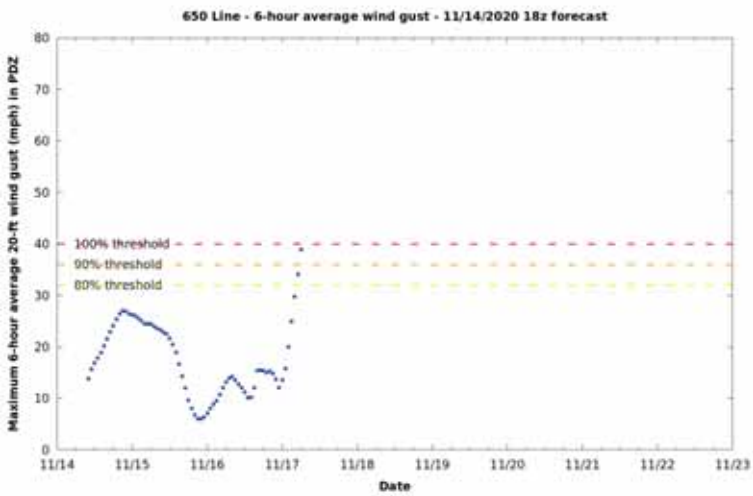
669 Line



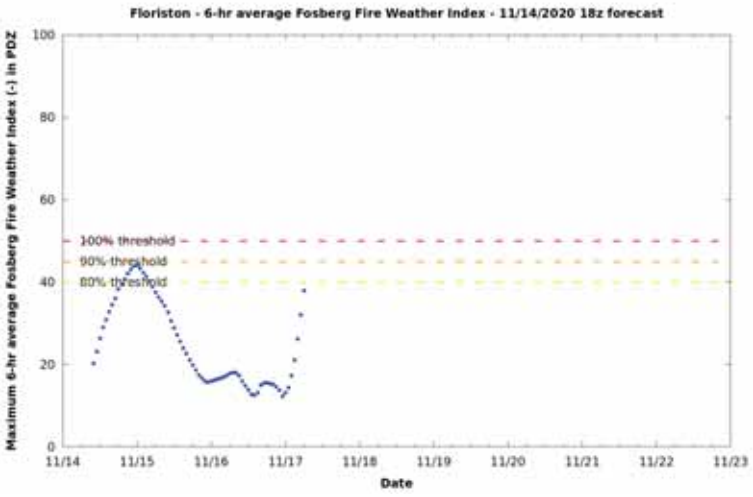


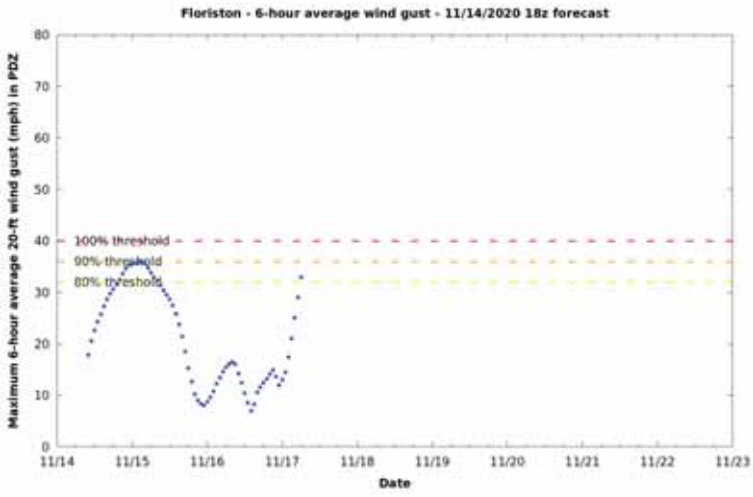
650 Line



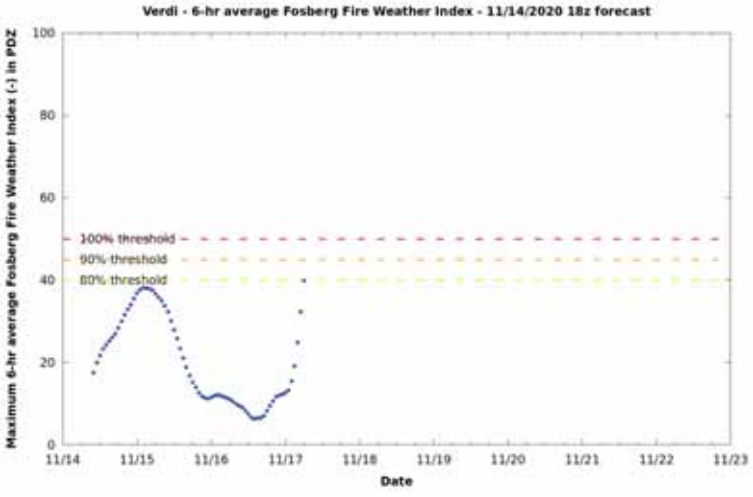


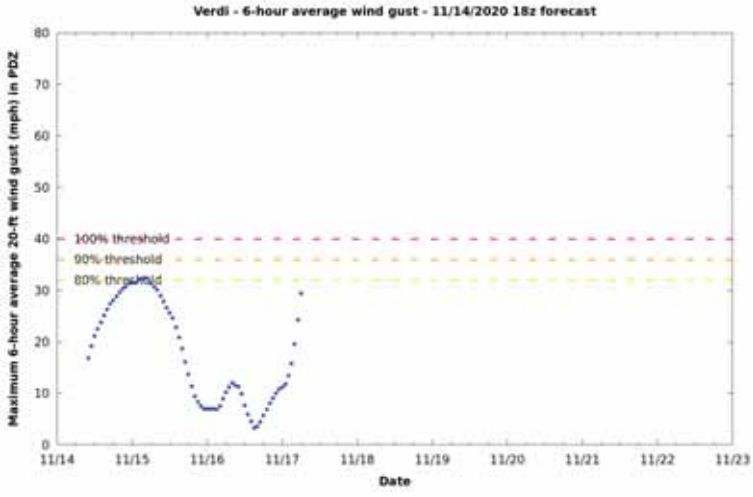
Floriston



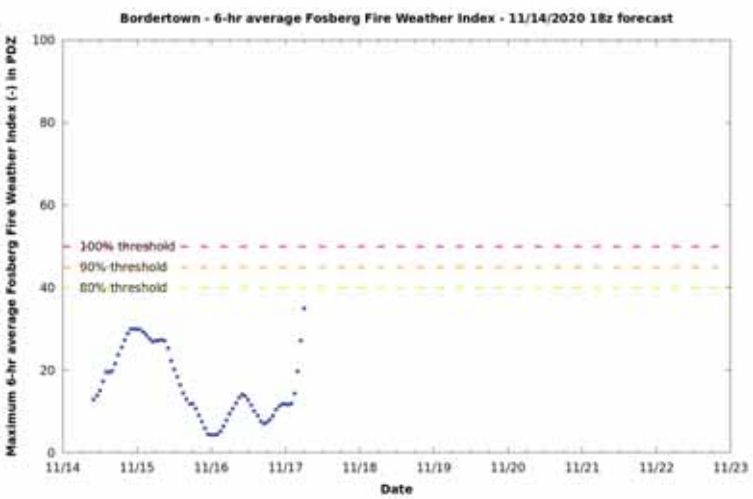


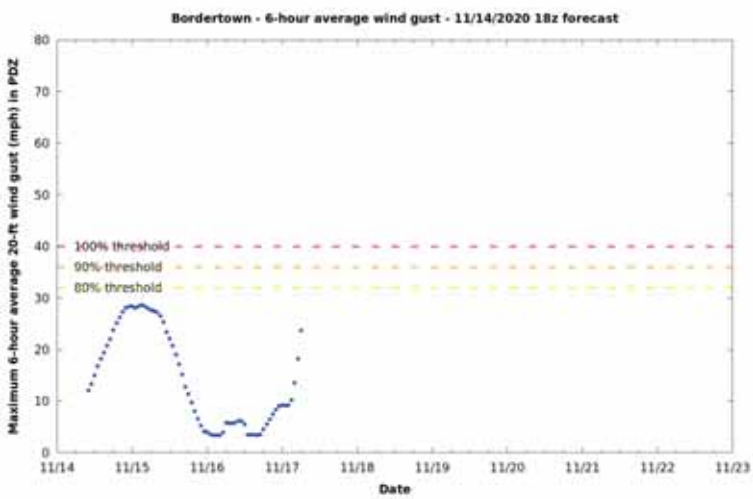
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/14/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/14/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/15/20 - 11/21/20

Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

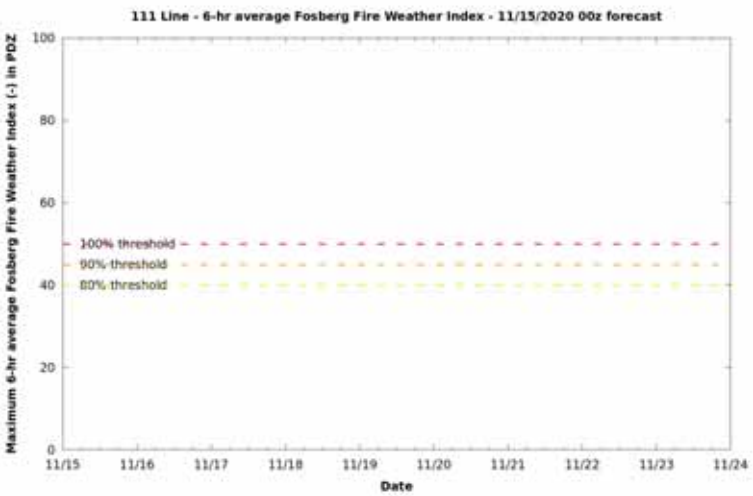
Liberty Utilities Energy Release Component Forecast for 11/15/20 - 11/21/20

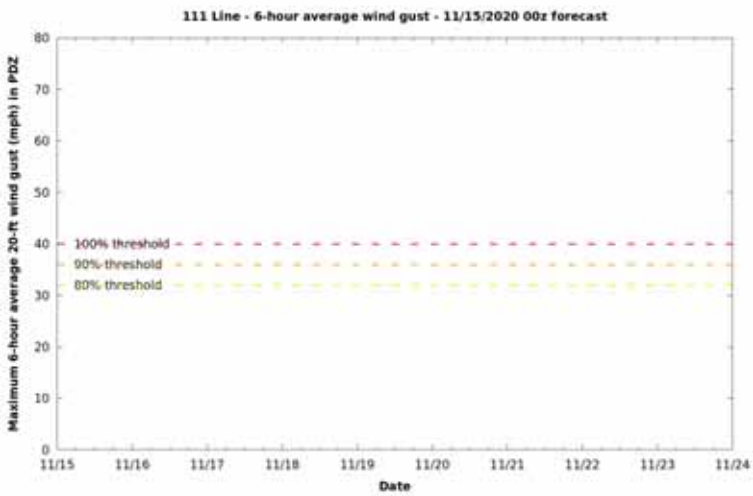
Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

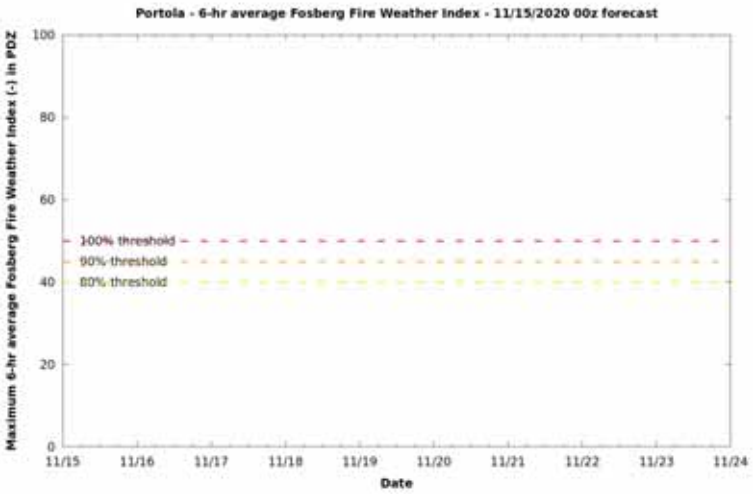
Liberty Utilities Fire Weather Summary Plots - 11/15/2020 00z forecast

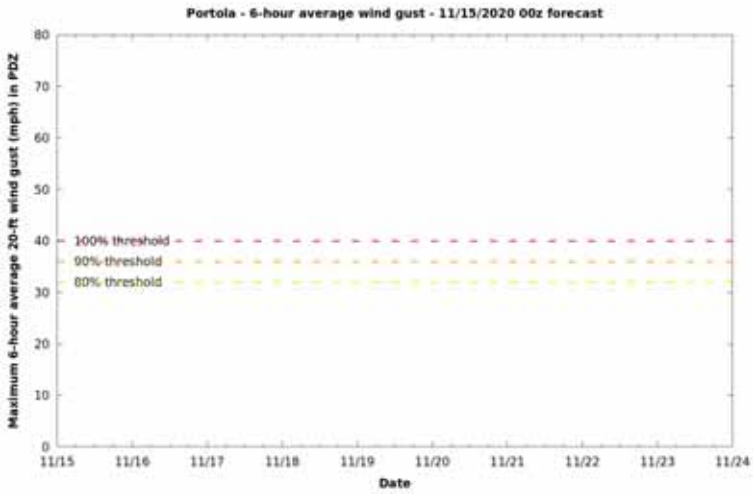
111 Line



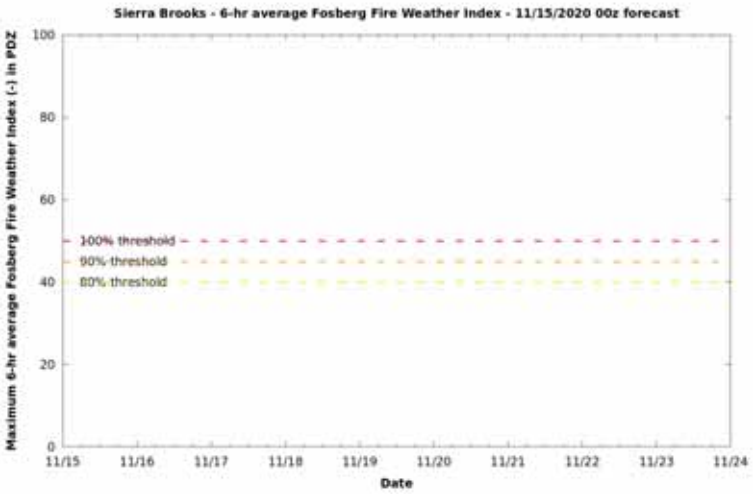


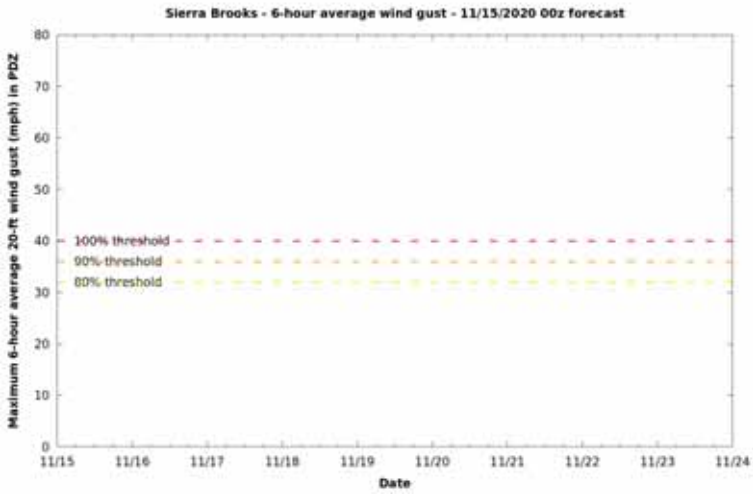
Portola



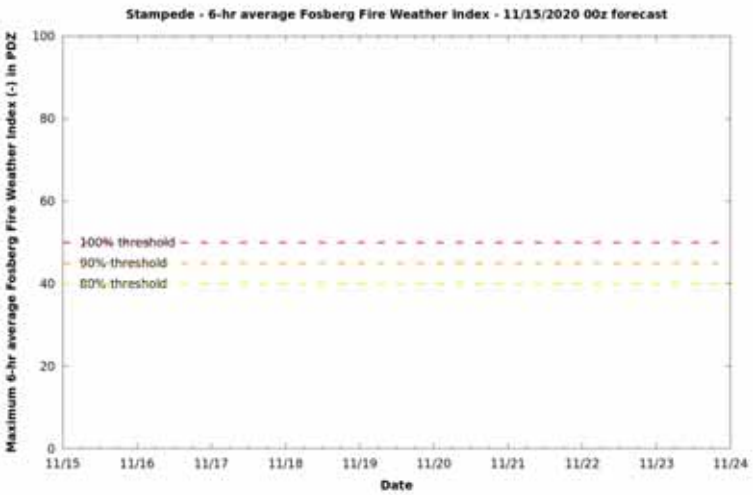


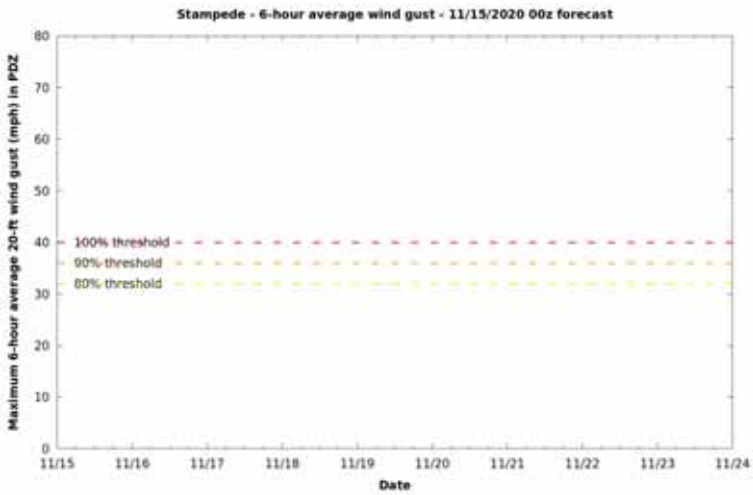
Sierra Brooks



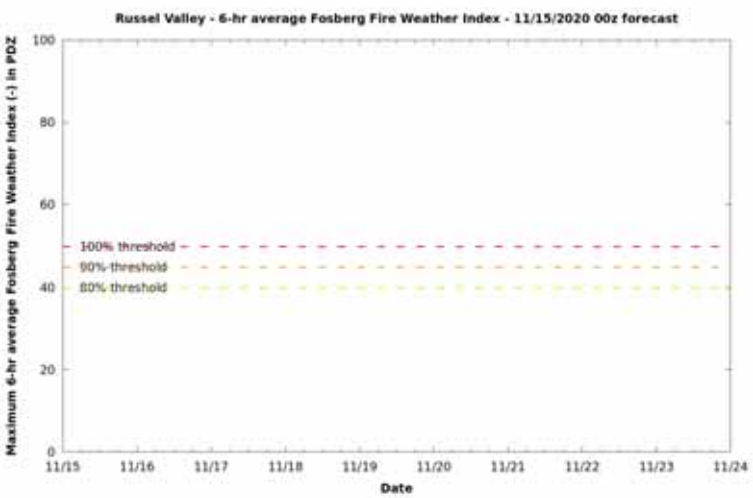


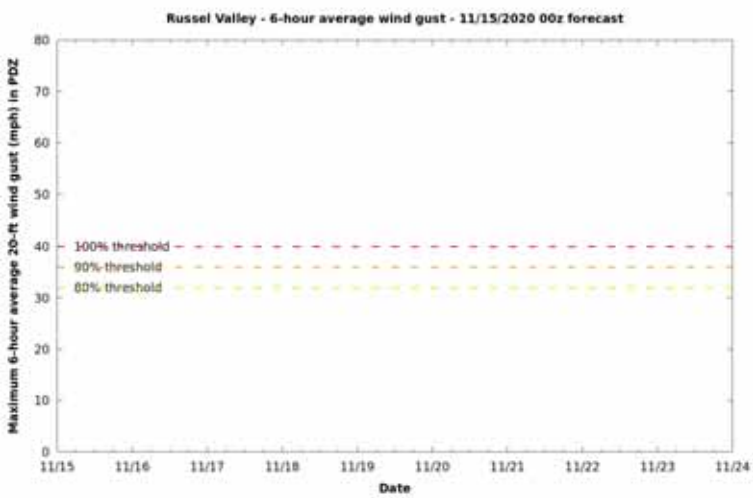
Stampede





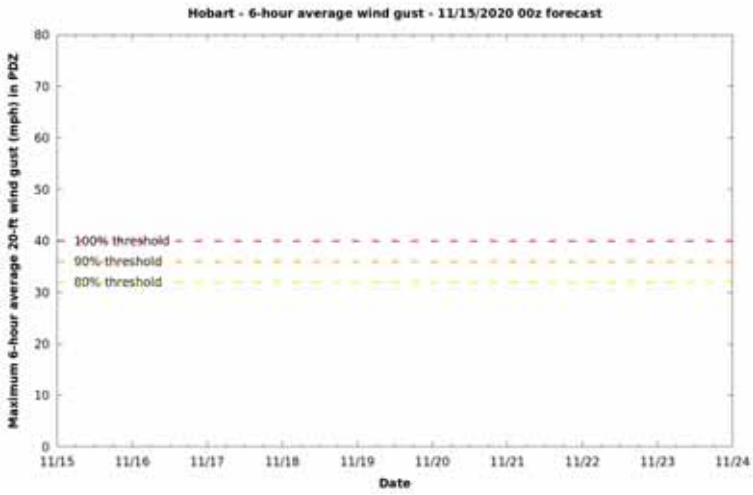
Russell Valley



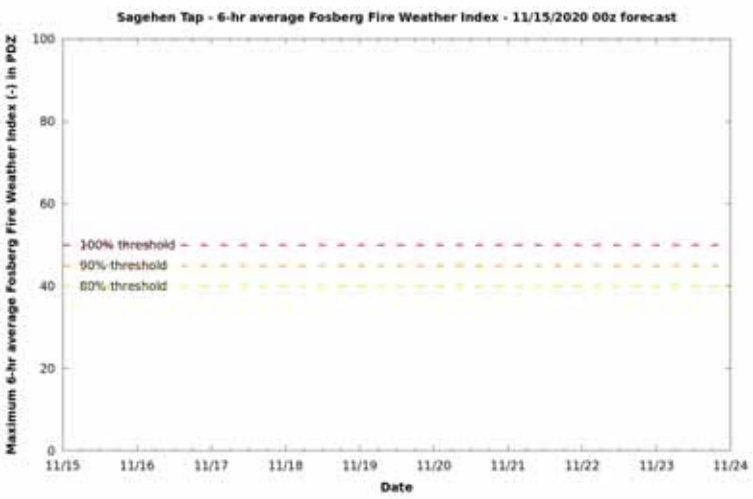


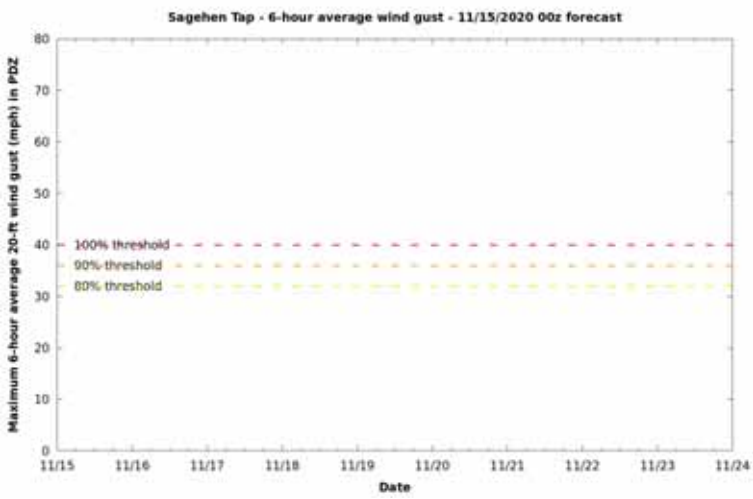
Hobart



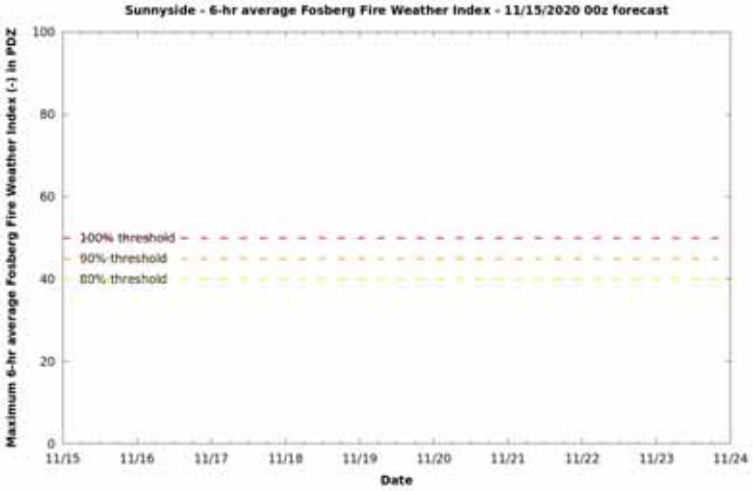


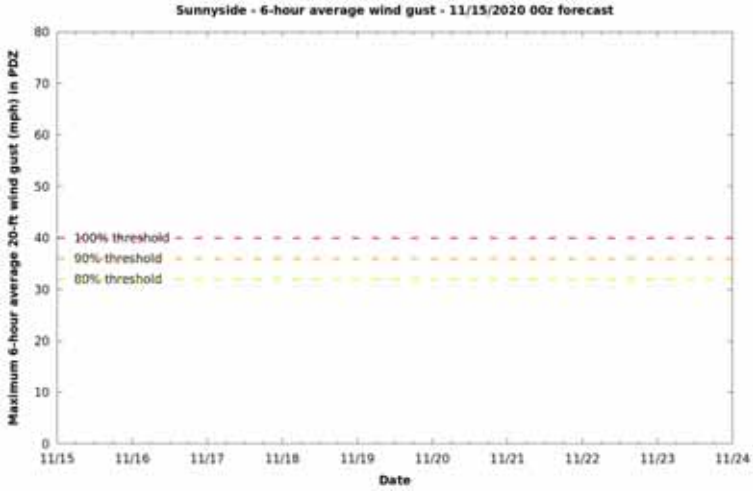
Sagehen tap



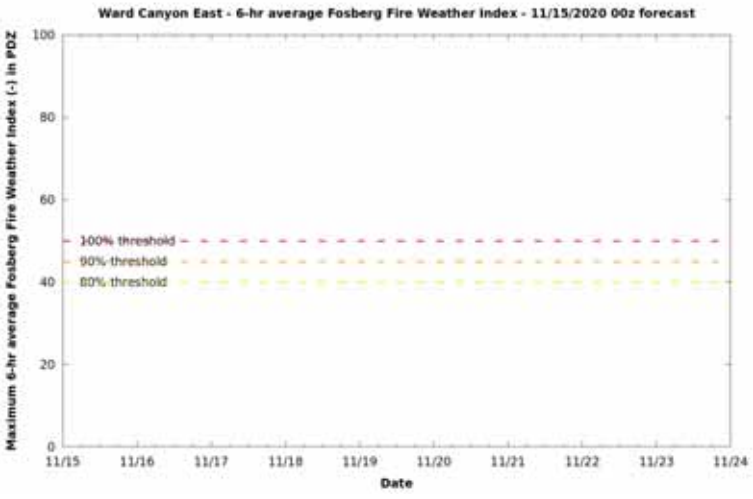


Sunnyside



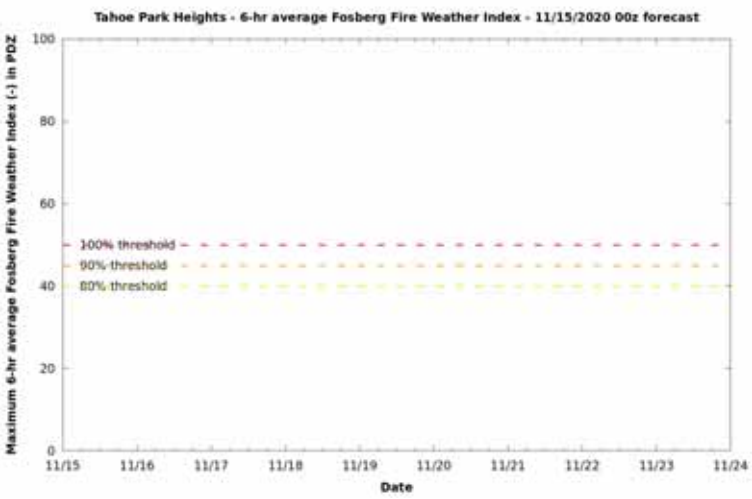


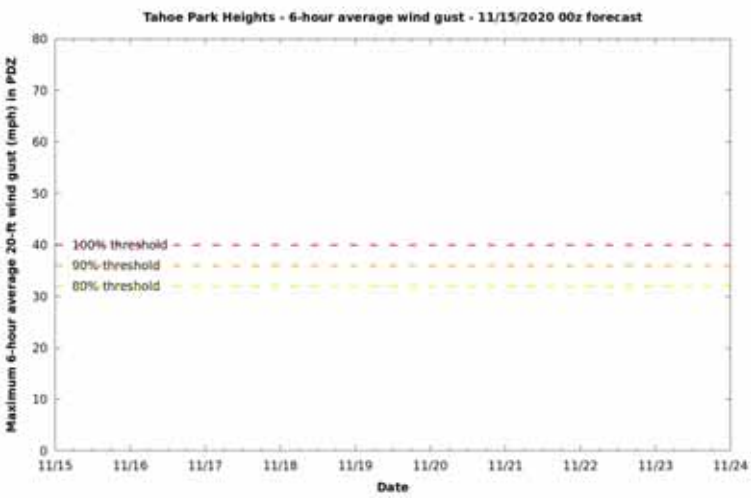
Ward Canyon East



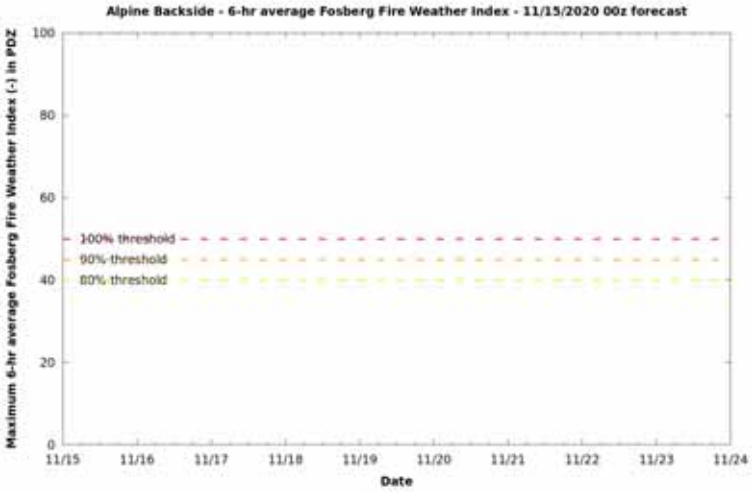


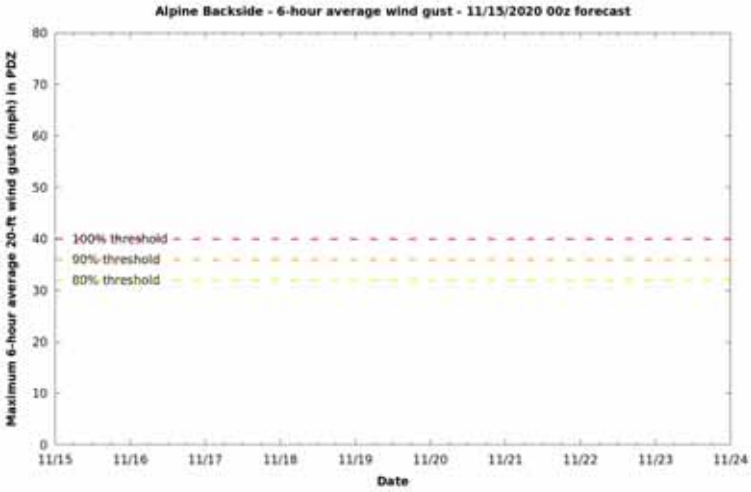
Tahoe Park Heights



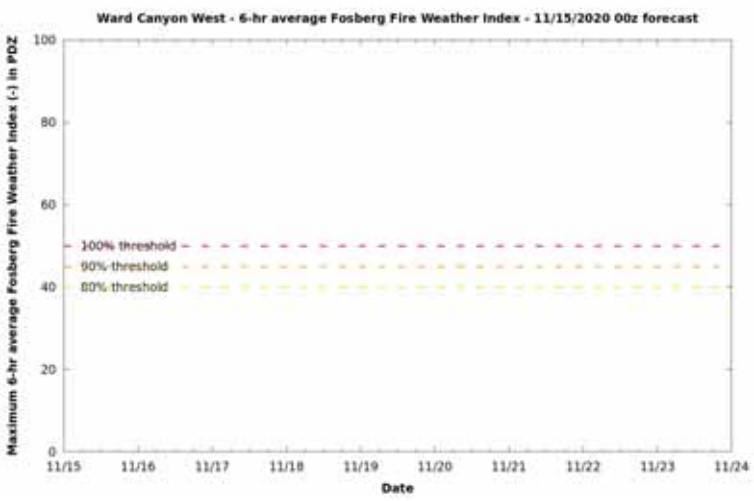


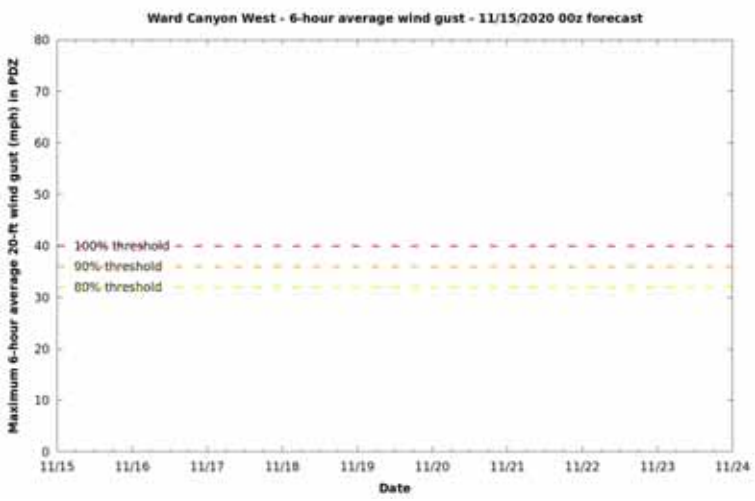
Alpine Backside



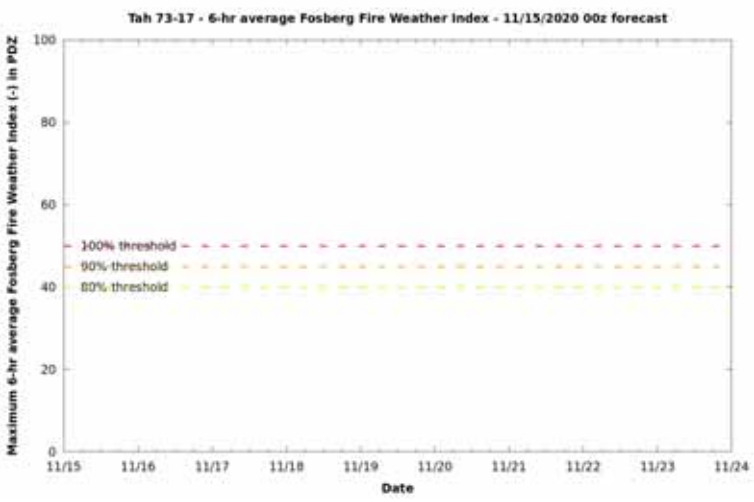


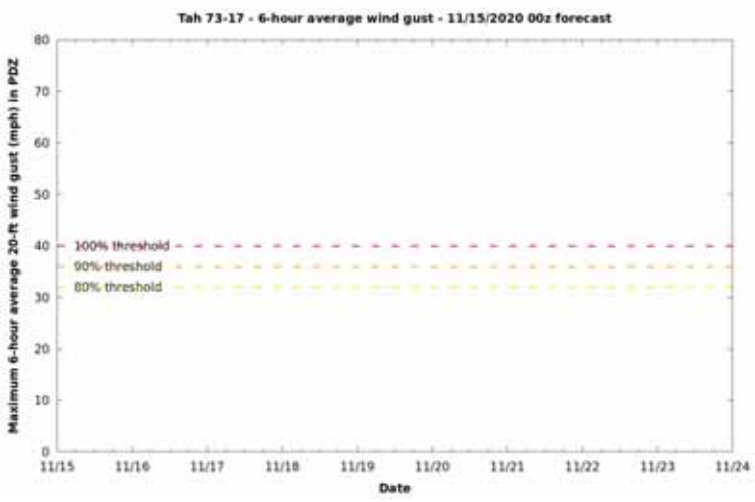
Ward Canyon West



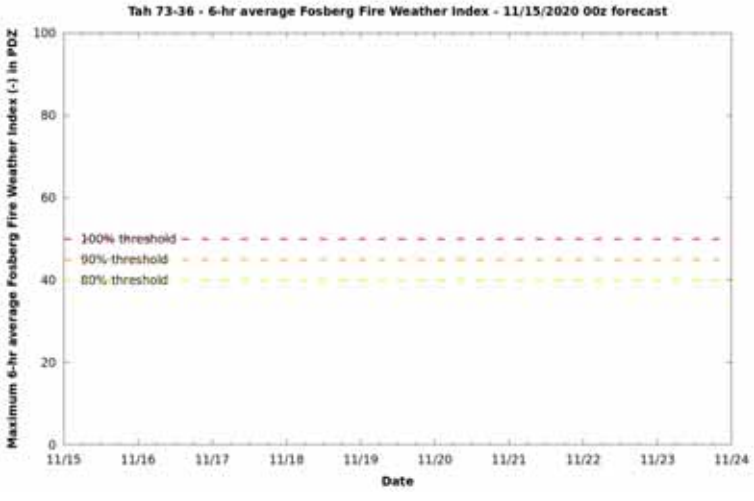


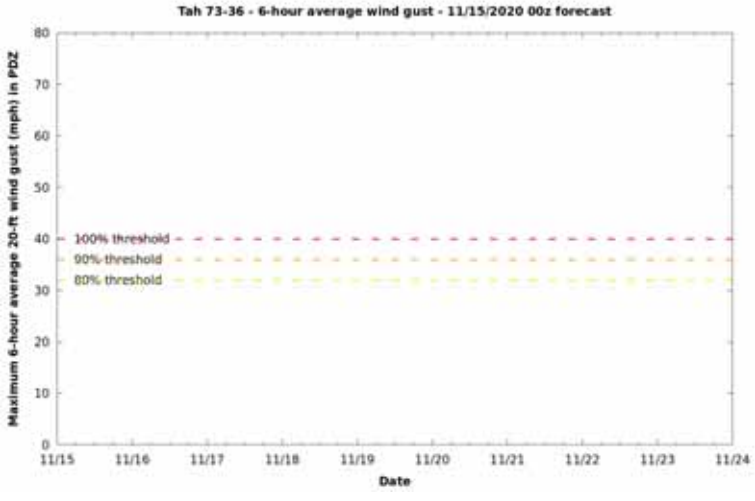
Tah 73-17



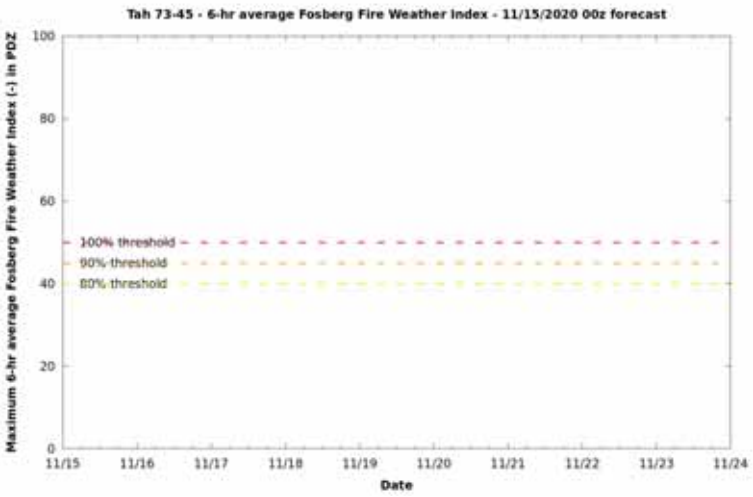


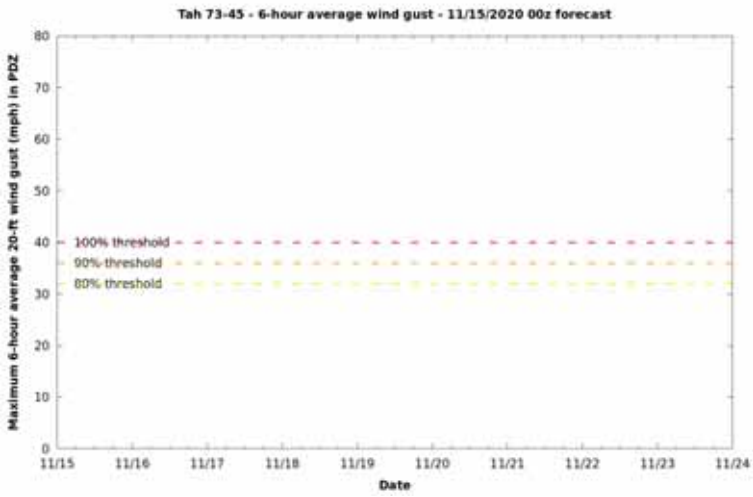
Tah 73-36



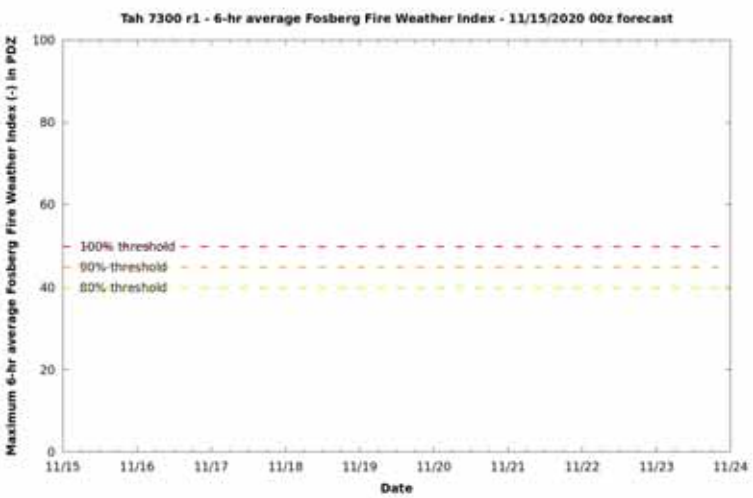


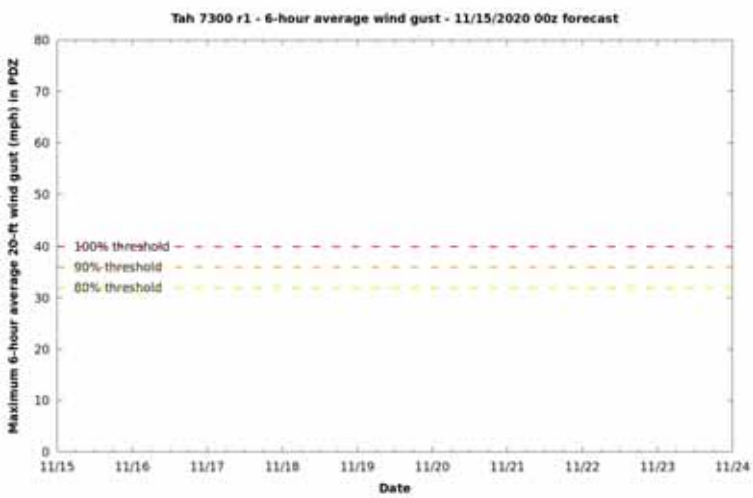
Tah 73-45



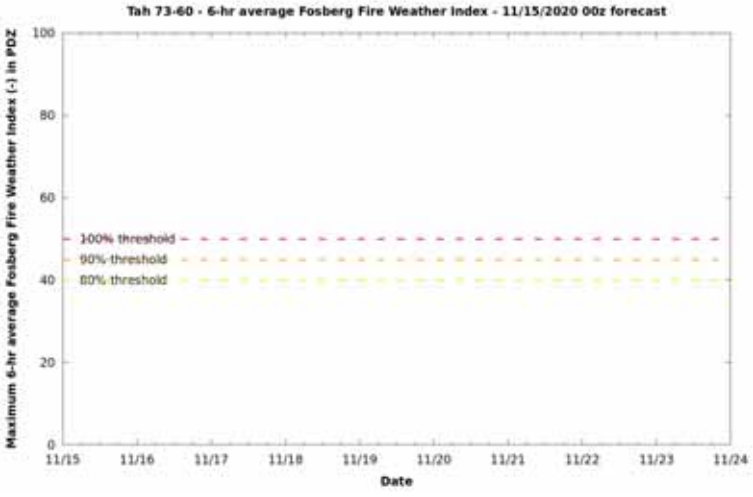


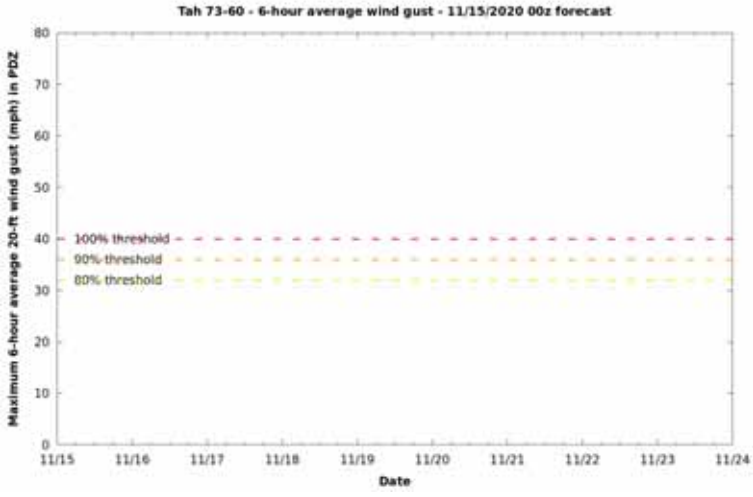
Tah 7300 r1



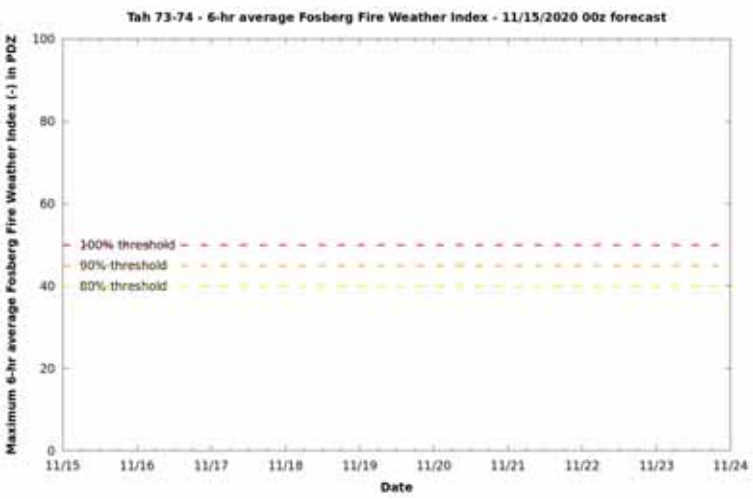


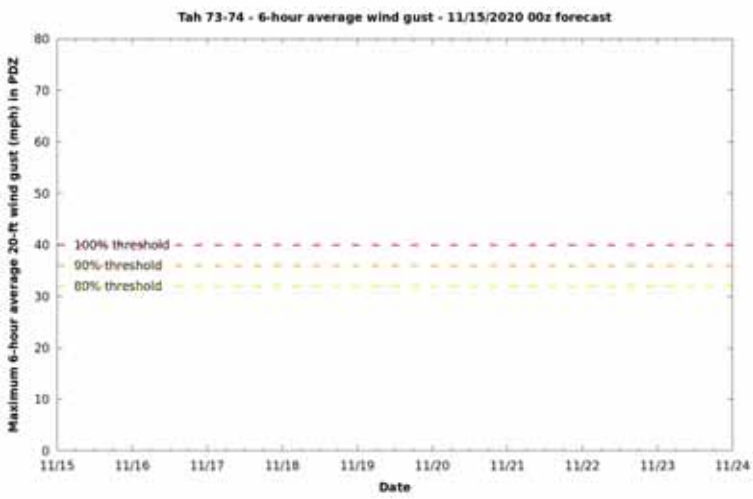
Tah 73-60



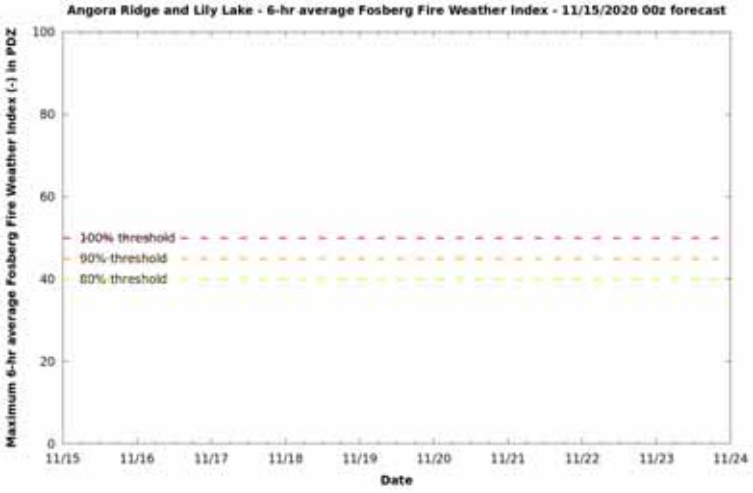


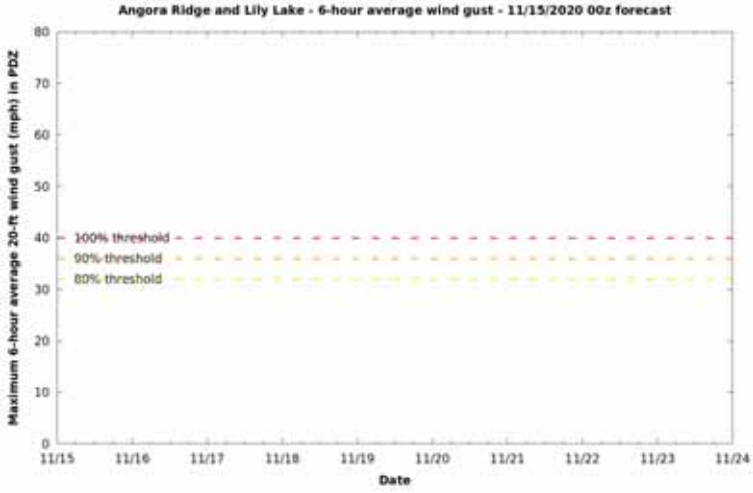
Tah 73-74



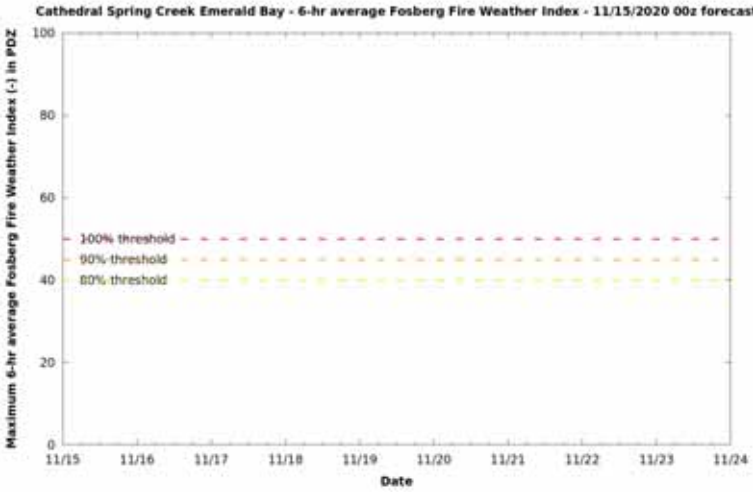


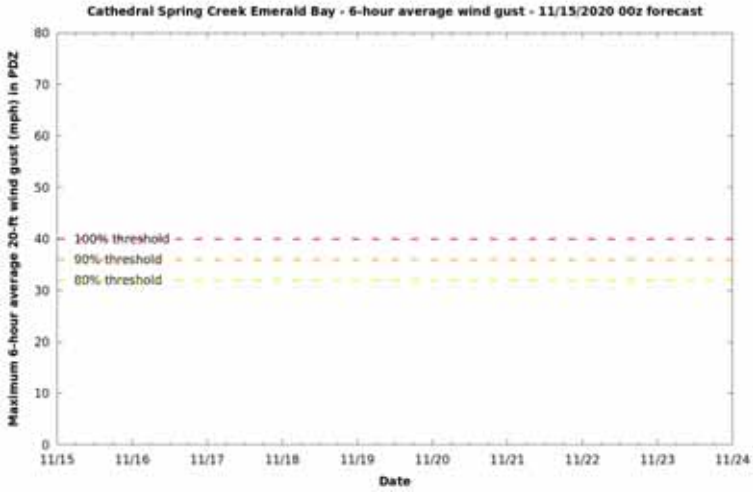
Angora Ridge and Lily Lake



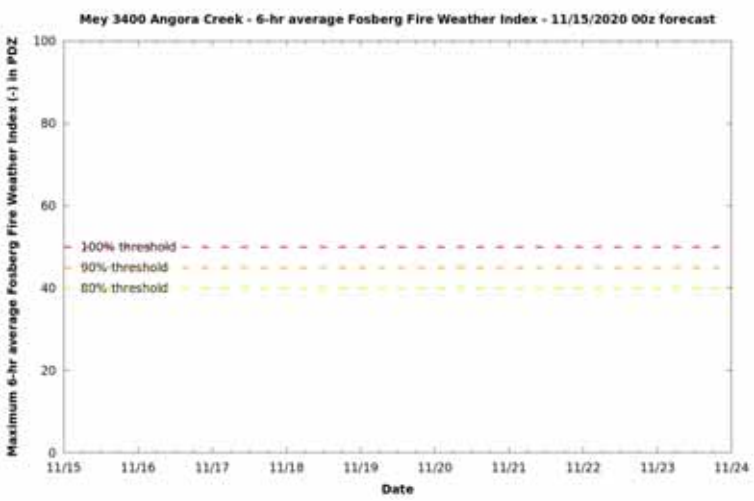


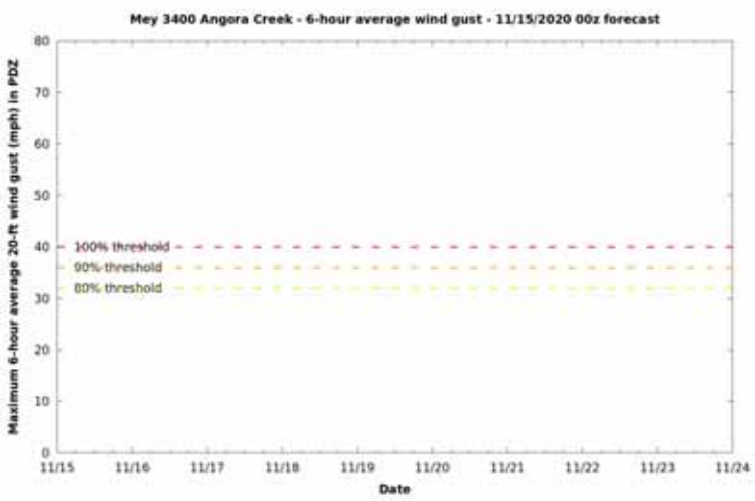
Cathedral Spring Creek Emerald Bay



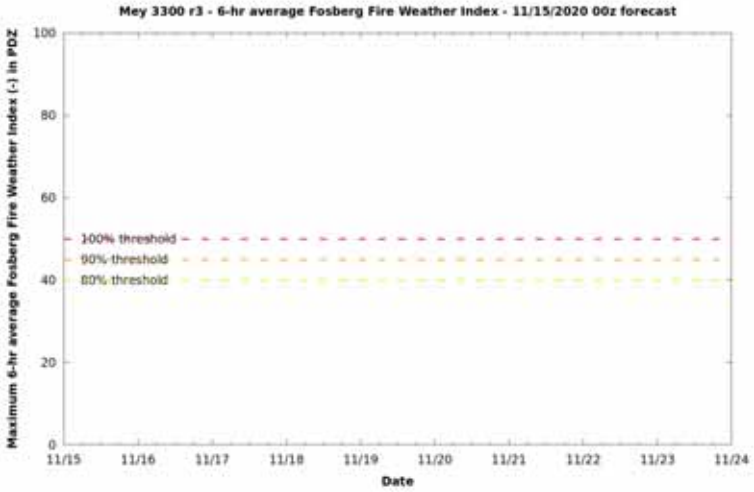


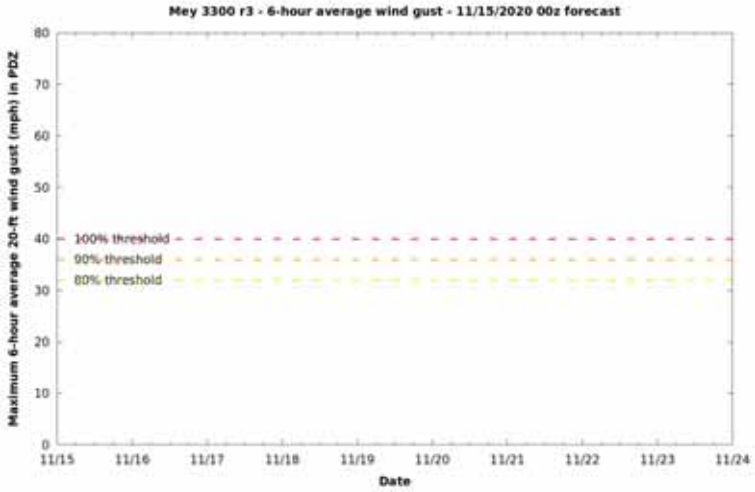
Mey 3400 Angora Creek



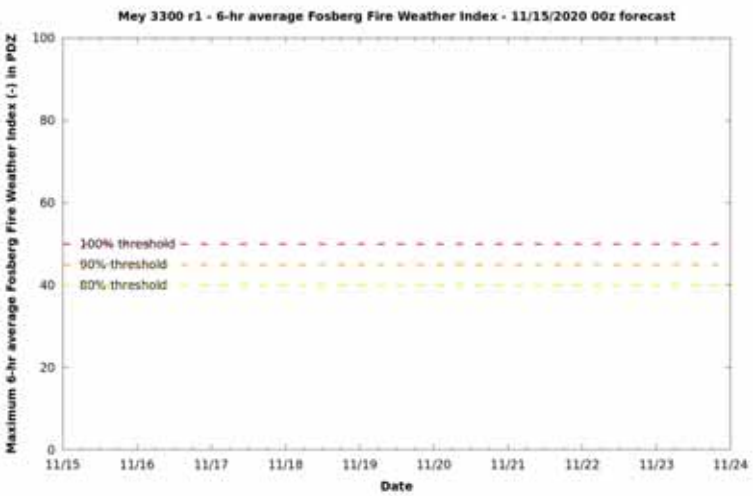


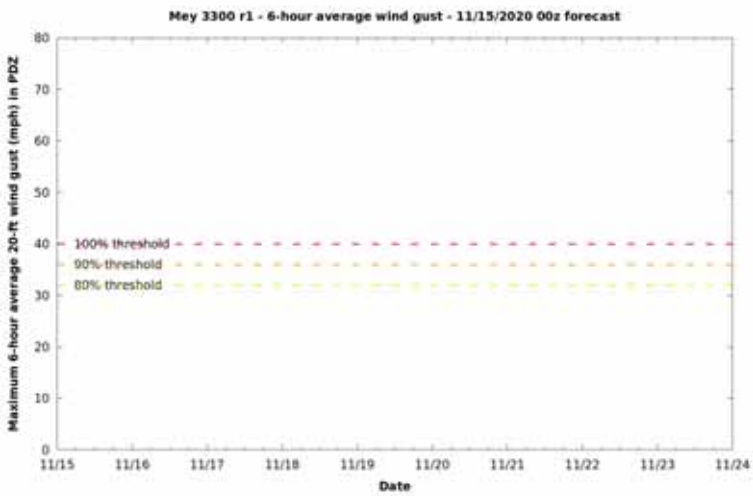
Mey 3300 r3



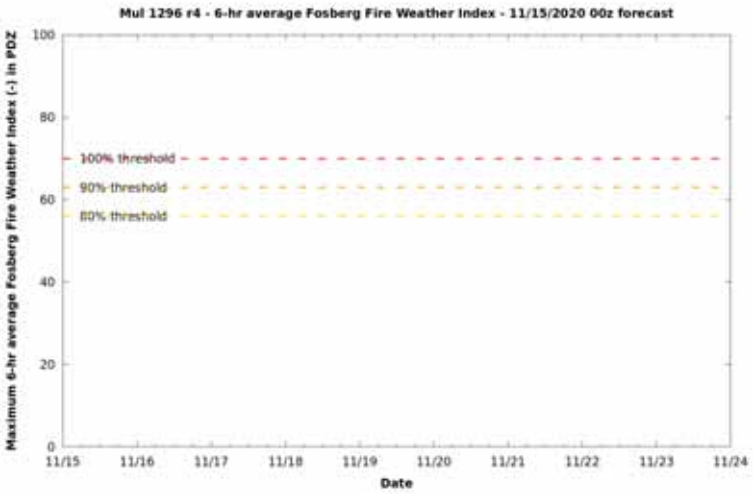


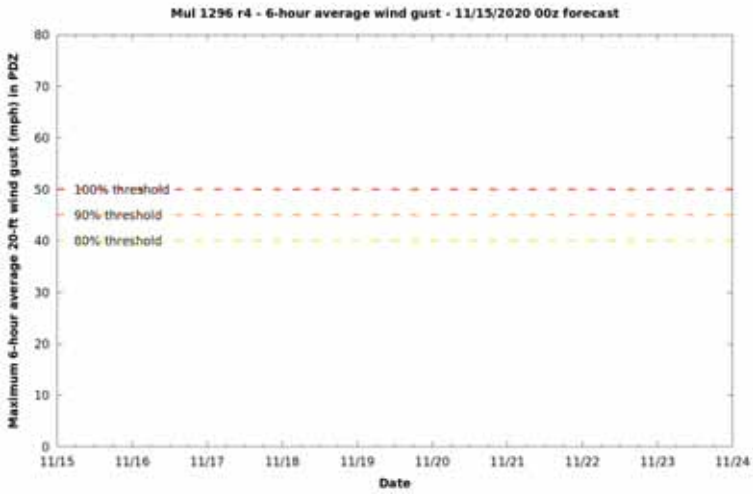
Mey 3300 r1



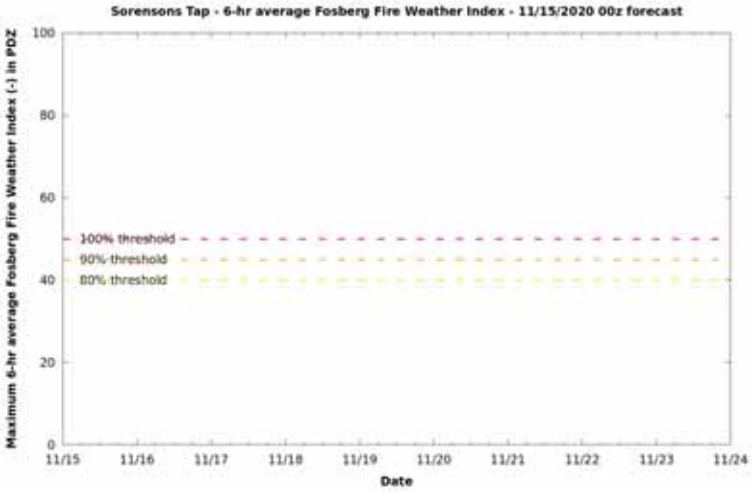


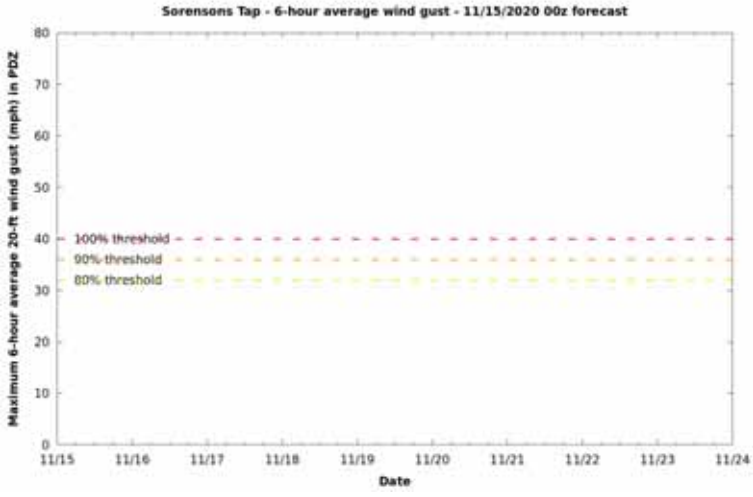
Mul 1296 r4



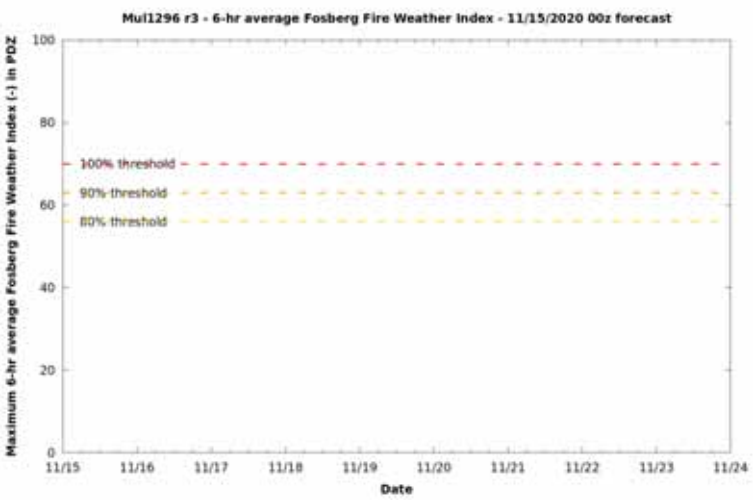


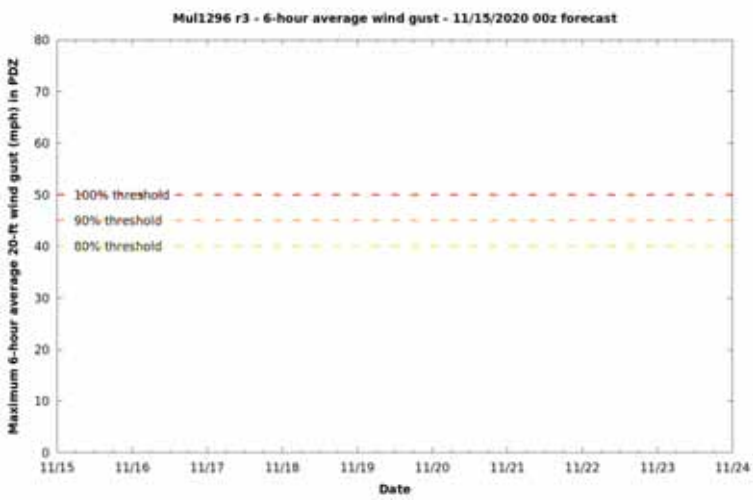
Sorensons Tap



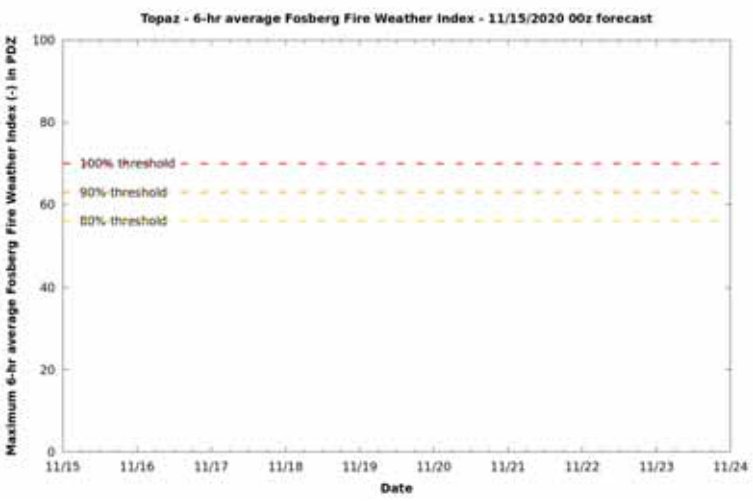


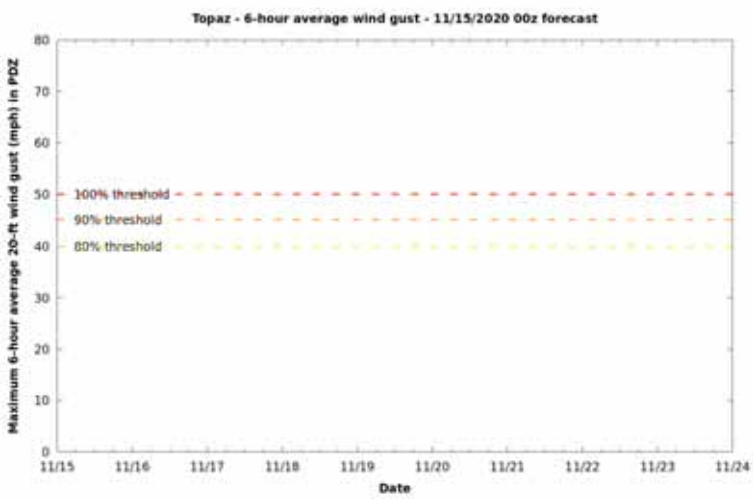
Mul 1296 r3



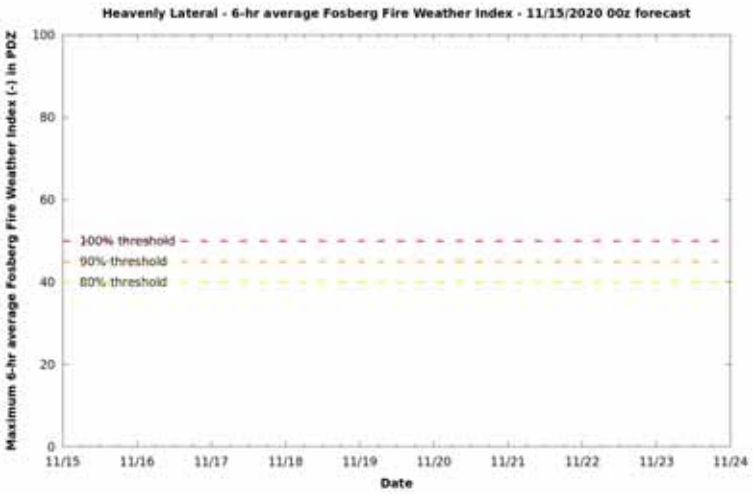


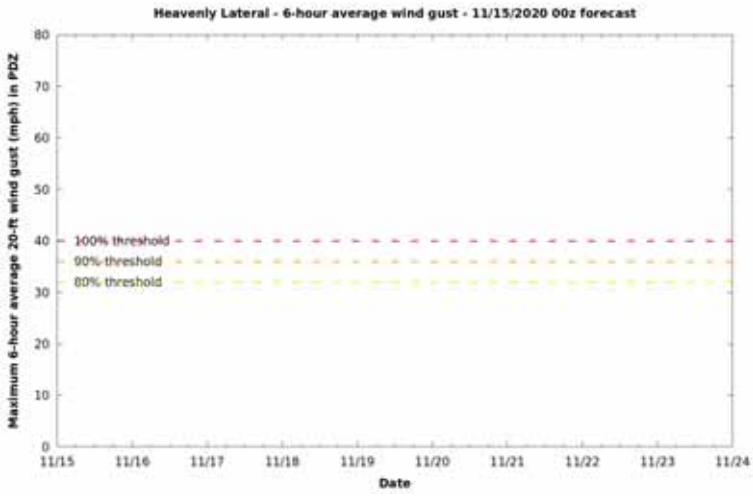
Topaz



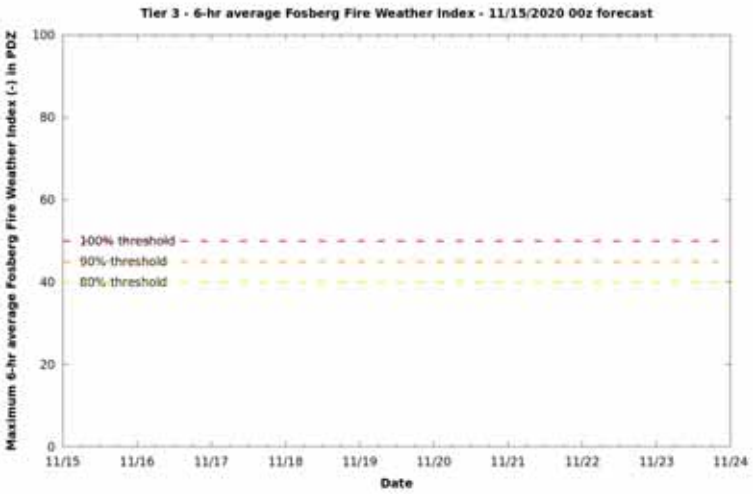


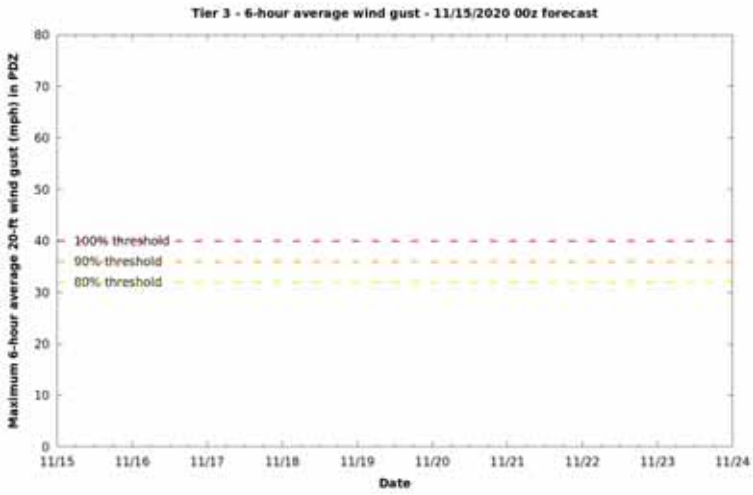
Heavenly Lateral



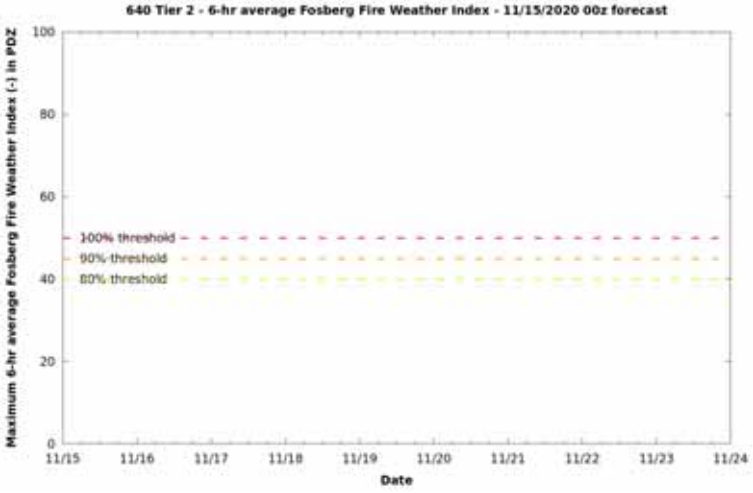


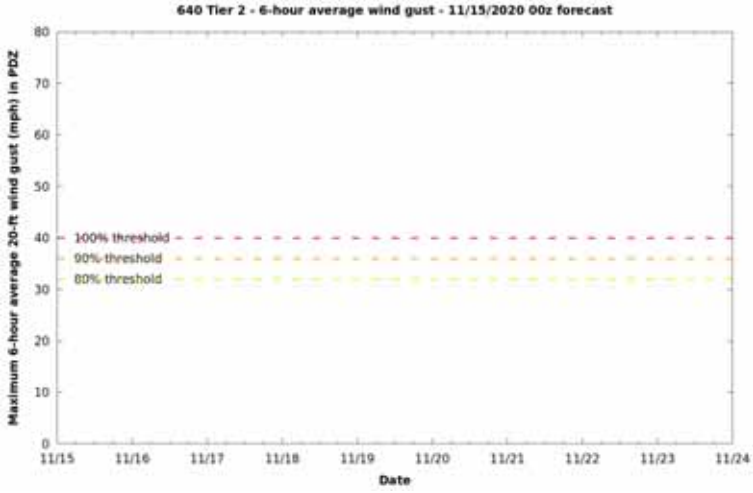
Tier 3



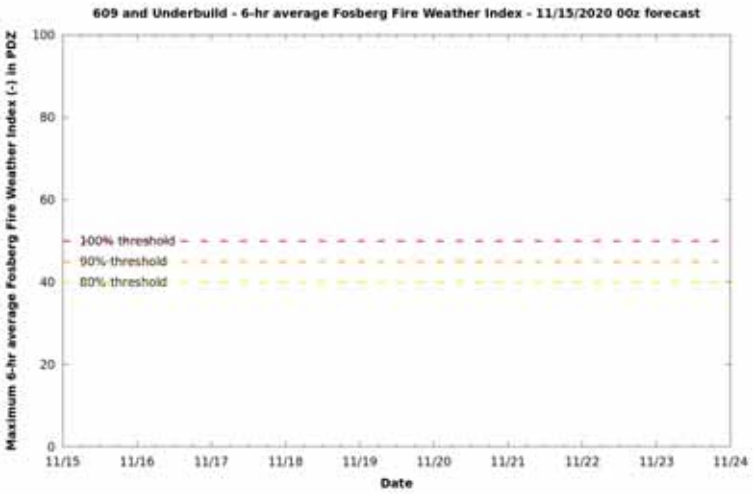


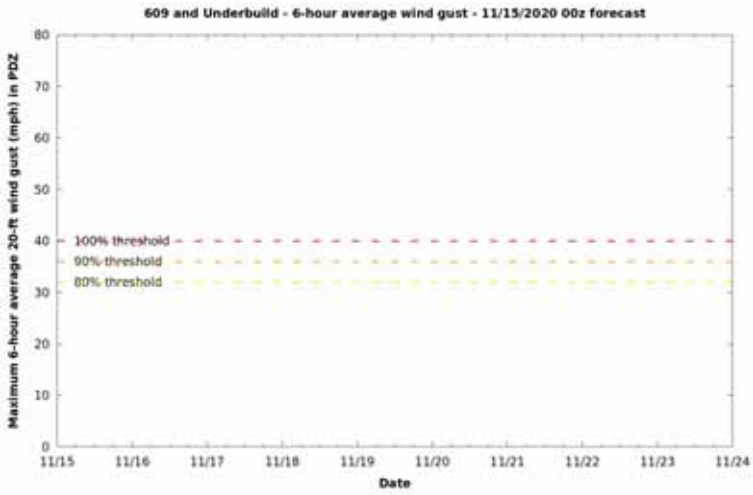
640 Tier 2



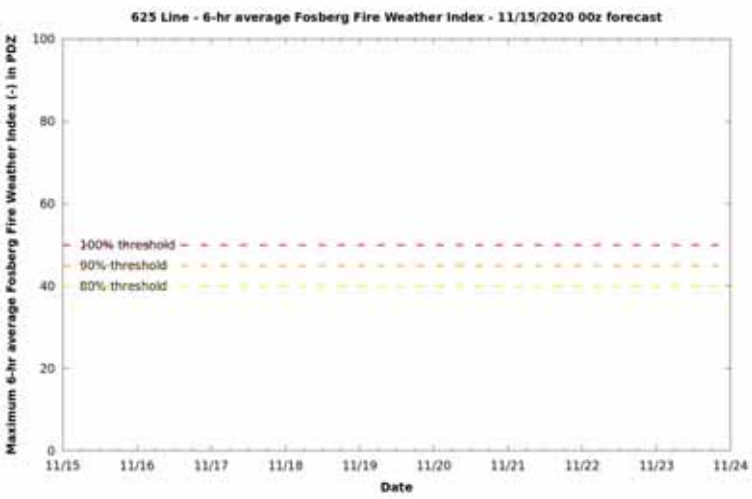


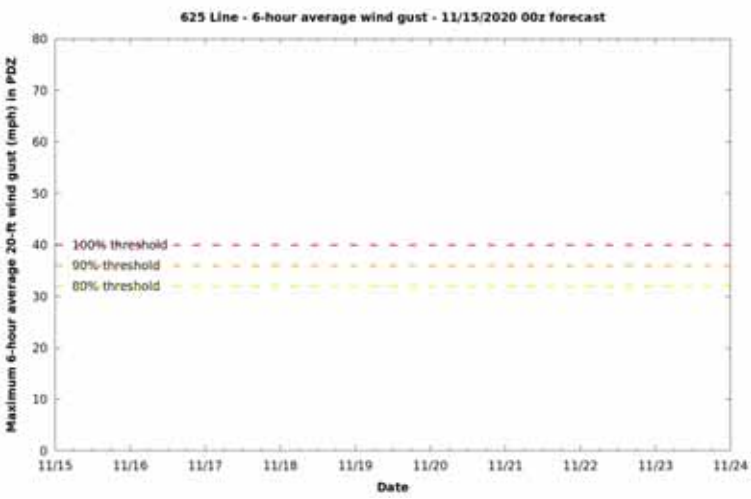
609 and Underbuild



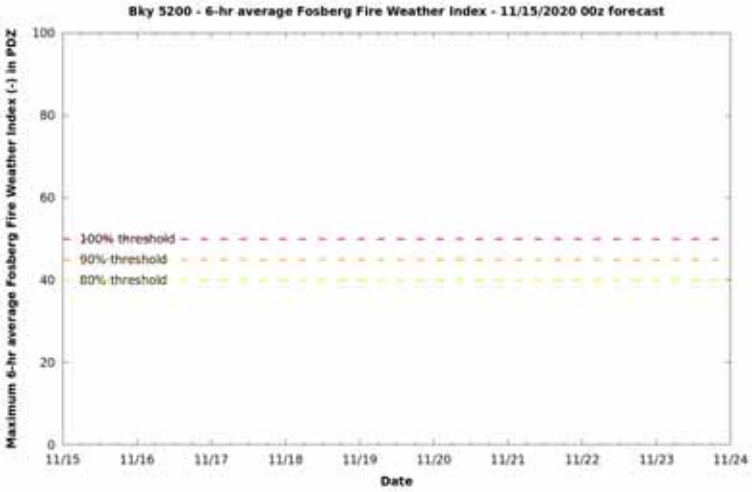


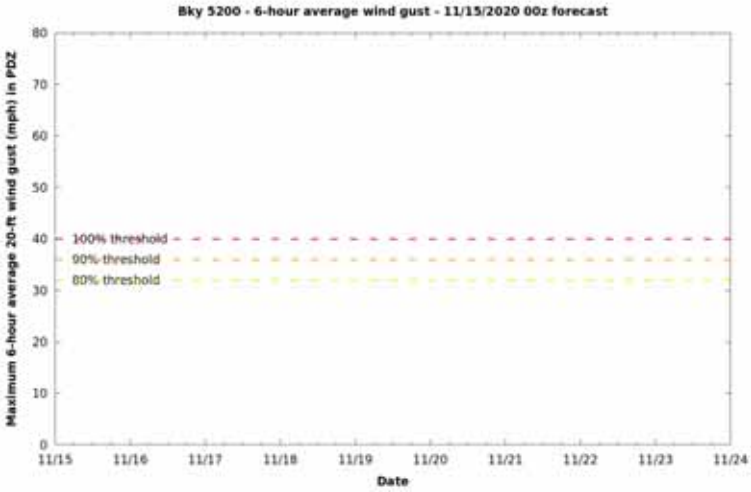
625 Line



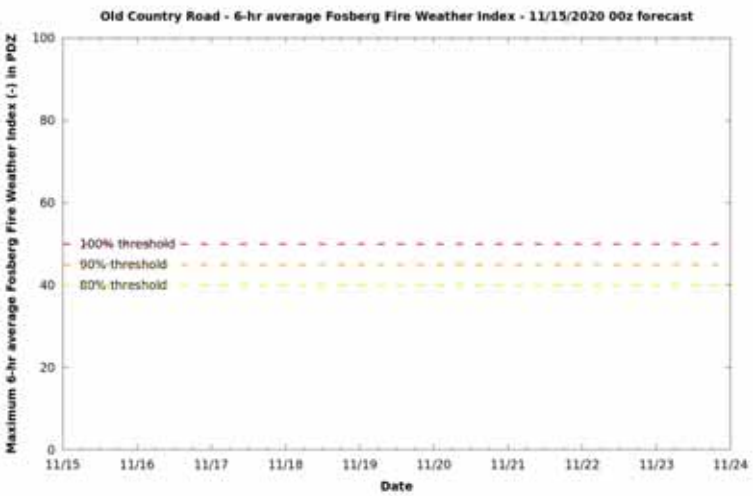


Bky 5200



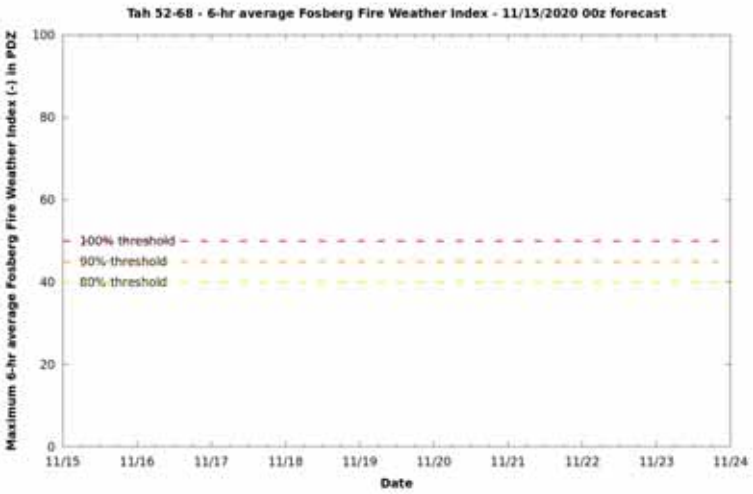


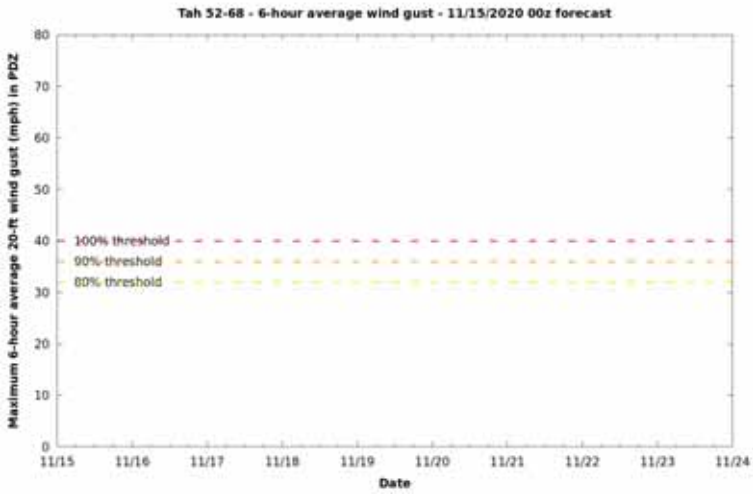
Old Country Road



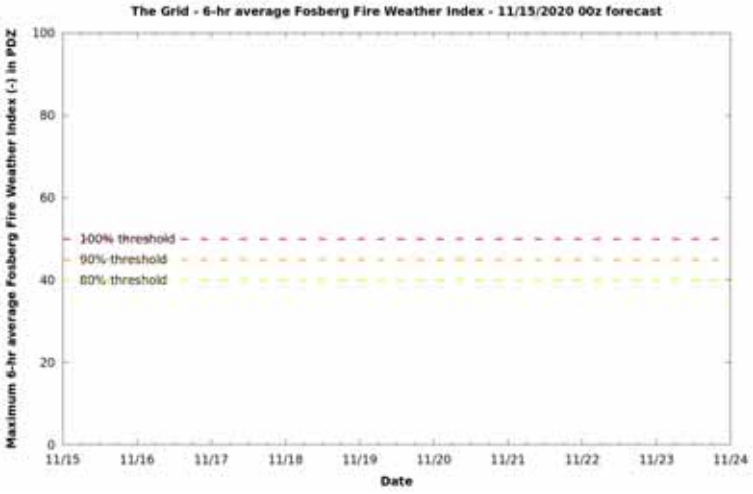


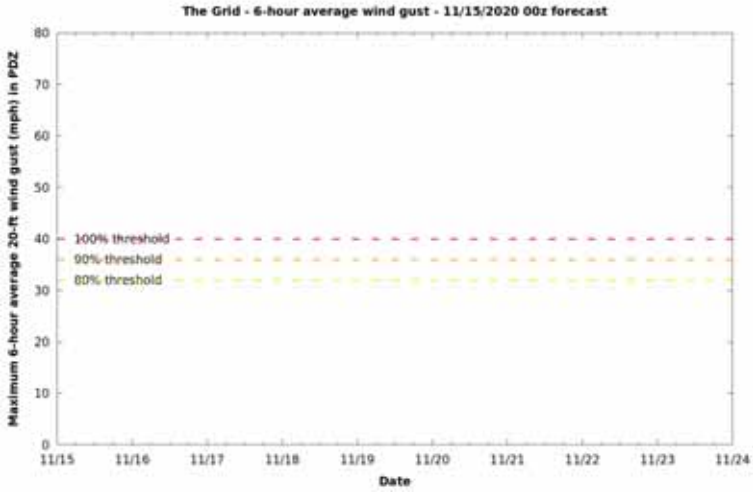
Tah 52-68





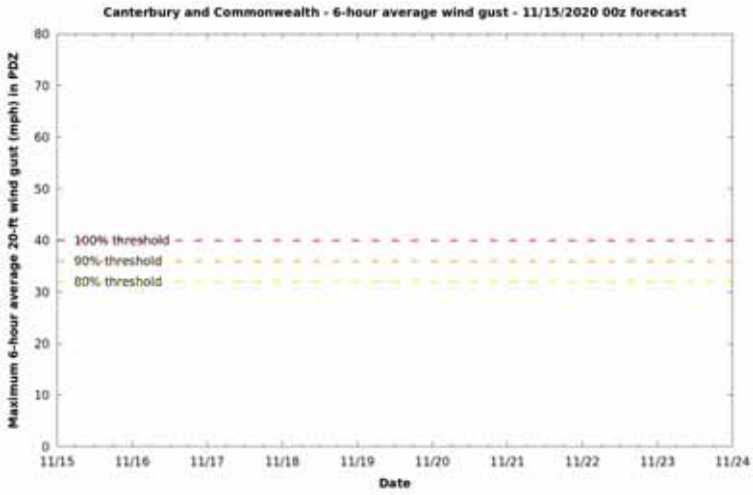
The Grid



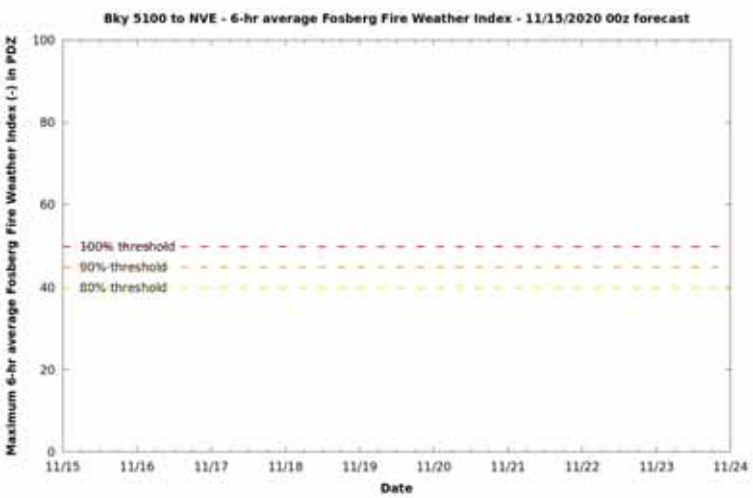


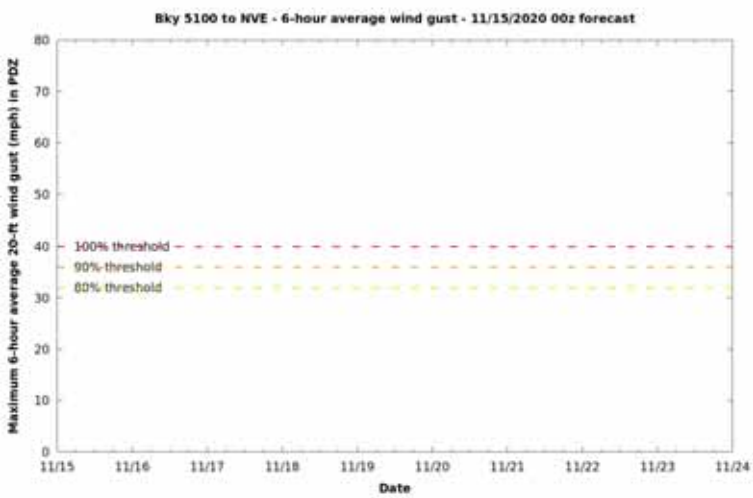
Canterbuy and Commonwealth



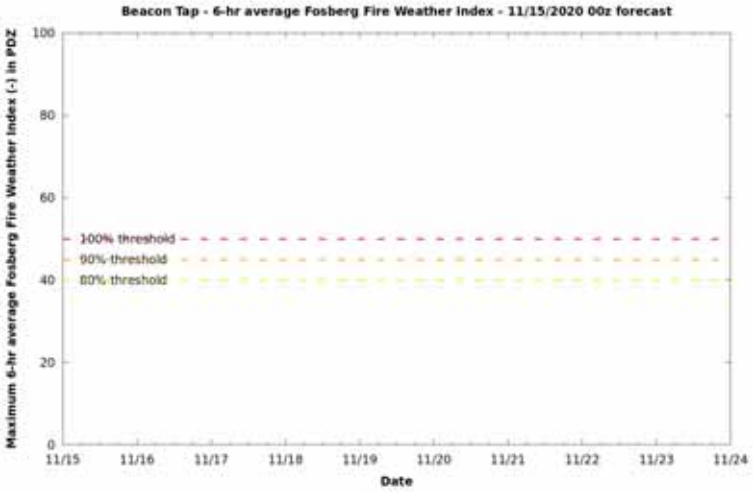


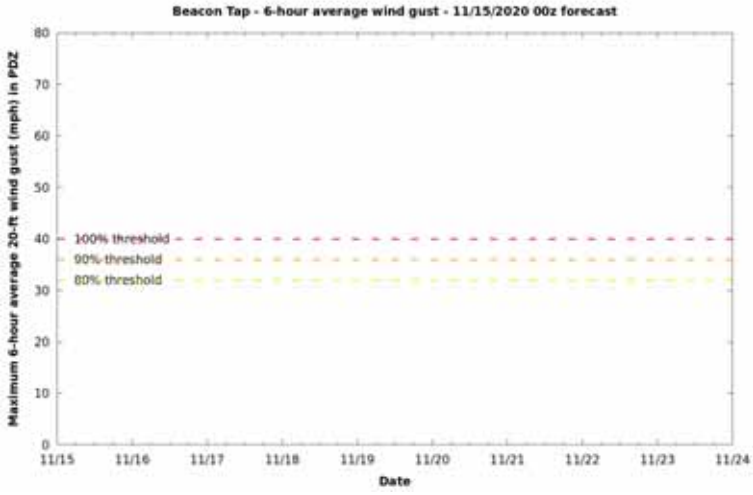
Bky 5100 to NVE



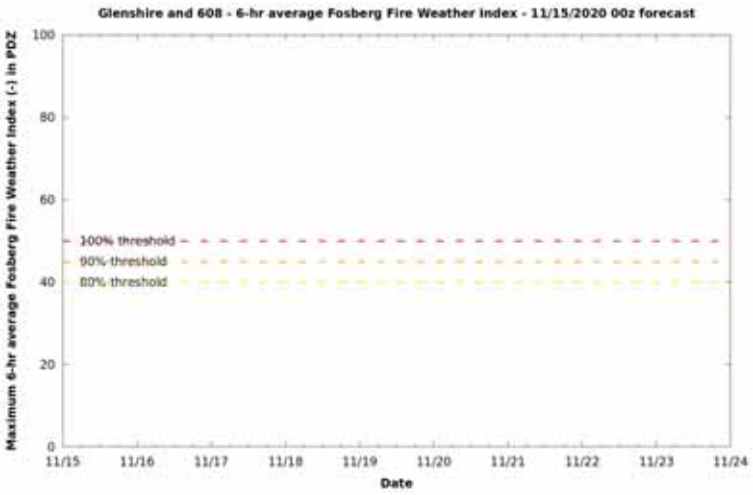


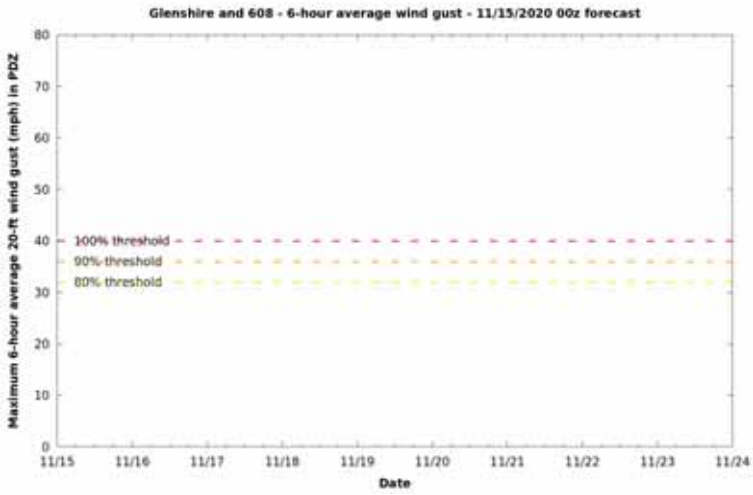
Beacon Tap



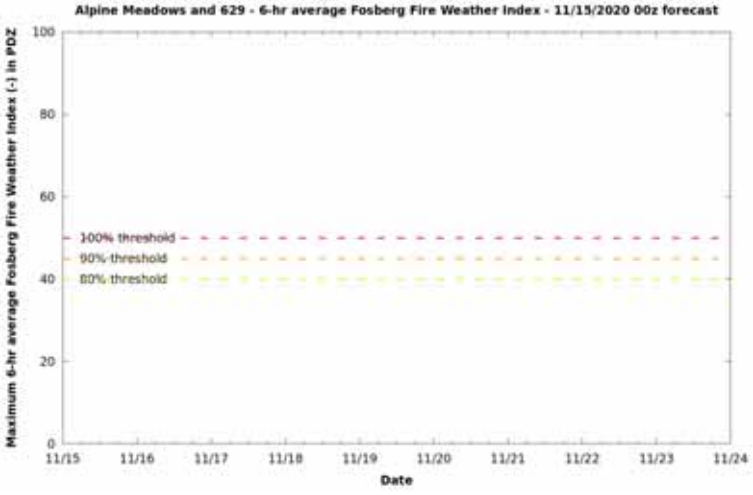


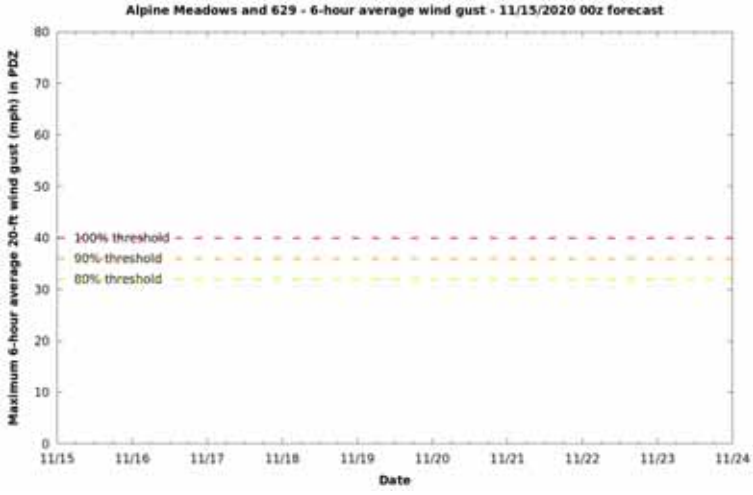
Glenshire and 608



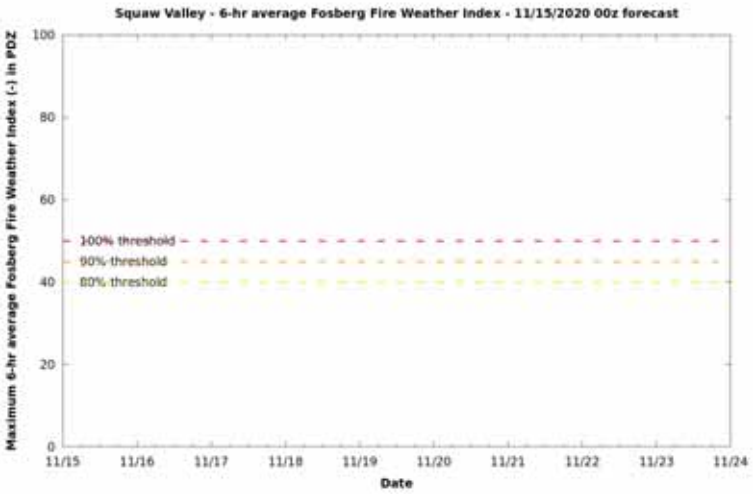


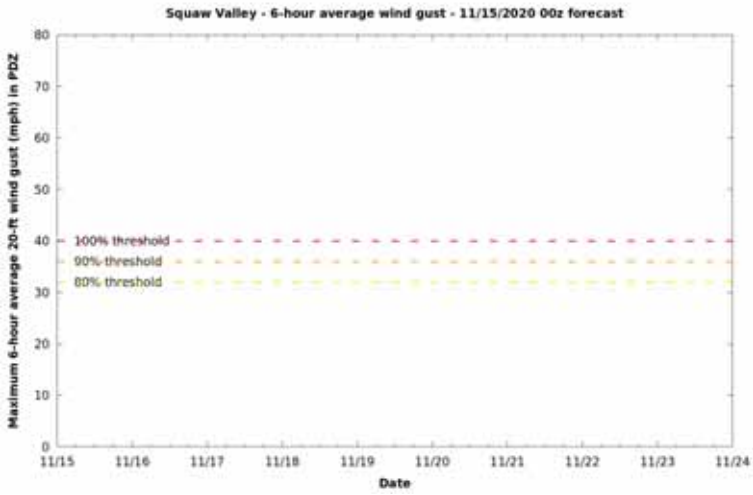
Alpine Meadows and 629



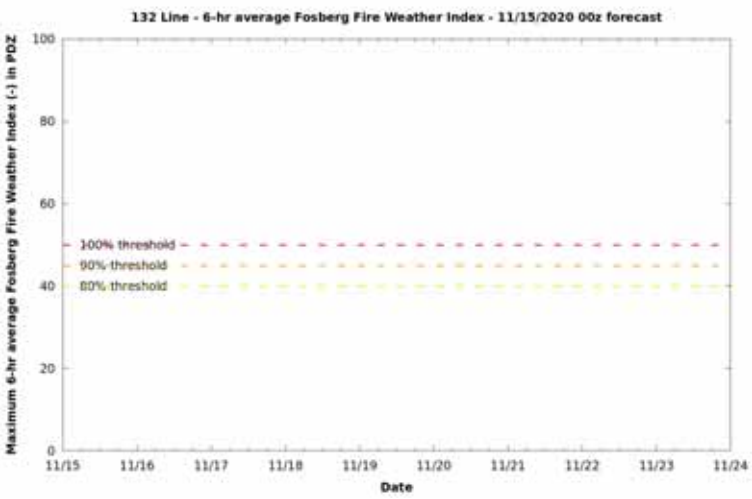


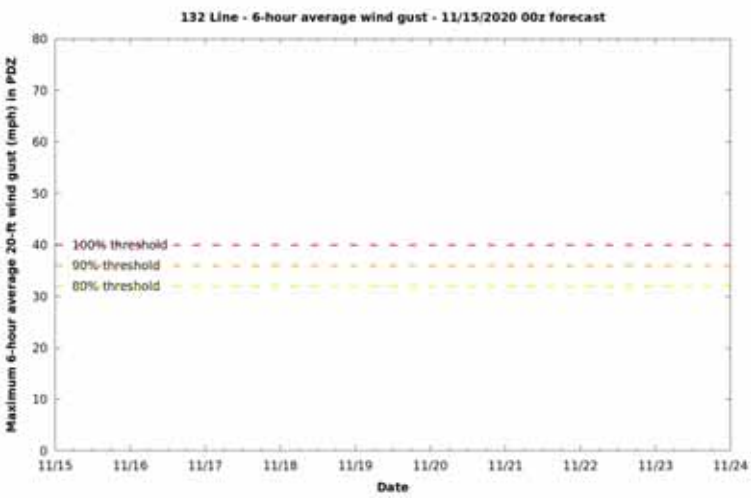
Squaw Valley



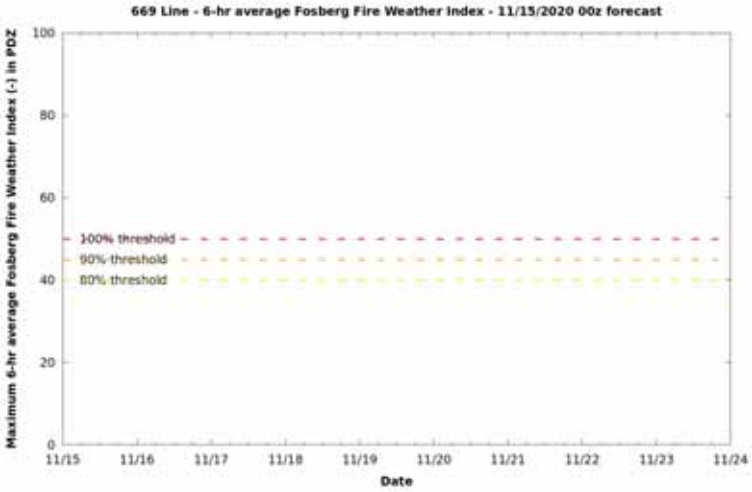


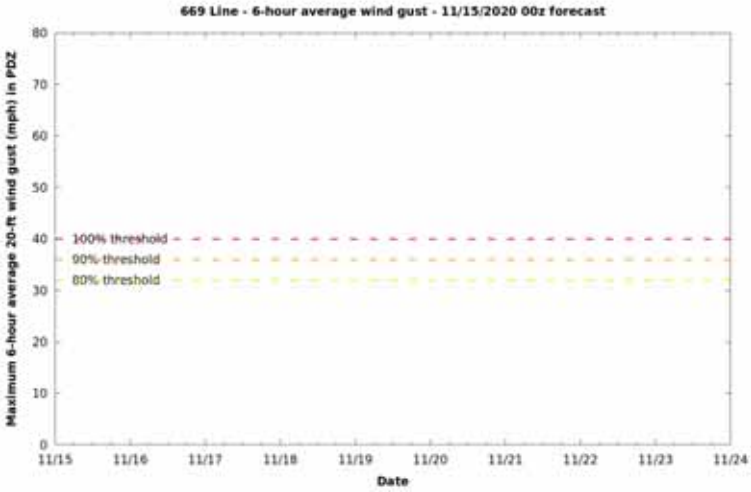
132 Line



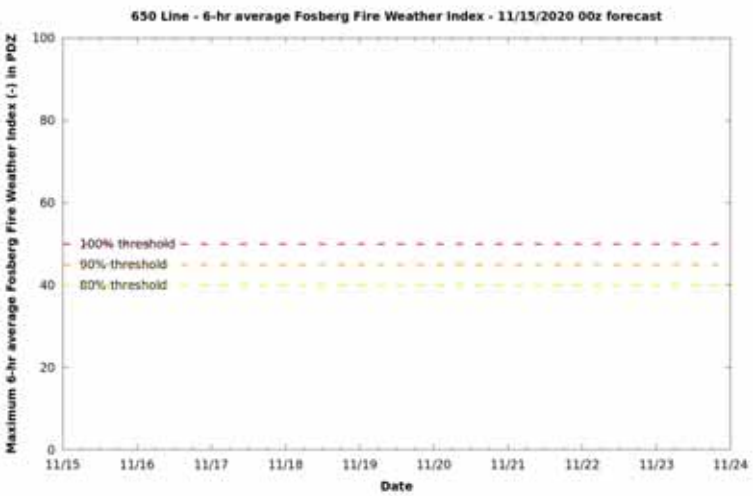


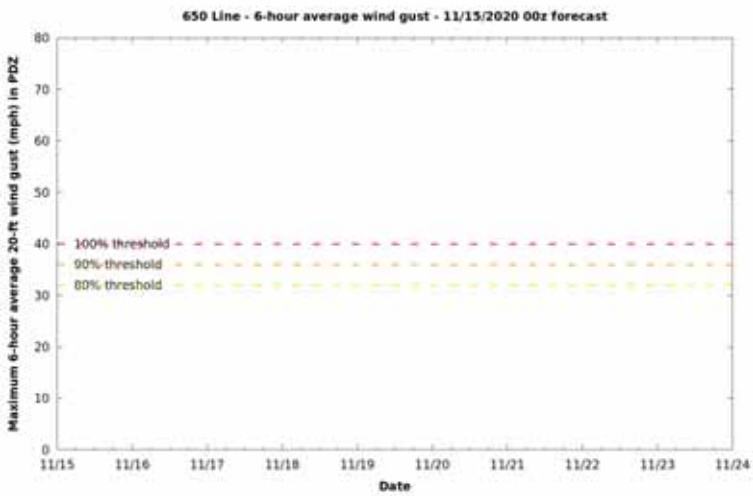
669 Line



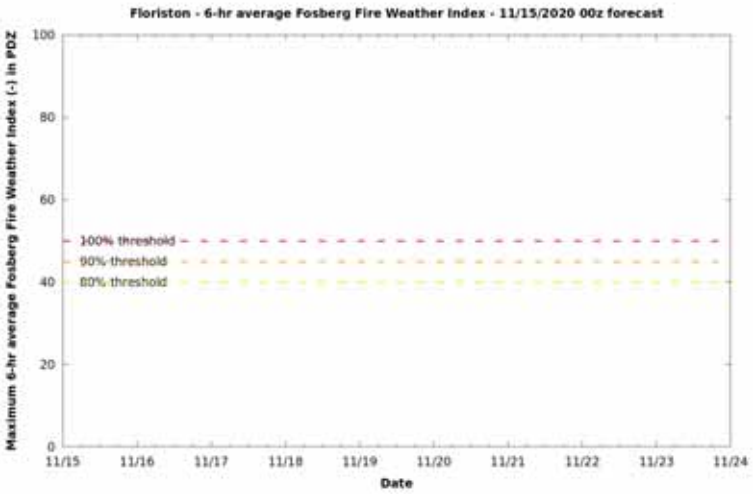


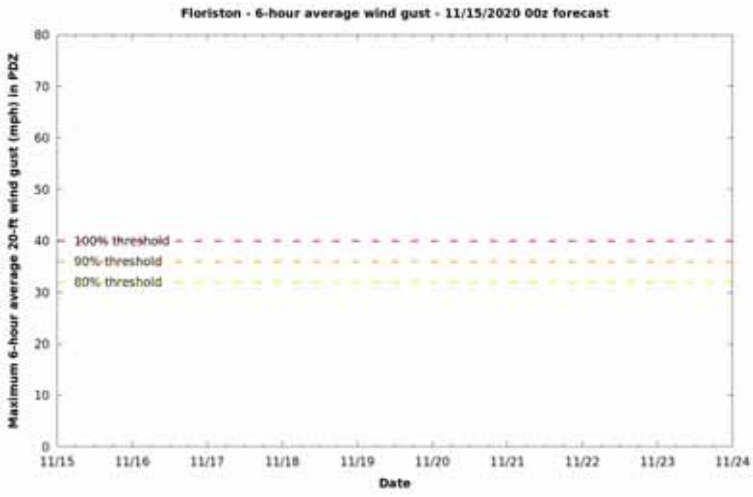
650 Line



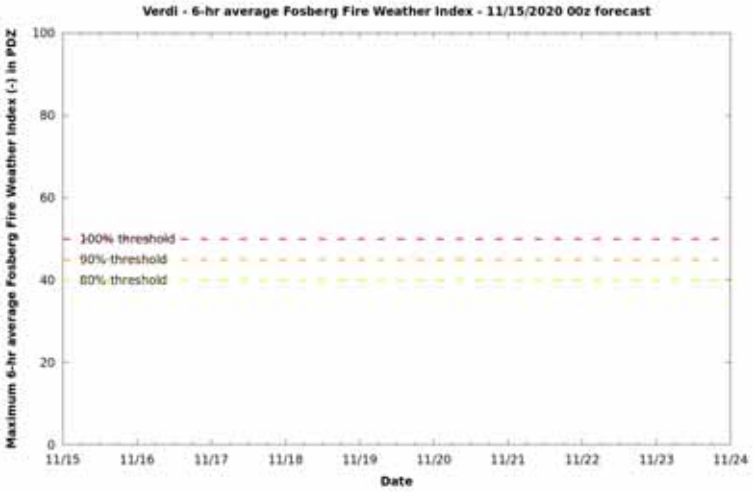


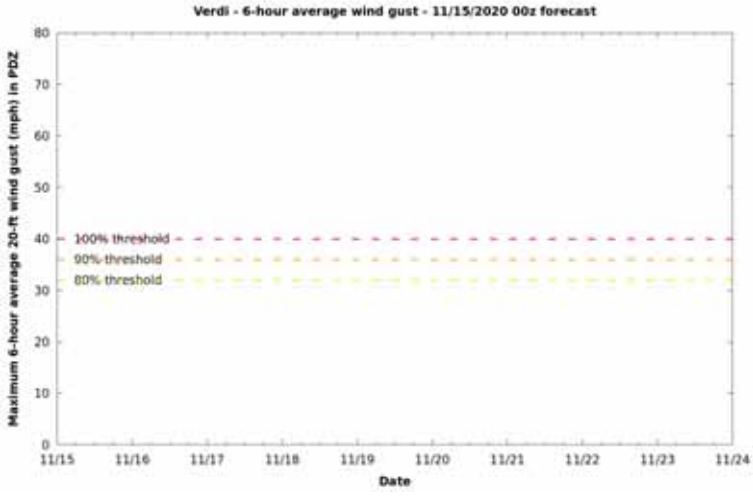
Floriston



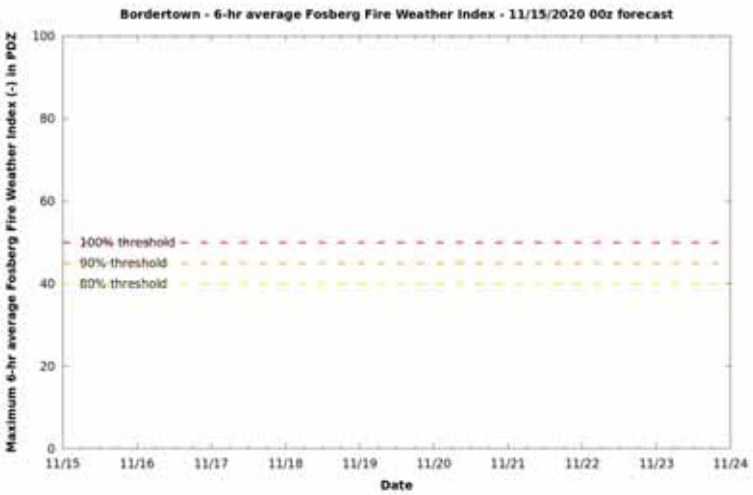


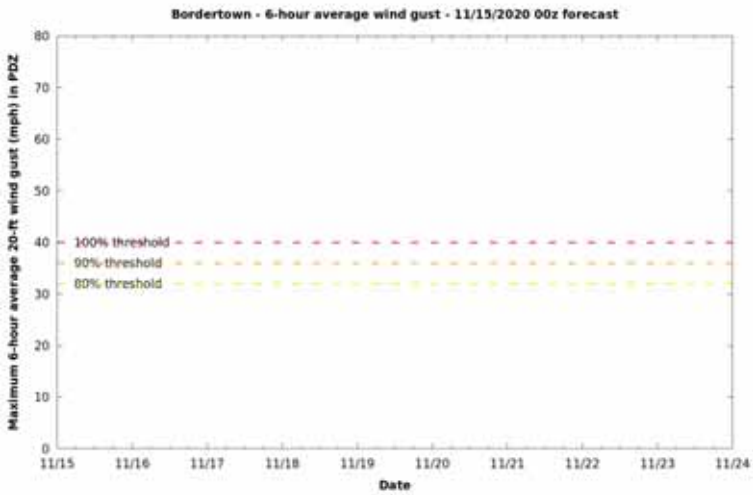
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/15/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
80% threshold
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
Date


Bordertown - 6-hour average wind gust - 11/15/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
80% threshold
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
Date

Liberty Utilities Fire Potential Index Forecast for 11/15/20 - 11/21/20

Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

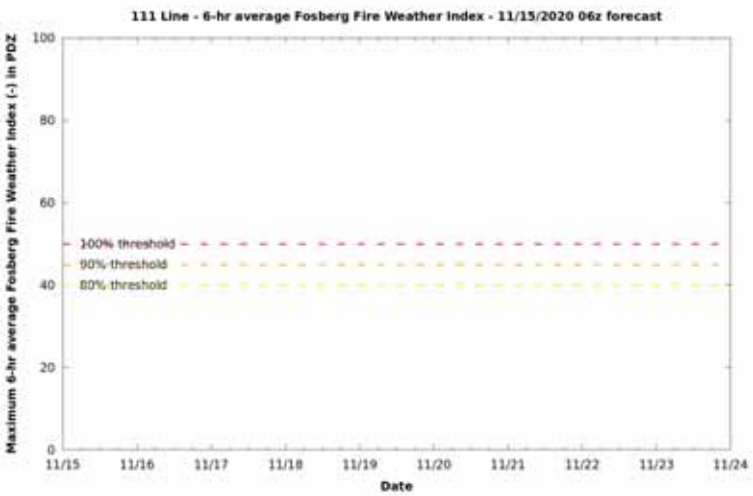
Liberty Utilities Energy Release Component Forecast for 11/15/20 - 11/21/20

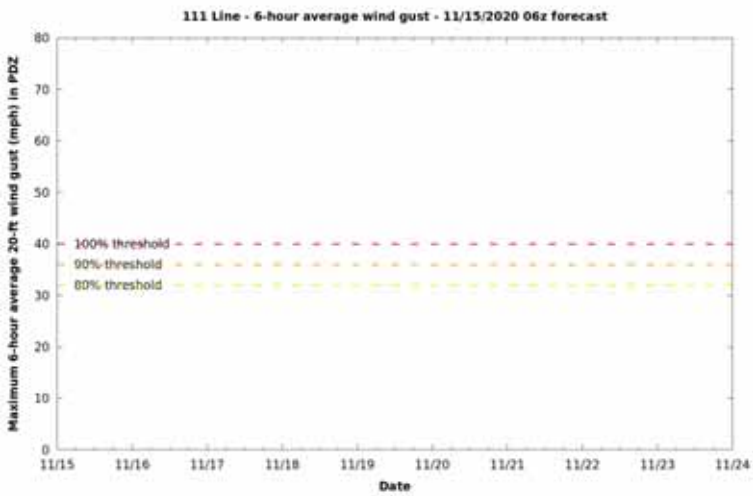
Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Brooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Topaz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Country Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 52-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The Grid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Verdi	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bordertown	0.0	0.0	0.0	0.0	0.0	0.0	0.0

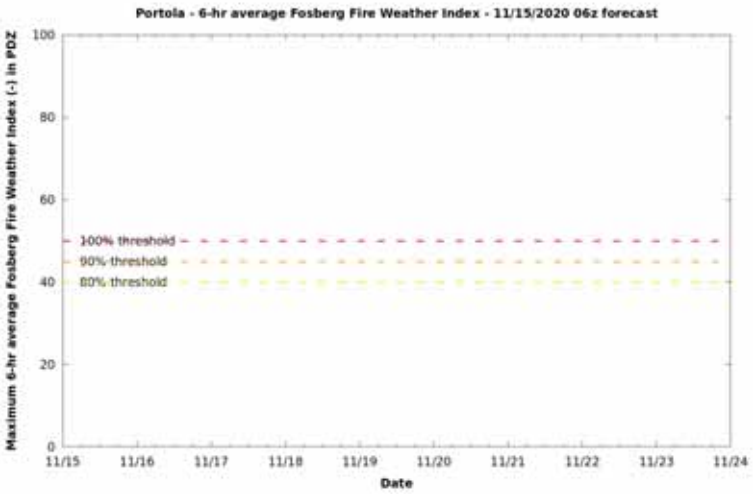
Liberty Utilities Fire Weather Summary Plots - 11/15/2020 06z forecast

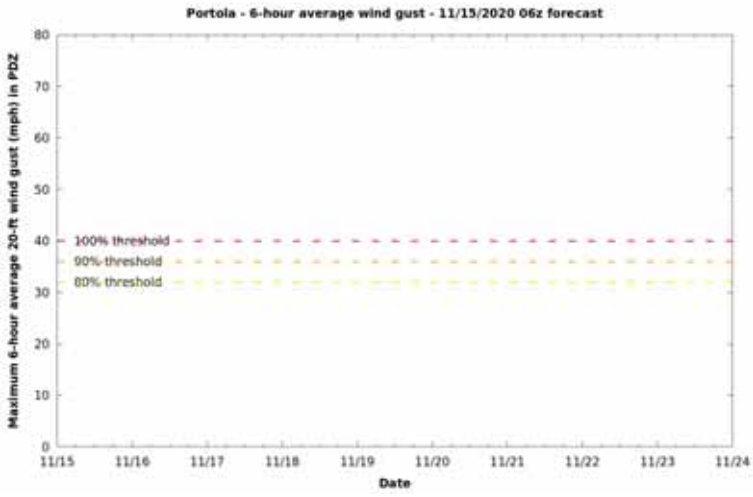
111 Line



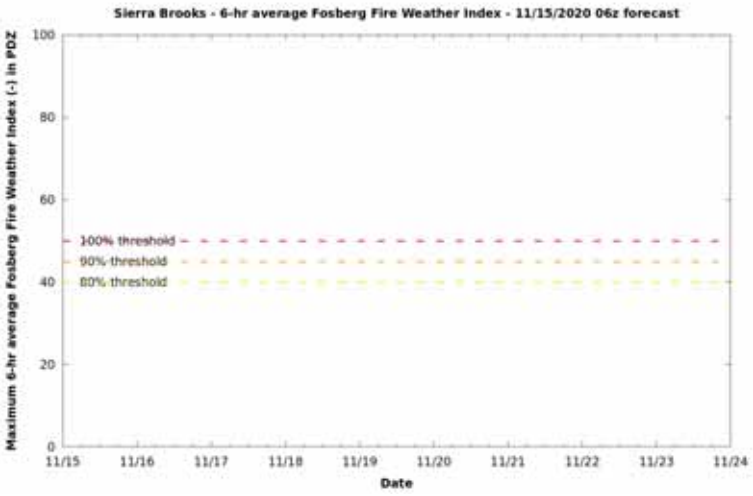


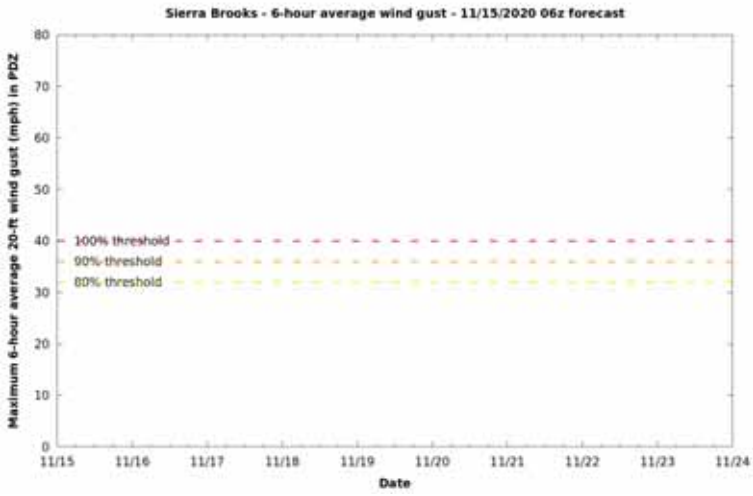
Portola



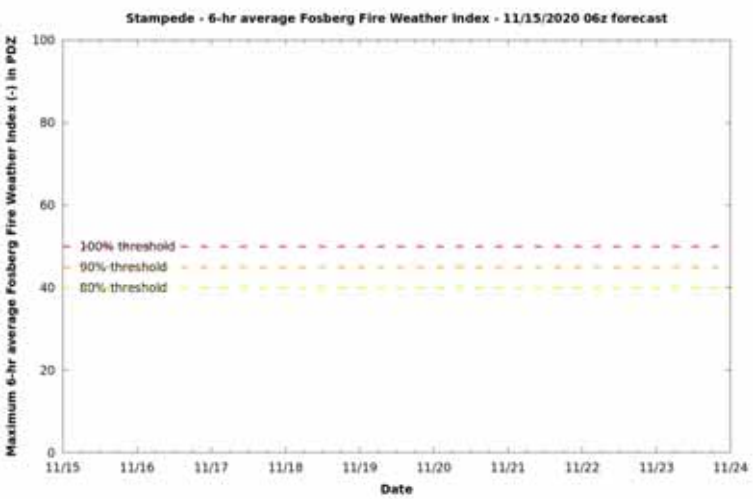


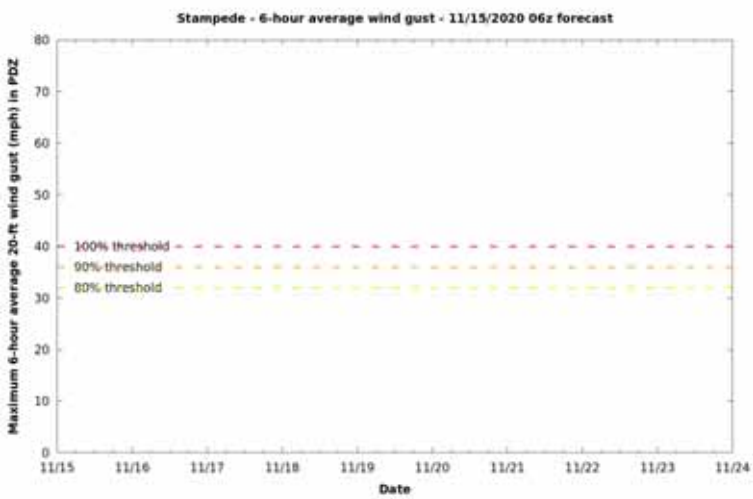
Sierra Brooks



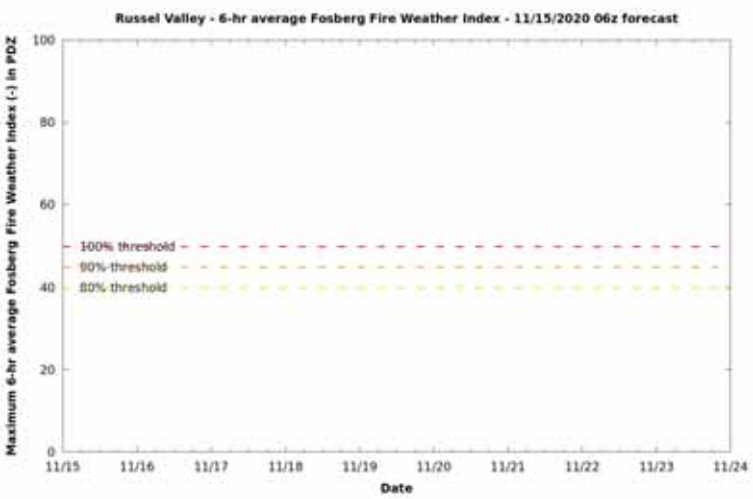


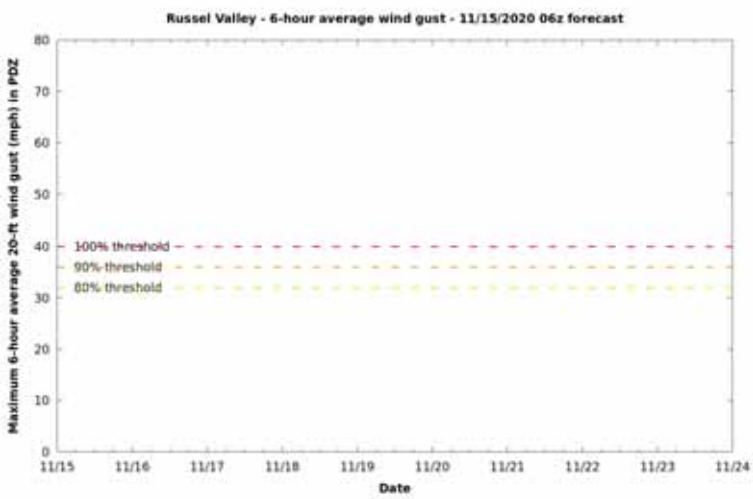
Stampede





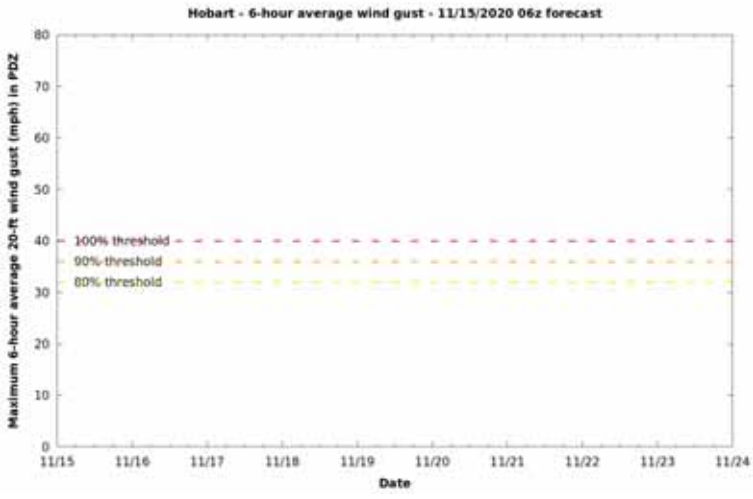
Russell Valley



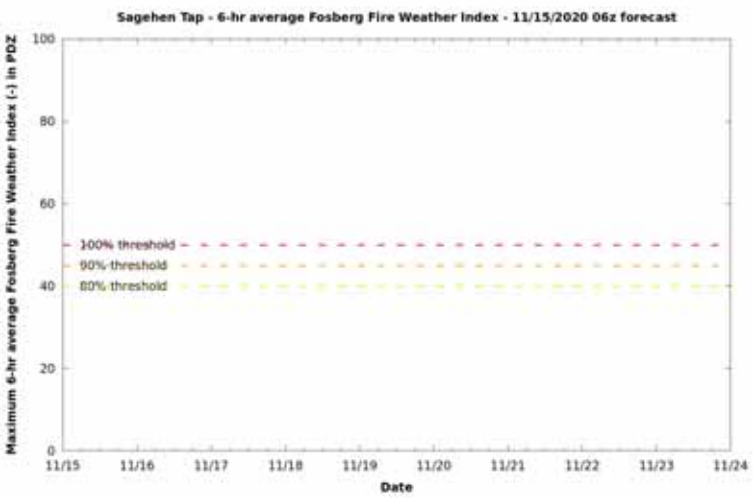


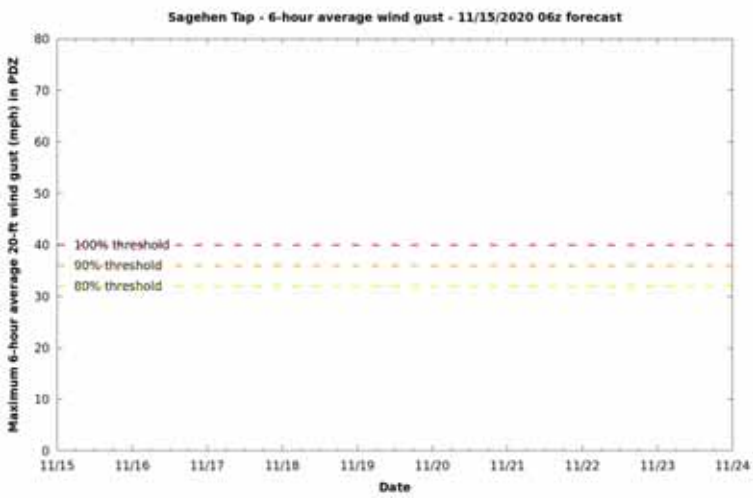
Hobart



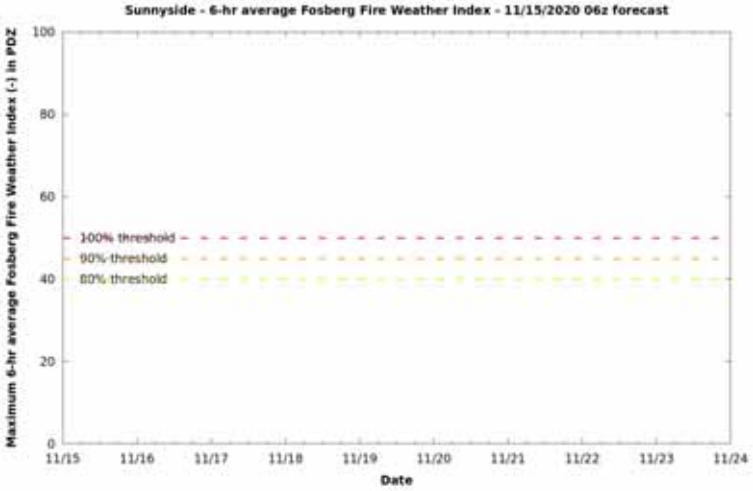


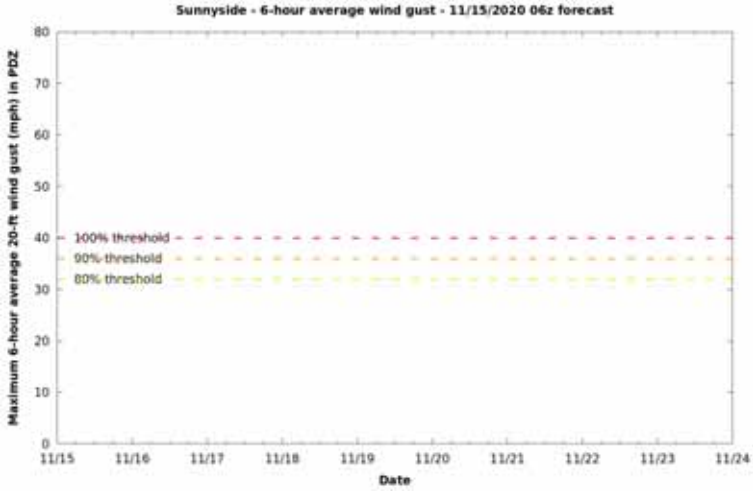
Sagehen tap



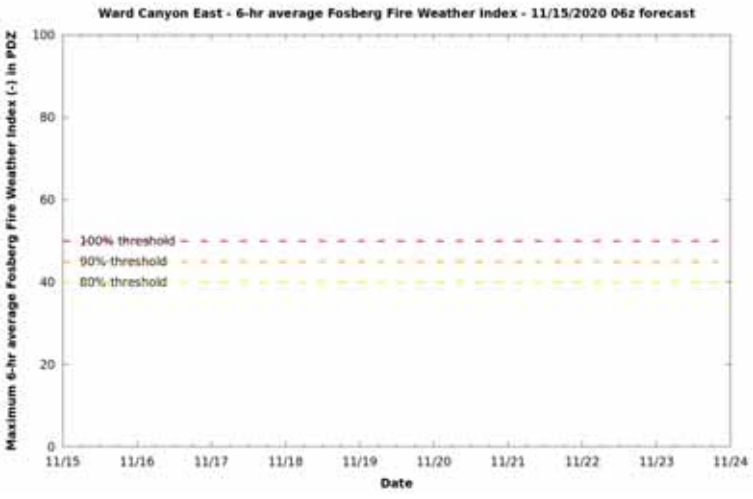


Sunnyside



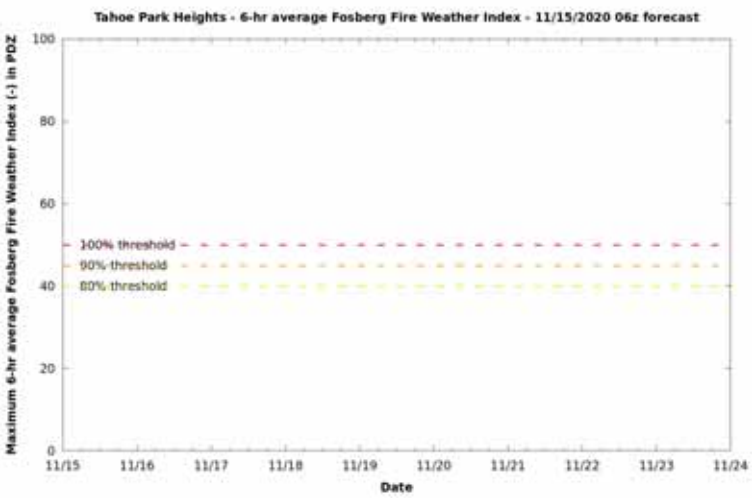


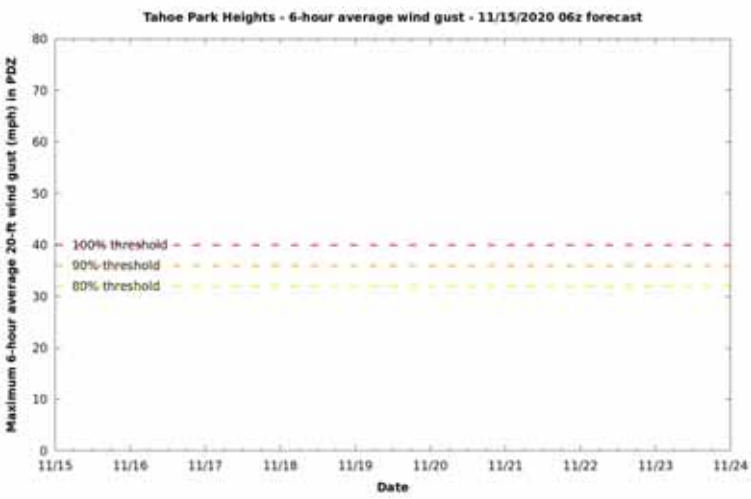
Ward Canyon East



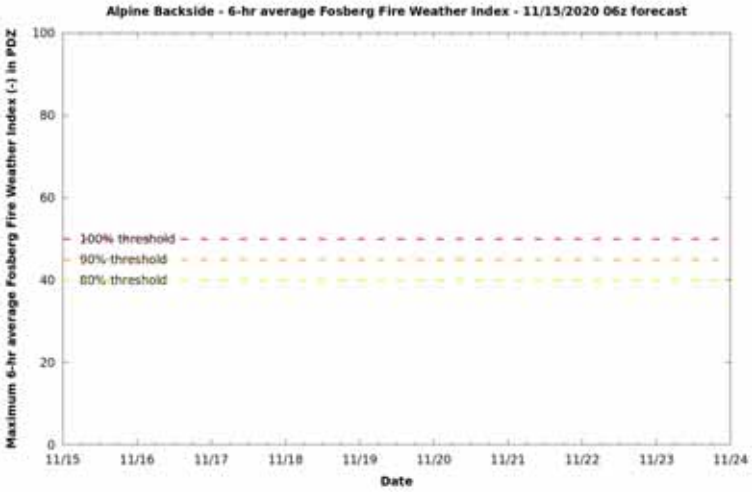


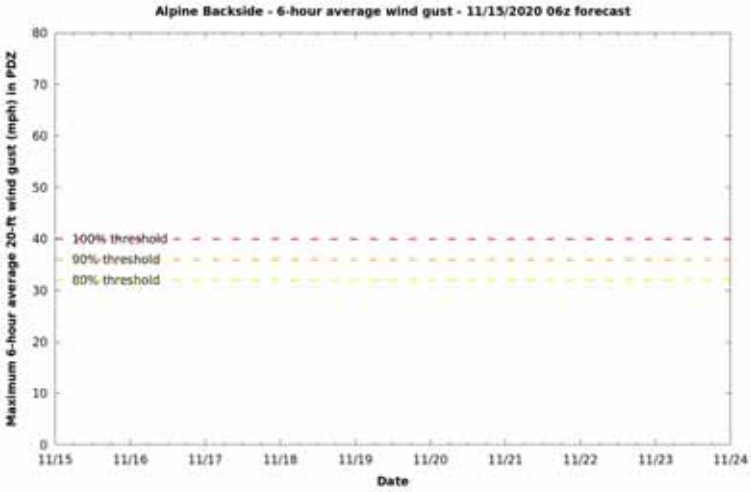
Tahoe Park Heights



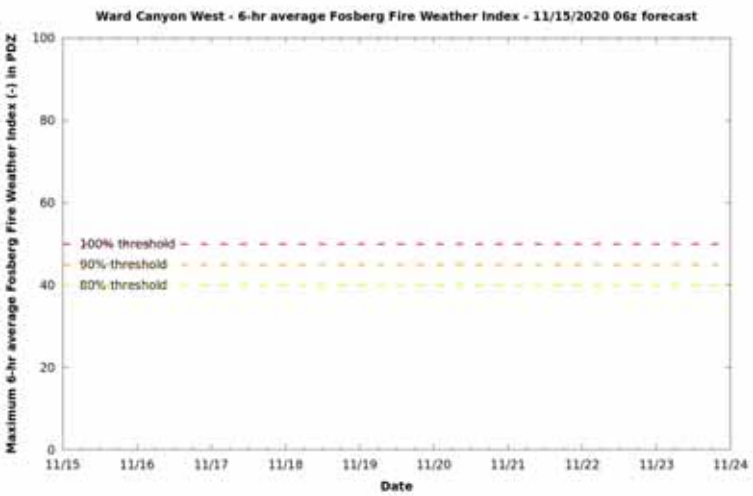


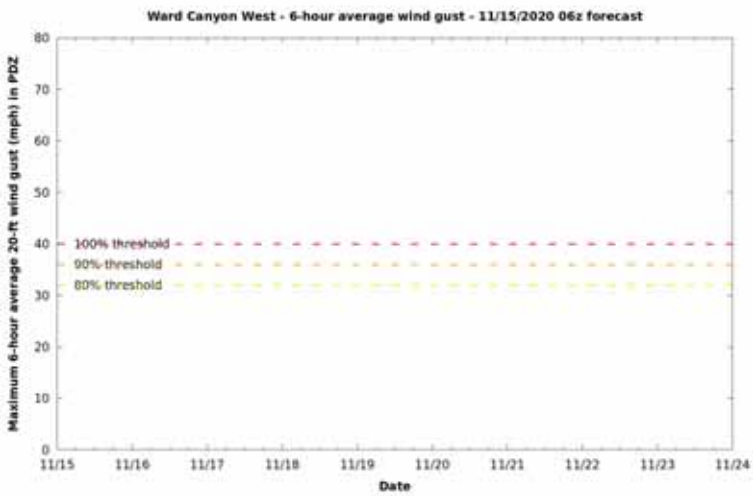
Alpine Backside



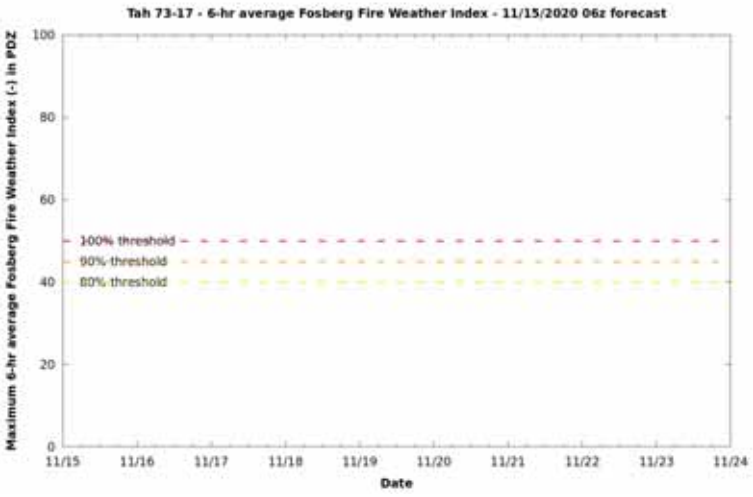


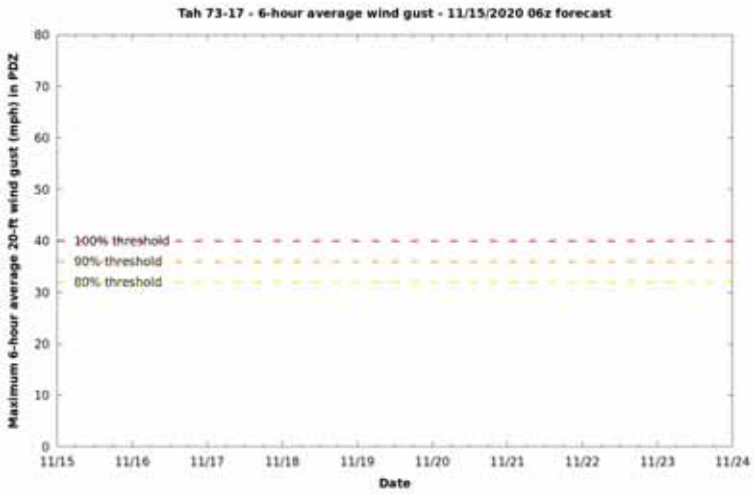
Ward Canyon West



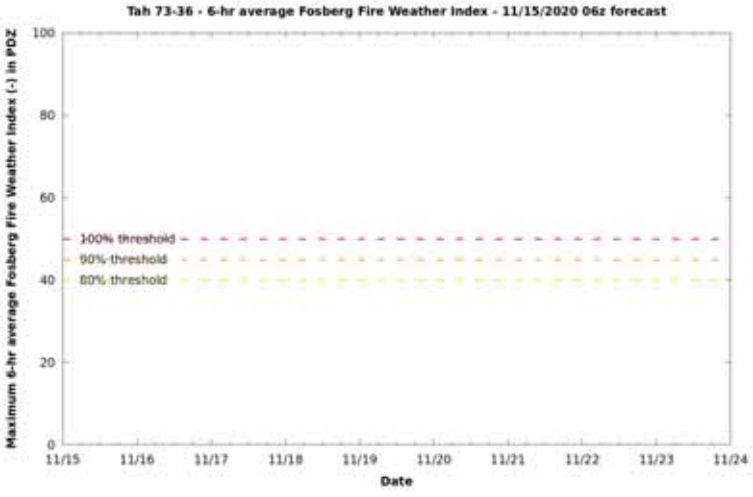


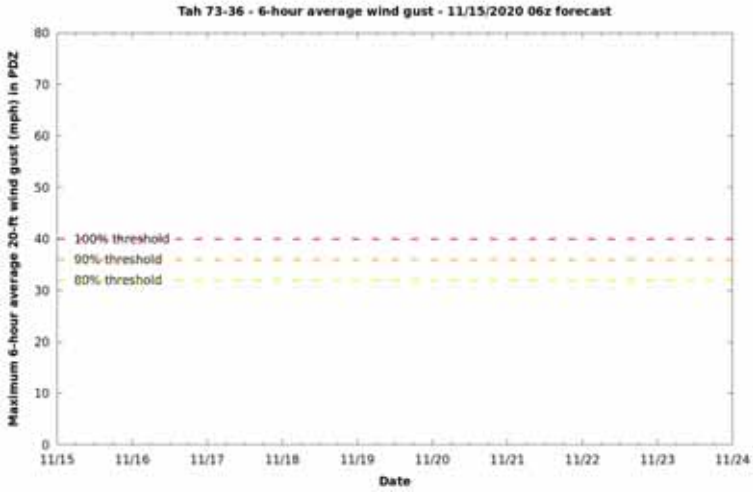
Tah 73-17



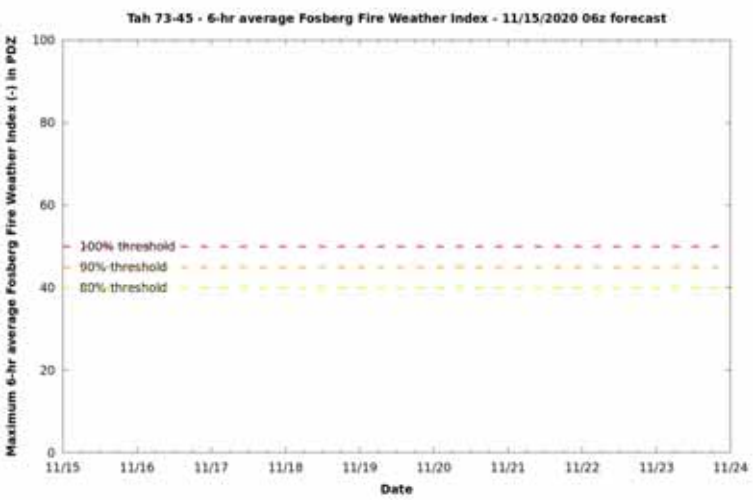


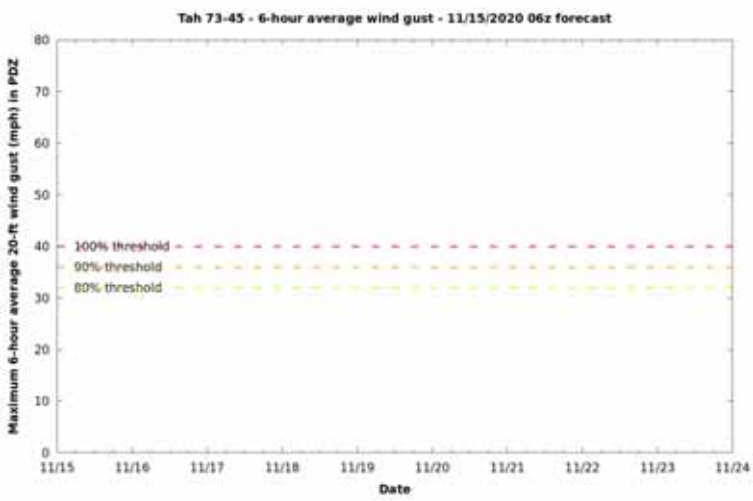
Tah 73-36



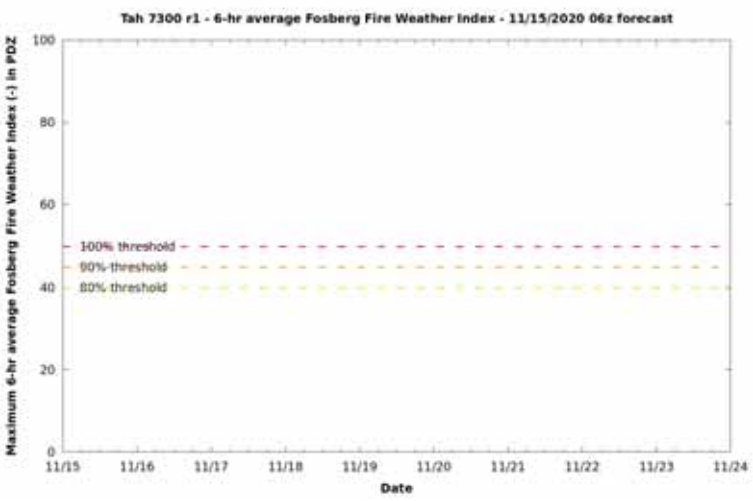


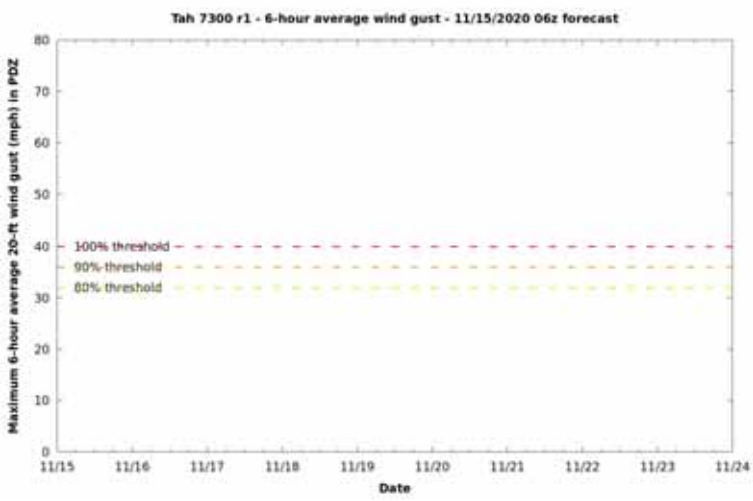
Tah 73-45



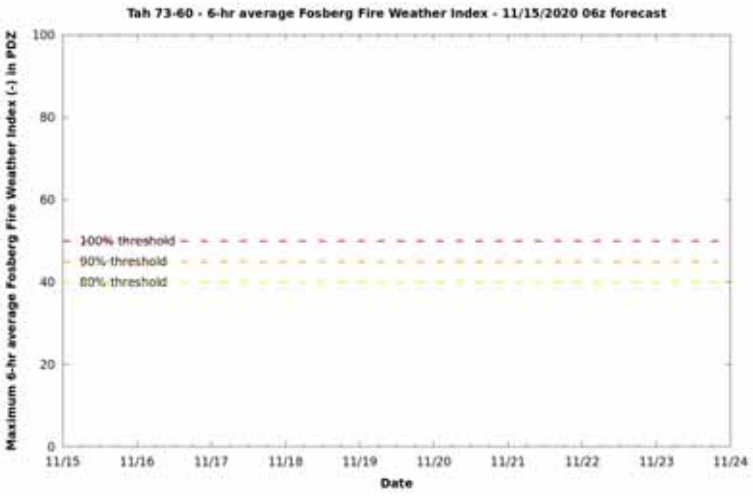


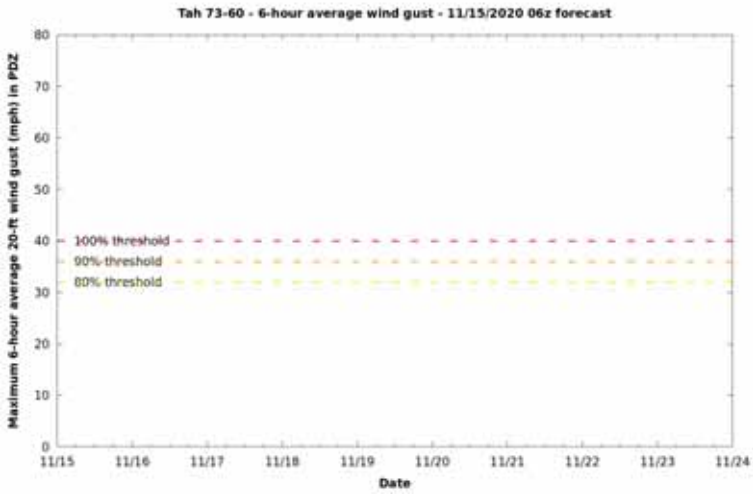
Tah 7300 r1



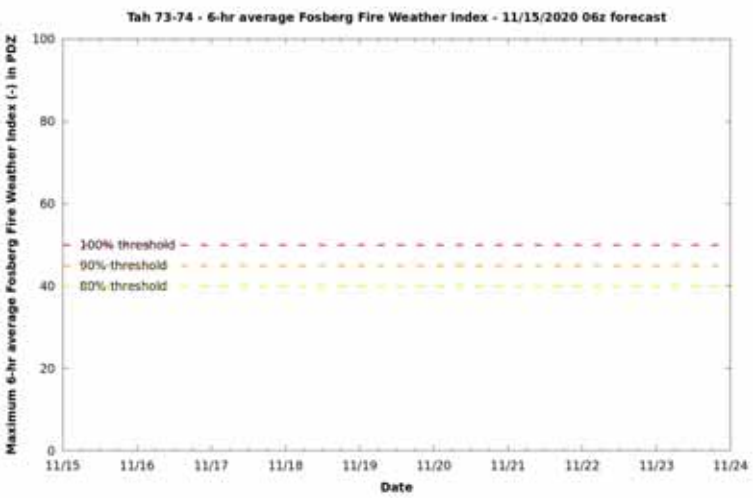


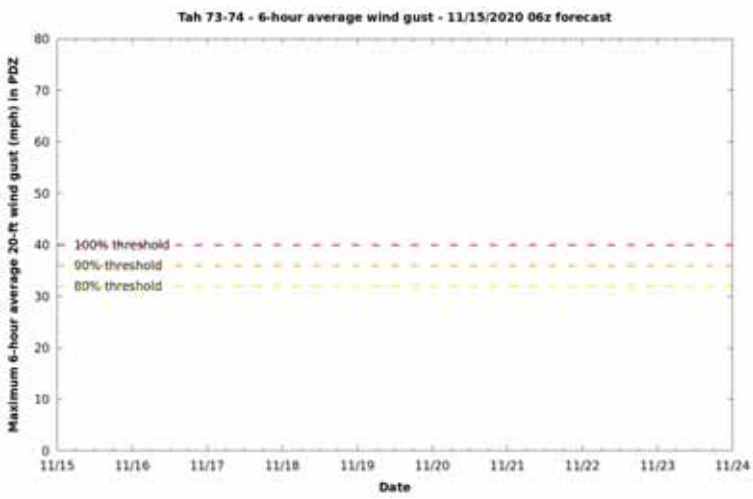
Tah 73-60



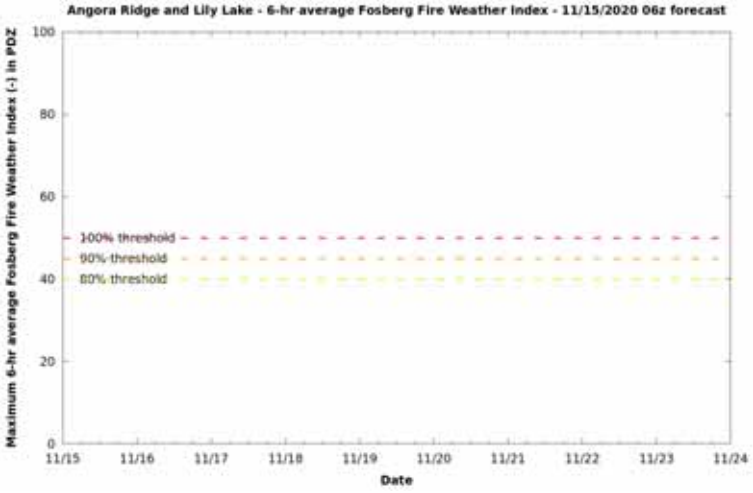


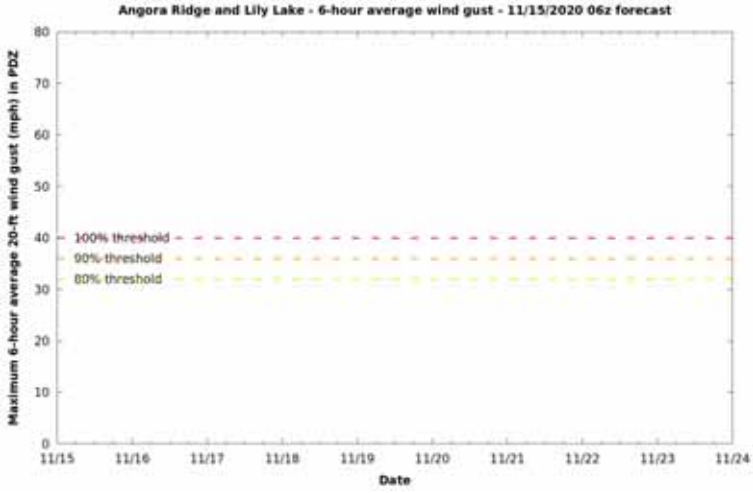
Tah 73-74



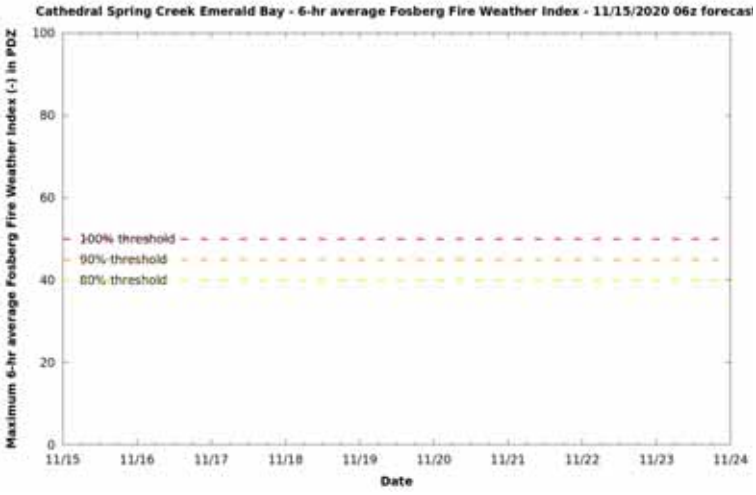


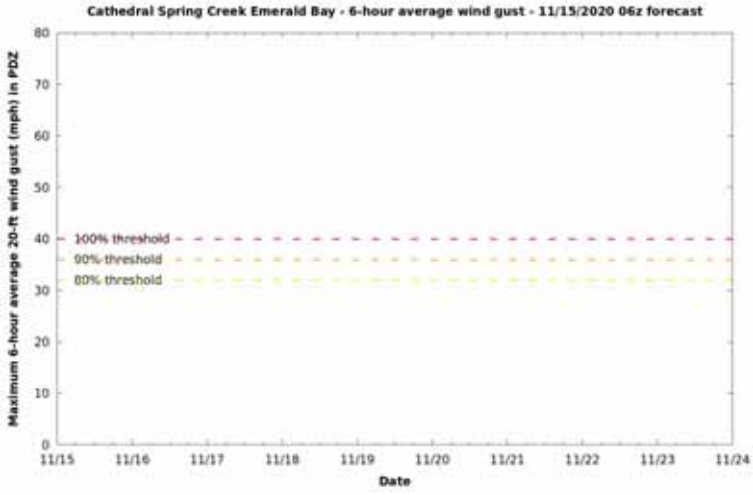
Angora Ridge and Lily Lake



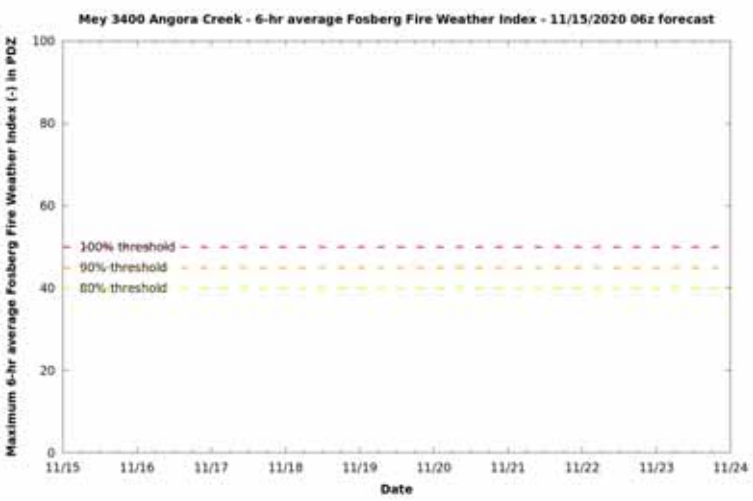


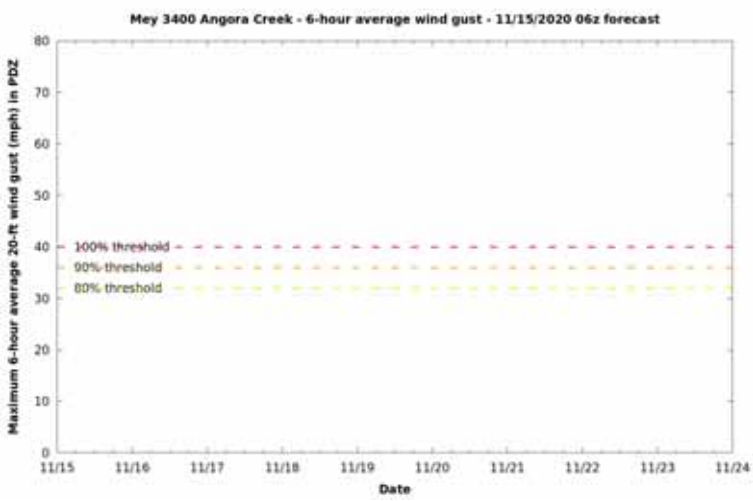
Cathedral Spring Creek Emerald Bay



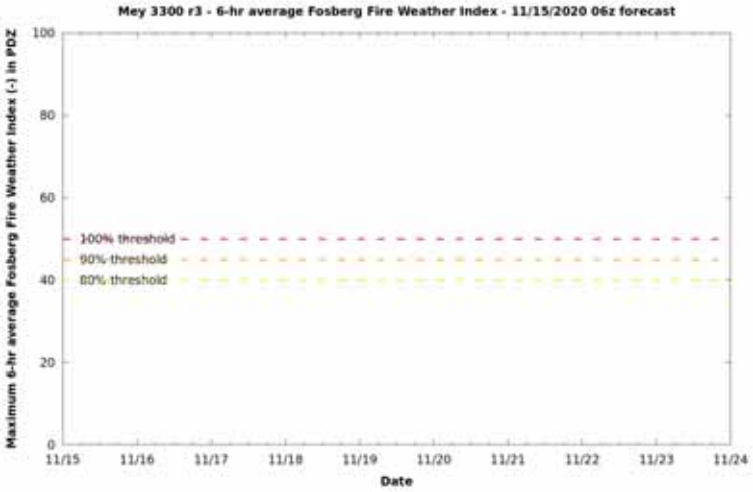


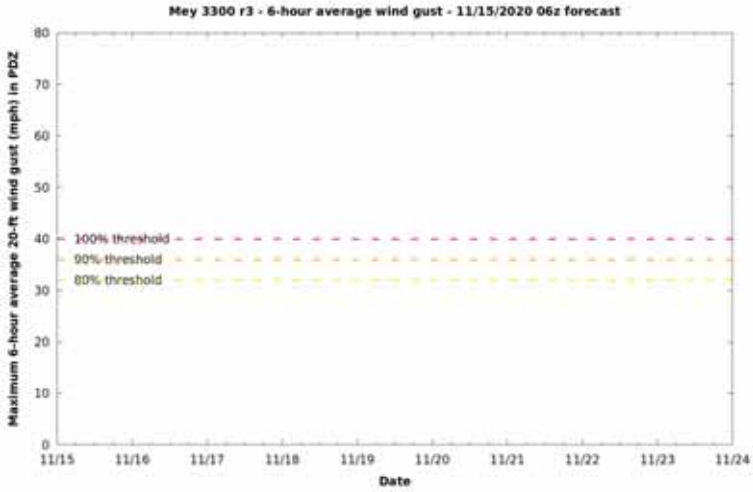
Mey 3400 Angora Creek



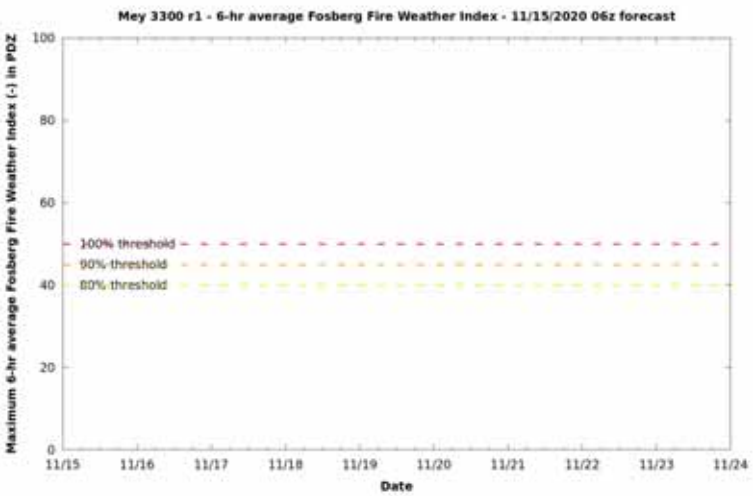


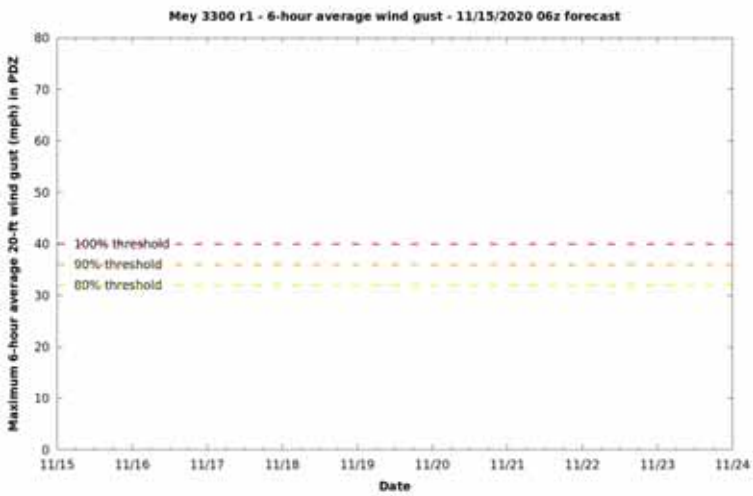
Mey 3300 r3



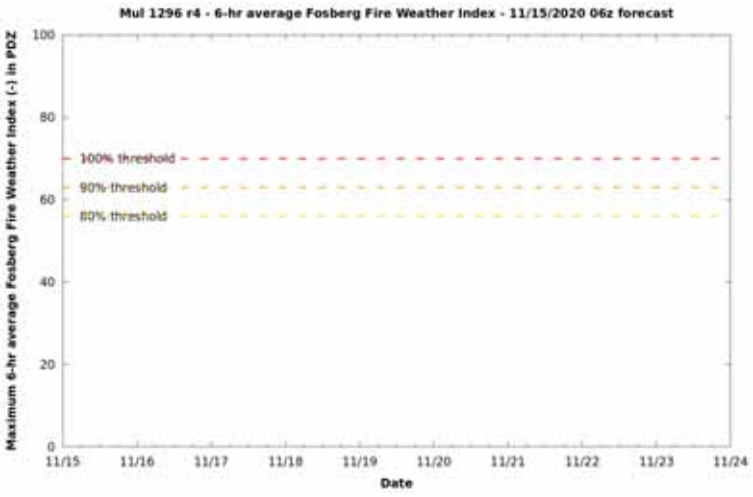


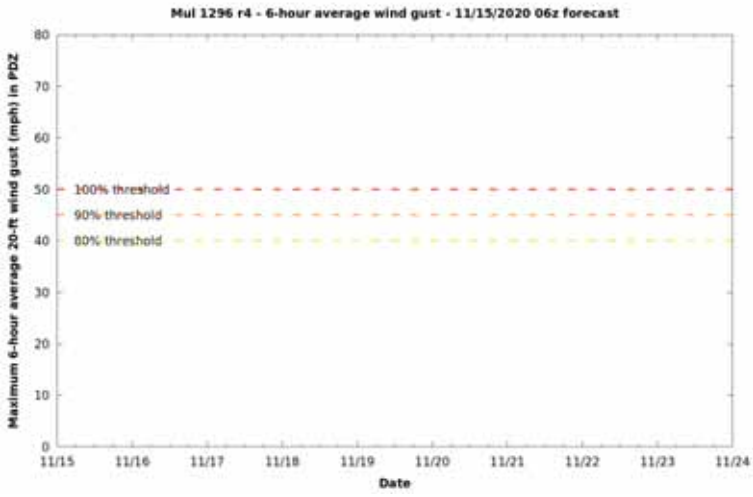
Mey 3300 r1



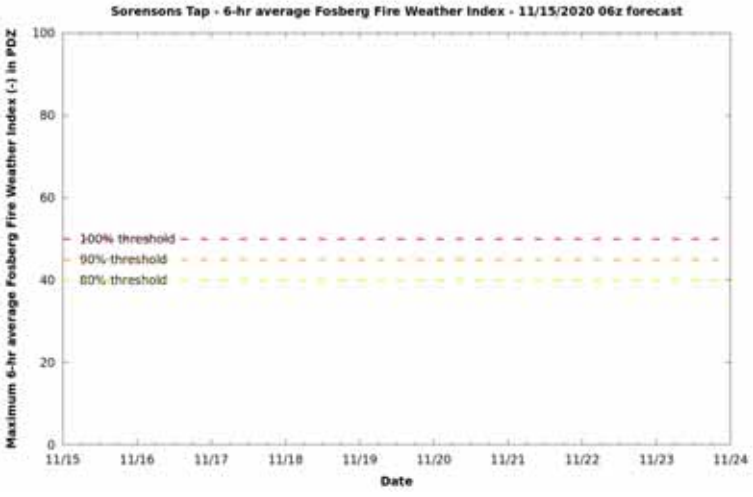


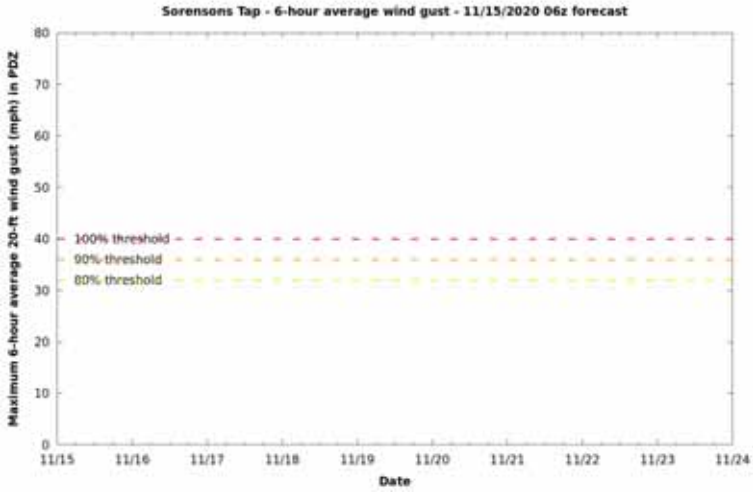
Mul 1296 r4



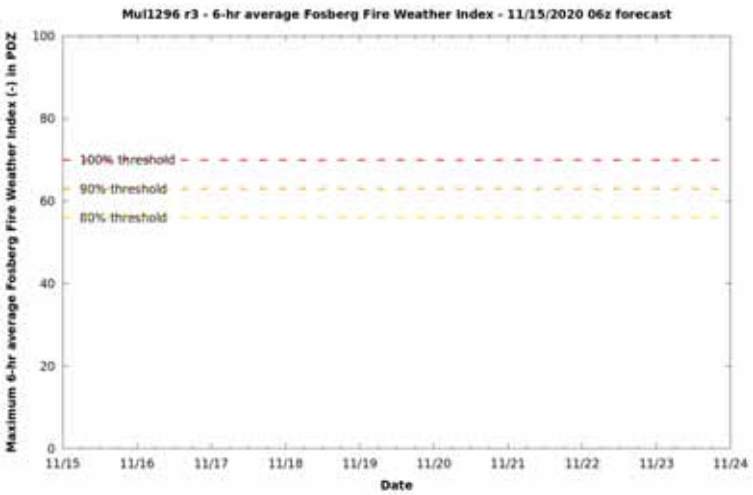


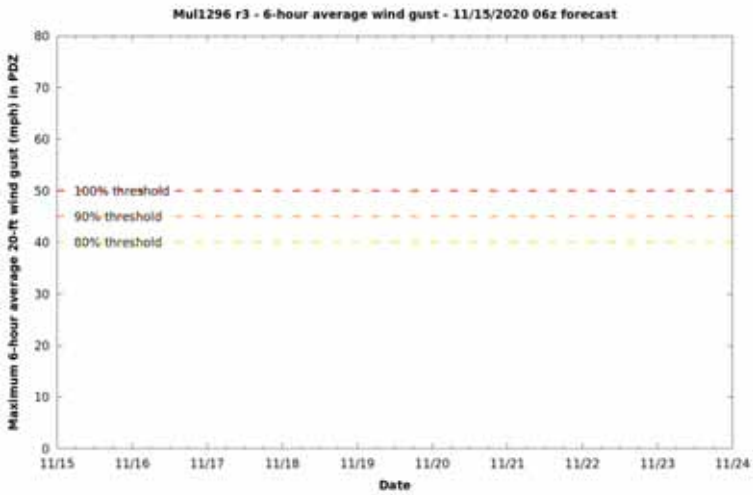
Sorensons Tap



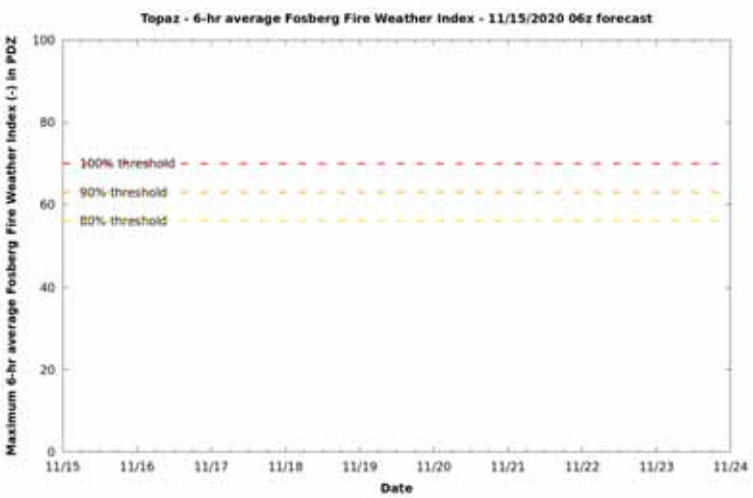


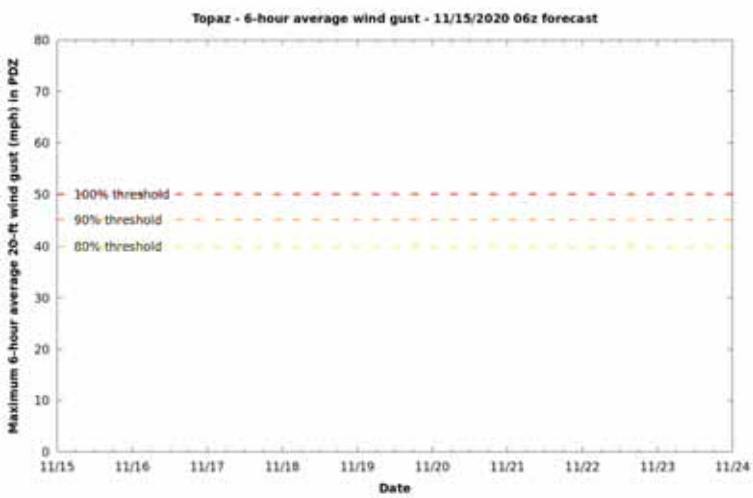
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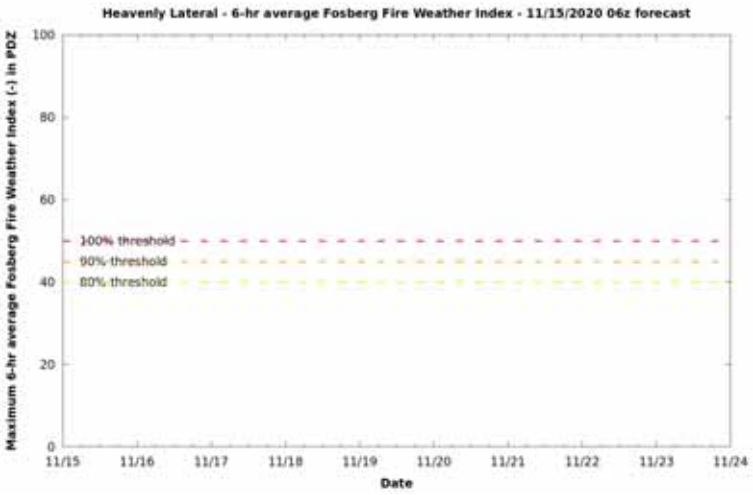


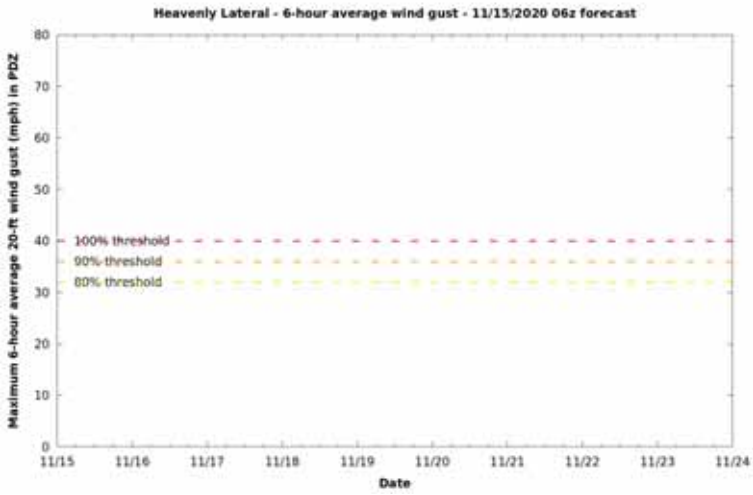
Topaz



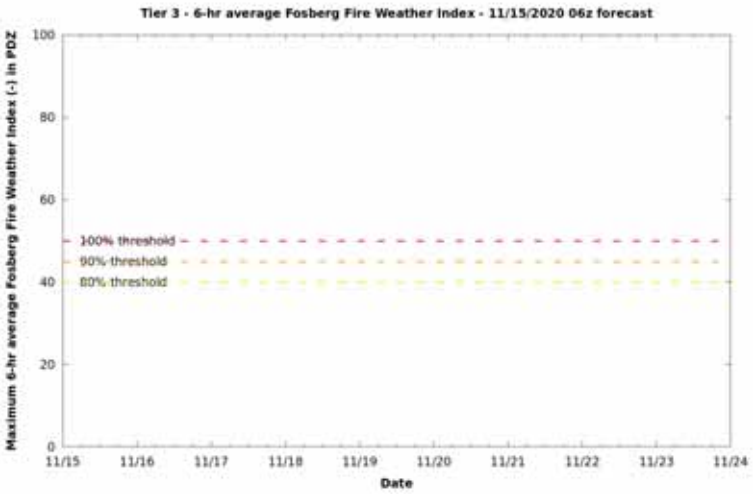


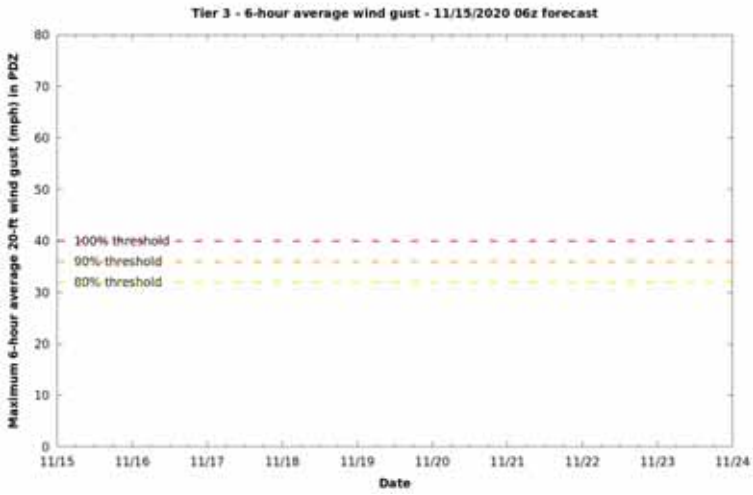
Heavenly Lateral



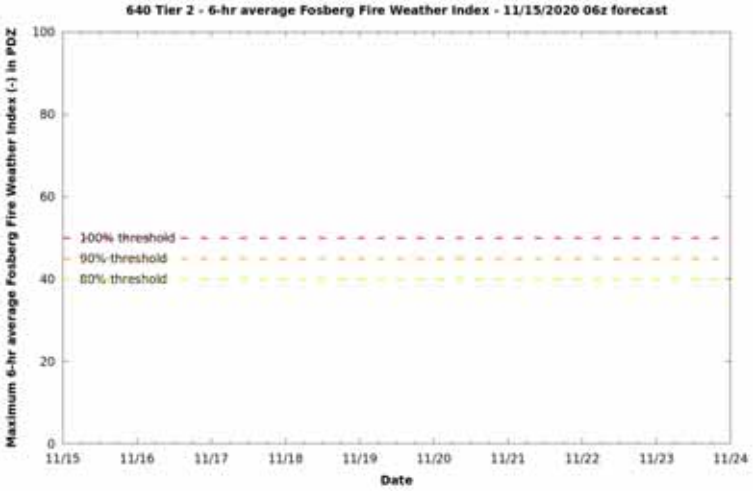


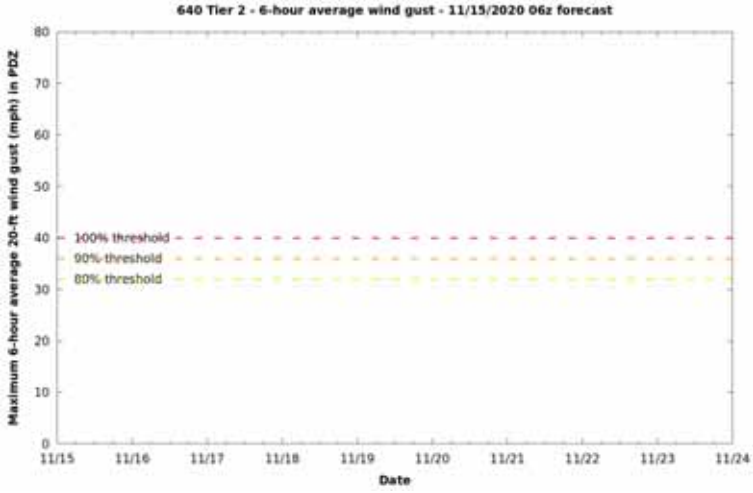
Tier 3



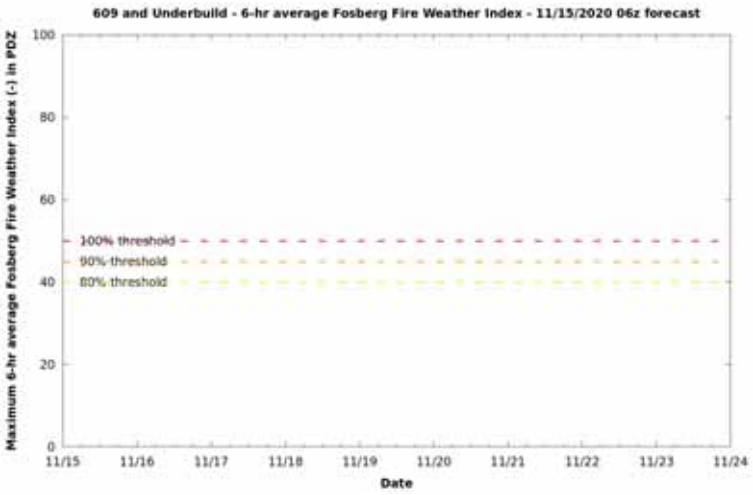


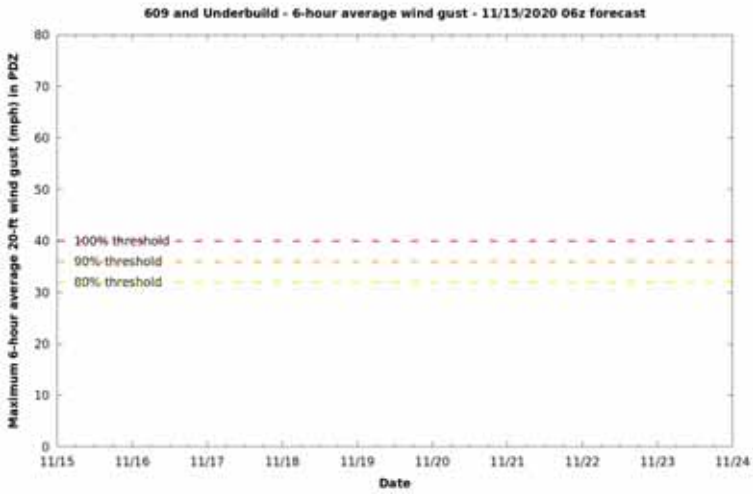
640 Tier 2



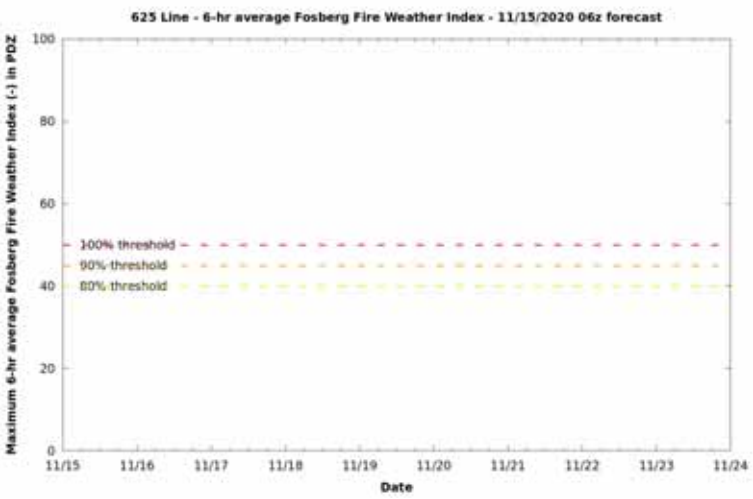


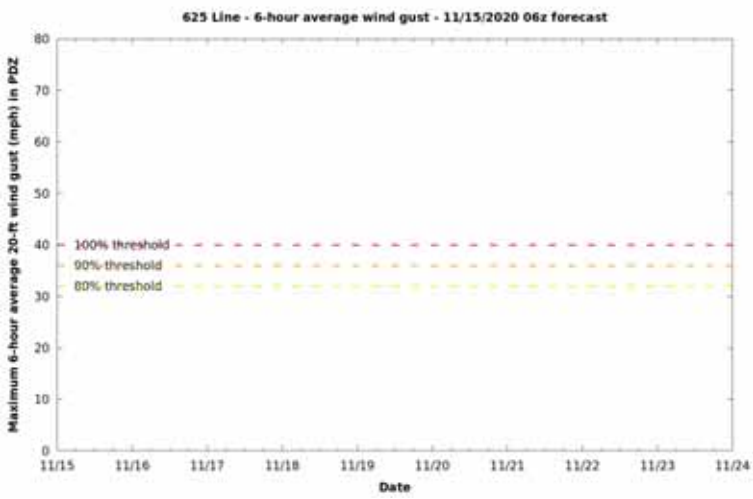
609 and Underbuild



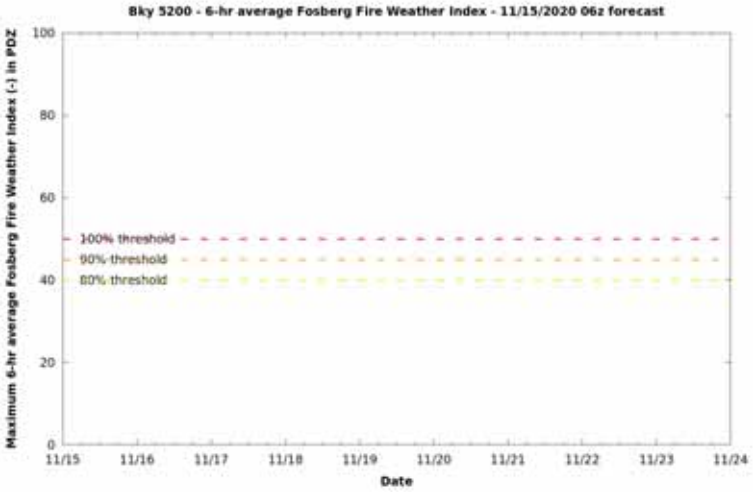


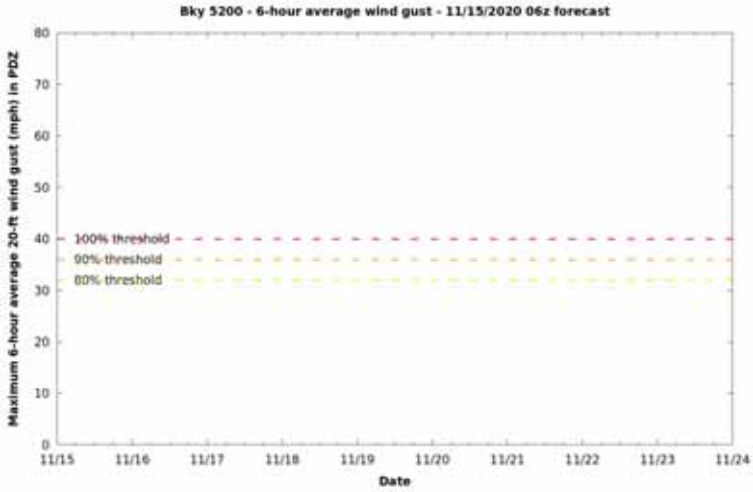
625 Line



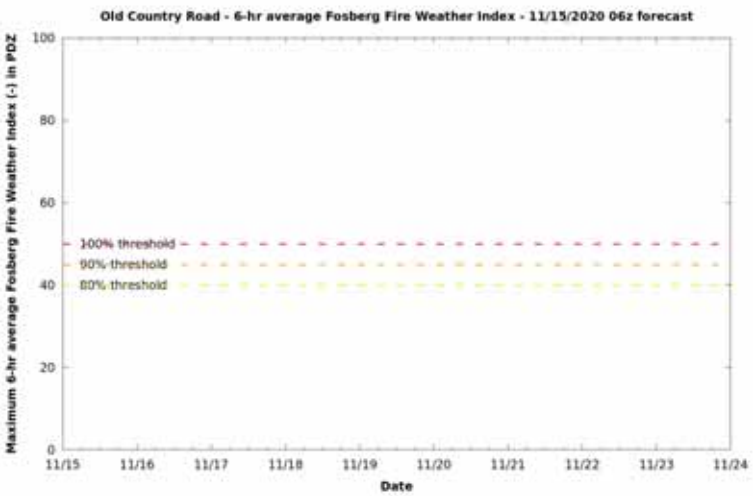


Bky 5200



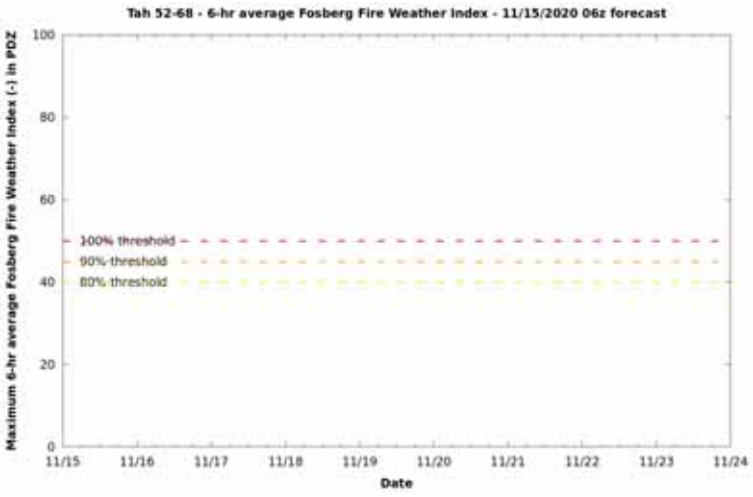


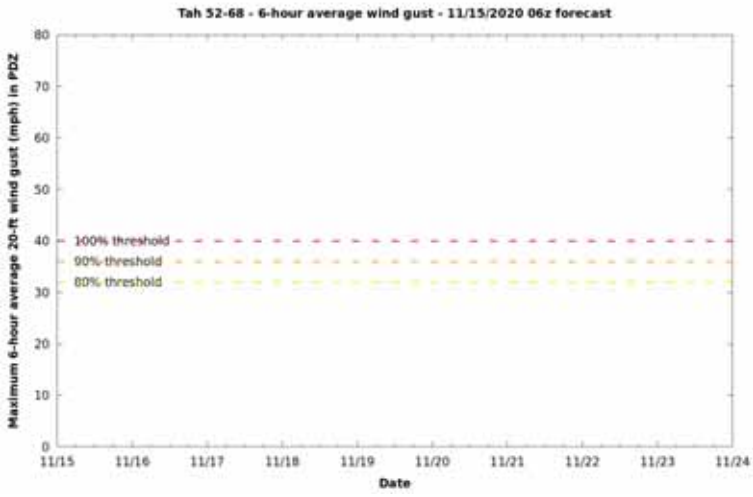
Old Country Road



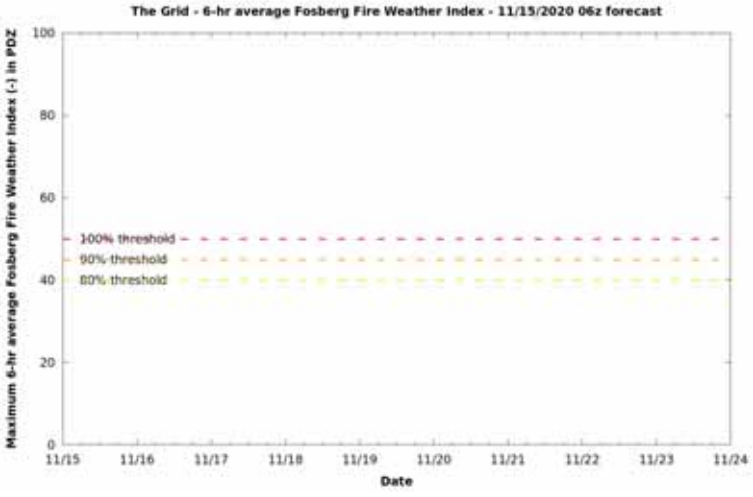


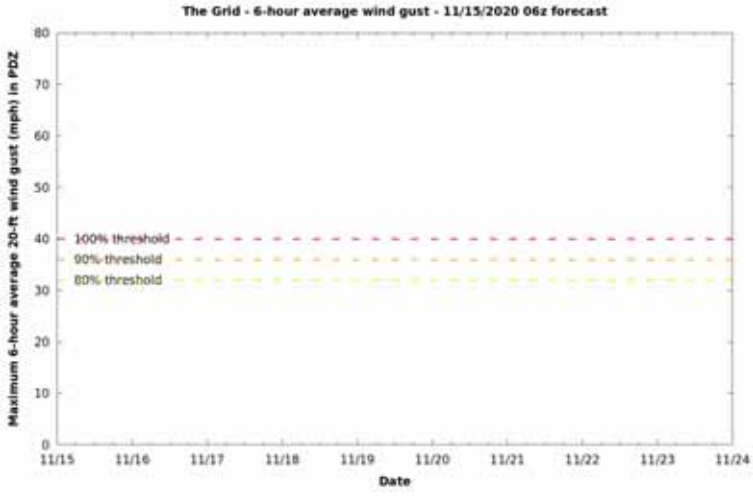
Tah 52-68





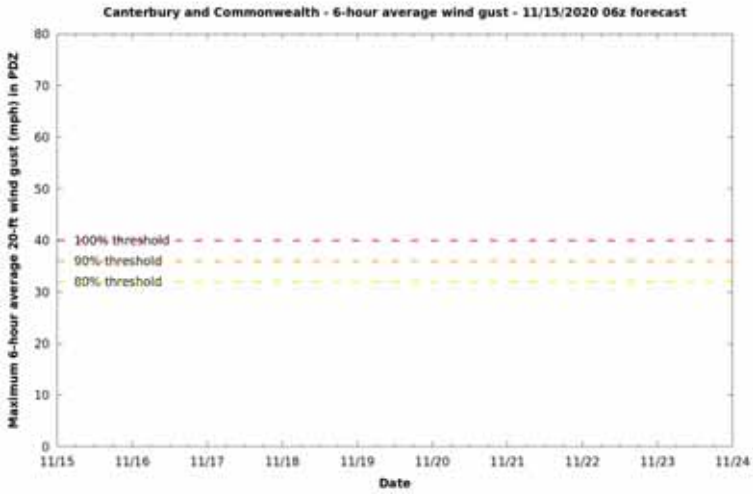
The Grid



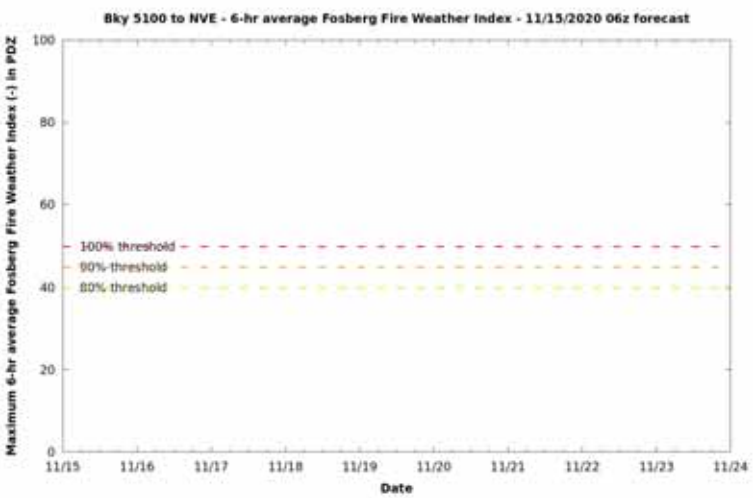


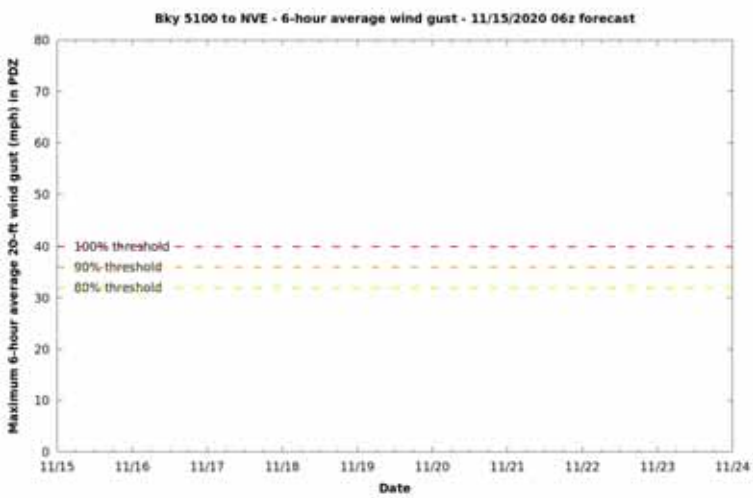
Canterbuy and Commonwealth



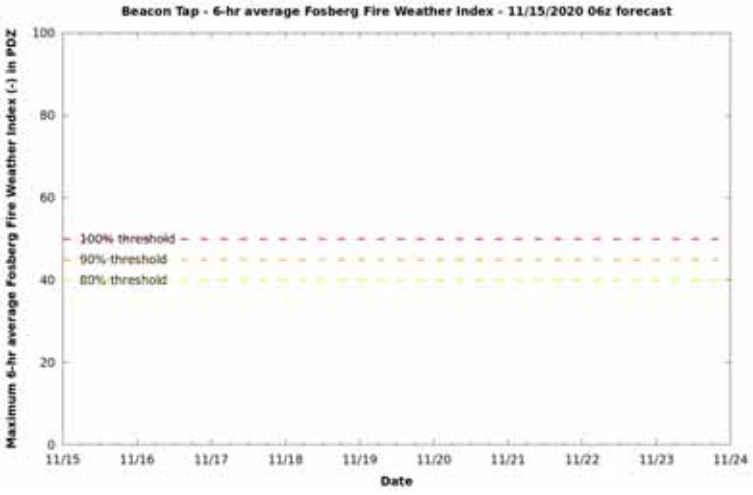


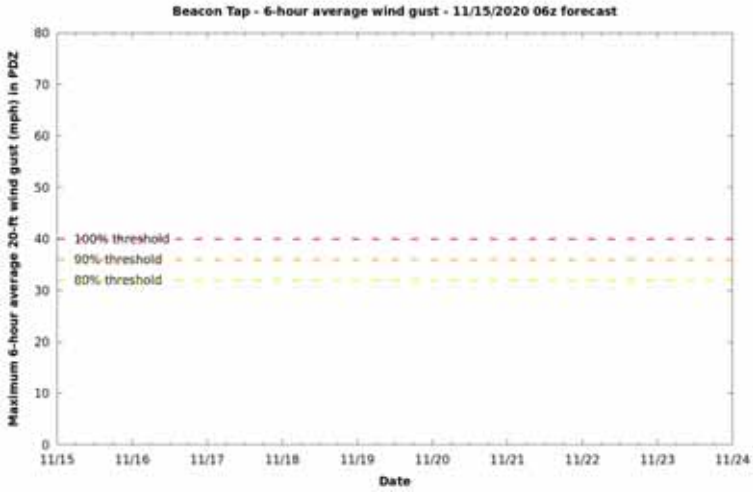
Bky 5100 to NVE



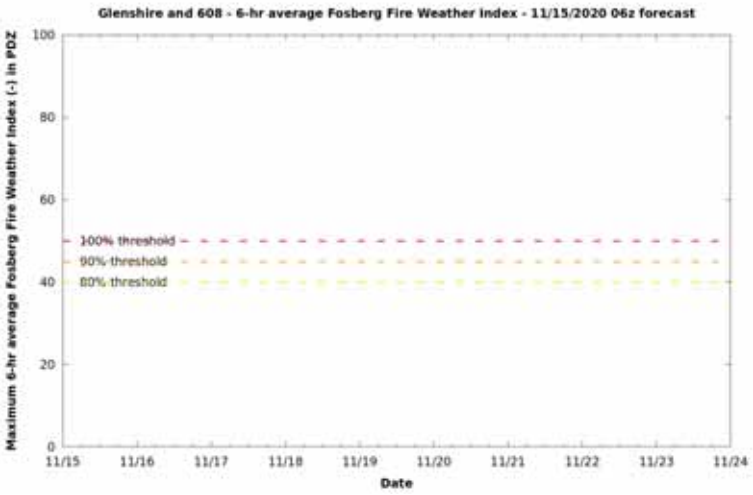


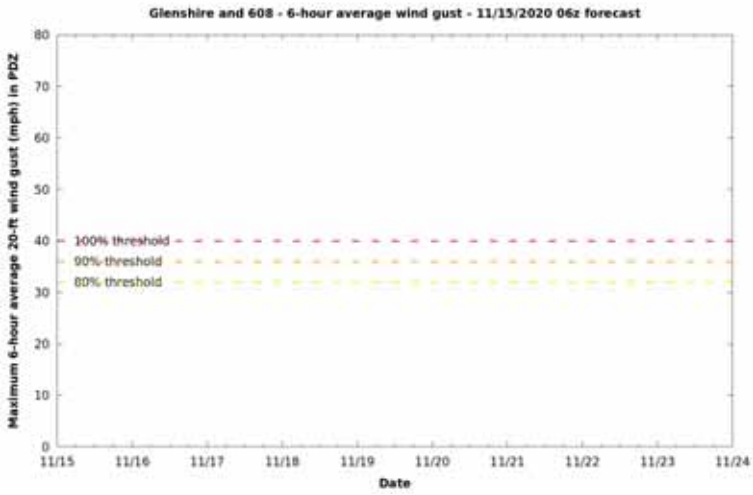
Beacon Tap



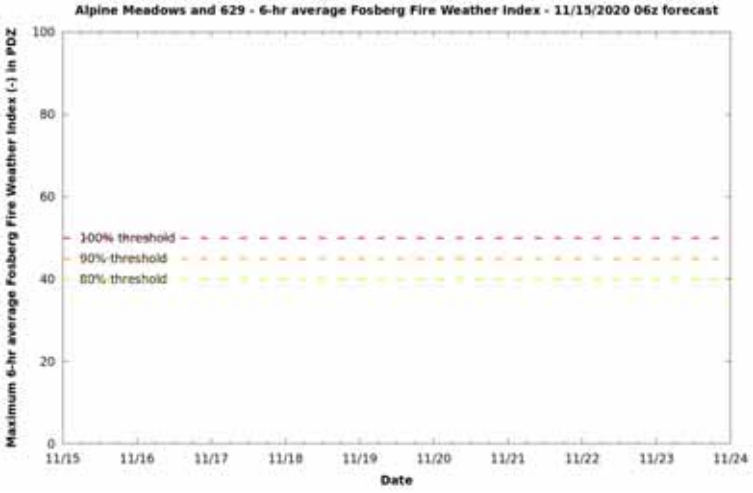


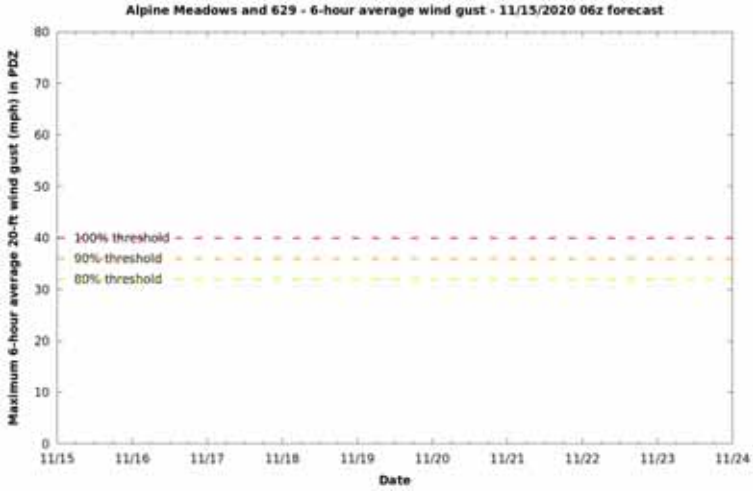
Glenshire and 608



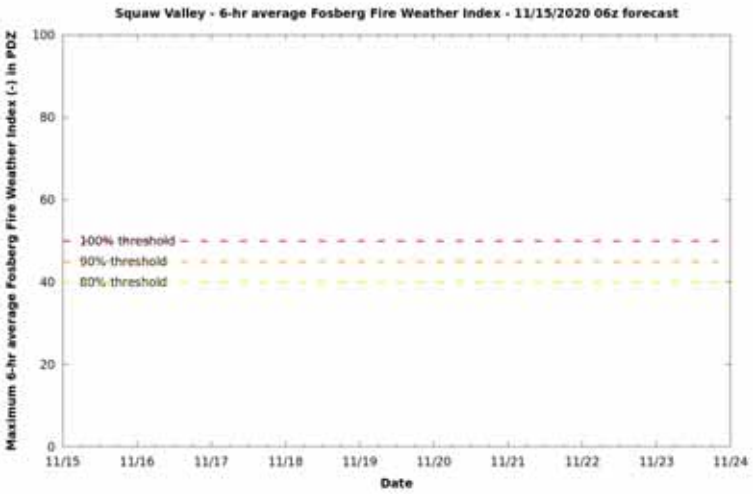


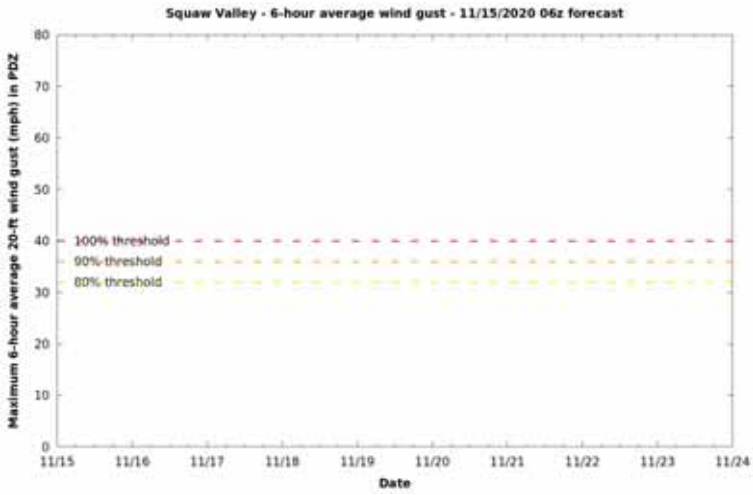
Alpine Meadows and 629



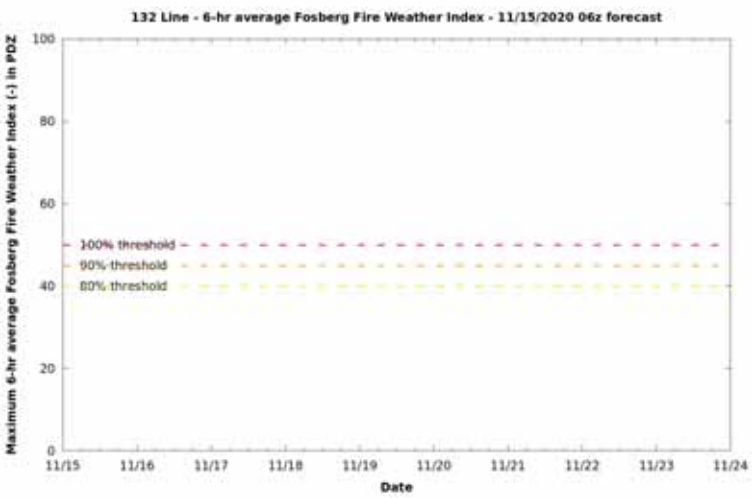


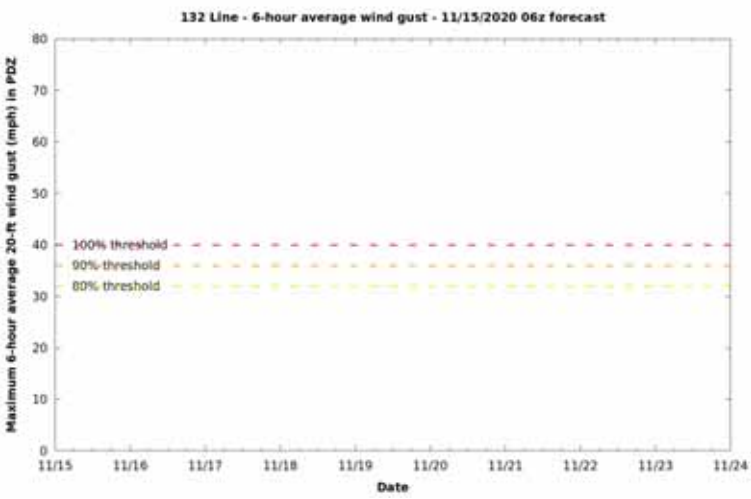
Squaw Valley



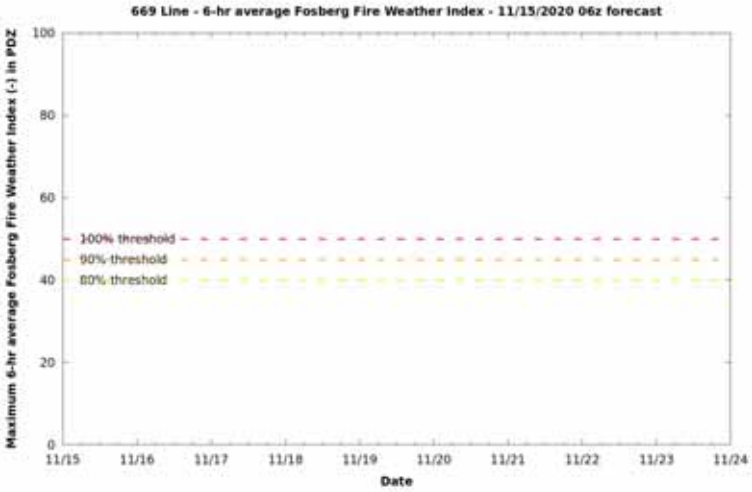


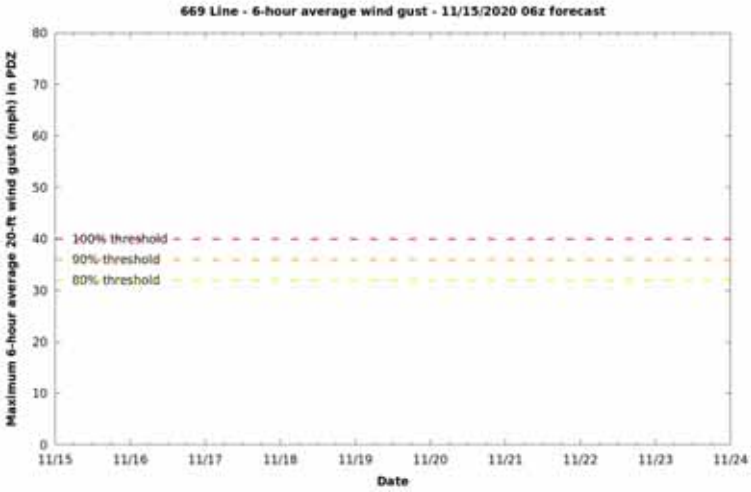
132 Line



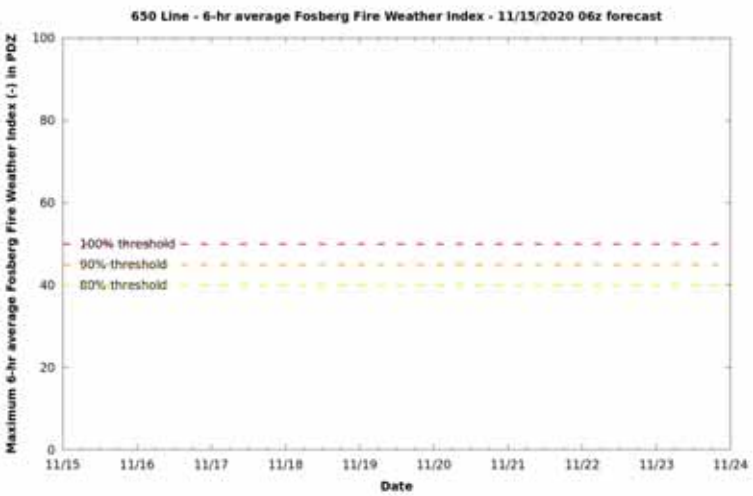


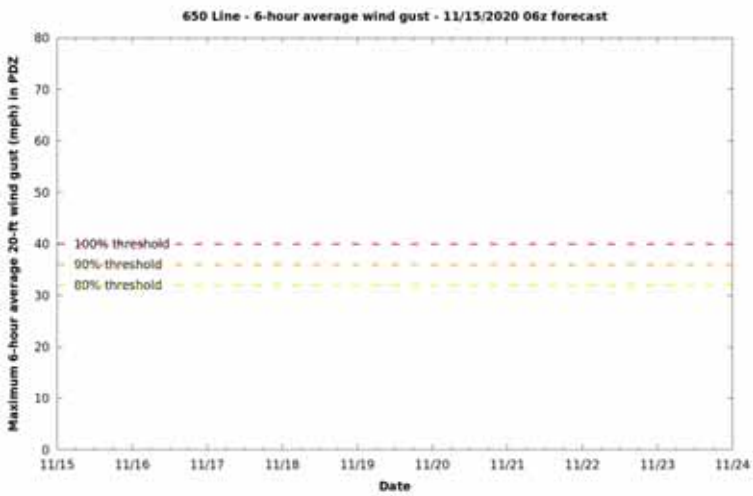
669 Line



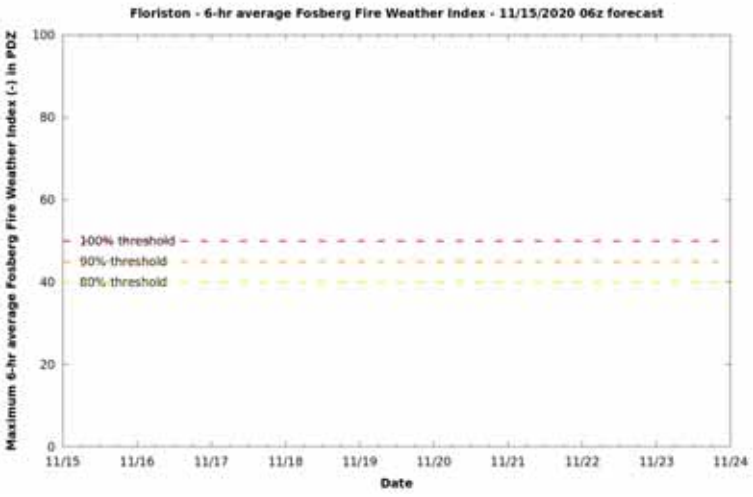


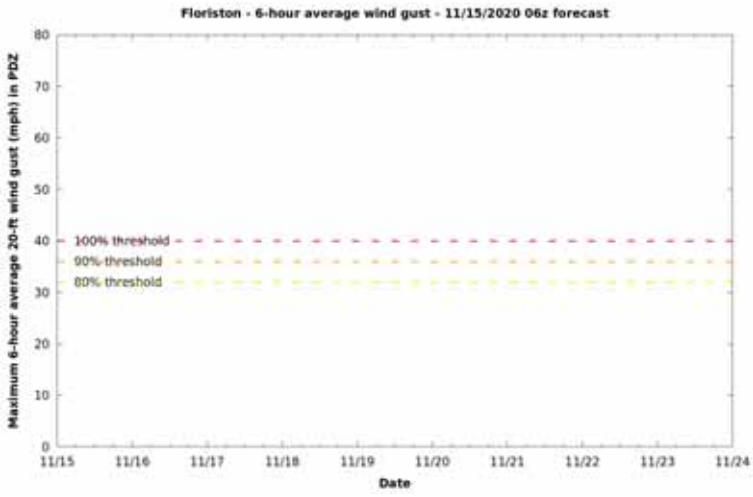
650 Line



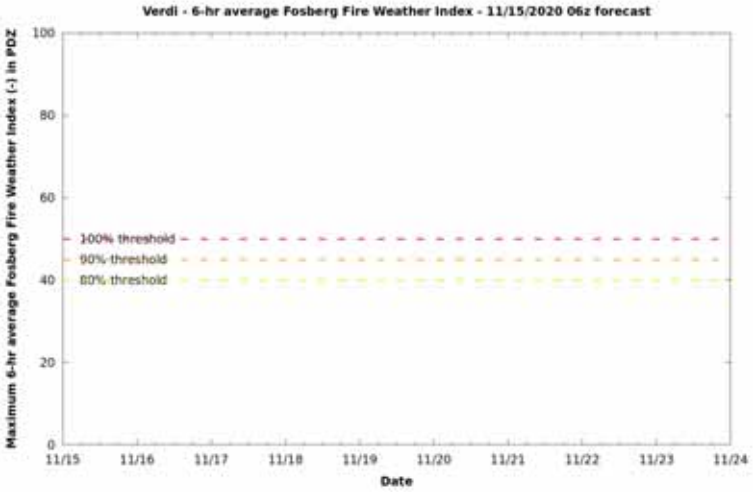


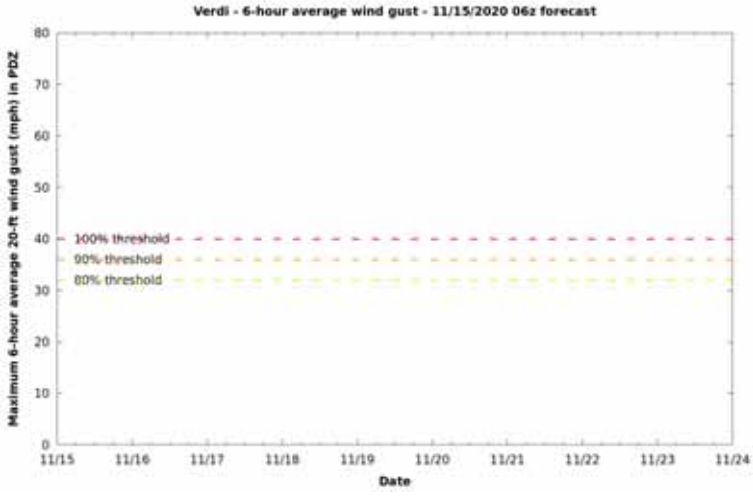
Floriston



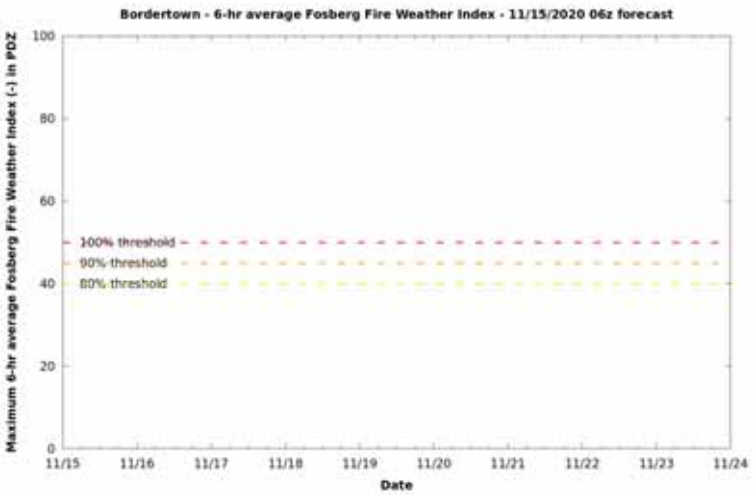


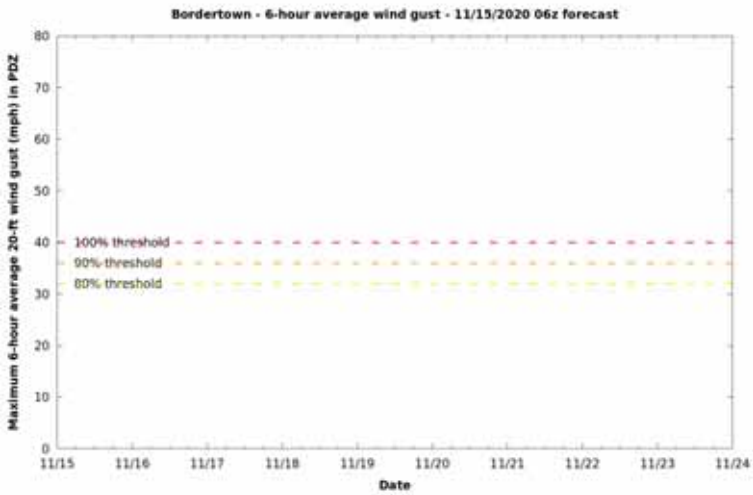
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/15/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100
80
60
40
20
0
100% threshold
90% threshold
80% threshold
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
Date


Bordertown - 6-hour average wind gust - 11/15/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
80
70
60
50
40
30
20
10
0
100% threshold
90% threshold
80% threshold
11/15
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
Date

Liberty Utilities Fire Potential Index Forecast for 11/15/20 - 11/21/20

Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

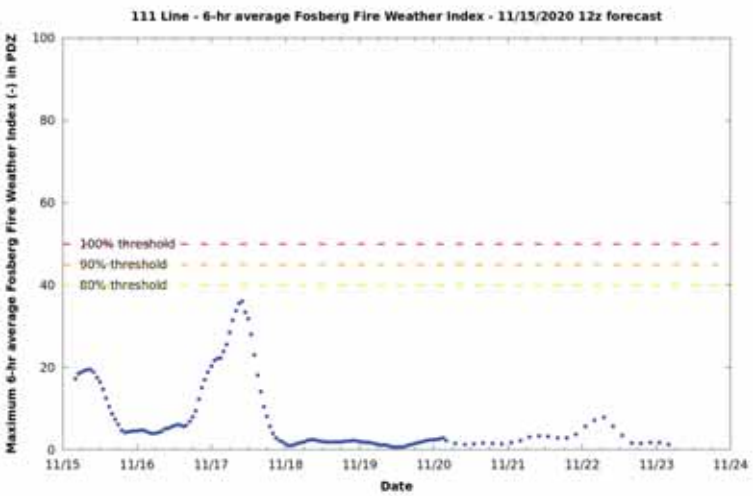
Liberty Utilities Energy Release Component Forecast for 11/15/20 - 11/21/20

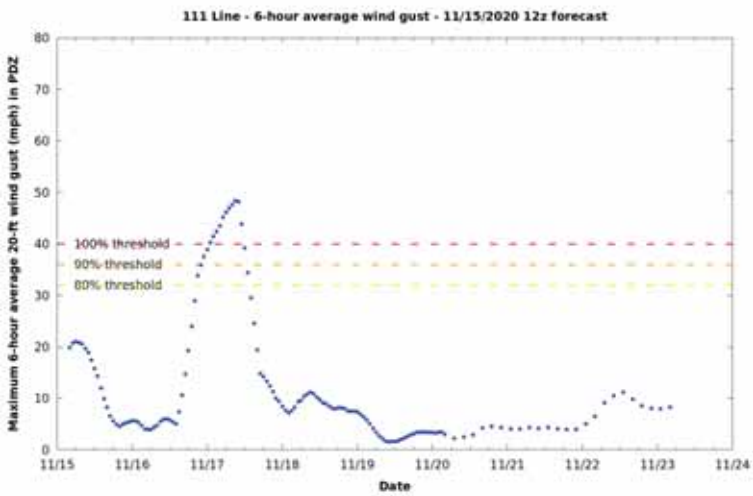
Zone	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	47.6	49.4	47.7	33.9	33.0	34.5	36.9
Sierra Brooks	50.9	56.8	54.6	40.3	42.4	45.2	49.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.3	1.4	1.2	0.7	0.7	0.6	0.6
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	23.8	27.2	24.3	15.9	17.7	19.6	20.4
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	43.0	48.3	43.8	27.6	28.9	31.5	32.5
Topaz	53.4	57.9	54.1	36.4	39.2	40.9	42.2
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	3.4	3.8	3.4	2.1	1.9	1.9	1.8
Old Country Road	29.7	32.0	26.3	16.6	14.9	14.3	13.7
Tah 52-68	20.1	21.7	17.9	11.2	10.2	9.7	9.3
The Grid	8.3	9.5	8.1	4.6	4.3	3.8	3.6
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	24.1	24.1	23.0	15.4	15.6	15.5	16.8
Verdi	51.1	51.1	47.8	31.7	34.6	36.6	41.1
Bordertown	54.6	54.6	52.1	35.8	37.8	40.5	44.7

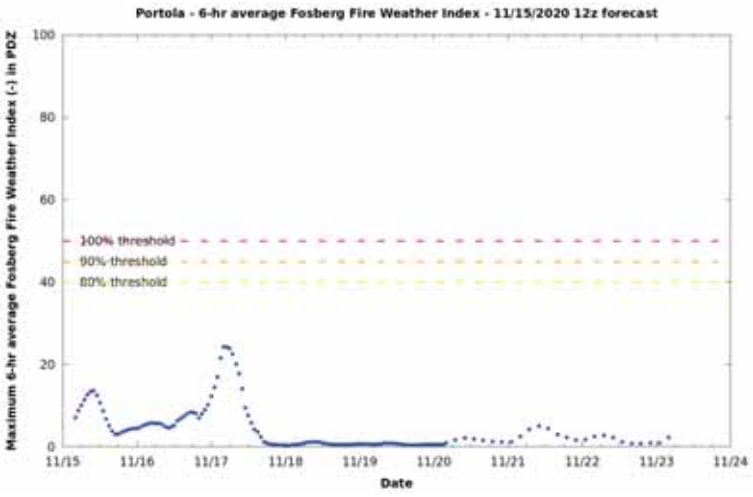
Liberty Utilities Fire Weather Summary Plots - 11/15/2020 12z forecast

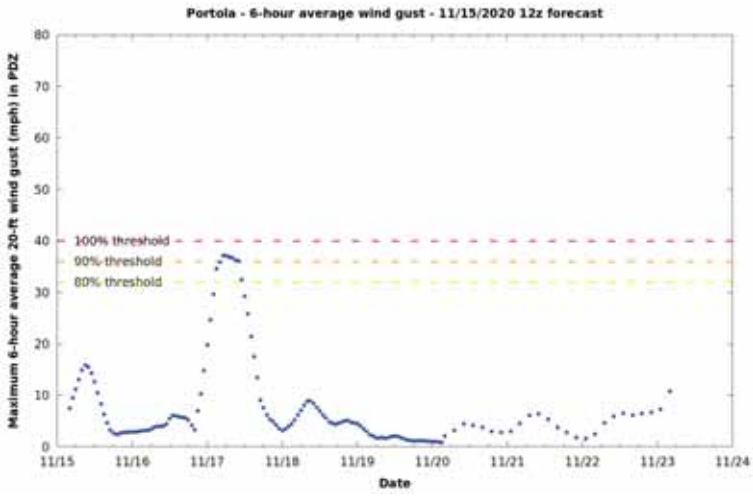
111 Line



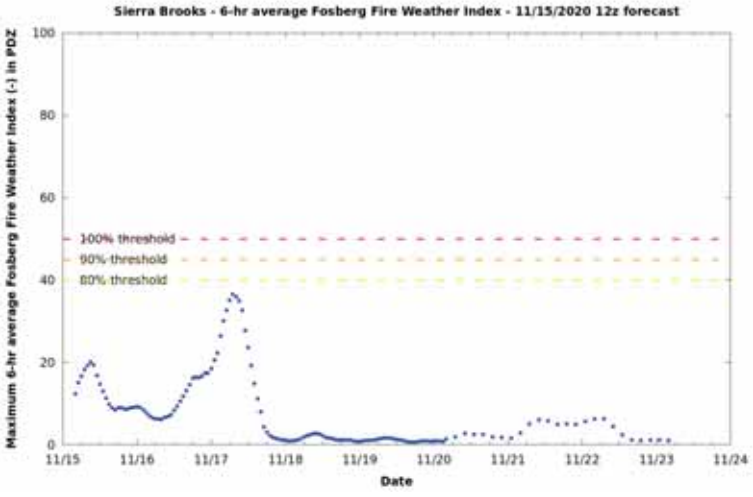


Portola



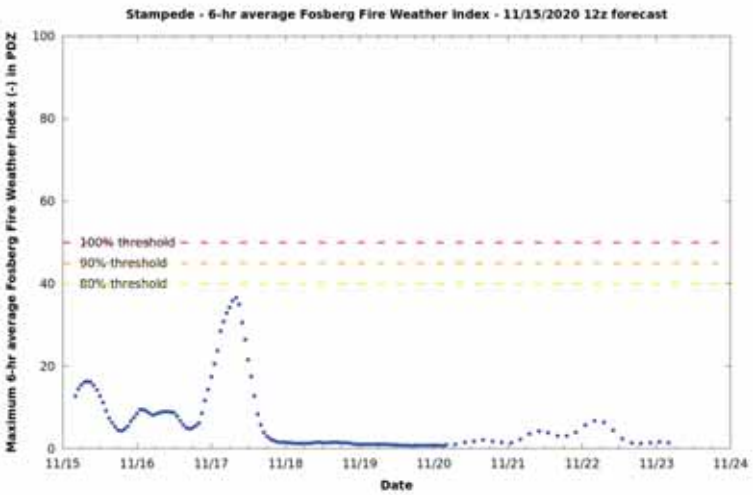


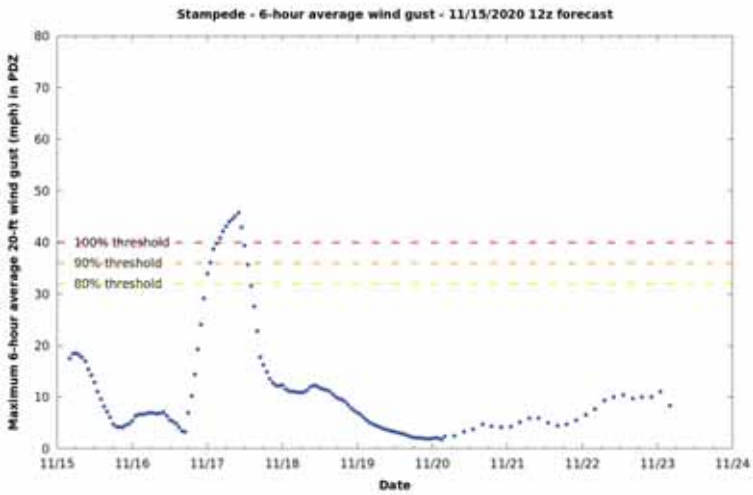
Sierra Brooks



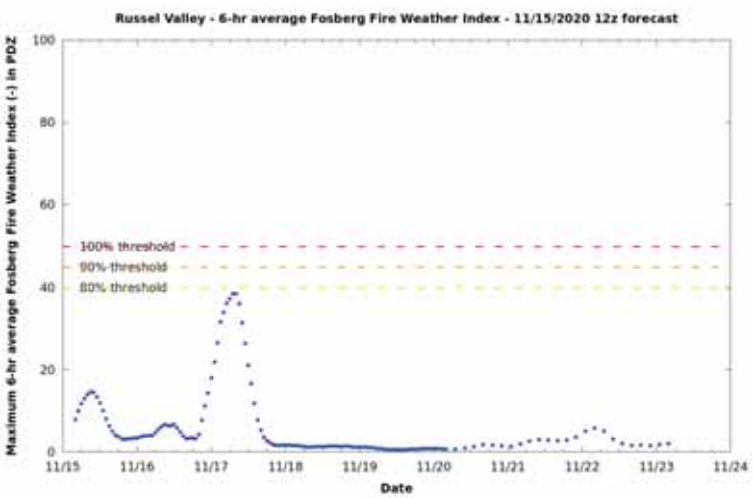


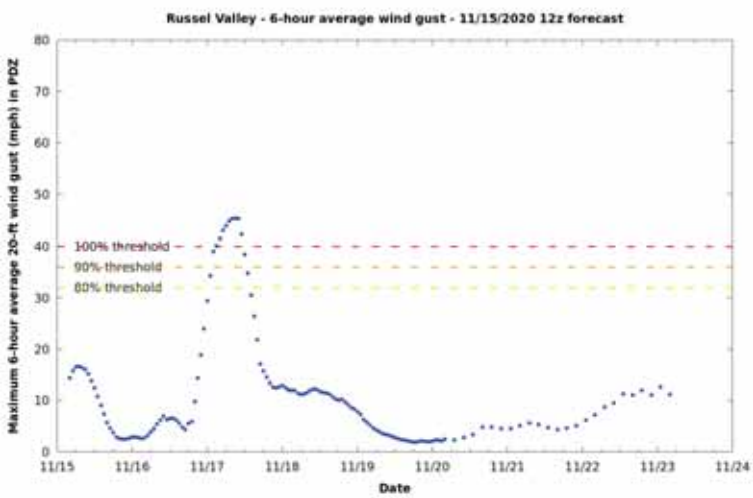
Stampede



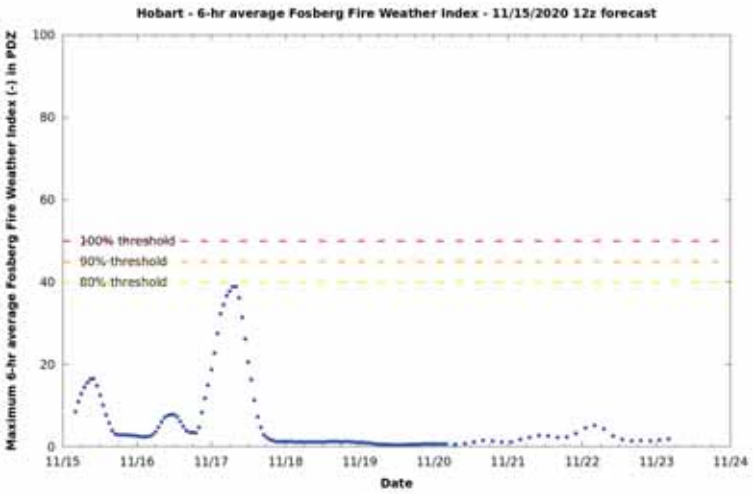


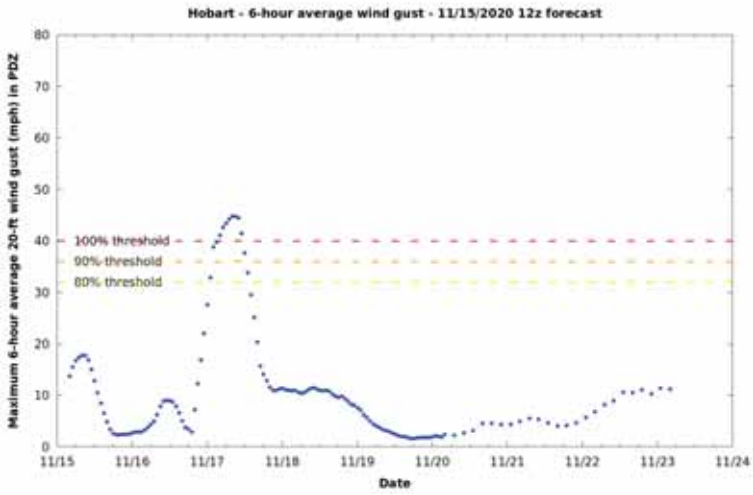
Russell Valley



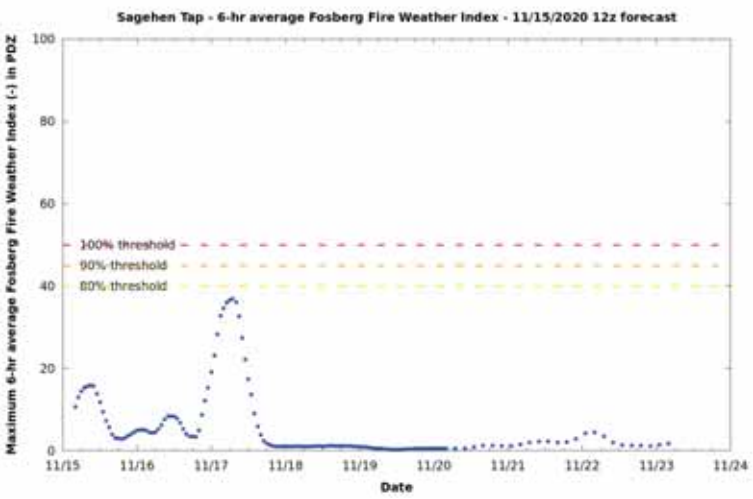


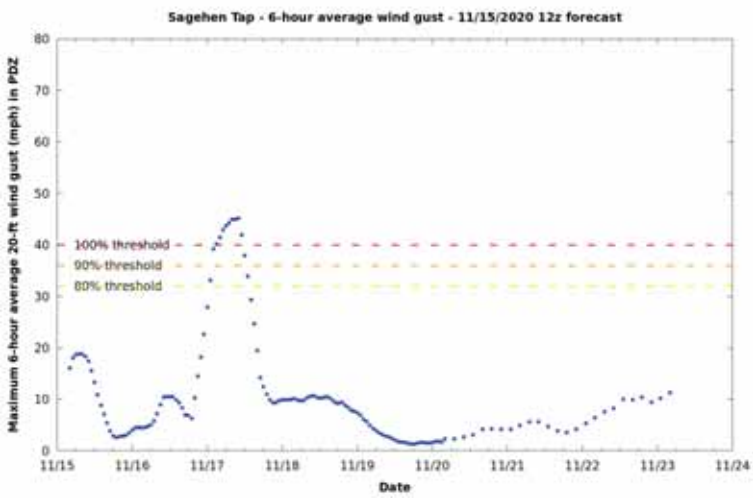
Hobart



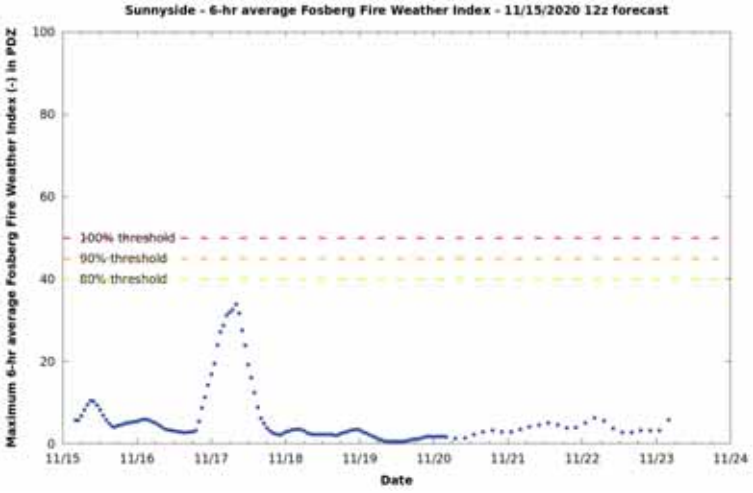


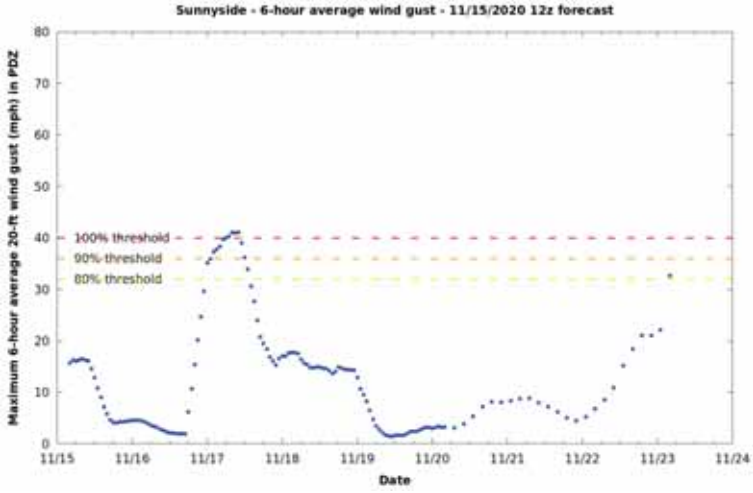
Sagehen tap



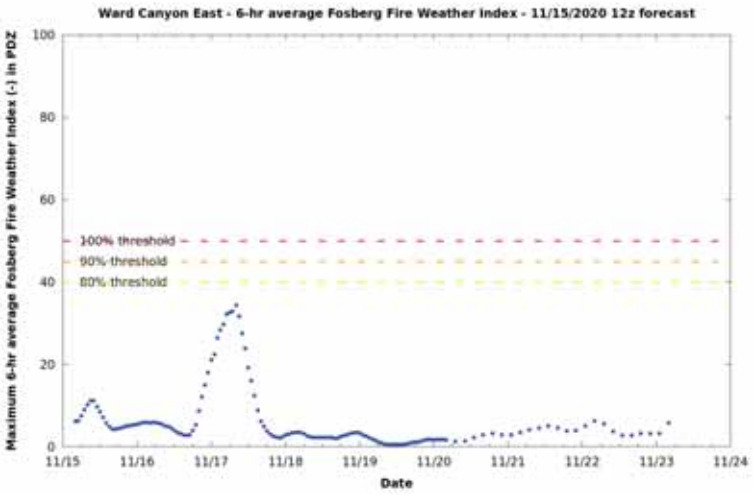


Sunnyside



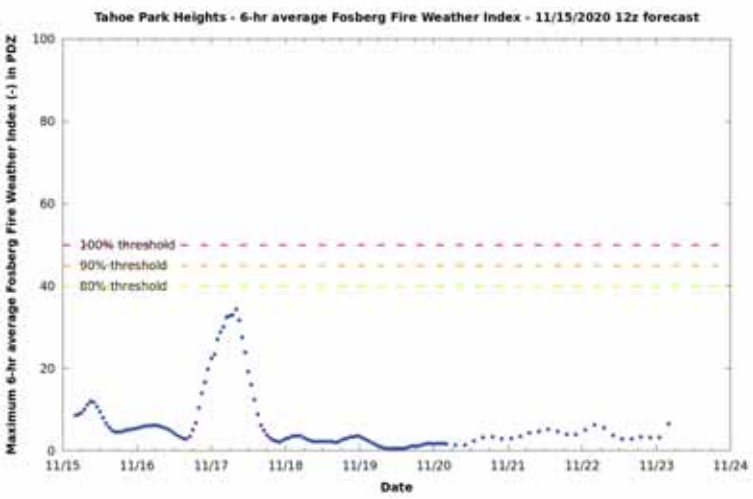


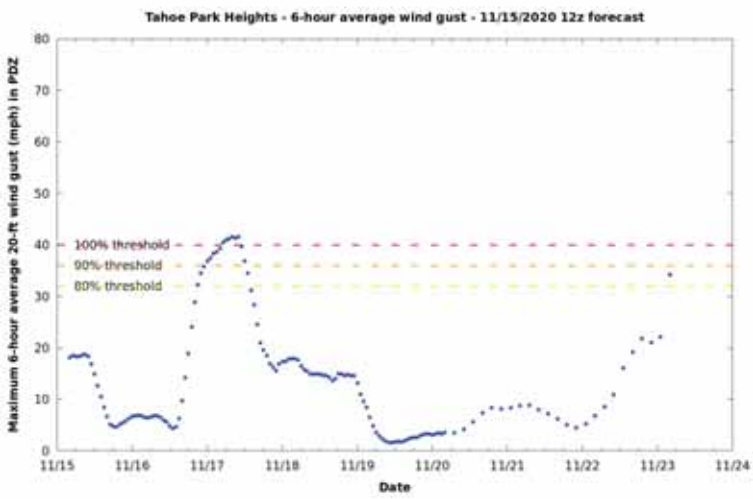
Ward Canyon East



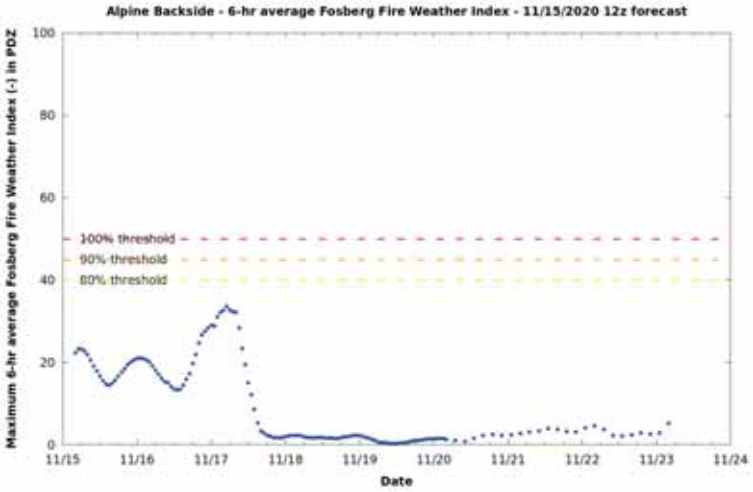


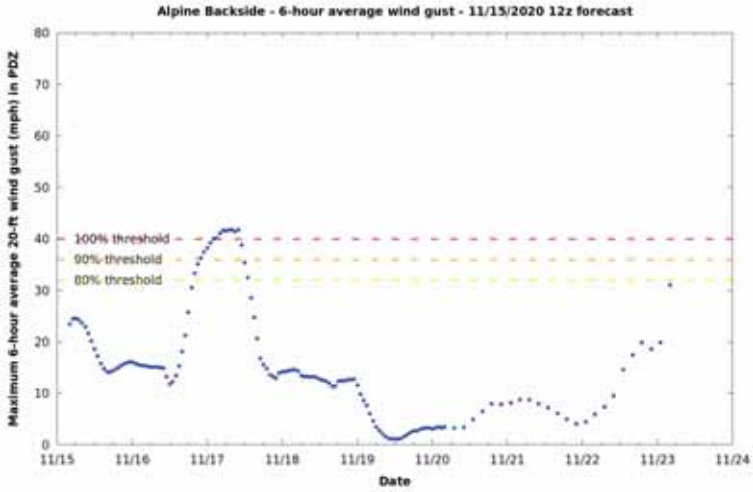
Tahoe Park Heights



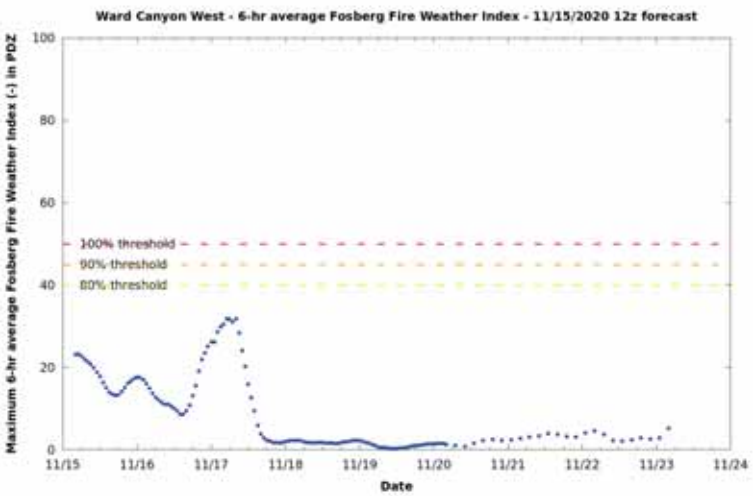


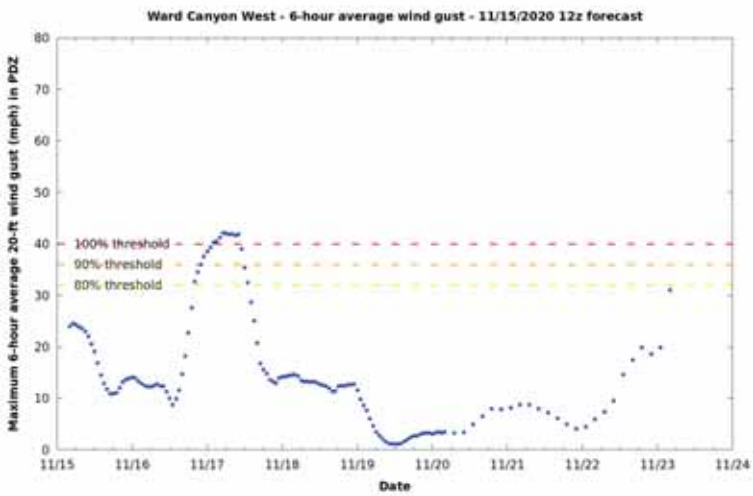
Alpine Backside



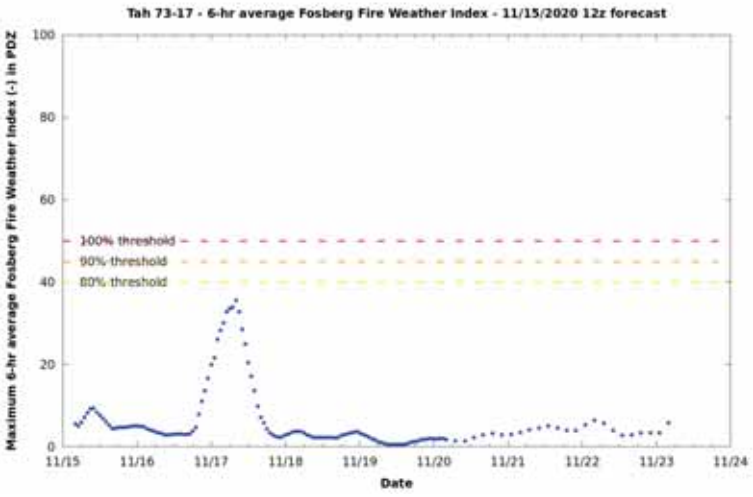


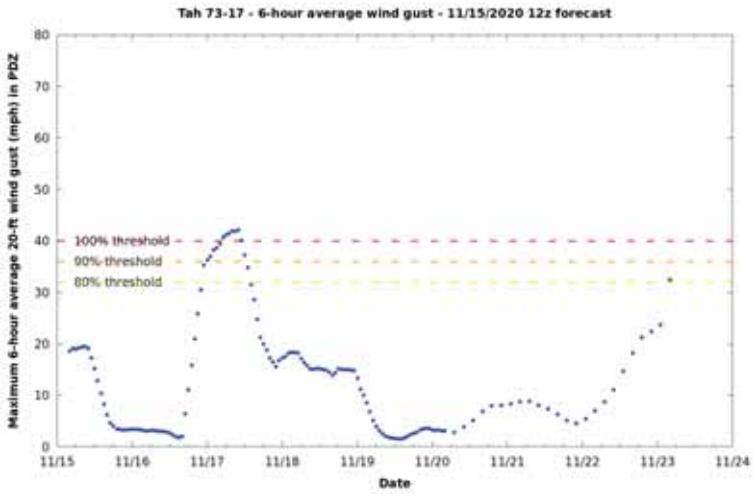
Ward Canyon West



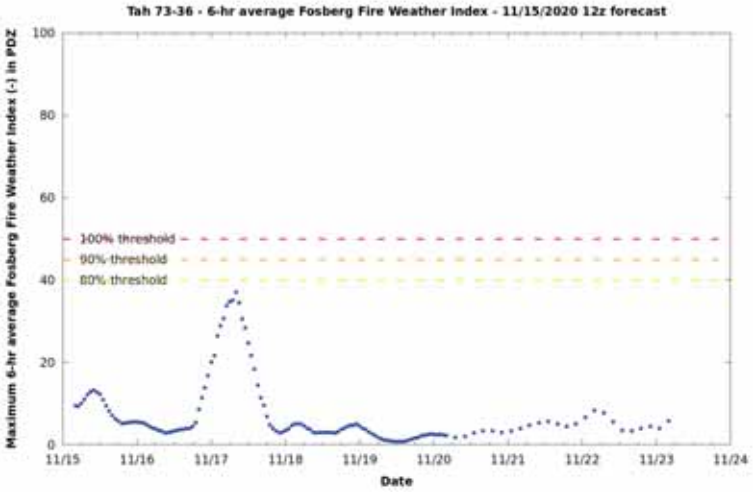


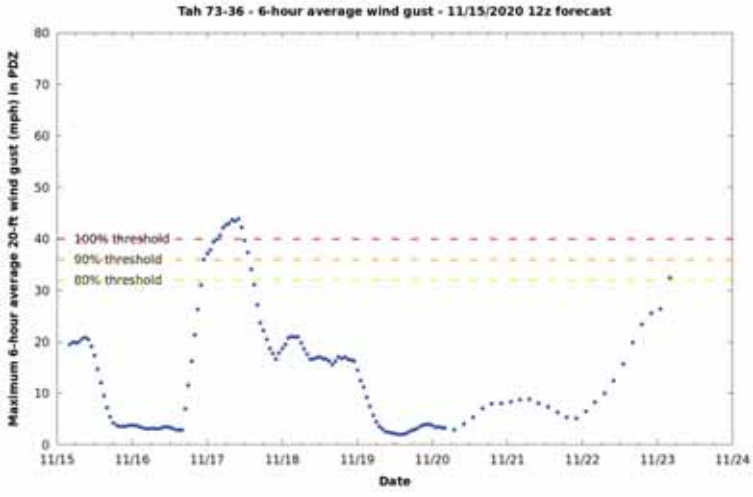
Tah 73-17



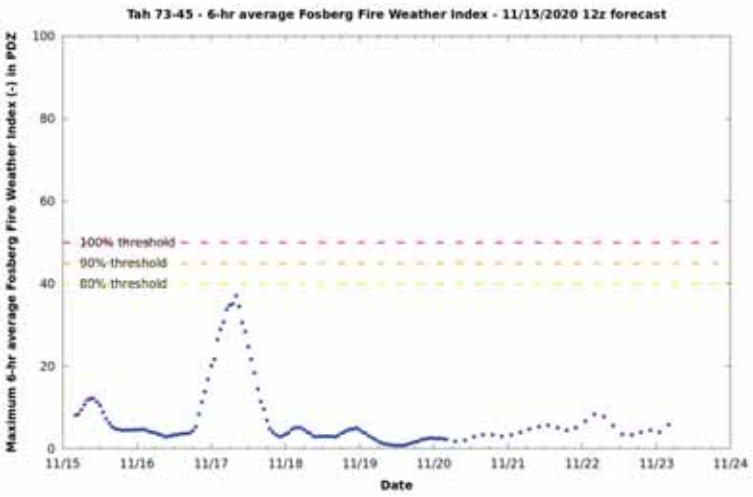


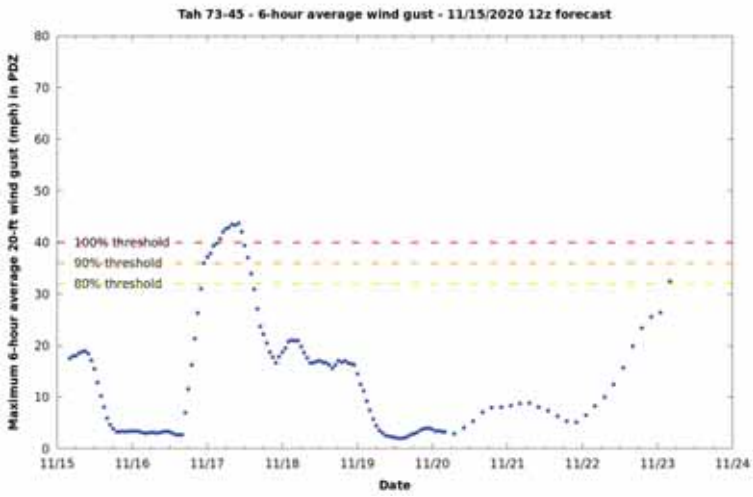
Tah 73-36



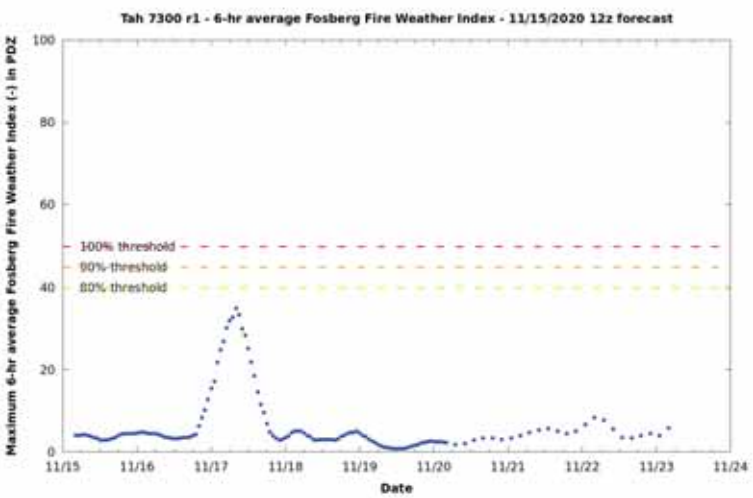


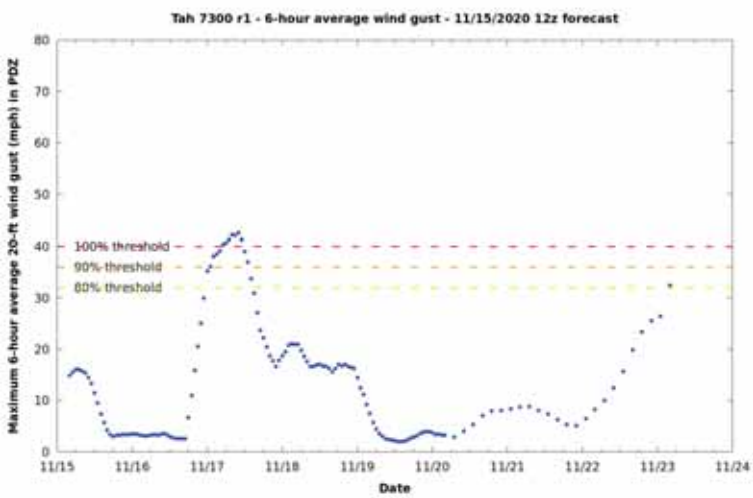
Tah 73-45



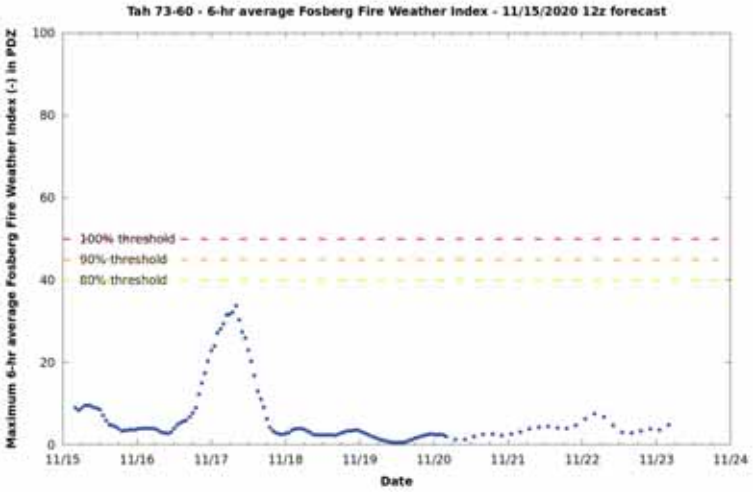


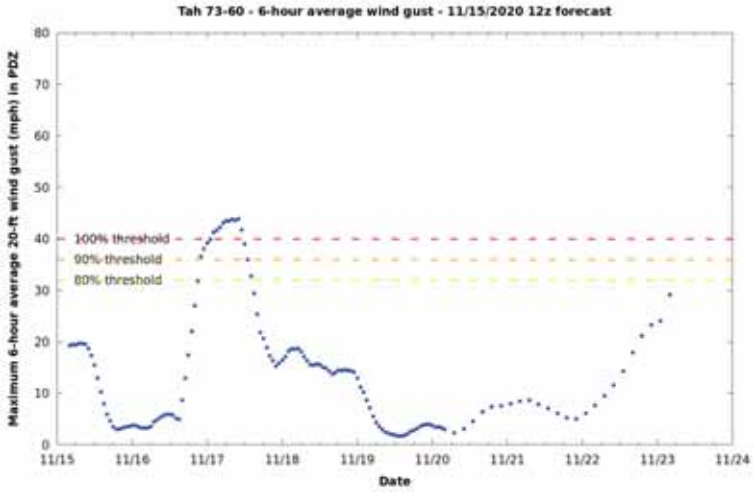
Tah 7300 r1



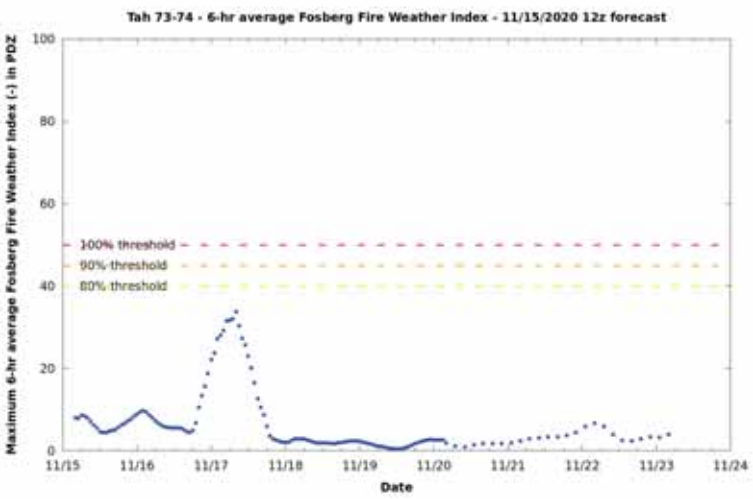


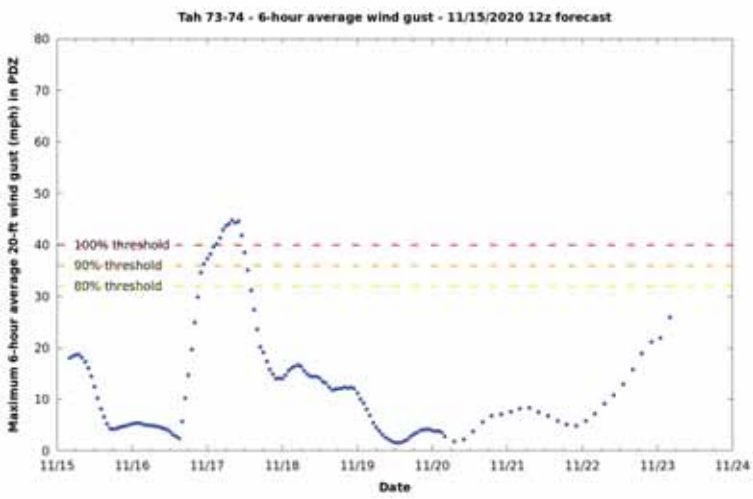
Tah 73-60



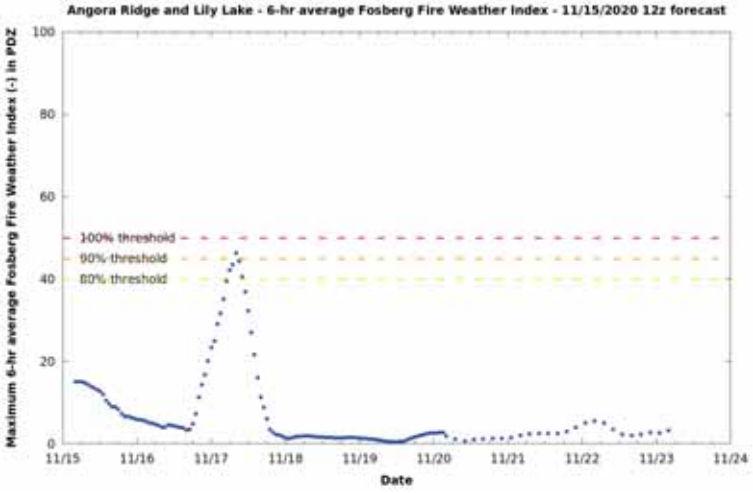


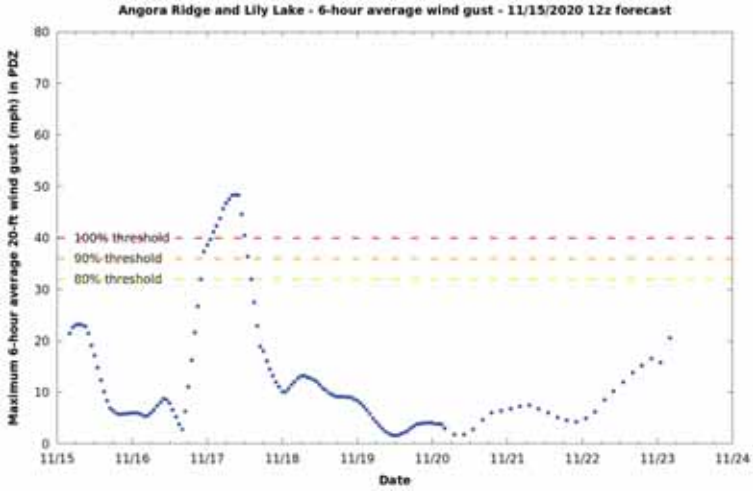
Tah 73-74



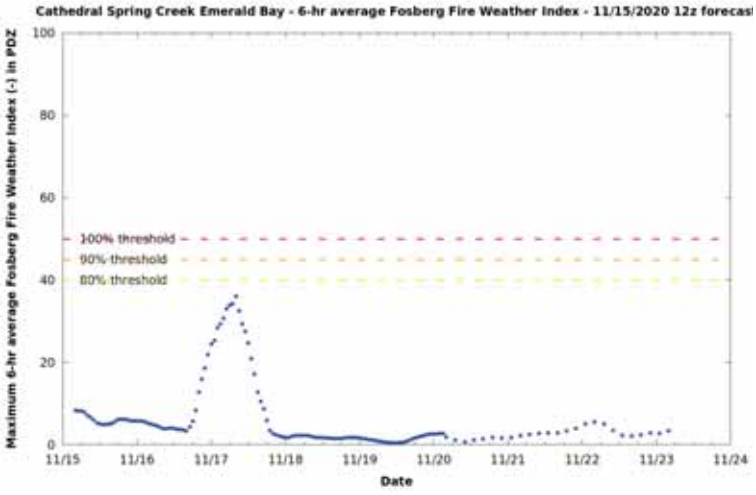


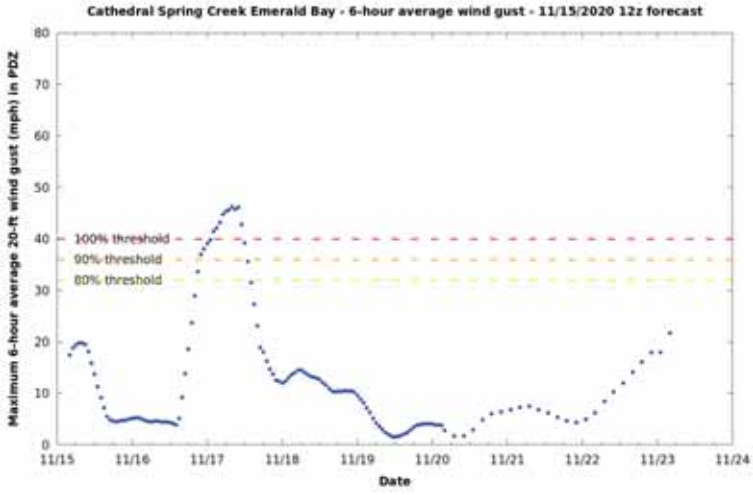
Angora Ridge and Lily Lake



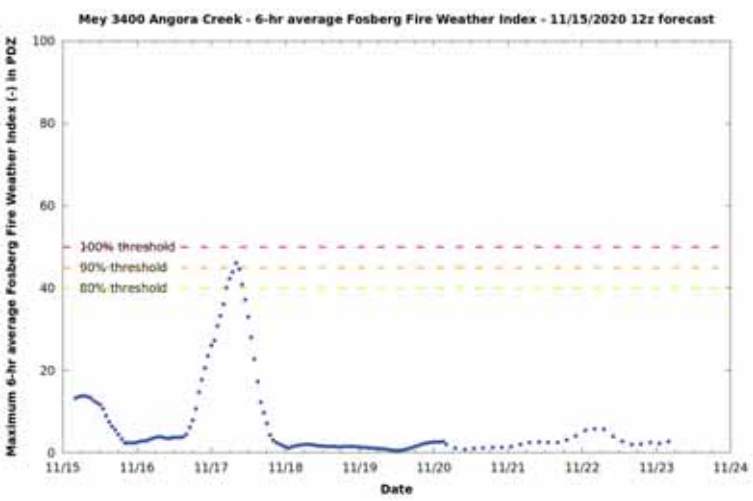


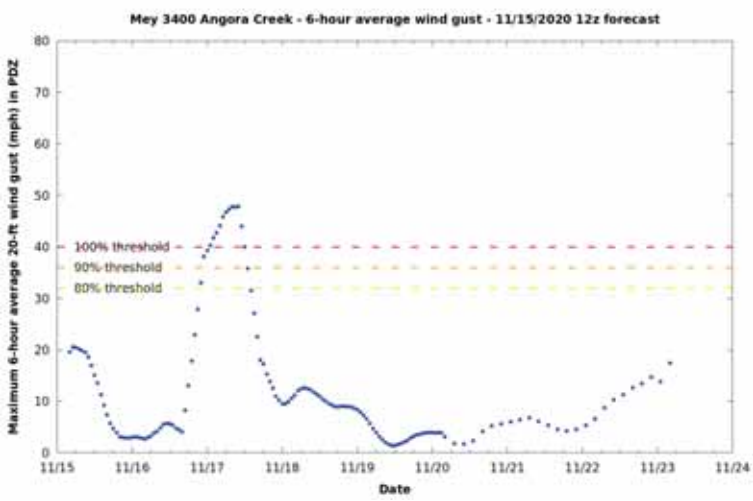
Cathedral Spring Creek Emerald Bay



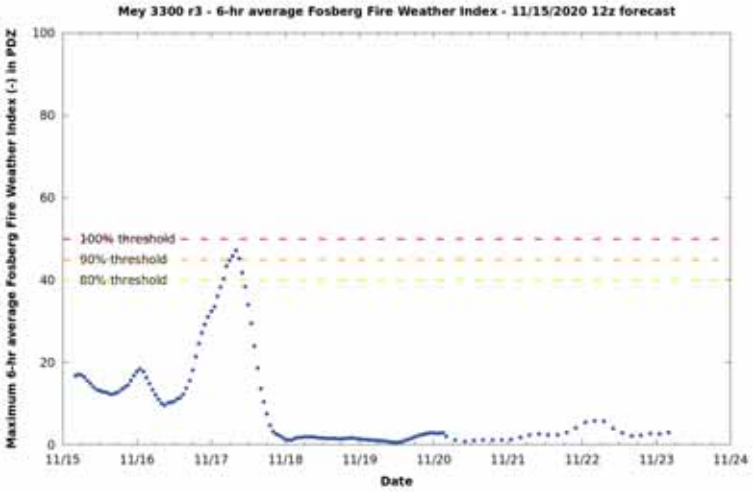


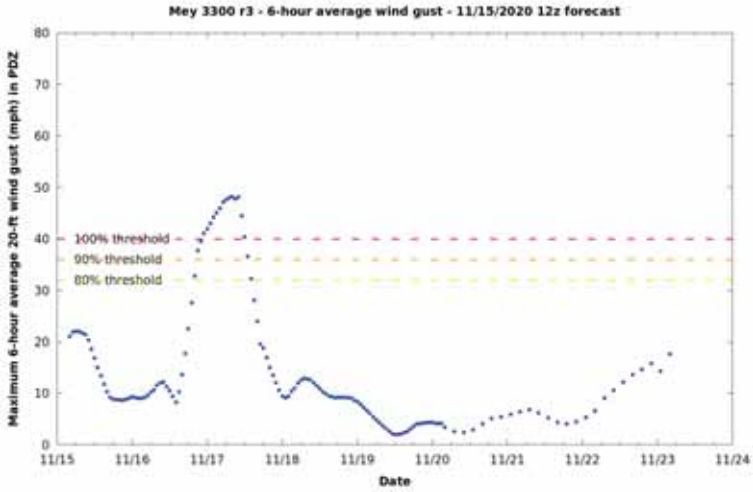
Mey 3400 Angora Creek



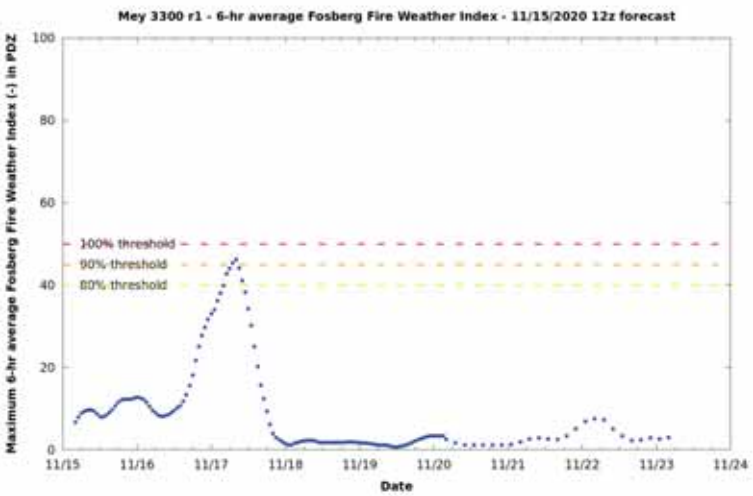


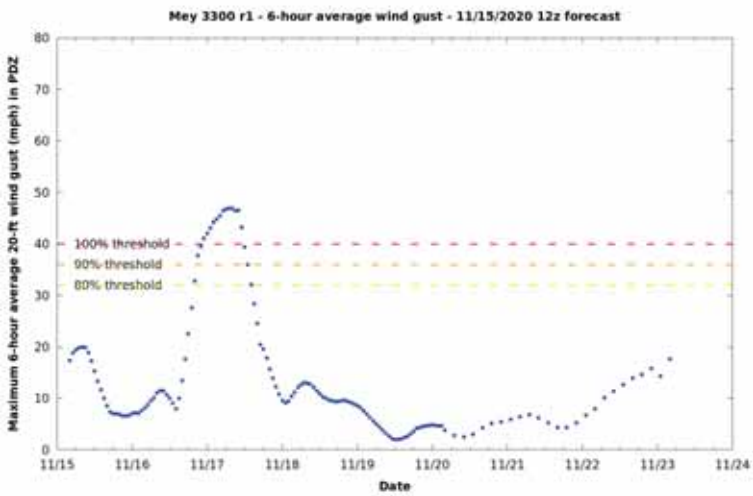
Mey 3300 r3



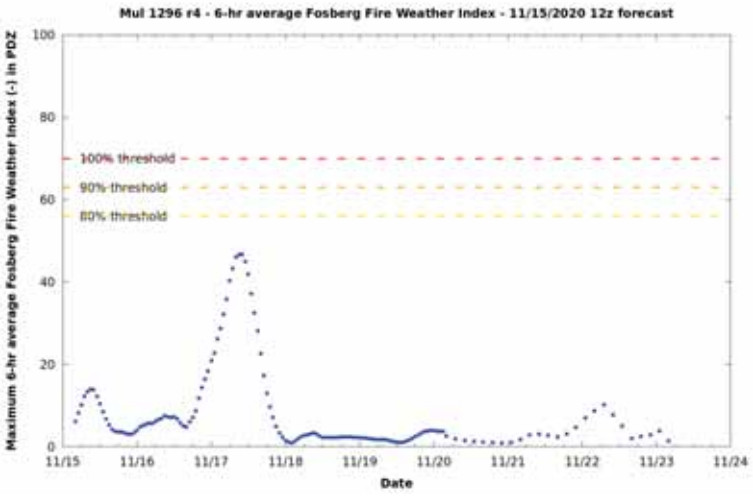


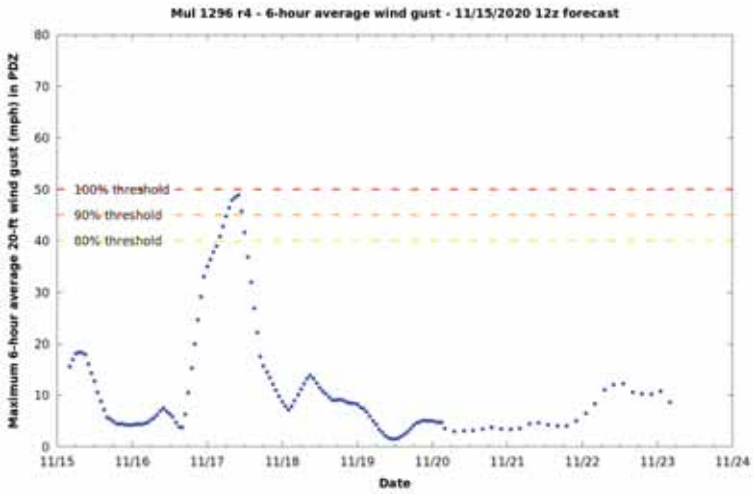
Mey 3300 r1



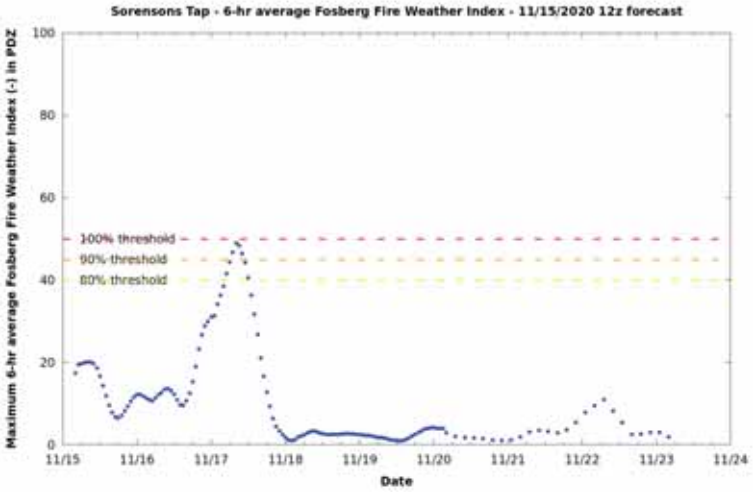


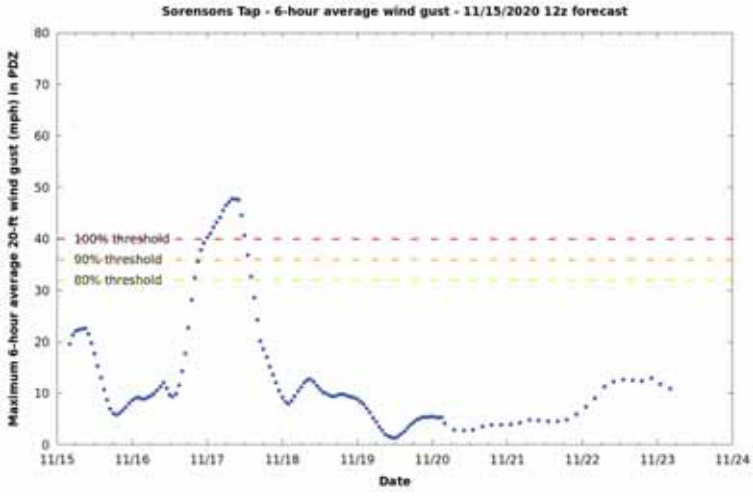
Mul 1296 r4



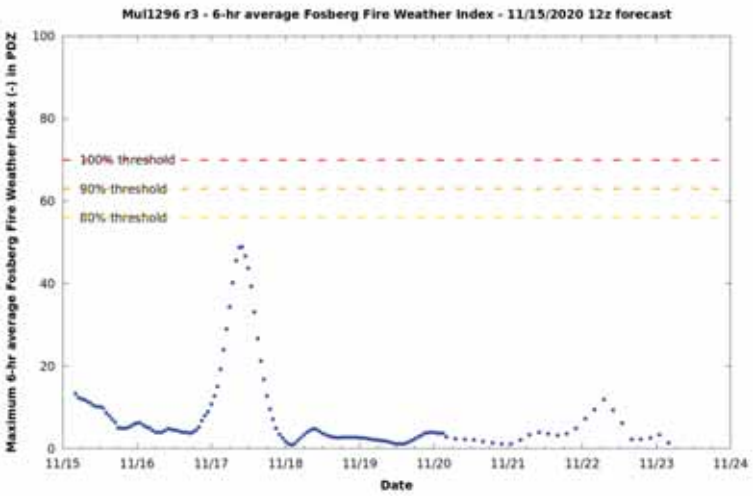


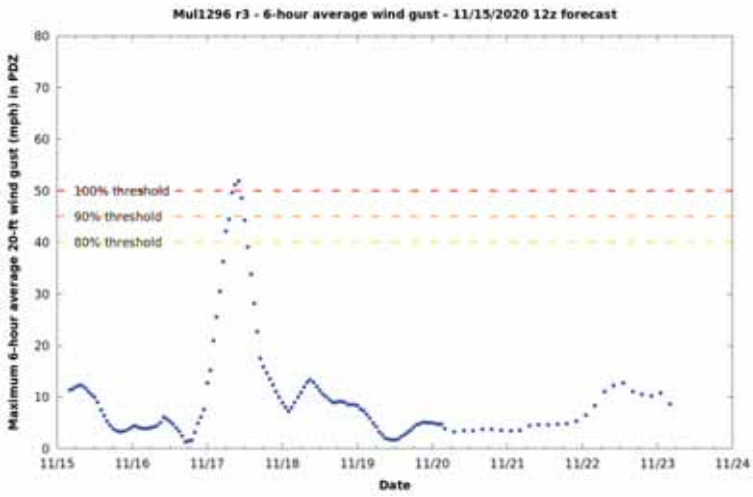
Sorensons Tap



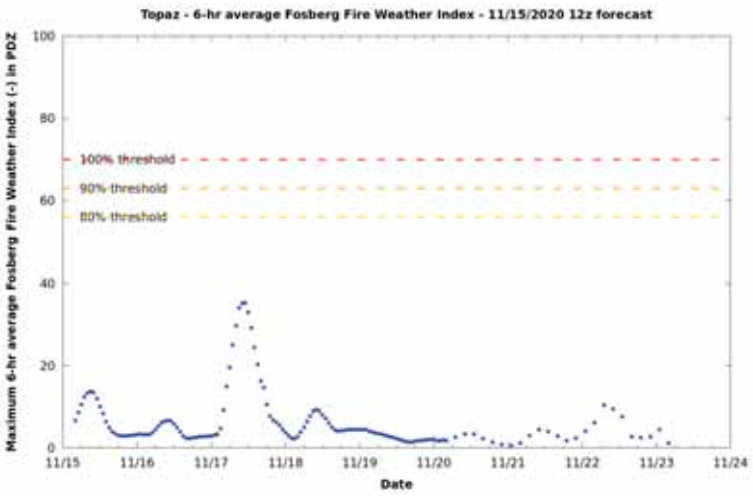


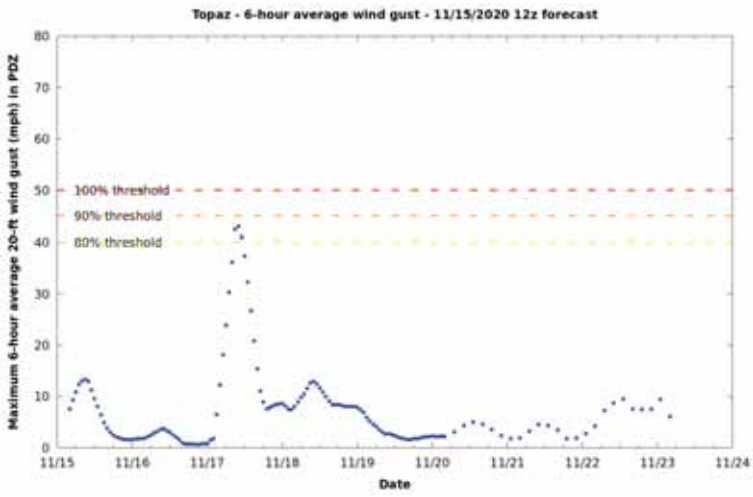
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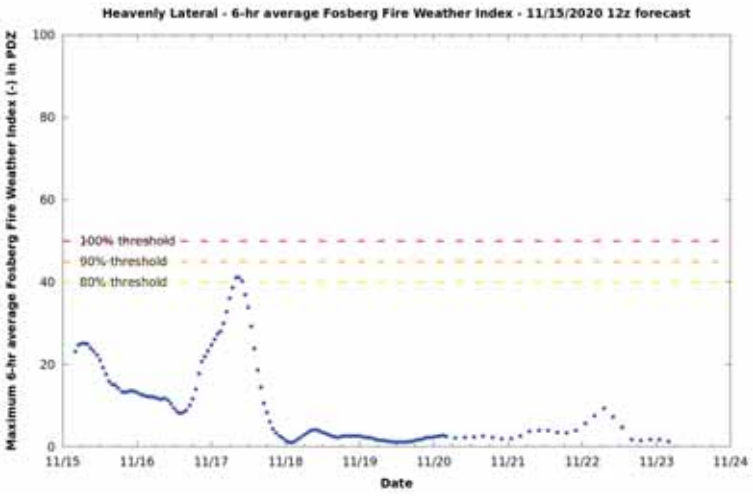


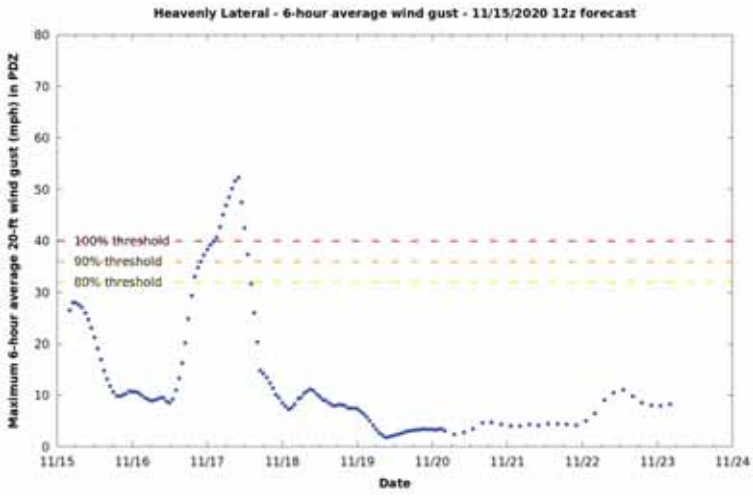
Topaz



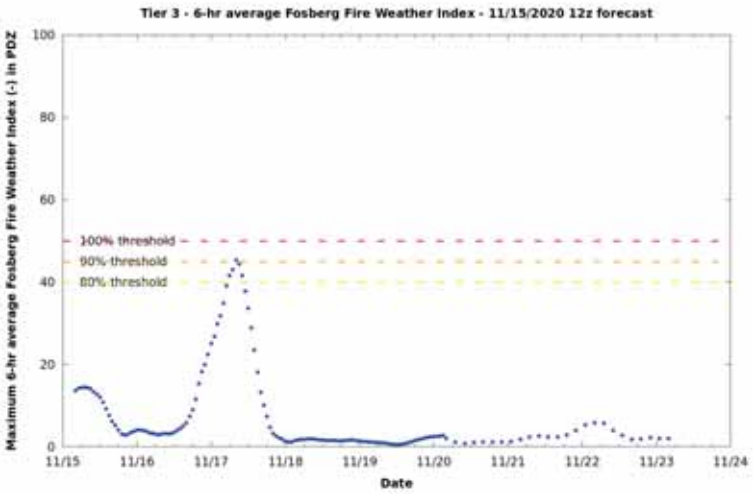


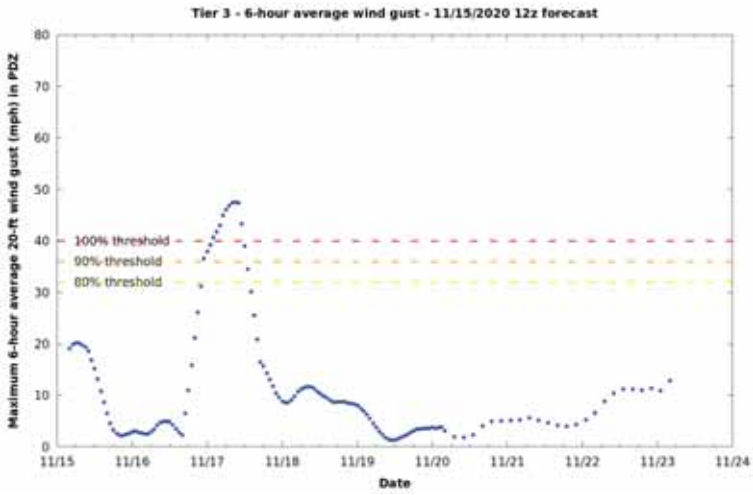
Heavenly Lateral



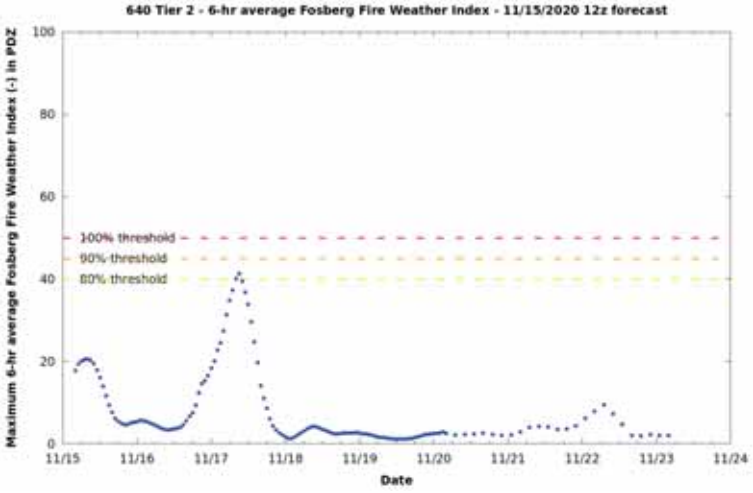


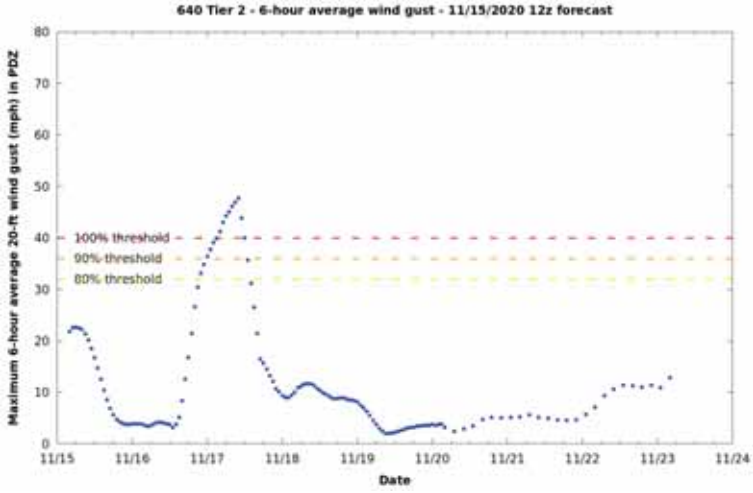
Tier 3



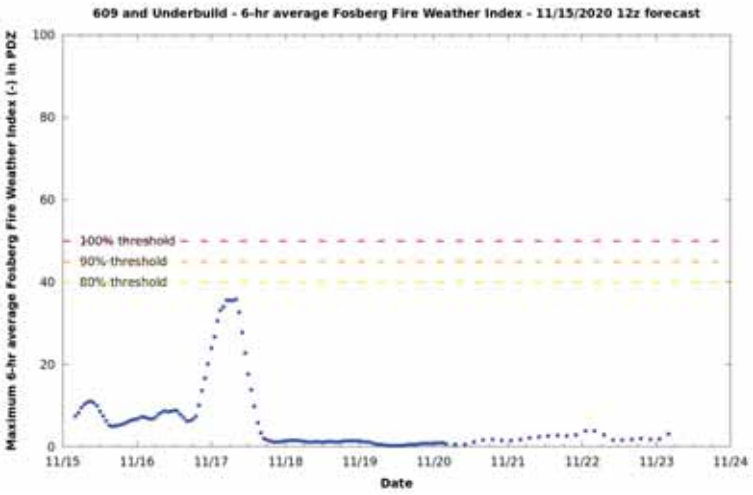


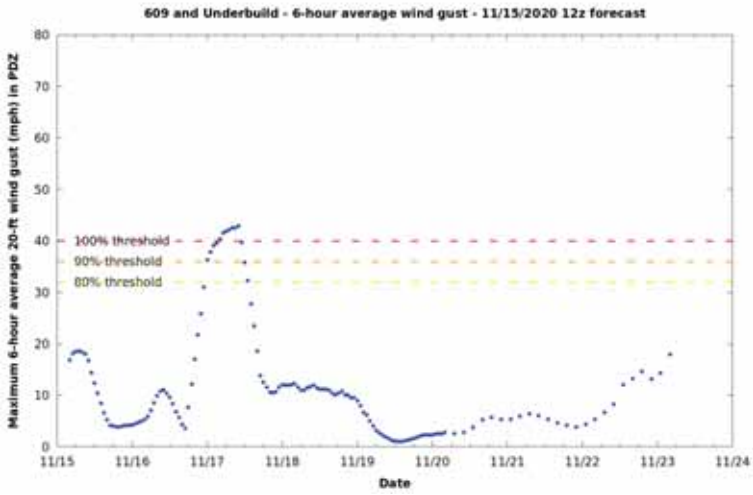
640 Tier 2



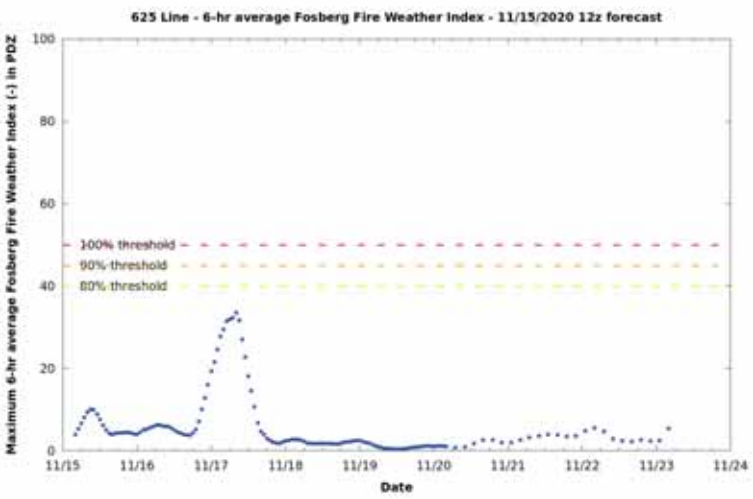


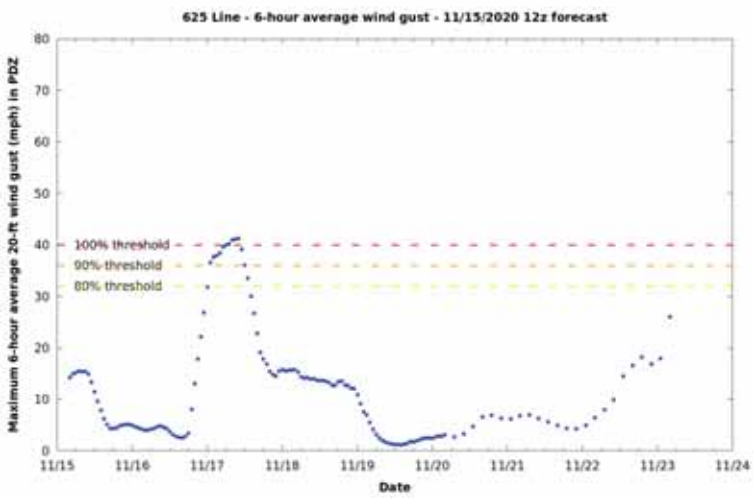
609 and Underbuild



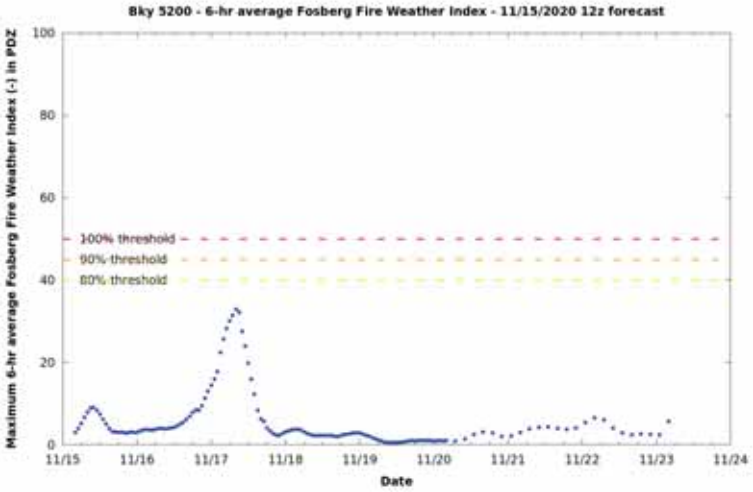


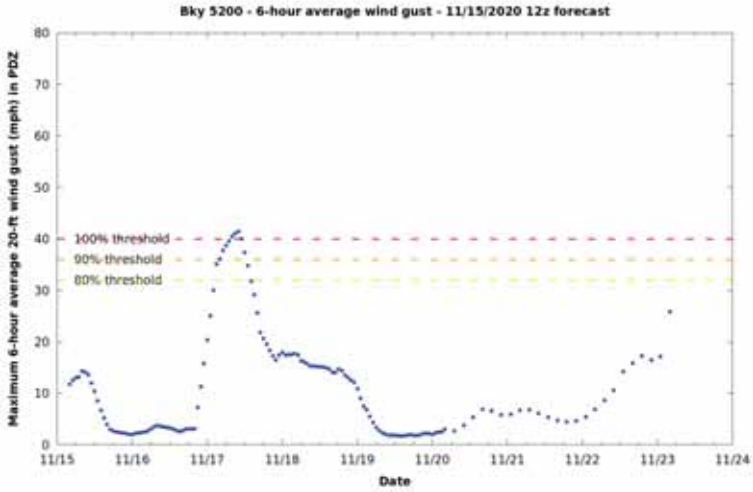
625 Line



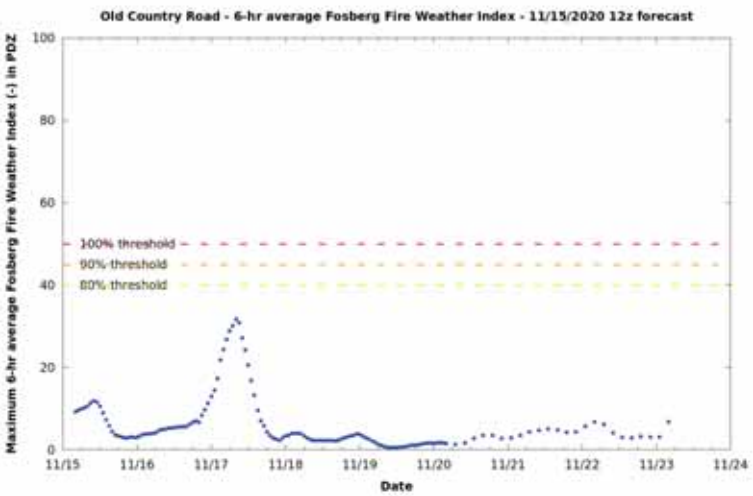


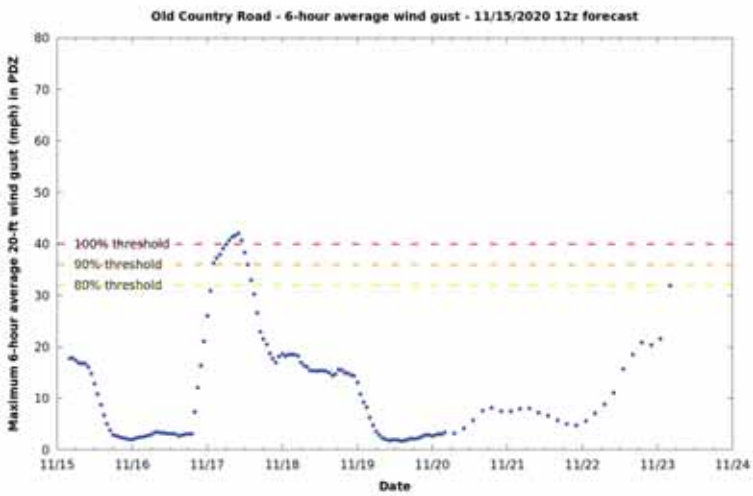
Bky 5200



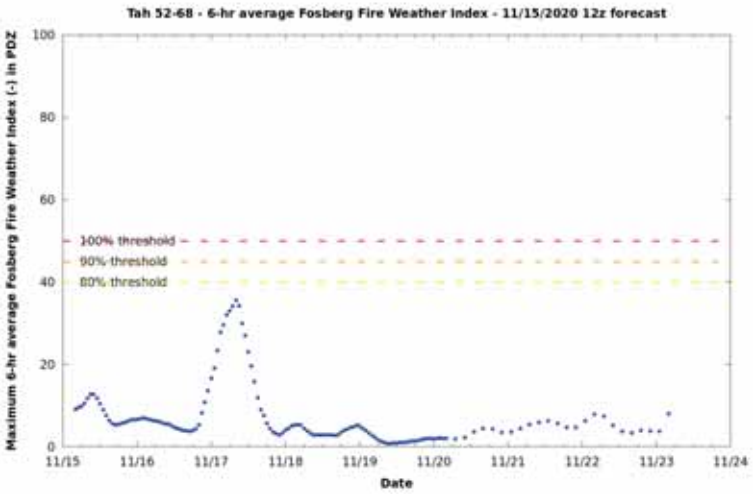


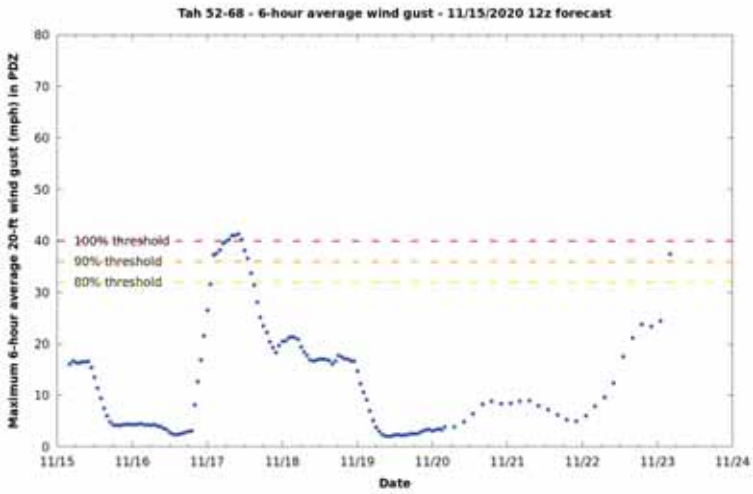
Old Country Road



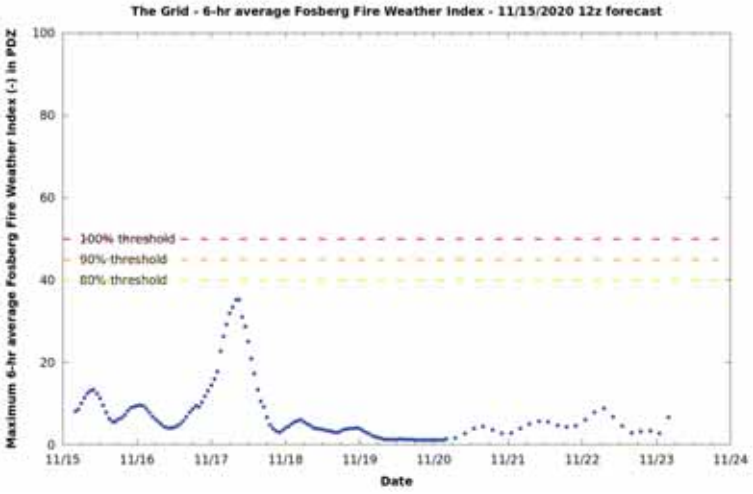


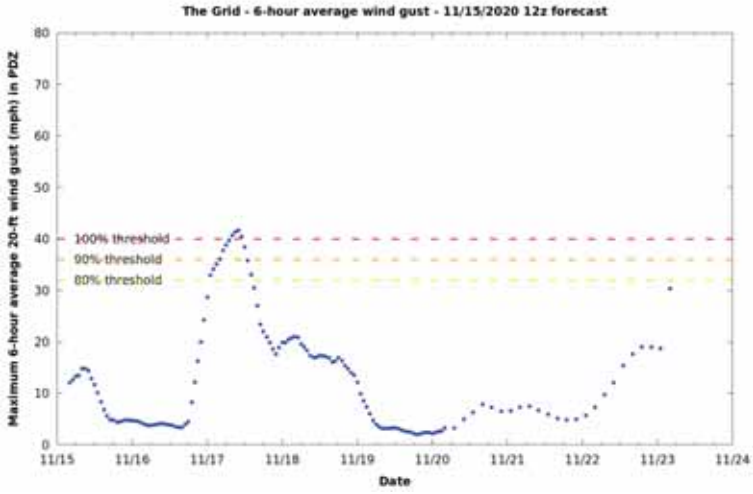
Tah 52-68



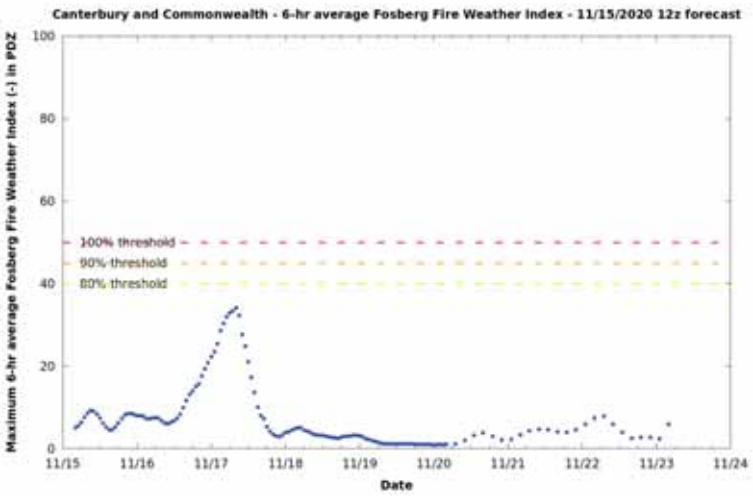


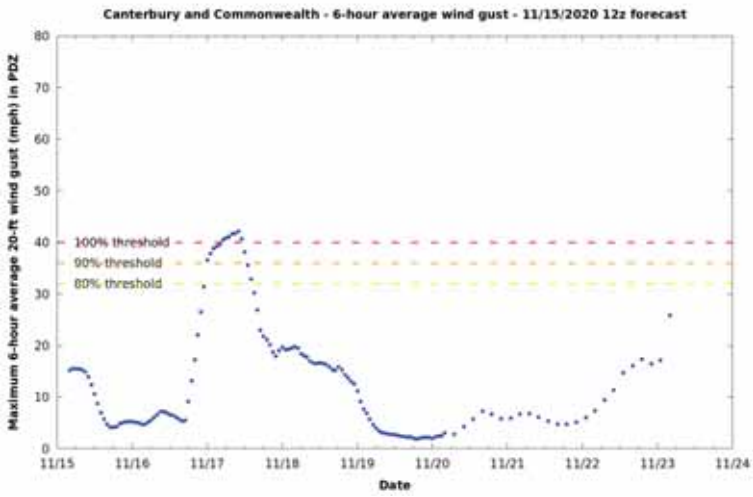
The Grid



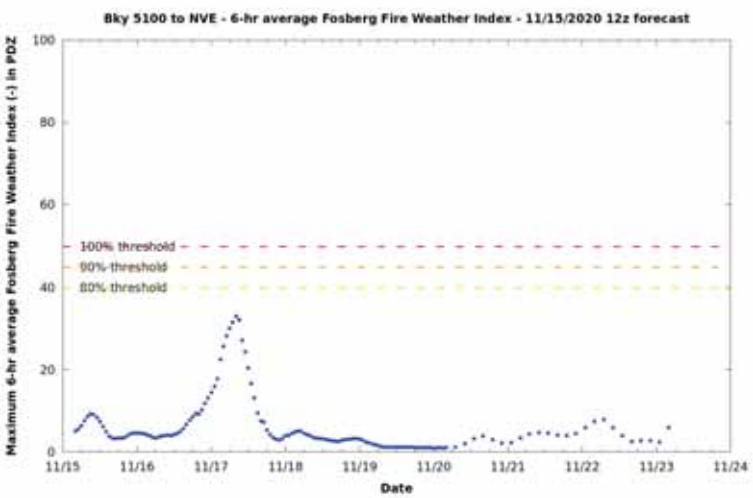


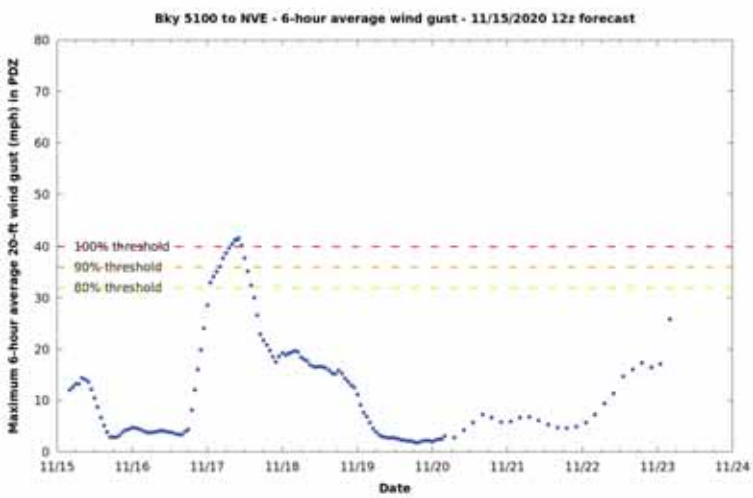
Canterbuy and Commonwealth



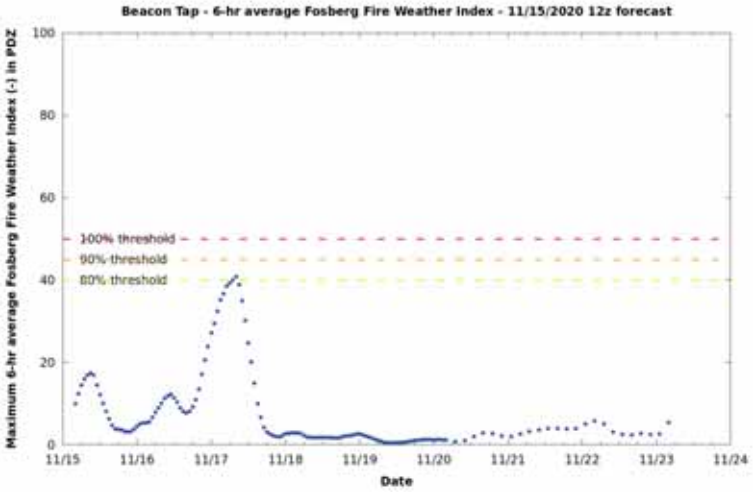


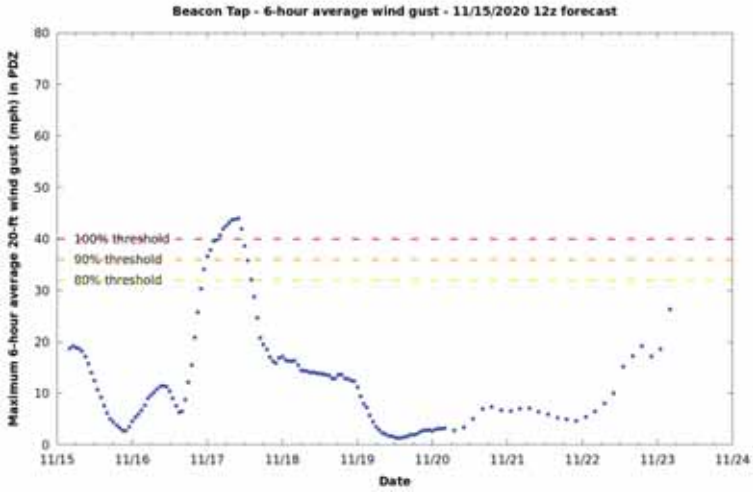
Bky 5100 to NVE



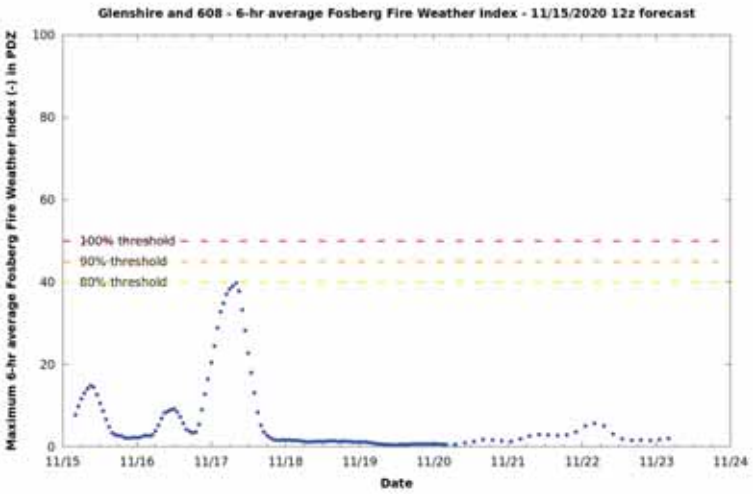


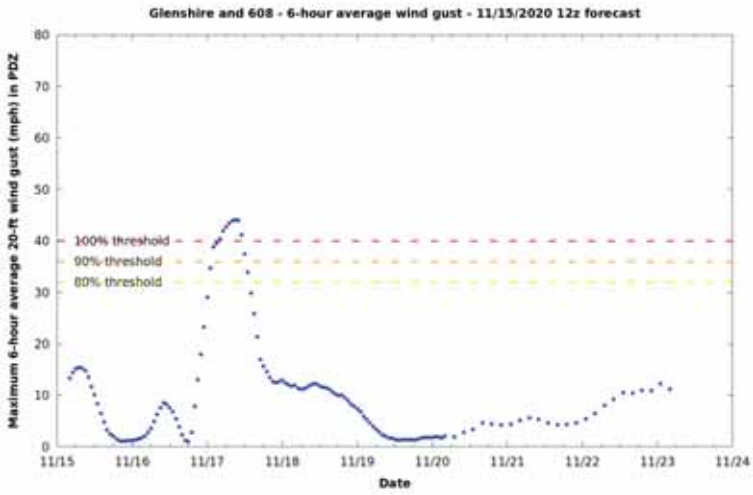
Beacon Tap



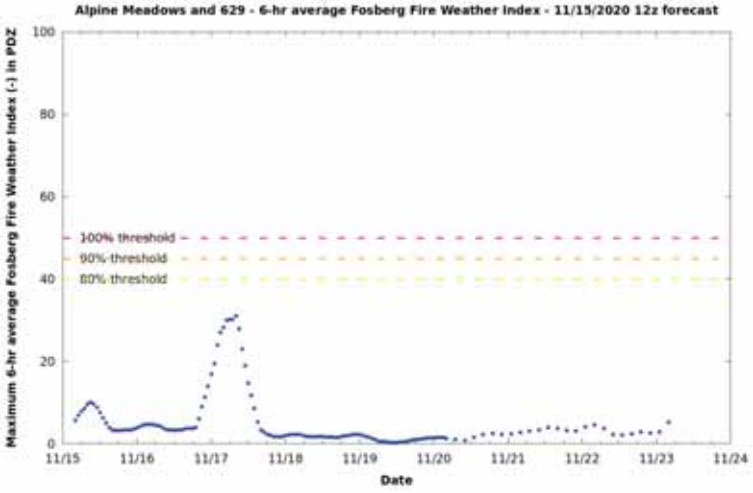


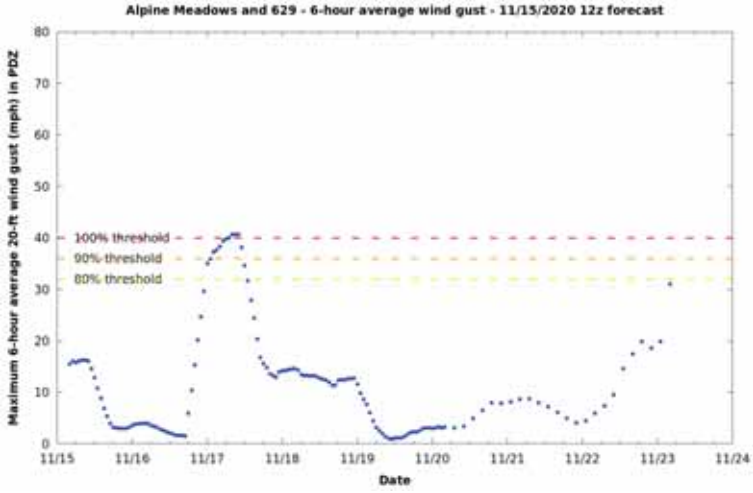
Glenshire and 608



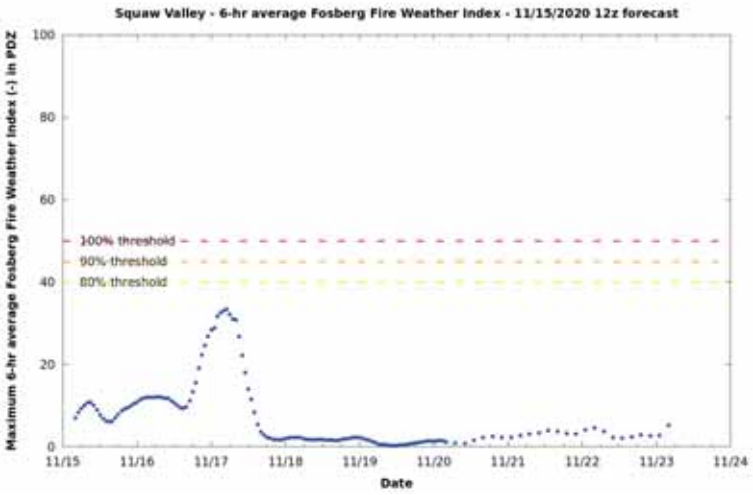


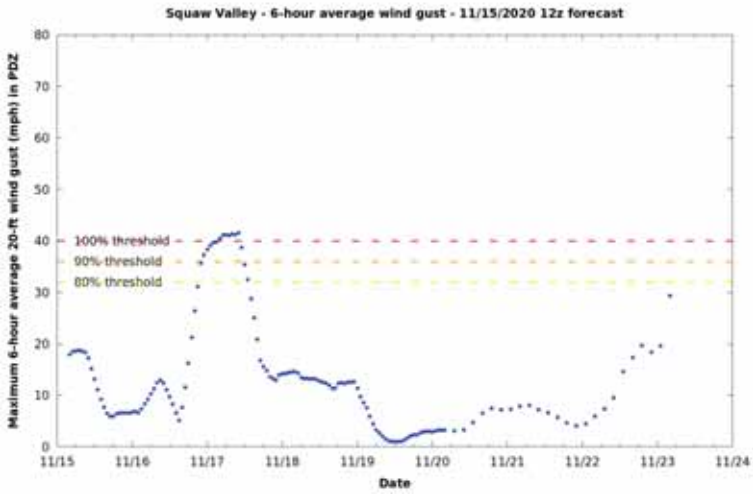
Alpine Meadows and 629



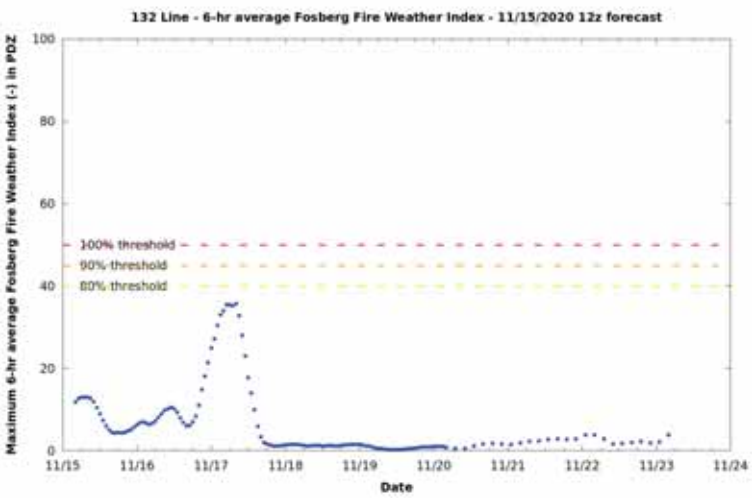


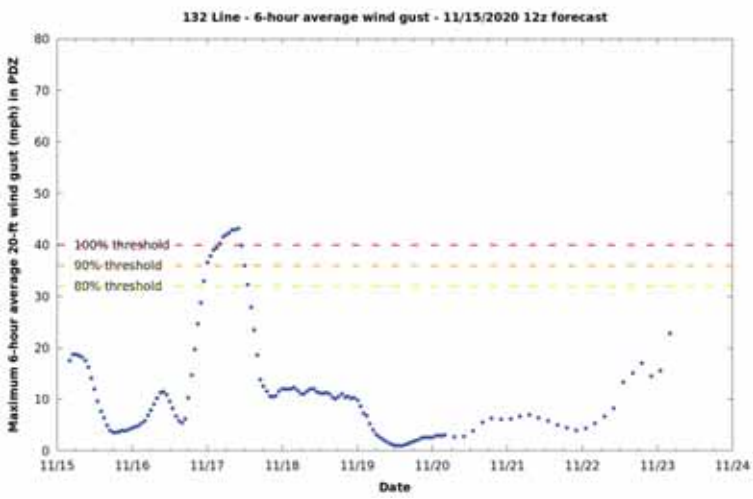
Squaw Valley



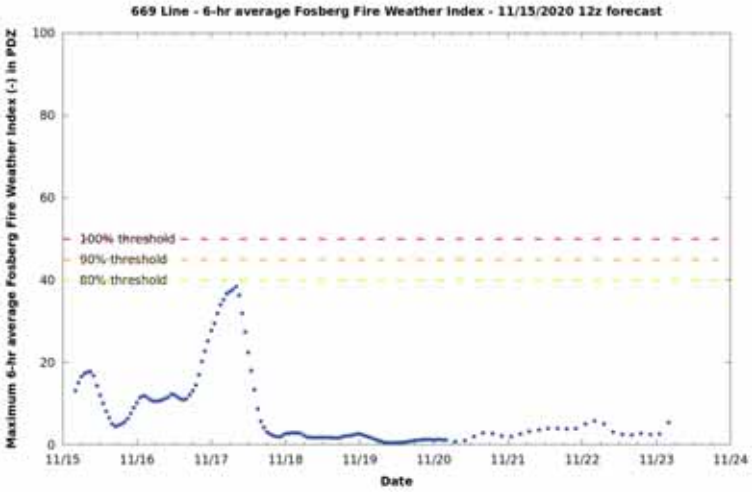


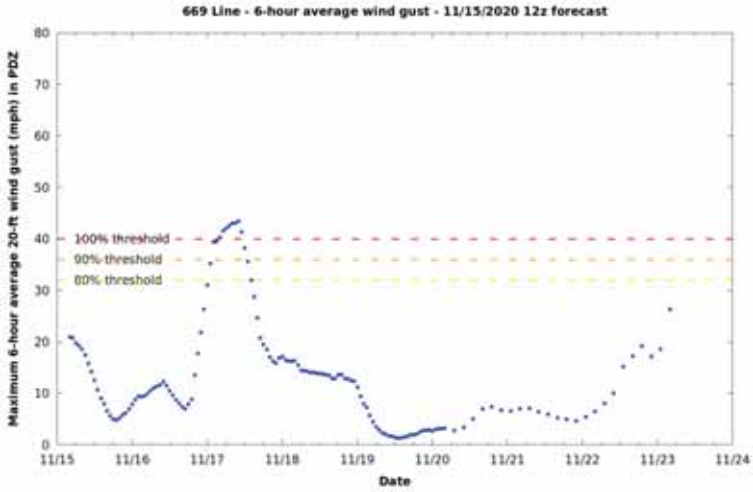
132 Line



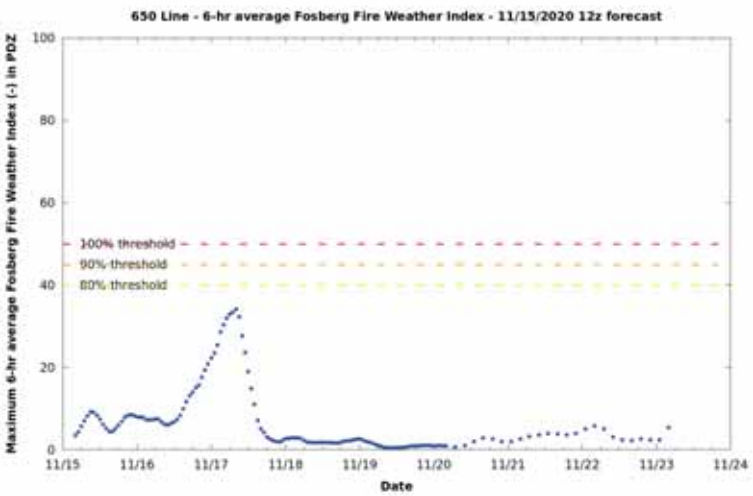


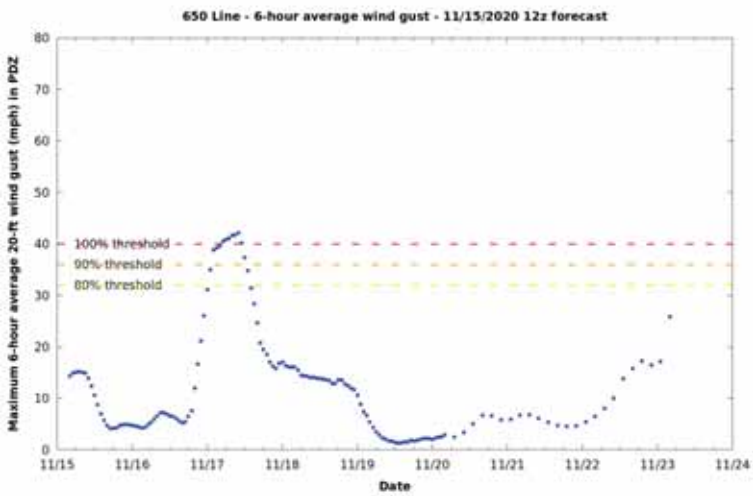
669 Line



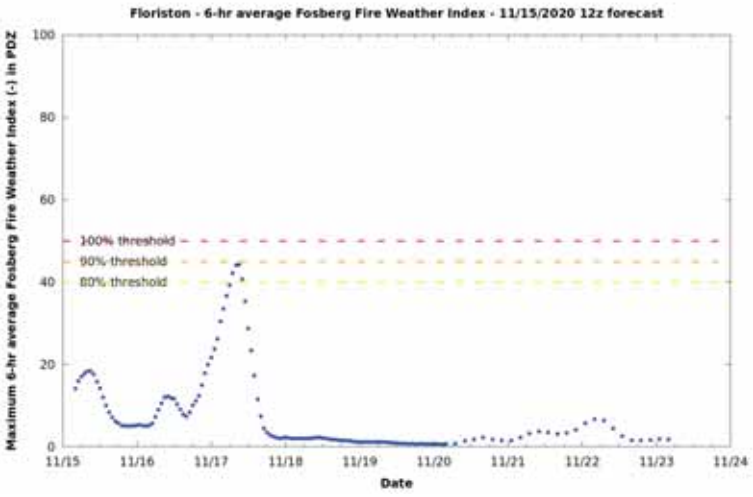


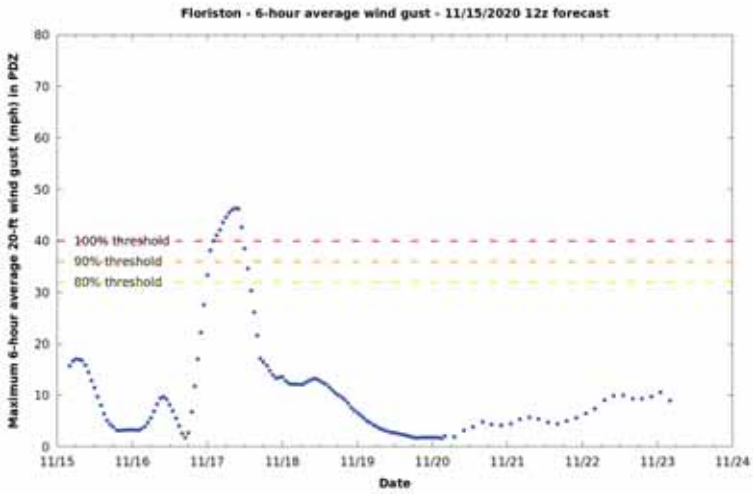
650 Line



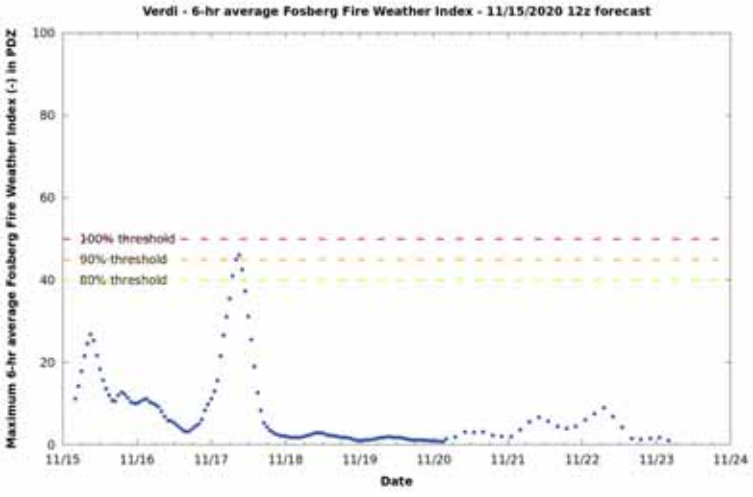


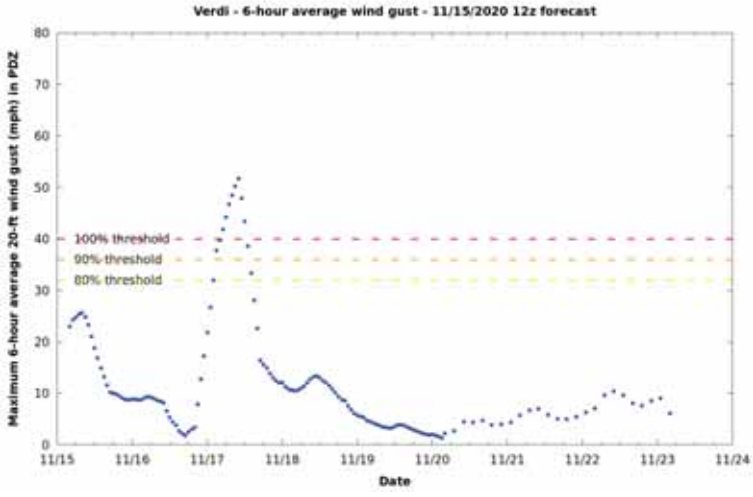
Floriston



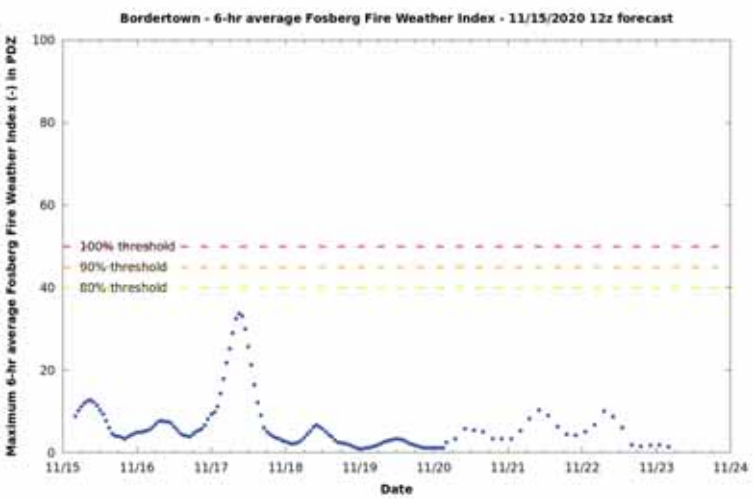


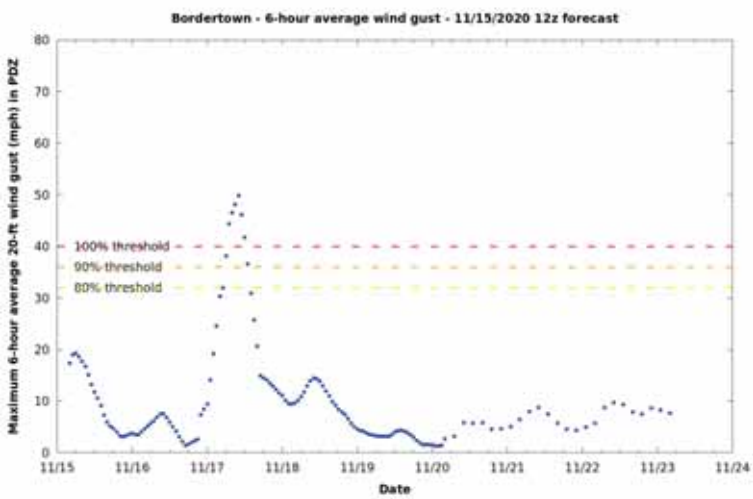
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/15/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/15/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/16/20 - 11/22/20

Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

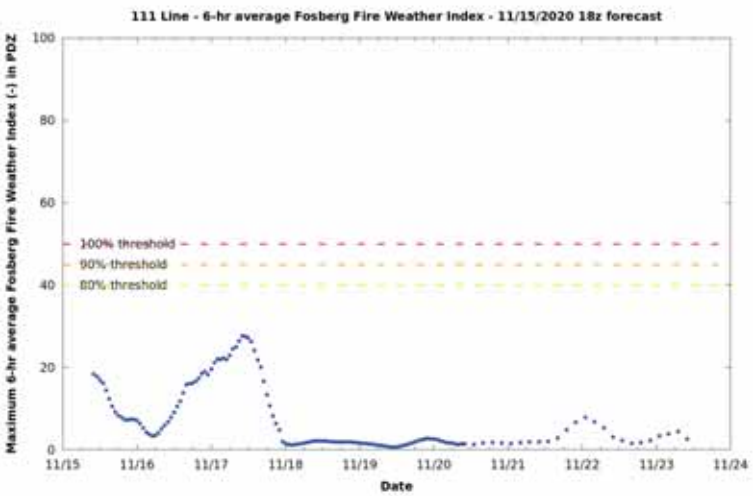
Liberty Utilities Energy Release Component Forecast for 11/16/20 - 11/22/20

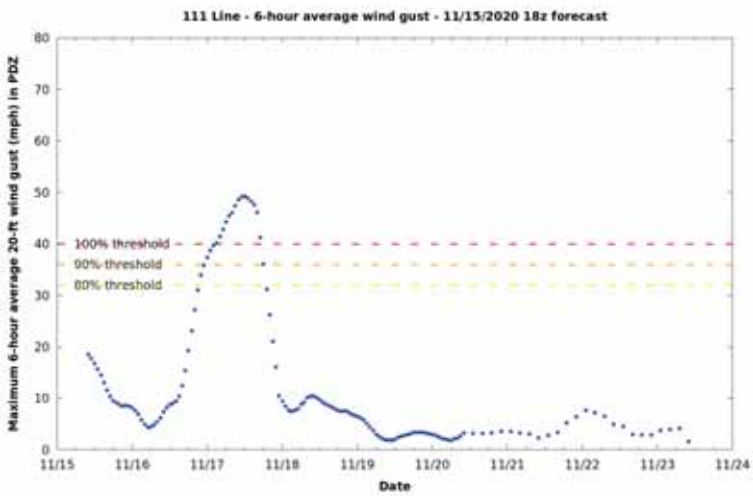
Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	47.6	49.4	47.7	33.9	33.0	34.5	36.9
Sierra Brooks	50.9	56.8	54.6	40.3	42.4	45.2	49.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.3	1.4	1.2	0.7	0.7	0.6	0.6
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	23.8	27.2	24.3	15.9	17.7	19.6	20.4
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	43.0	48.3	43.8	27.6	28.9	31.5	32.5
Topaz	53.4	57.9	54.1	36.4	39.2	40.9	42.2
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	3.4	3.8	3.4	2.1	1.9	1.9	1.8
Old Country Road	29.7	32.0	26.3	16.6	14.9	14.3	13.7
Tah 52-68	20.1	21.7	17.9	11.2	10.2	9.7	9.3
The Grid	8.3	9.5	8.1	4.6	4.3	3.8	3.6
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	24.1	24.1	23.0	15.4	15.6	15.5	16.8
Verdi	51.1	51.1	47.8	31.7	34.6	36.6	41.1
Bordertown	54.6	54.6	52.1	35.8	37.8	40.5	44.7

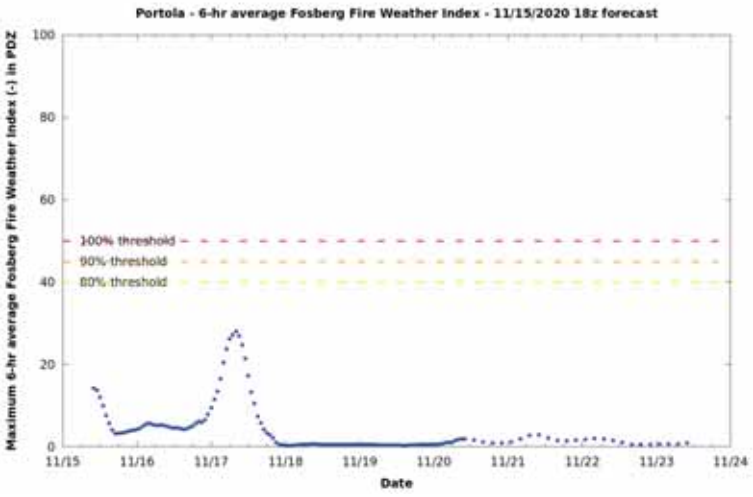
Liberty Utilities Fire Weather Summary Plots - 11/15/2020 18z forecast

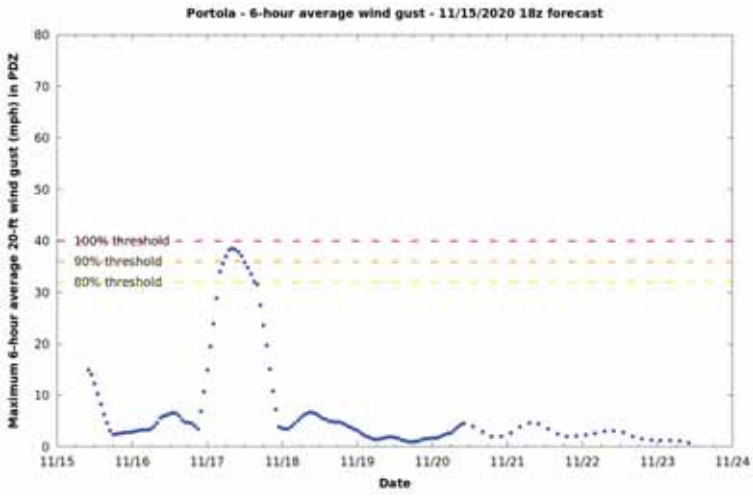
111 Line



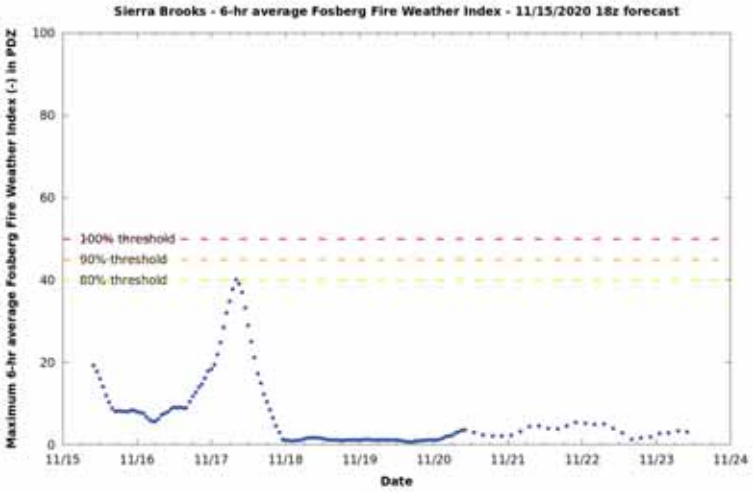


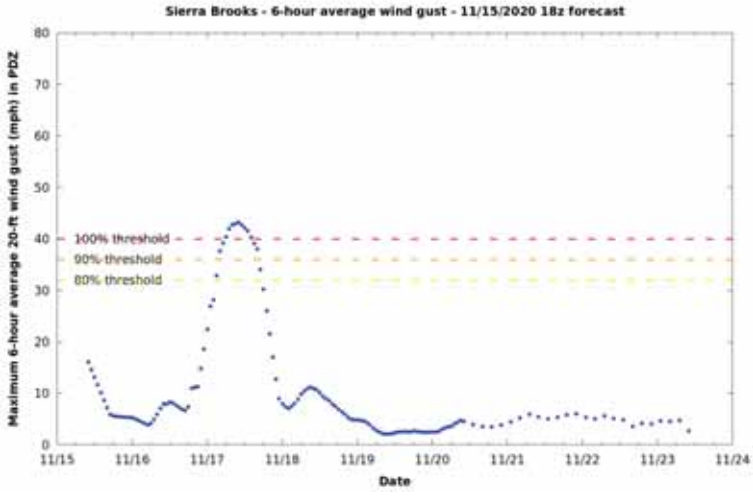
Portola



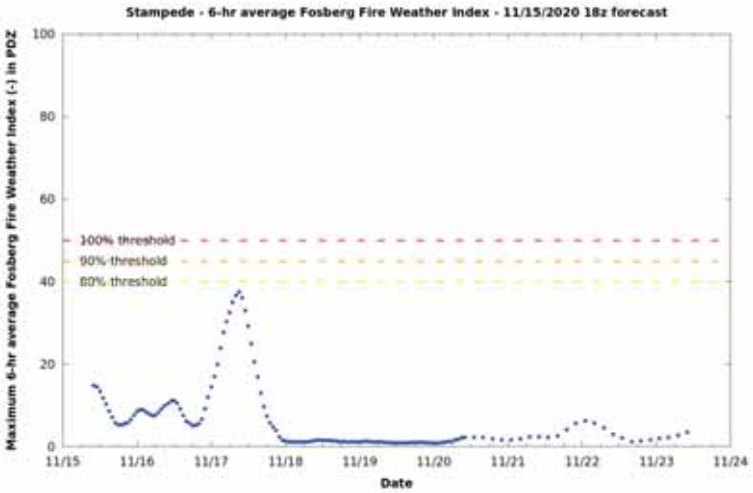


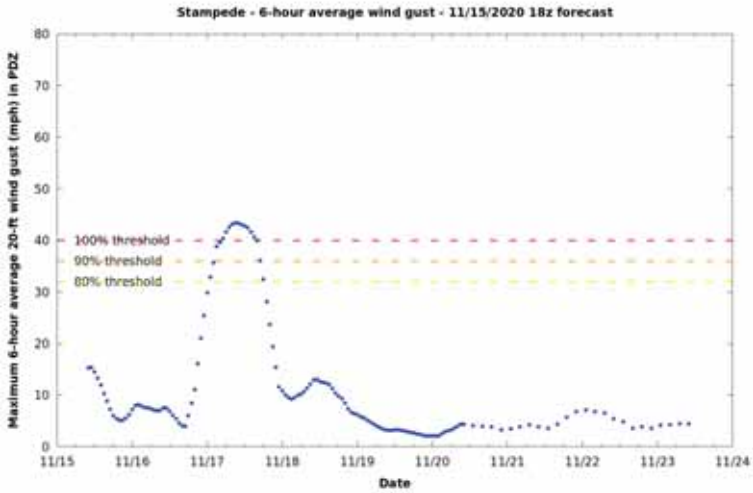
Sierra Brooks



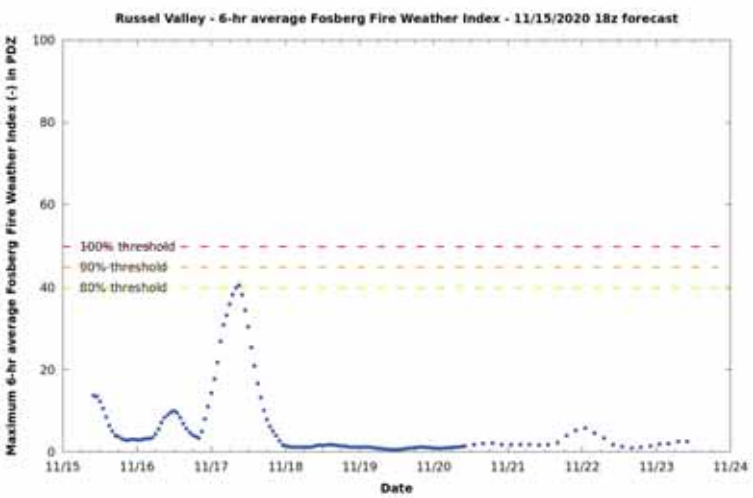


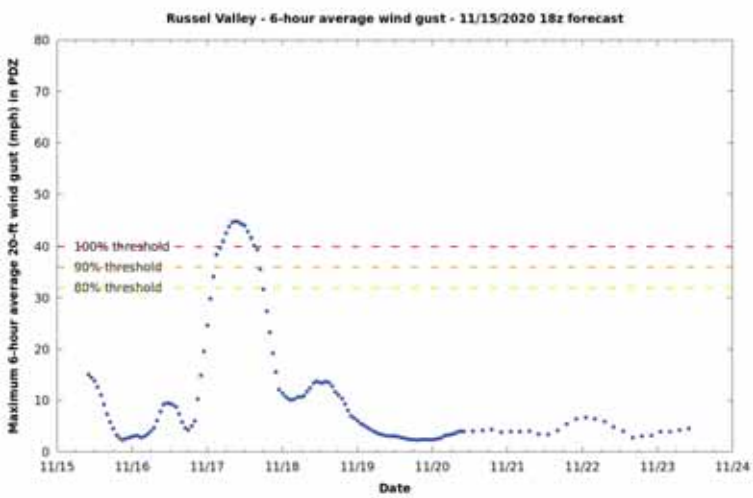
Stampede



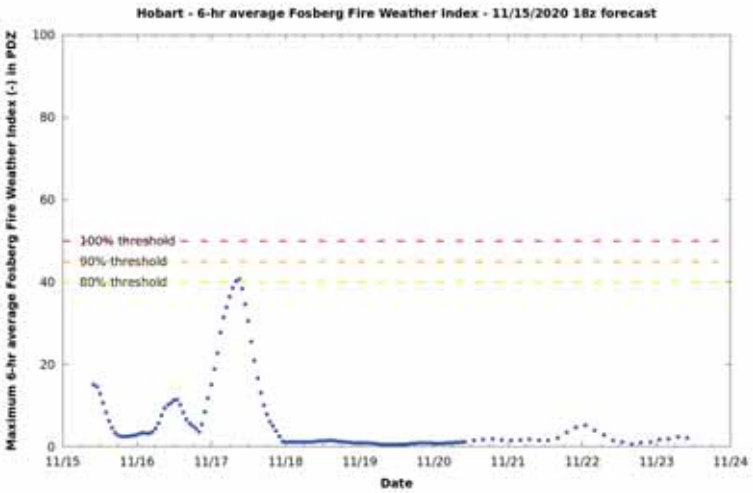


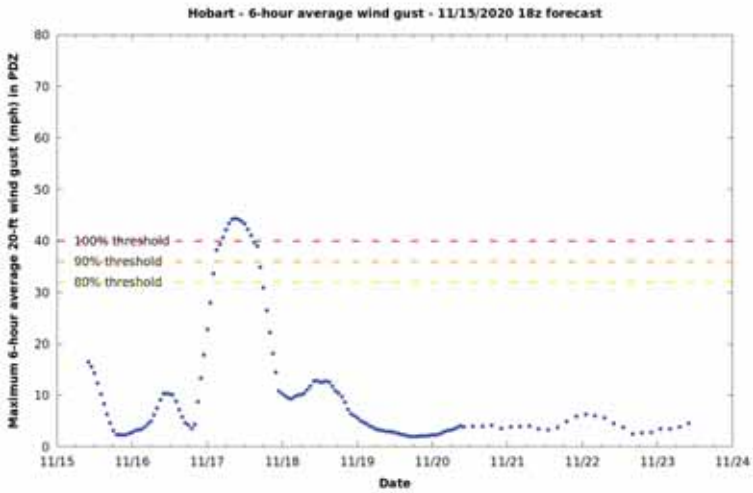
Russell Valley



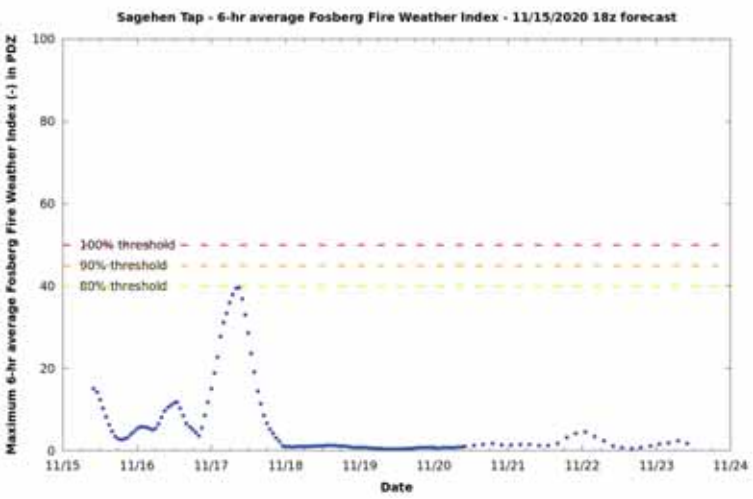


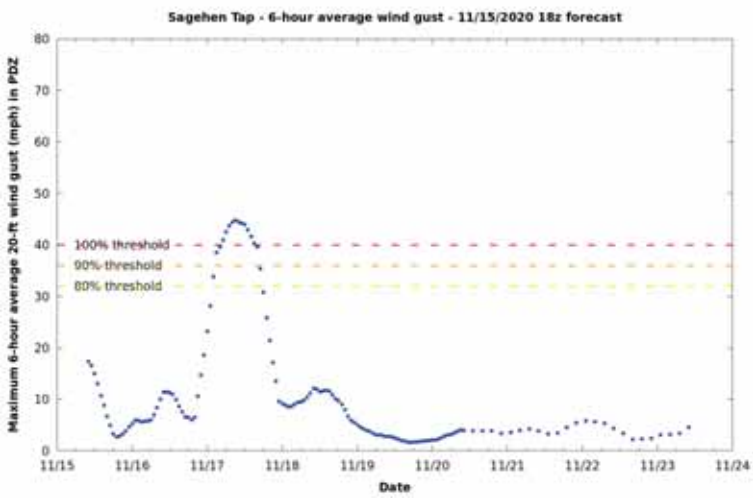
Hobart



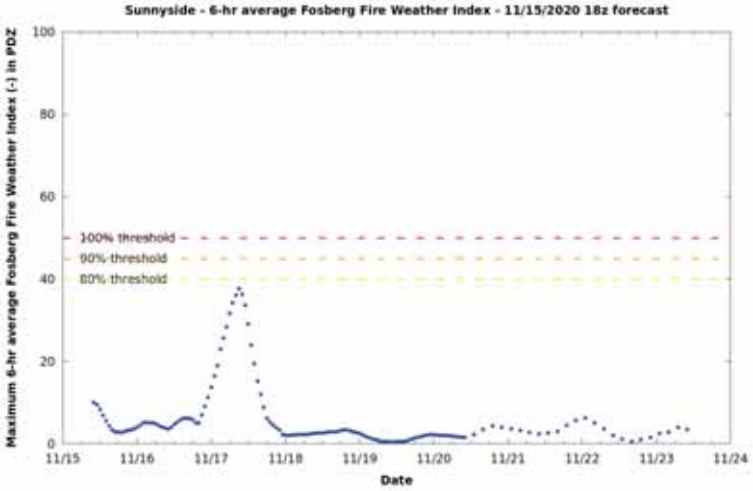


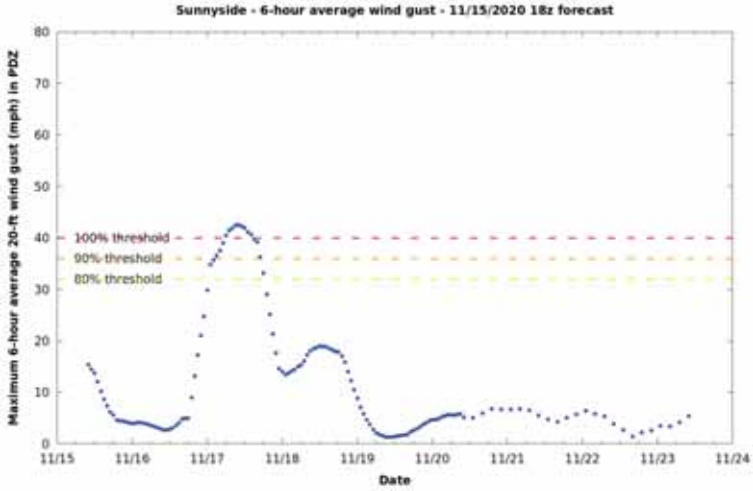
Sagehen tap



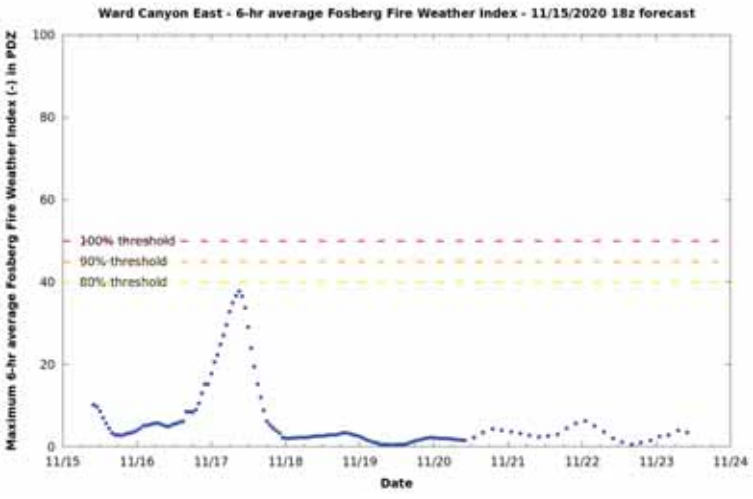


Sunnyside



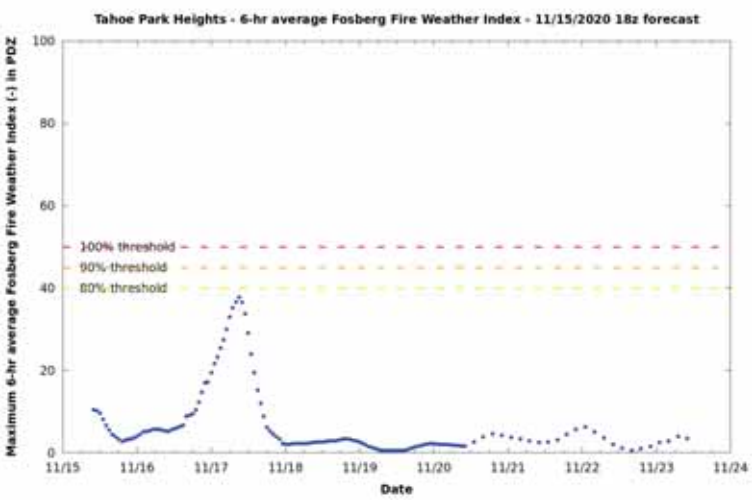


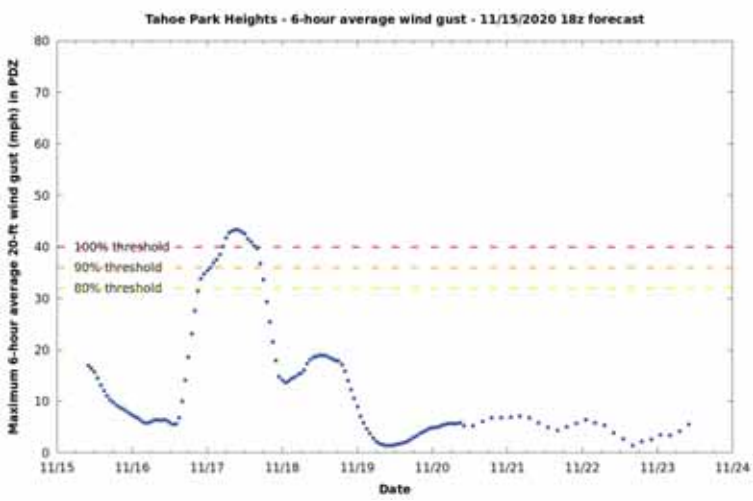
Ward Canyon East



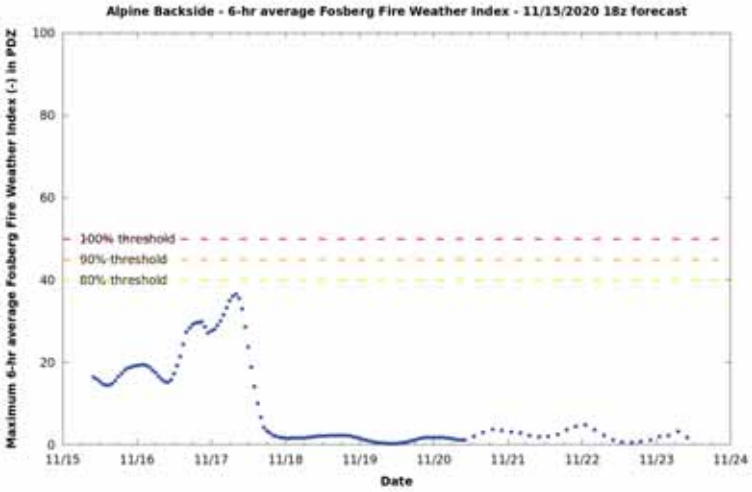


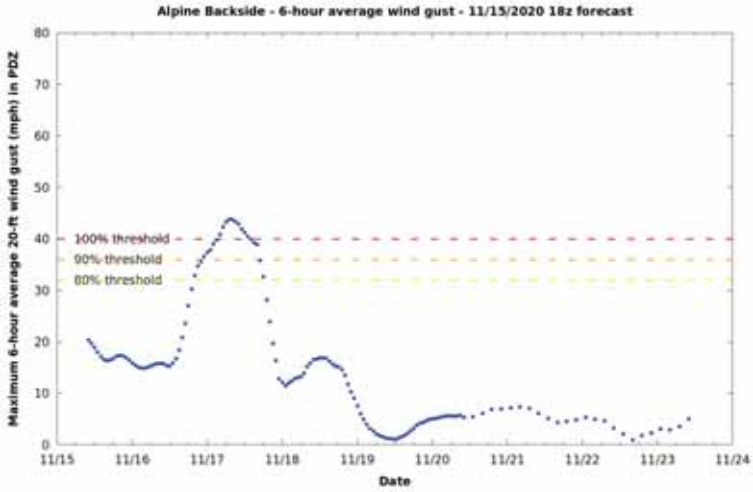
Tahoe Park Heights



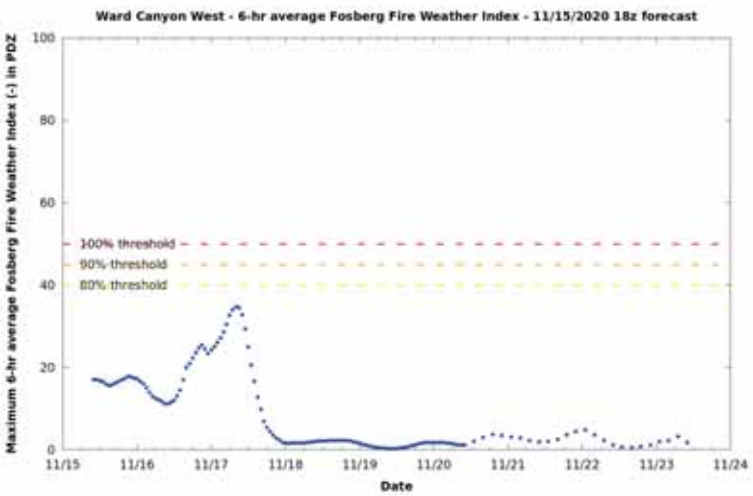


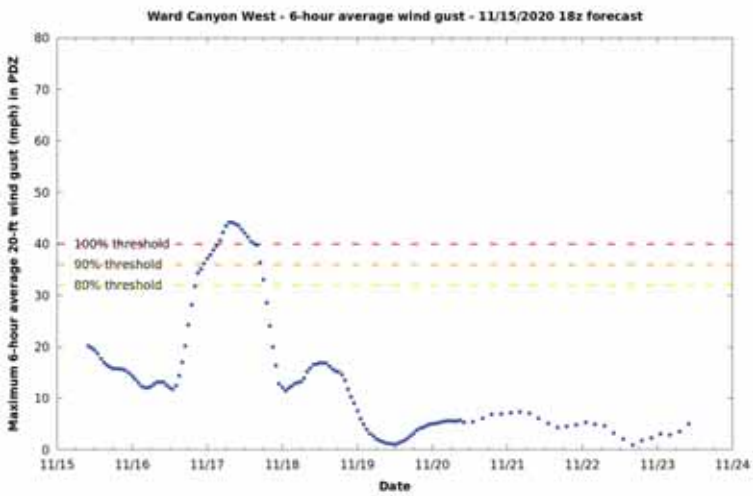
Alpine Backside



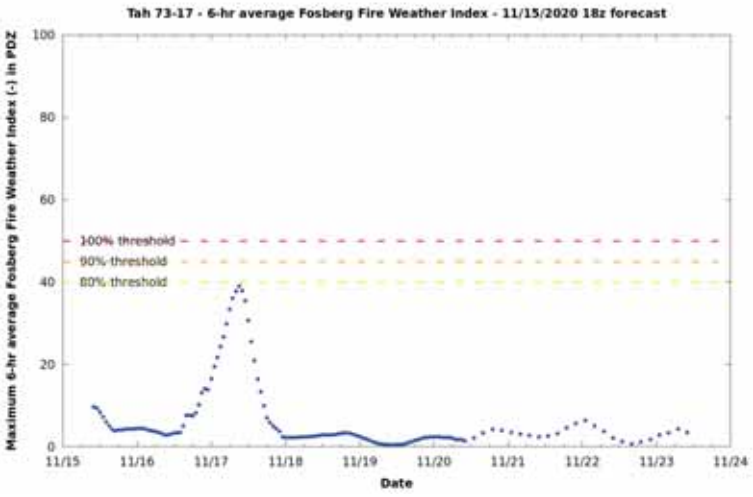


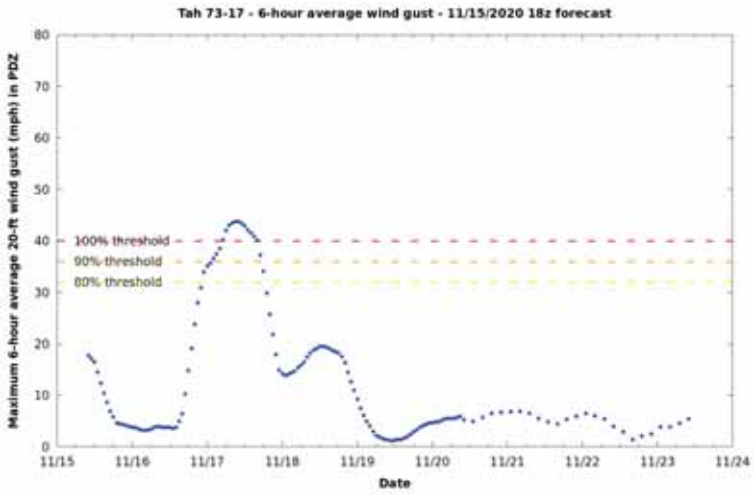
Ward Canyon West



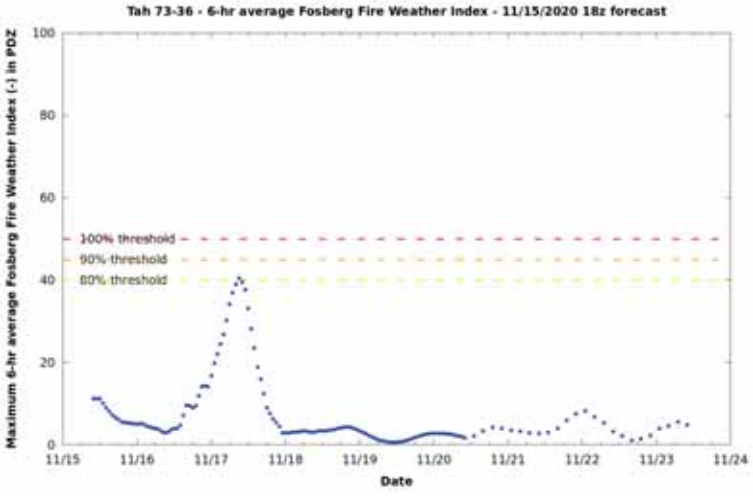


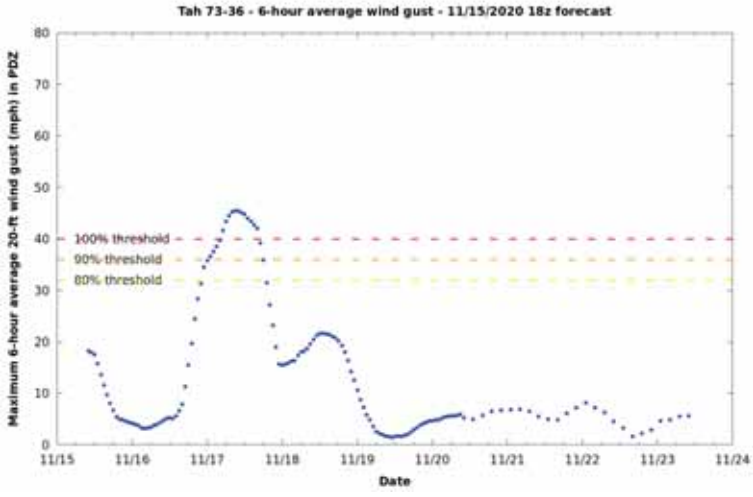
Tah 73-17



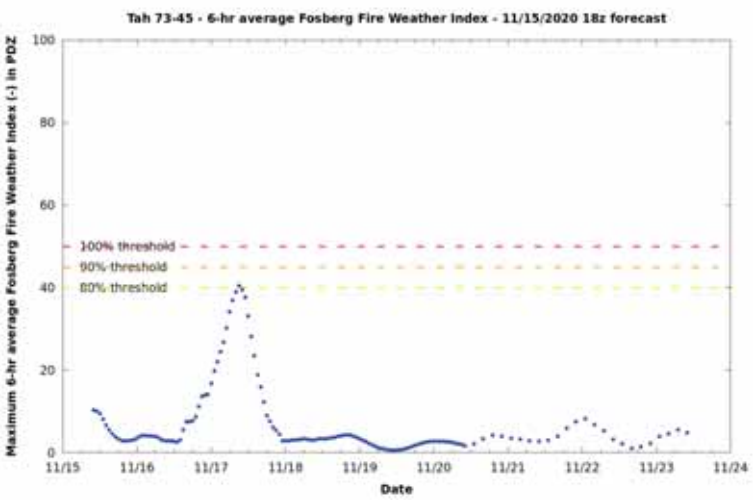


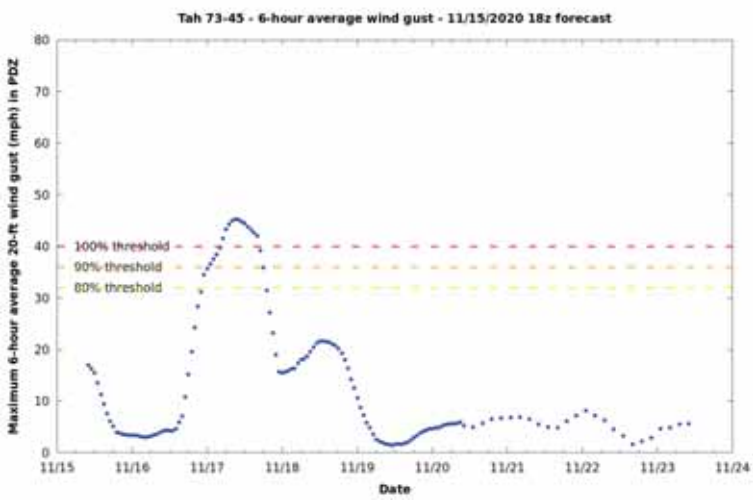
Tah 73-36



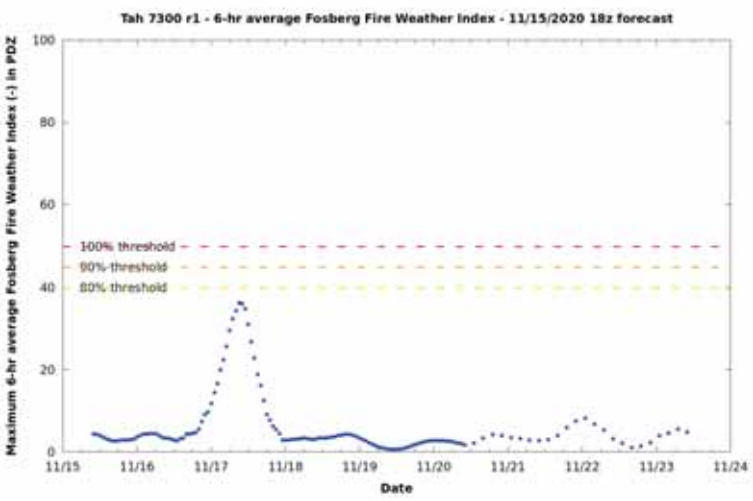


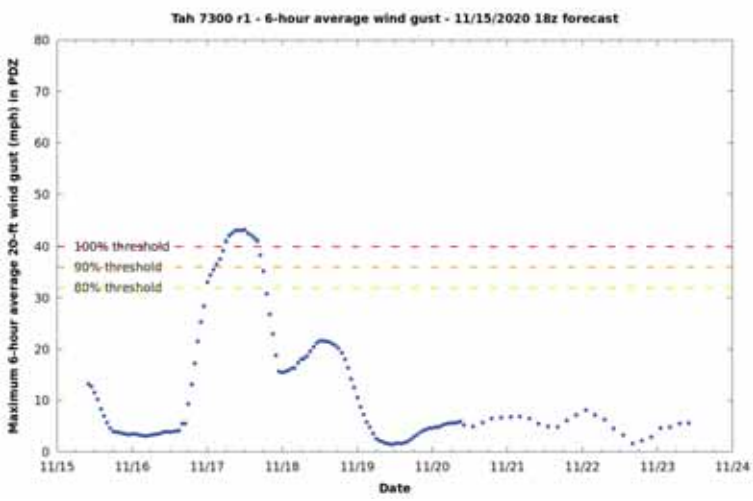
Tah 73-45



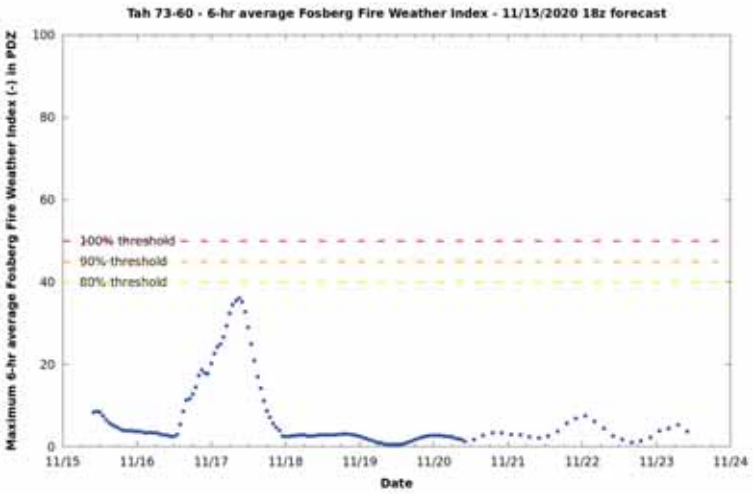


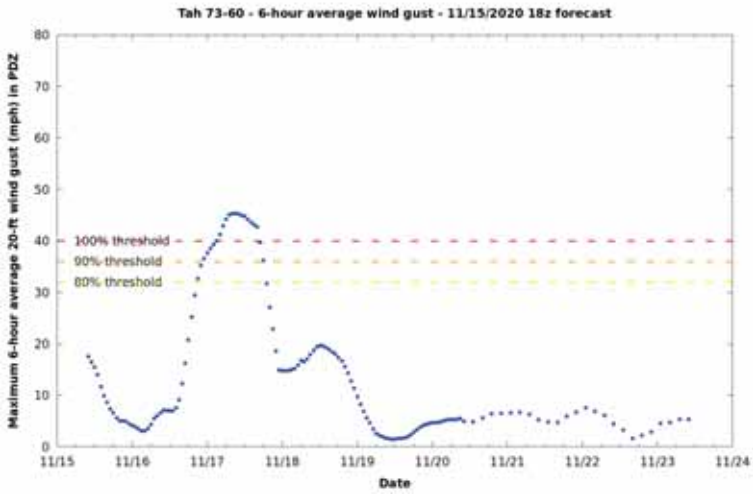
Tah 7300 r1



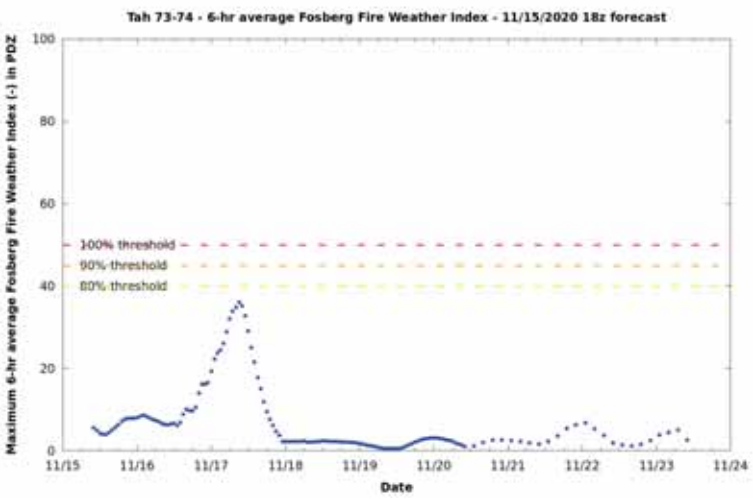


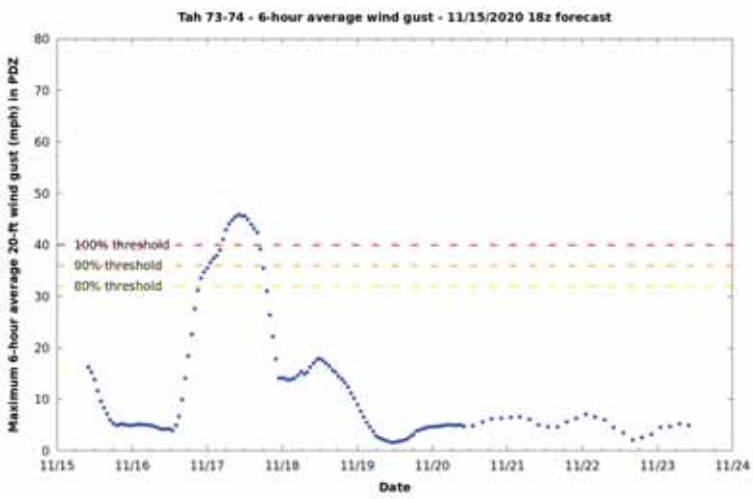
Tah 73-60



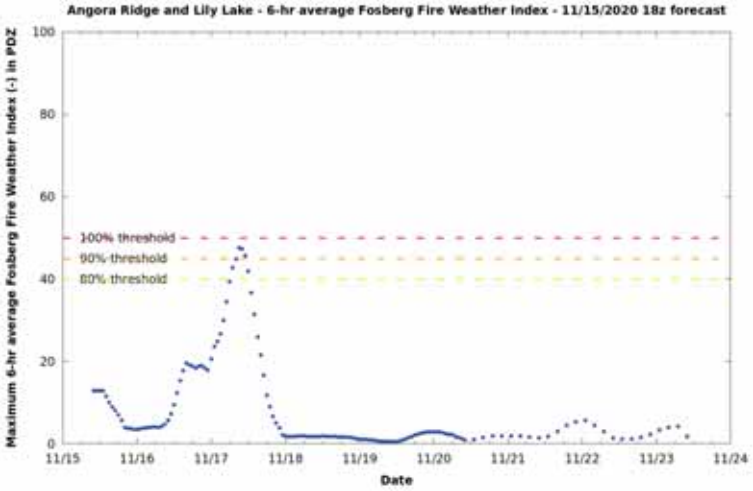


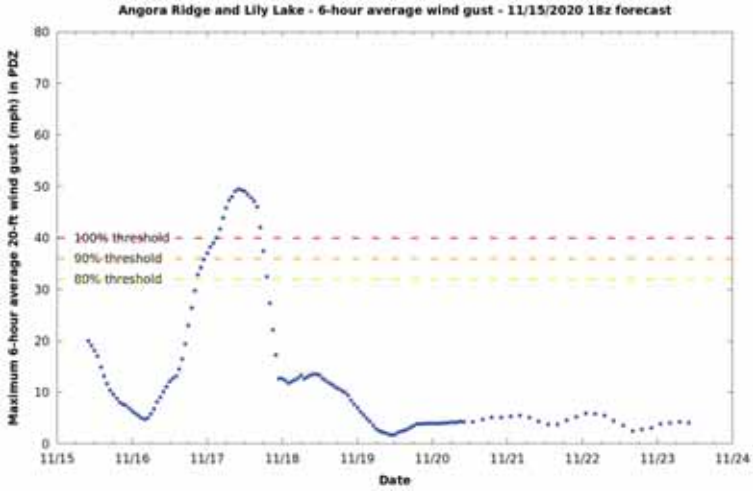
Tah 73-74



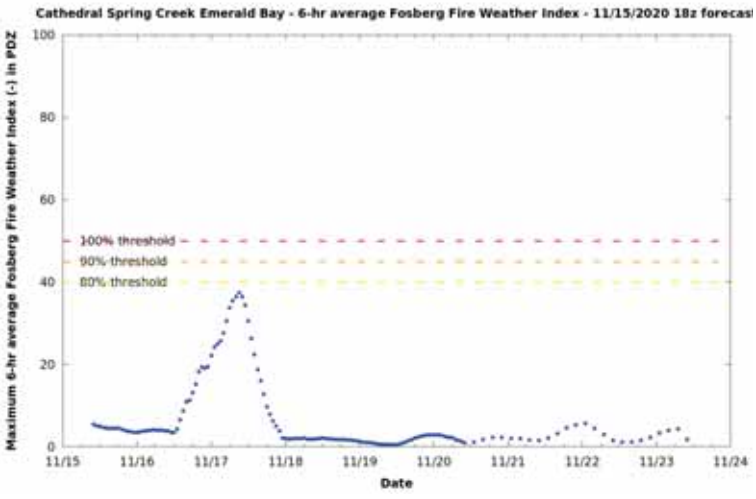


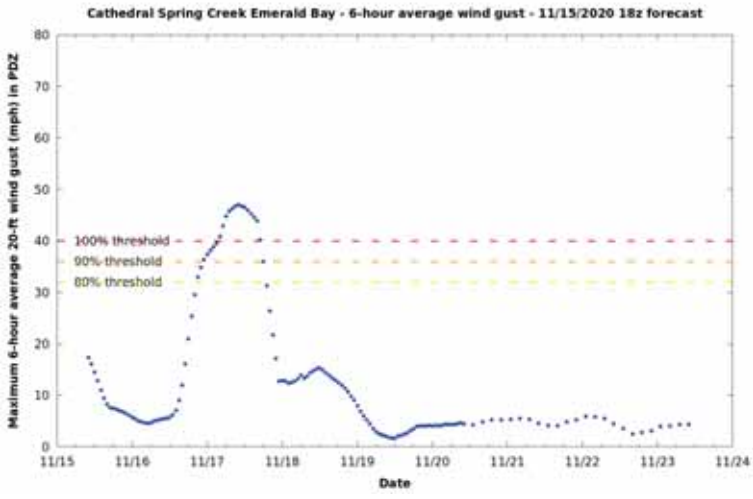
Angora Ridge and Lily Lake



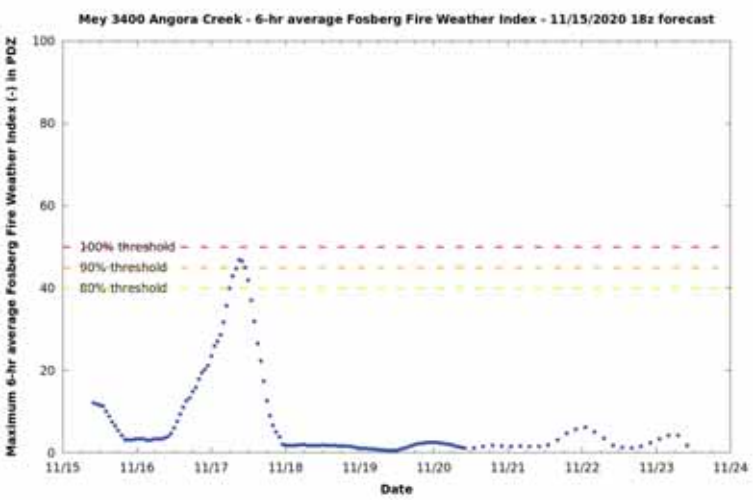


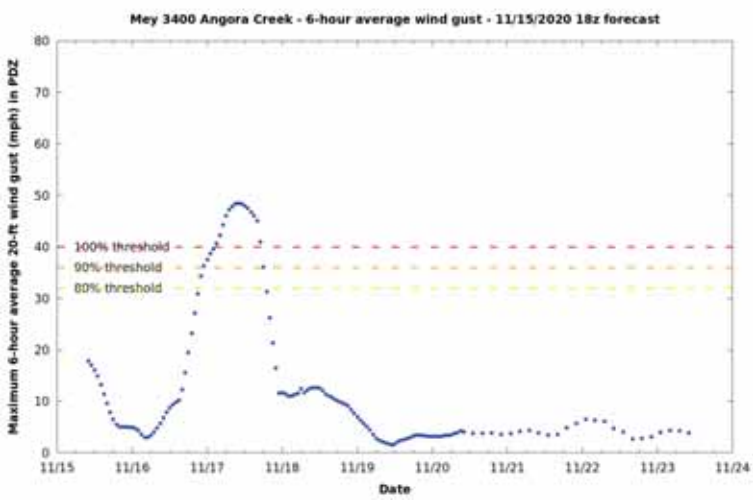
Cathedral Spring Creek Emerald Bay



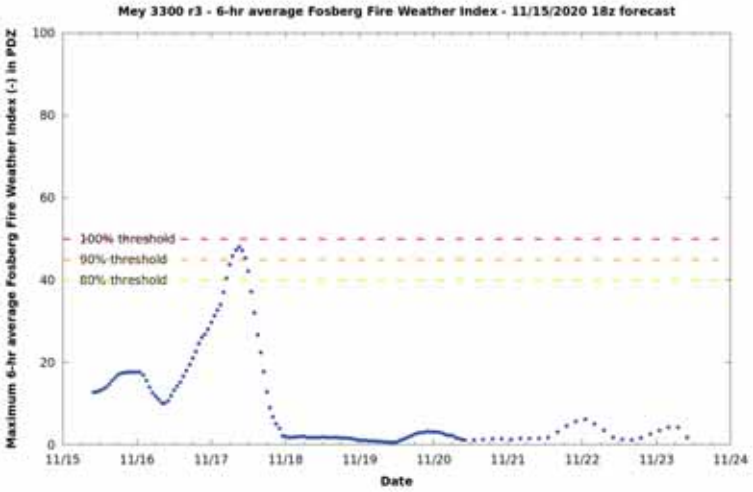


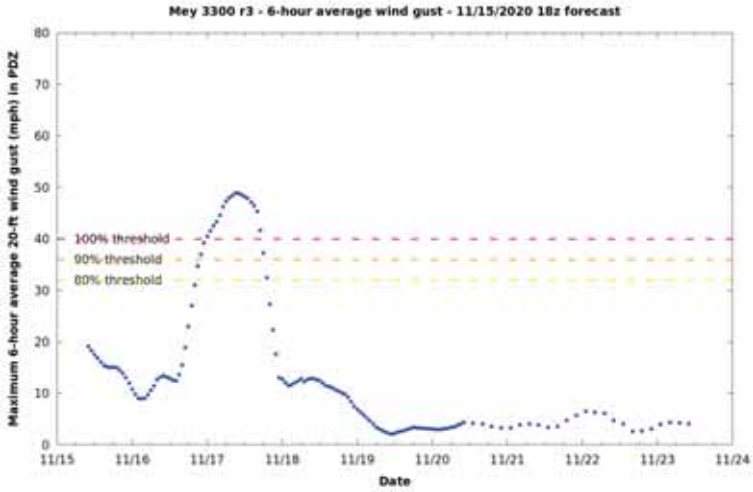
Mey 3400 Angora Creek



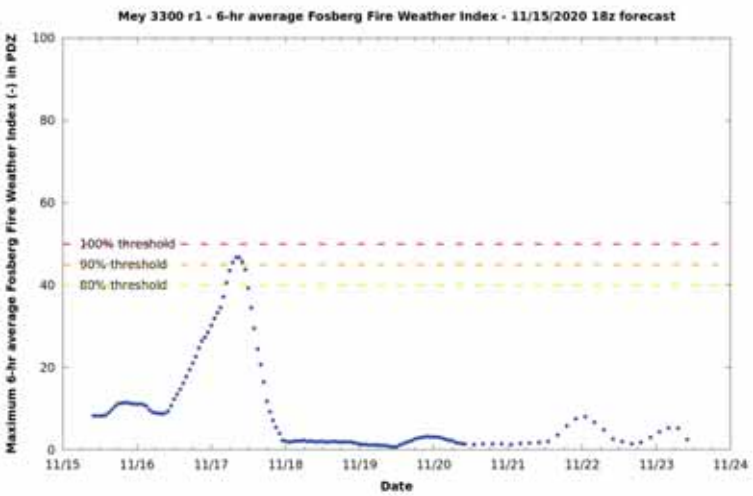


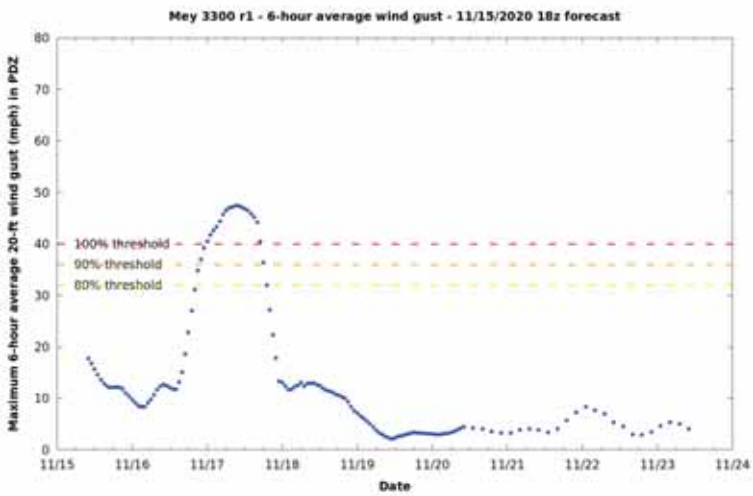
Mey 3300 r3



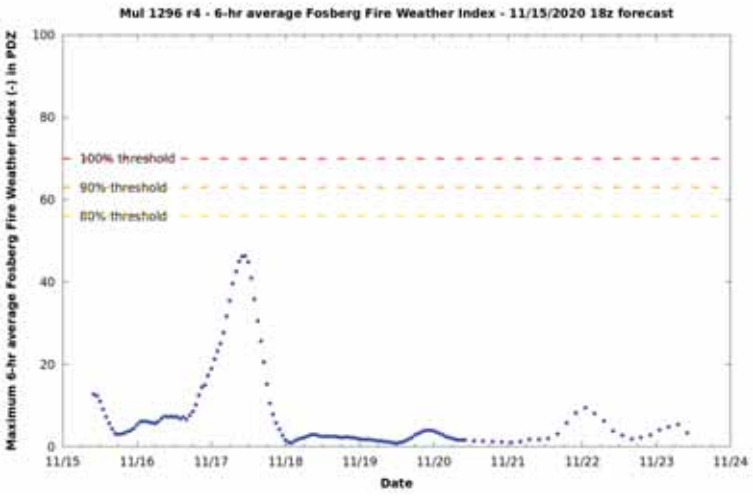


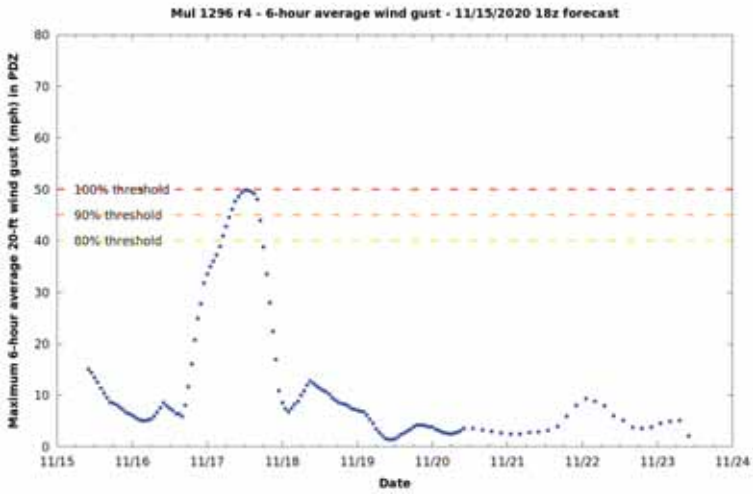
Mey 3300 r1



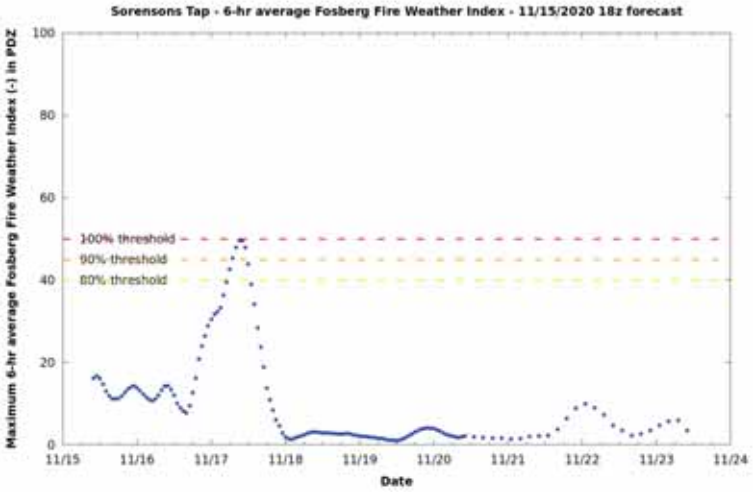


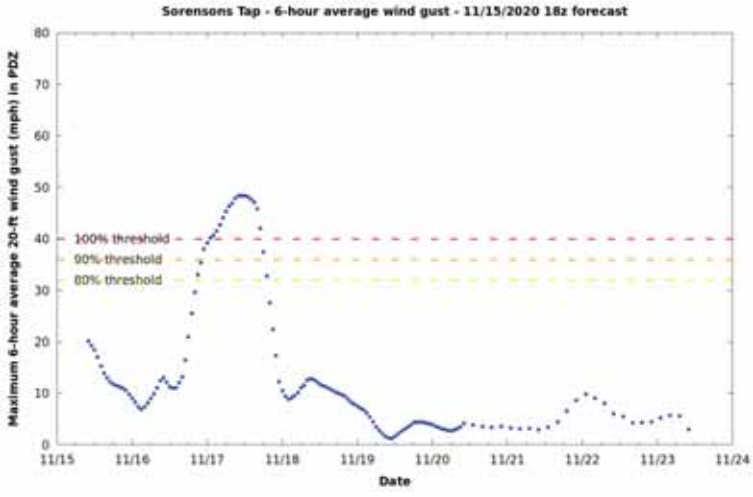
Mul 1296 r4



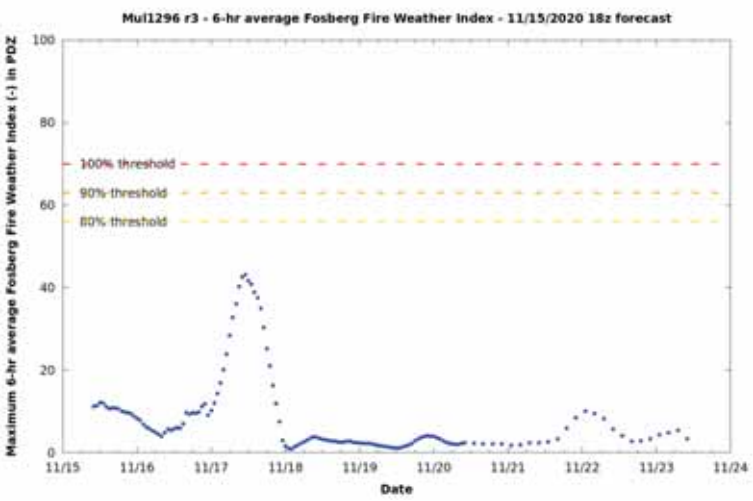


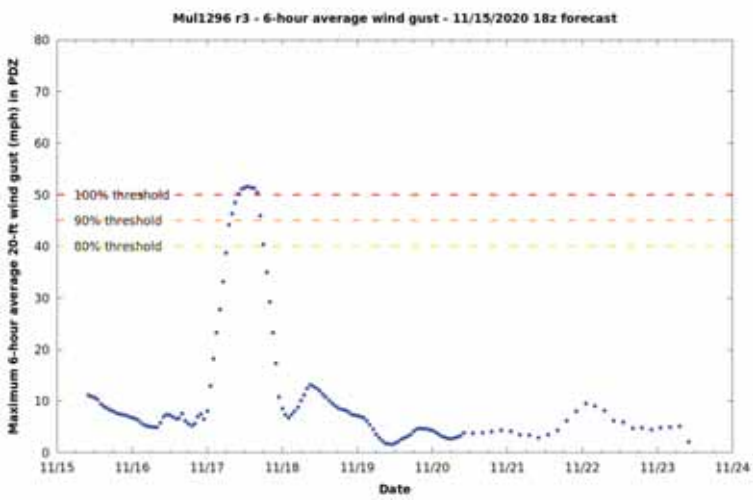
Sorensons Tap



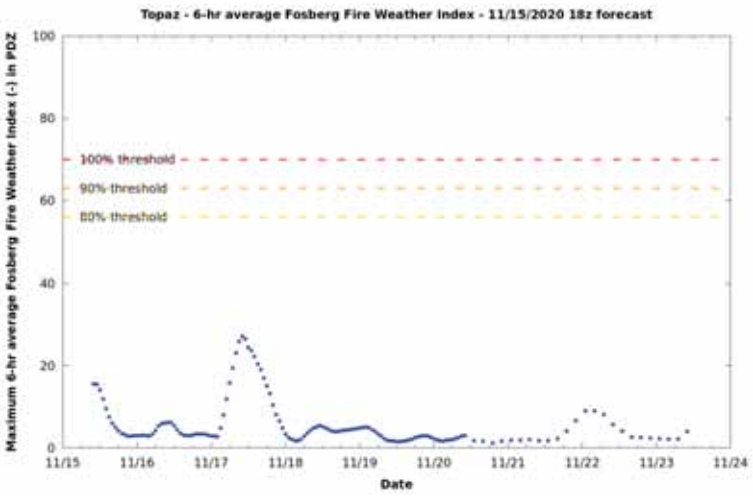


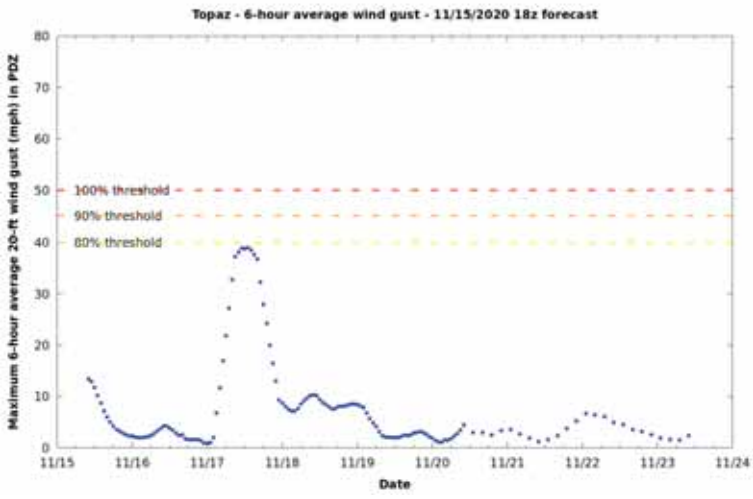
Mul 1296 r3



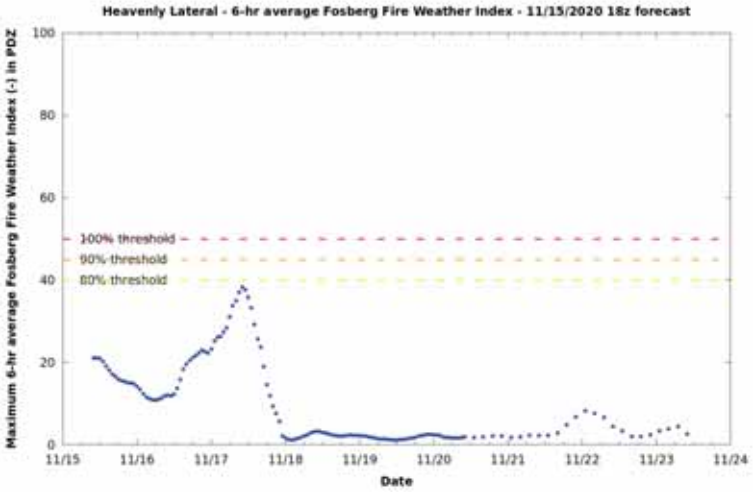


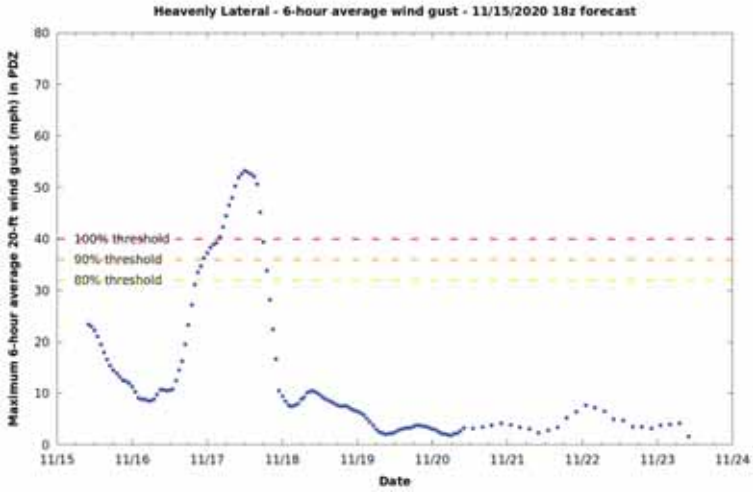
Topaz



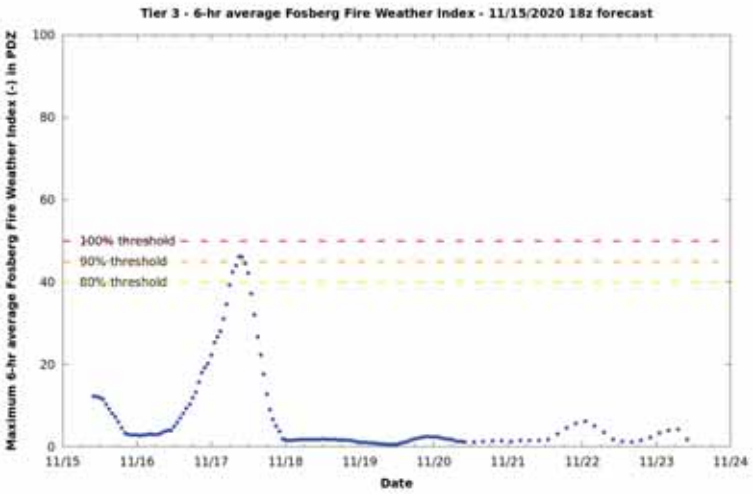


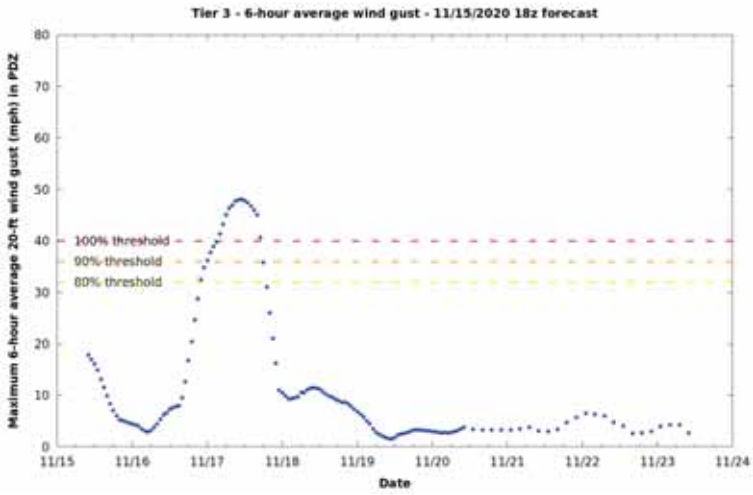
Heavenly Lateral



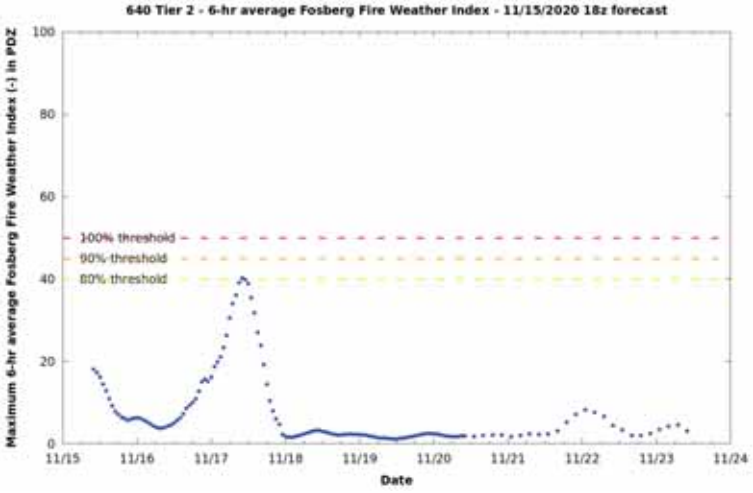


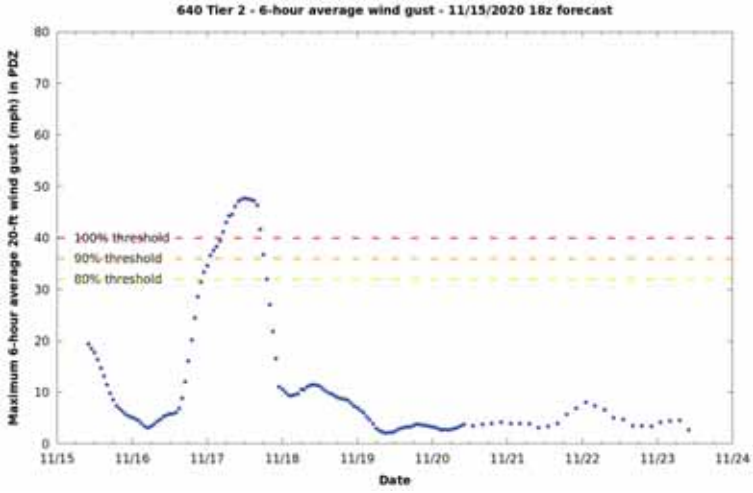
Tier 3



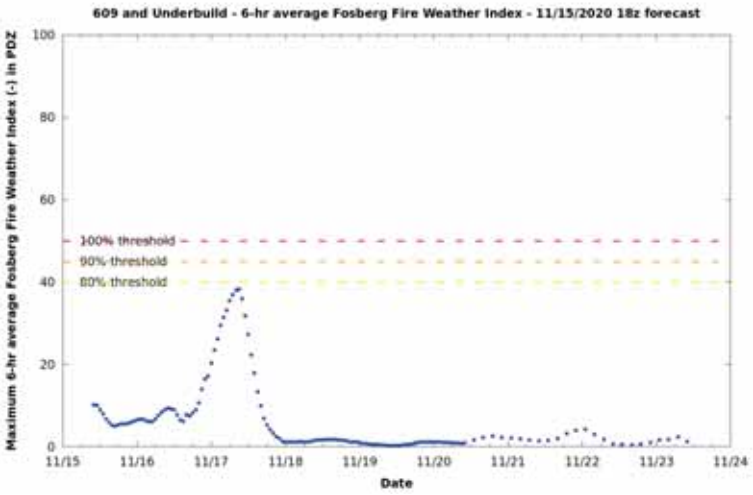


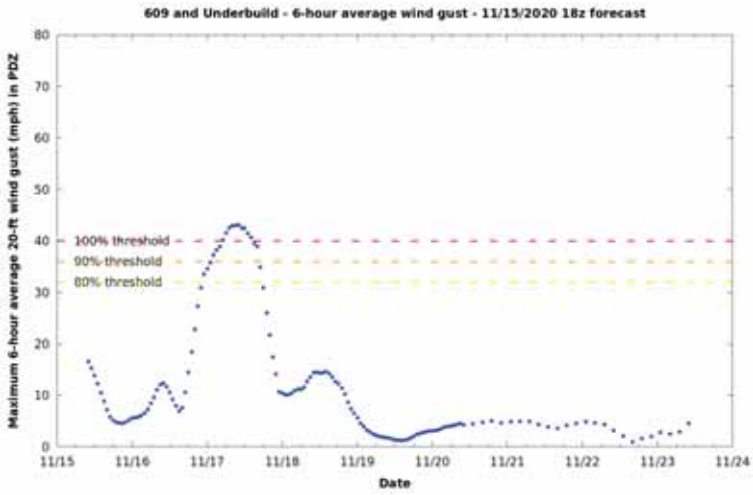
640 Tier 2



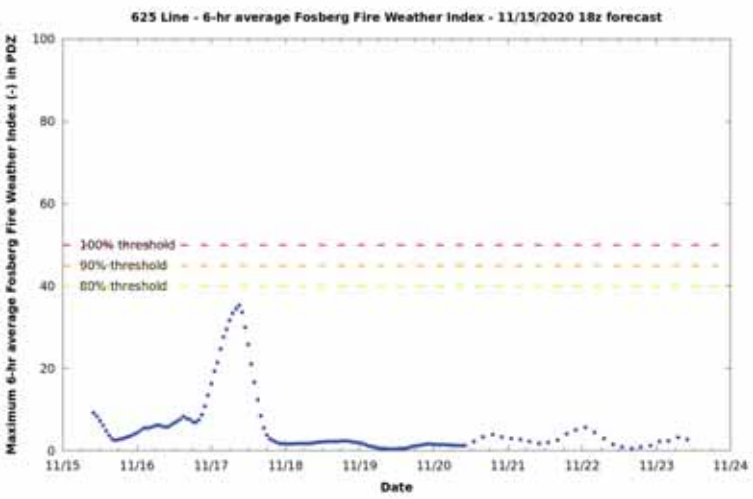


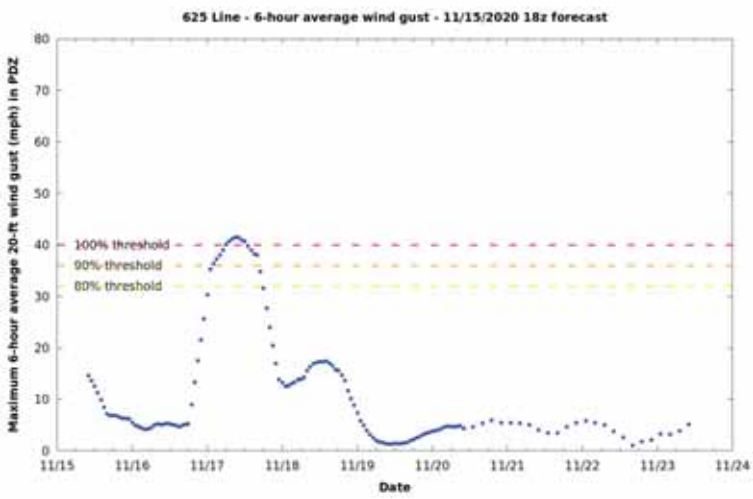
609 and Underbuild



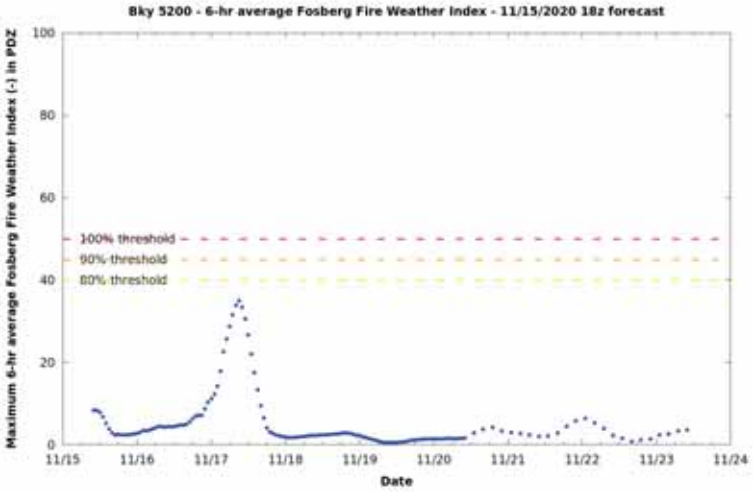


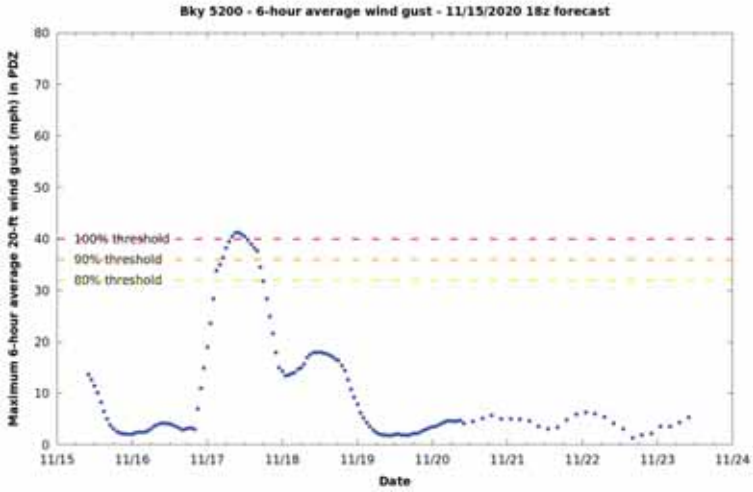
625 Line



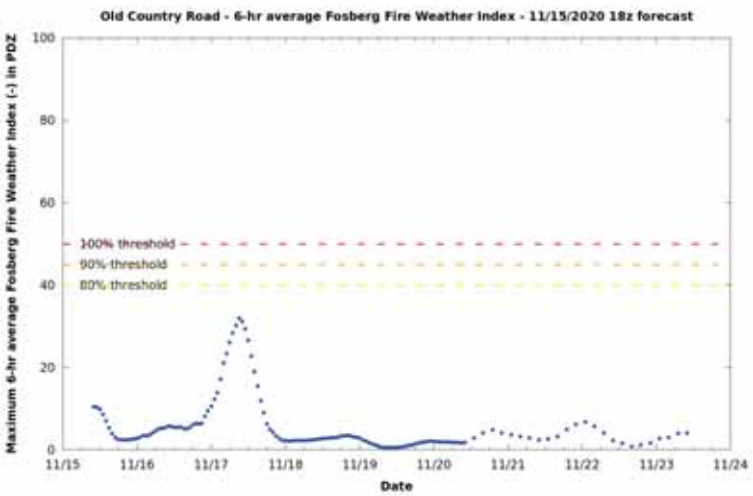


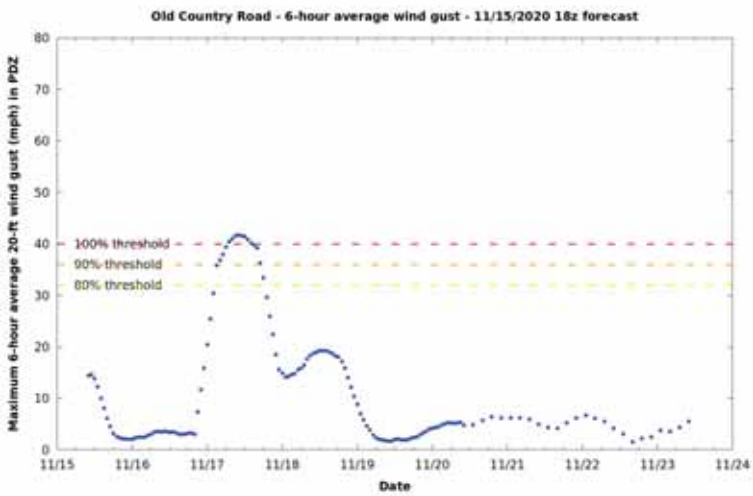
Bky 5200



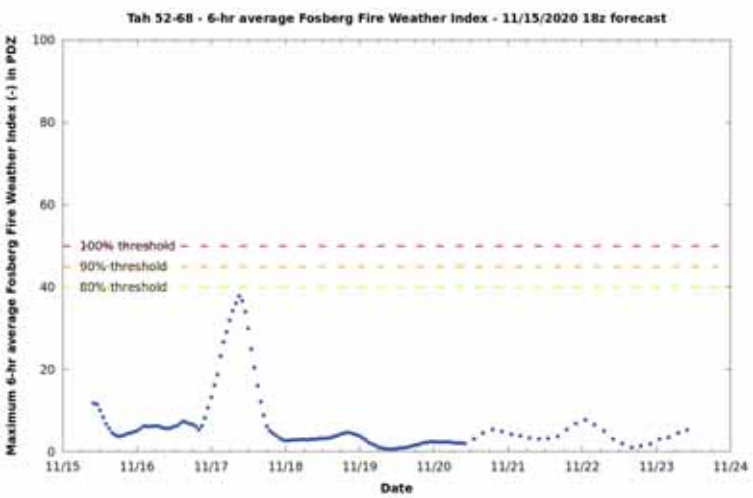


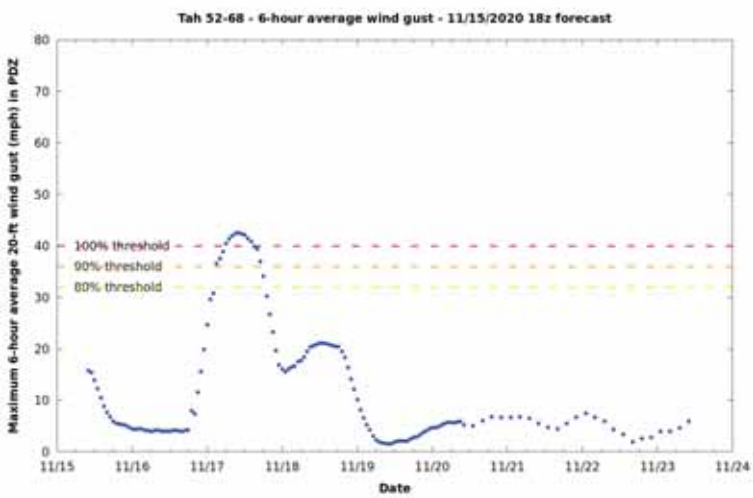
Old Country Road



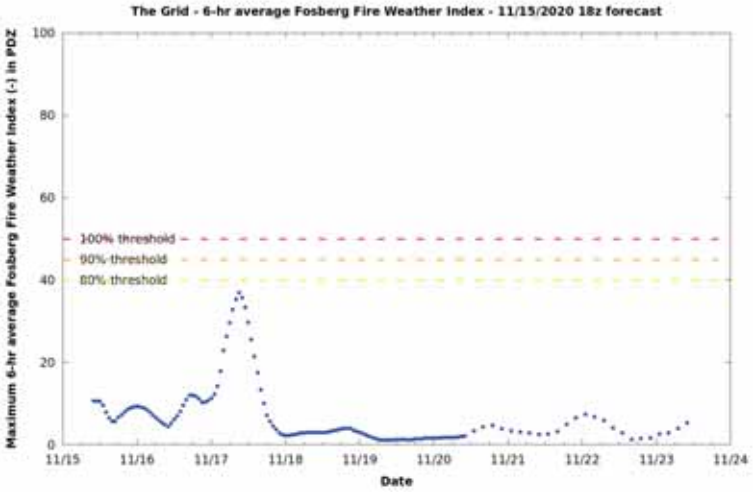


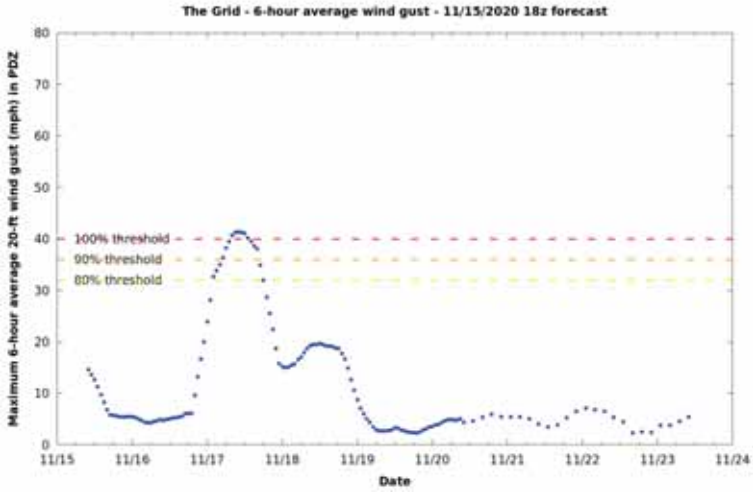
Tah 52-68



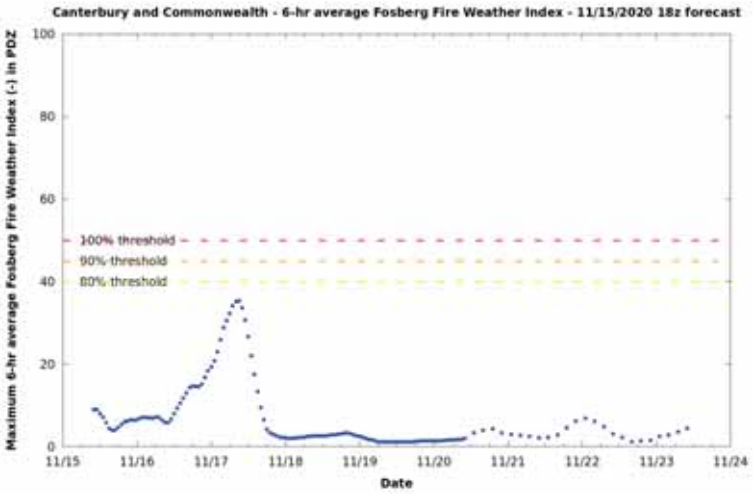


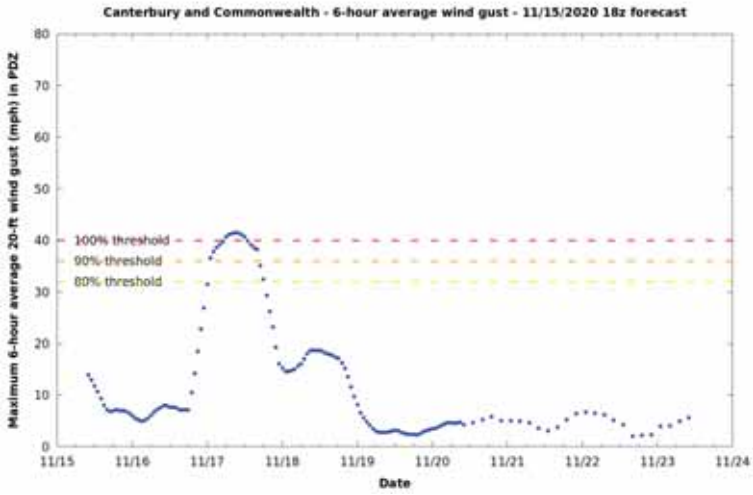
The Grid



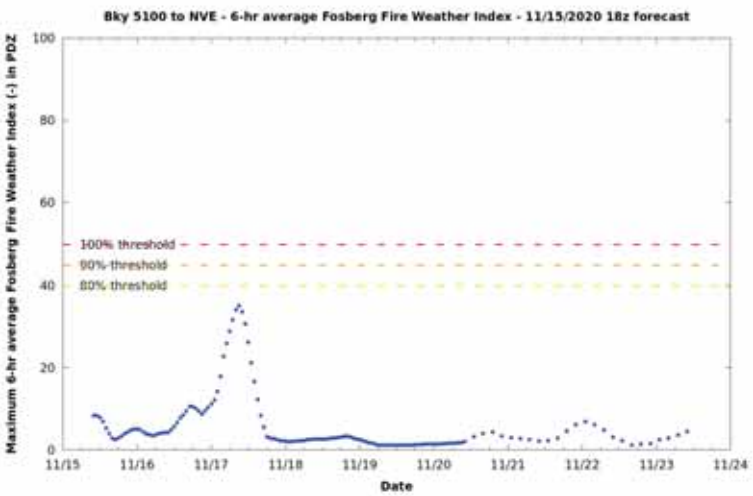


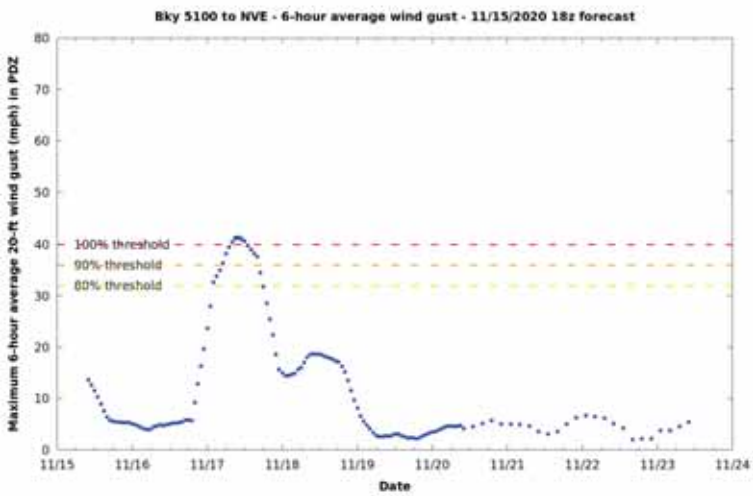
Canterbuy and Commonwealth



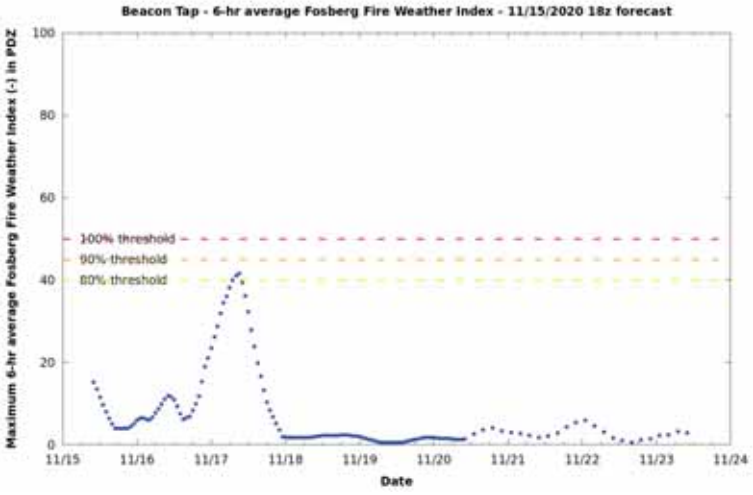


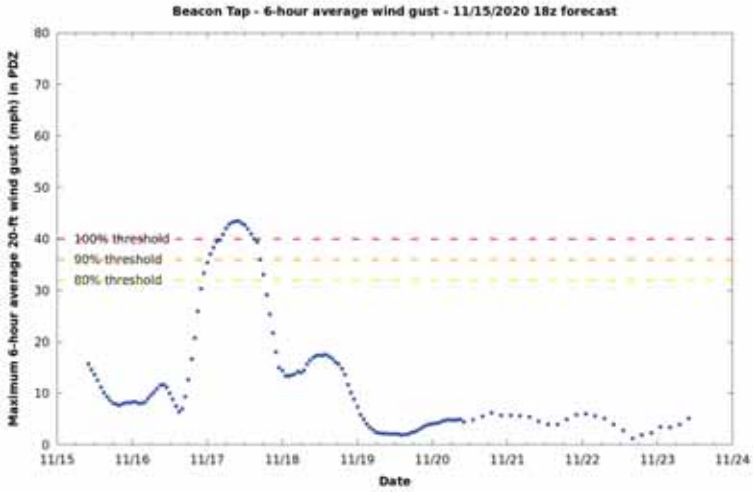
Bky 5100 to NVE



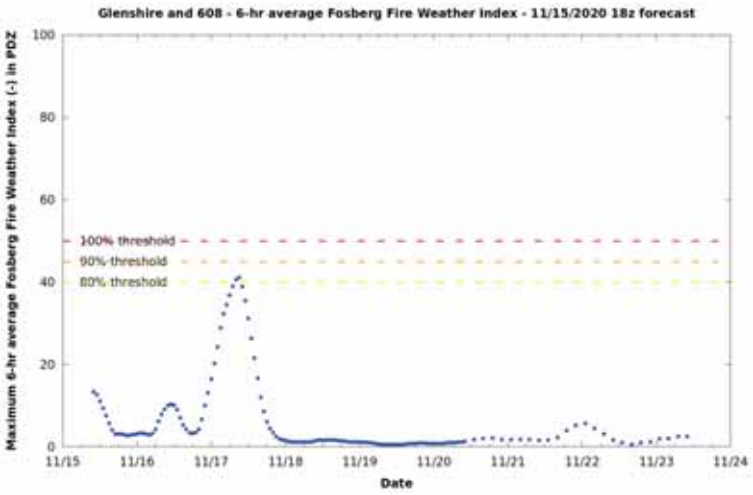


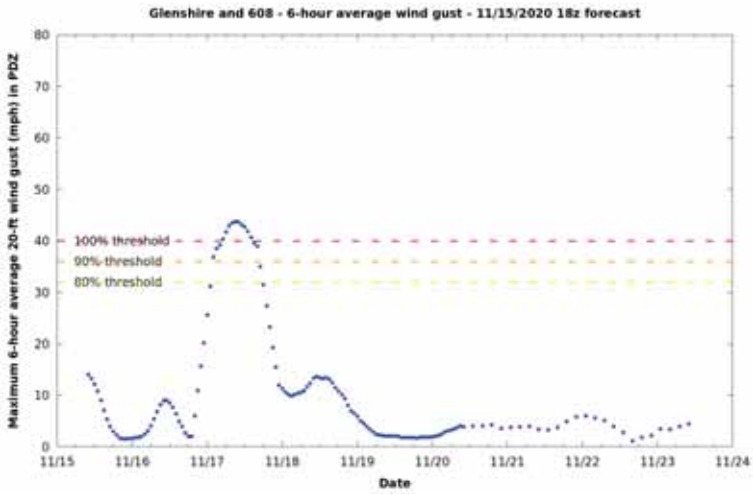
Beacon Tap



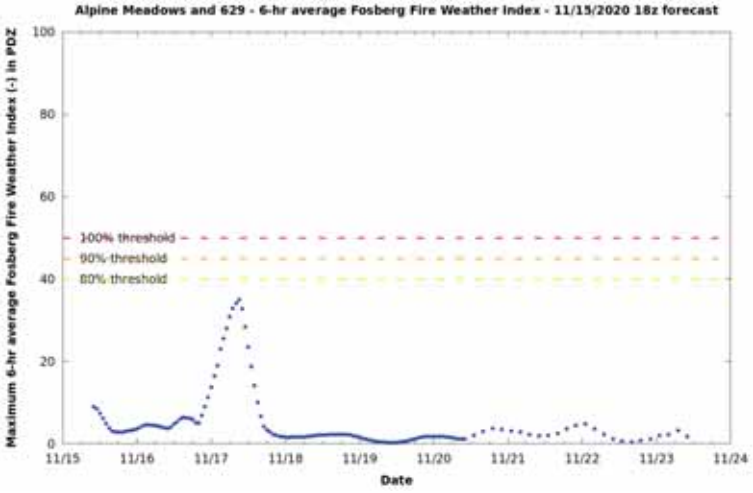


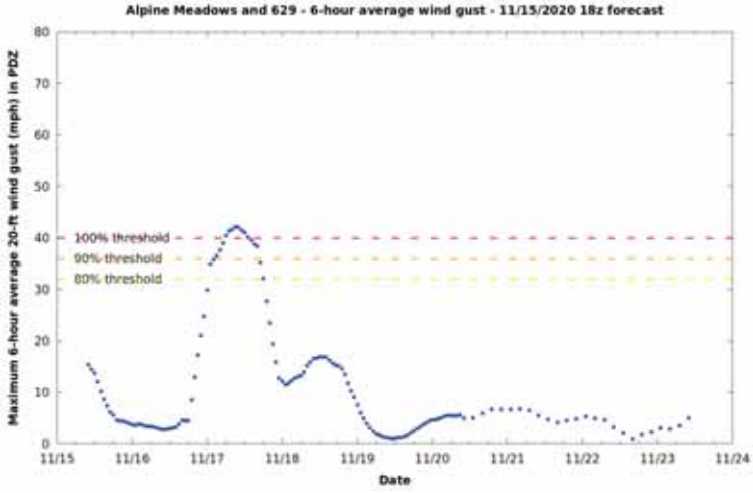
Glenshire and 608



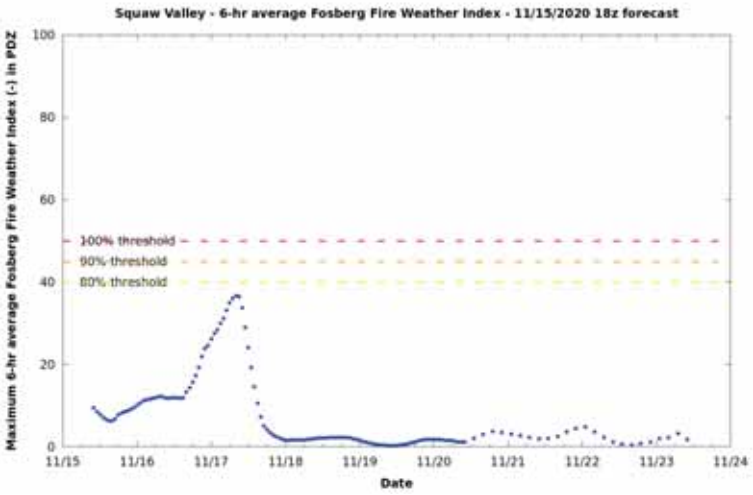


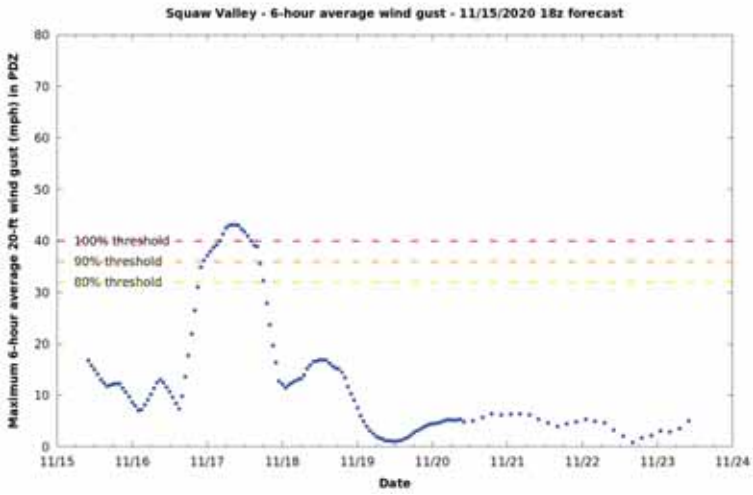
Alpine Meadows and 629



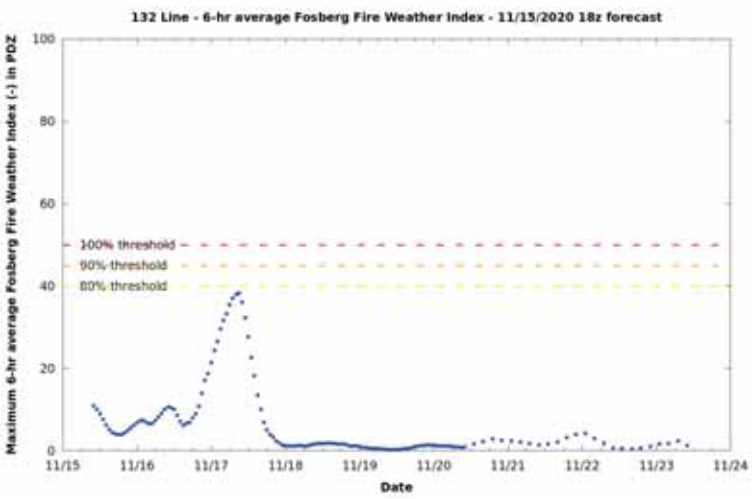


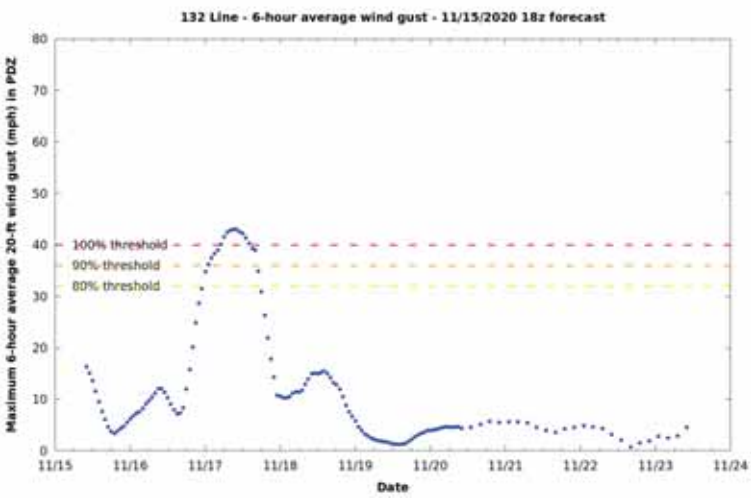
Squaw Valley



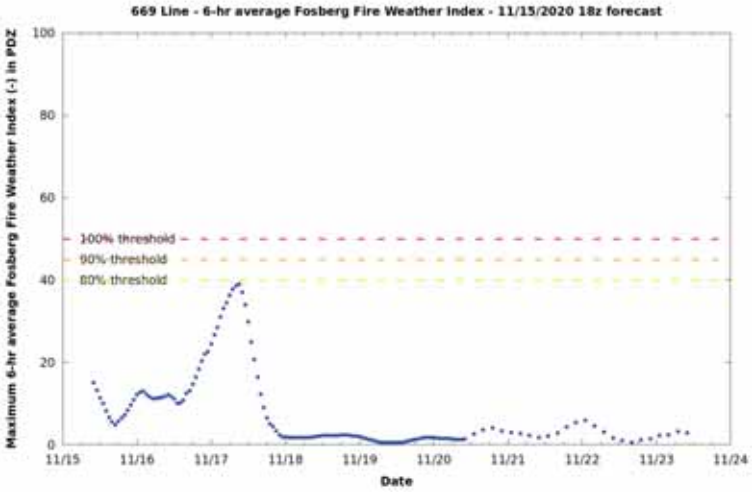


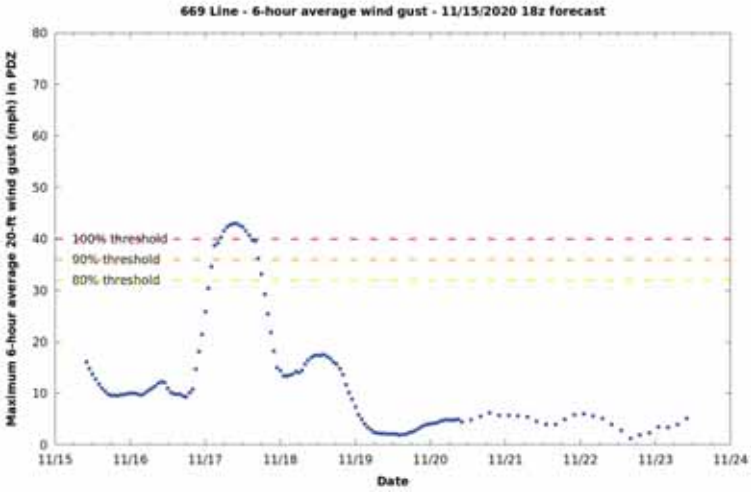
132 Line



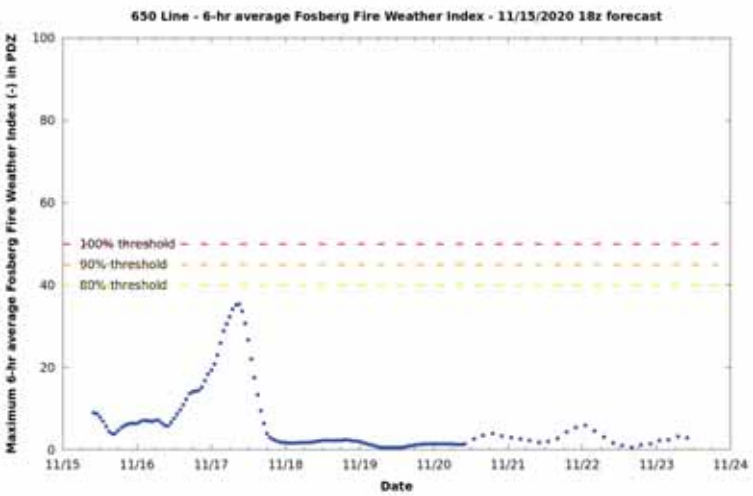


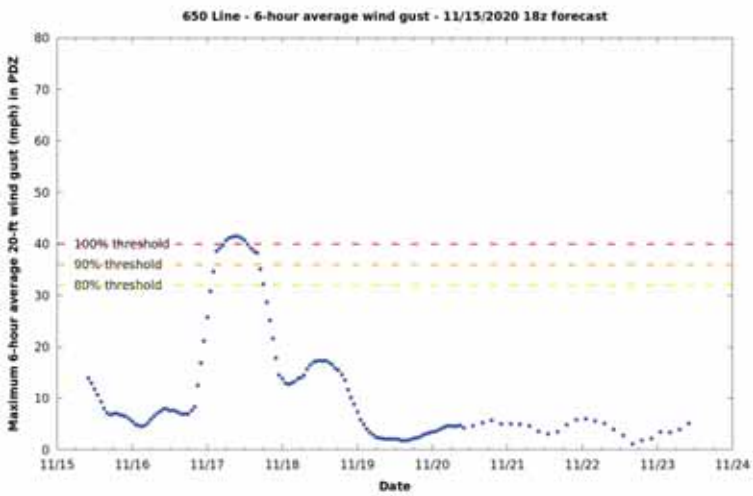
669 Line



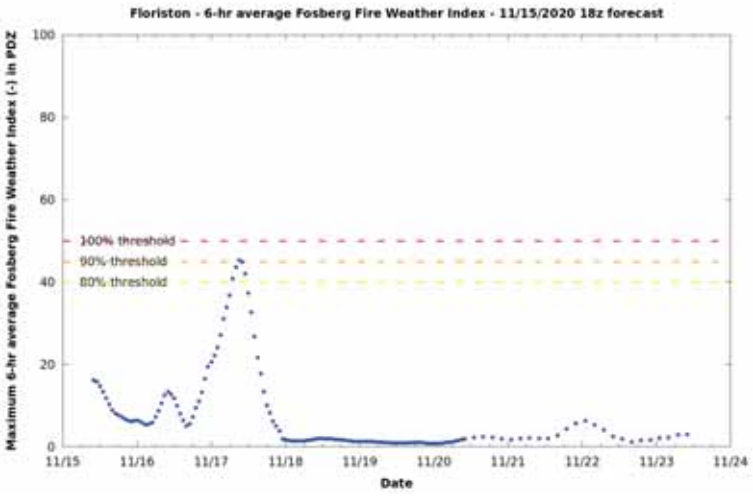


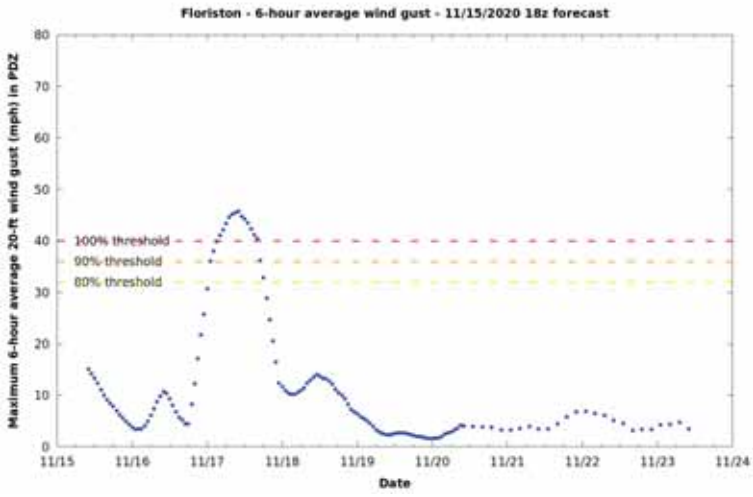
650 Line



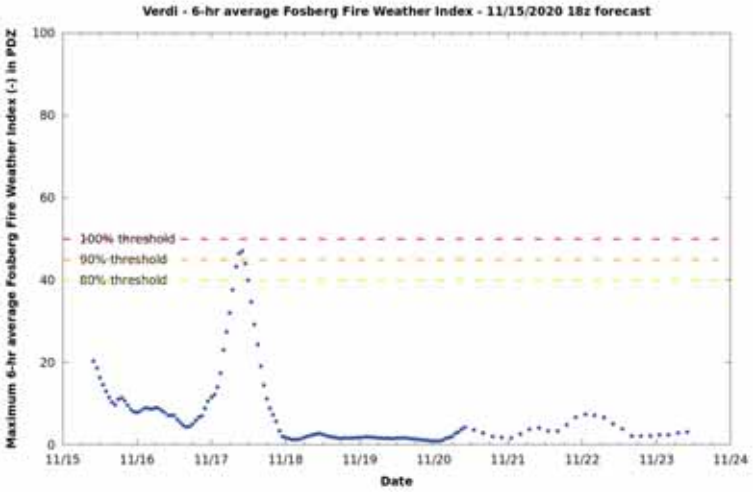


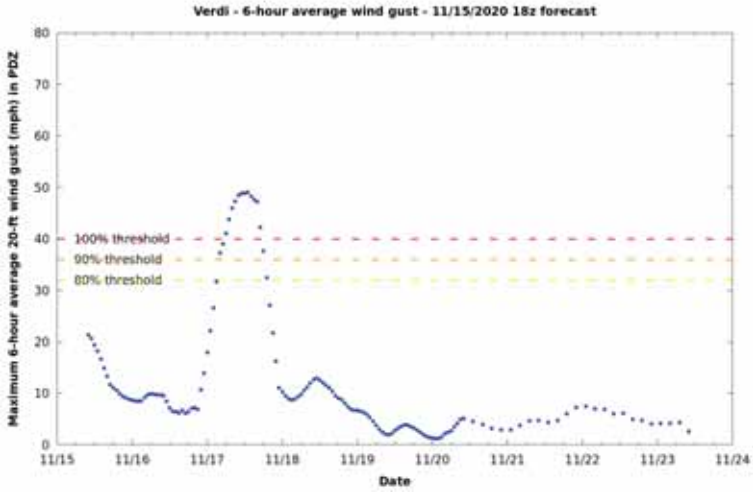
Floriston



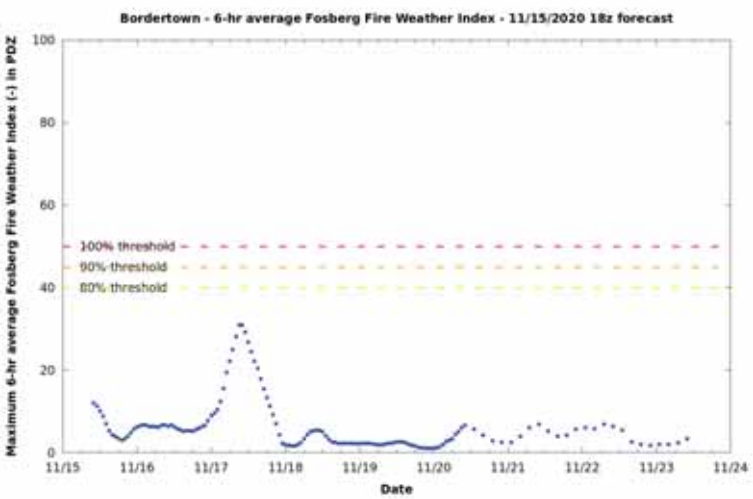


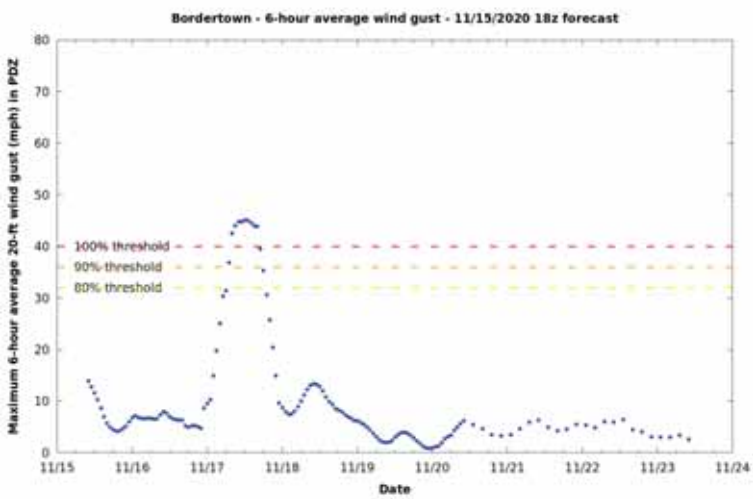
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/15/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/15/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/16/20 - 11/22/20

Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

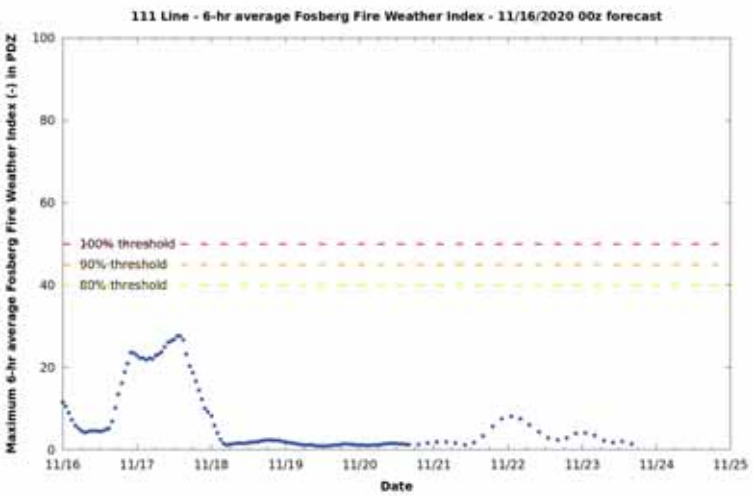
Liberty Utilities Energy Release Component Forecast for 11/16/20 - 11/22/20

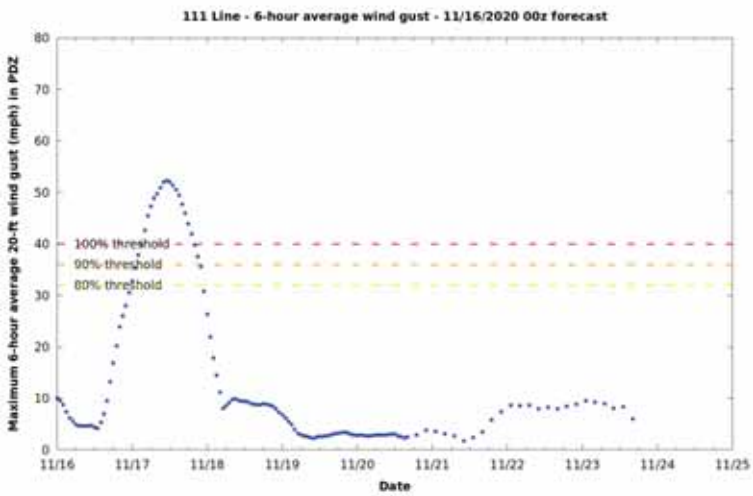
Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	47.6	49.4	47.7	33.9	33.0	34.5	36.9
Sierra Brooks	50.9	56.8	54.6	40.3	42.4	45.2	49.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.3	1.4	1.2	0.7	0.7	0.6	0.6
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	23.8	27.2	24.3	15.9	17.7	19.6	20.4
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	43.0	48.3	43.8	27.6	28.9	31.5	32.5
Topaz	53.4	57.9	54.1	36.4	39.2	40.9	42.2
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	3.4	3.8	3.4	2.1	1.9	1.9	1.8
Old Country Road	29.7	32.0	26.3	16.6	14.9	14.3	13.7
Tah 52-68	20.1	21.7	17.9	11.2	10.2	9.7	9.3
The Grid	8.3	9.5	8.1	4.6	4.3	3.8	3.6
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	24.1	24.1	23.0	15.4	15.6	15.5	16.8
Verdi	51.1	51.1	47.8	31.7	34.6	36.6	41.1
Bordertown	54.6	54.6	52.1	35.8	37.8	40.5	44.7

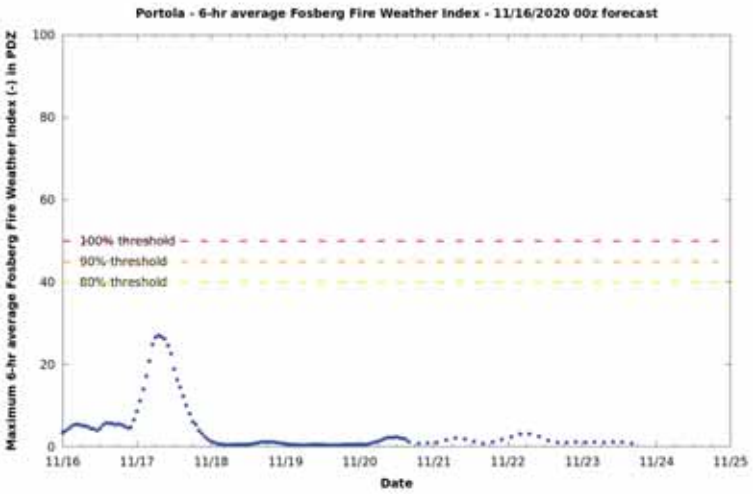
Liberty Utilities Fire Weather Summary Plots - 11/16/2020 00z forecast

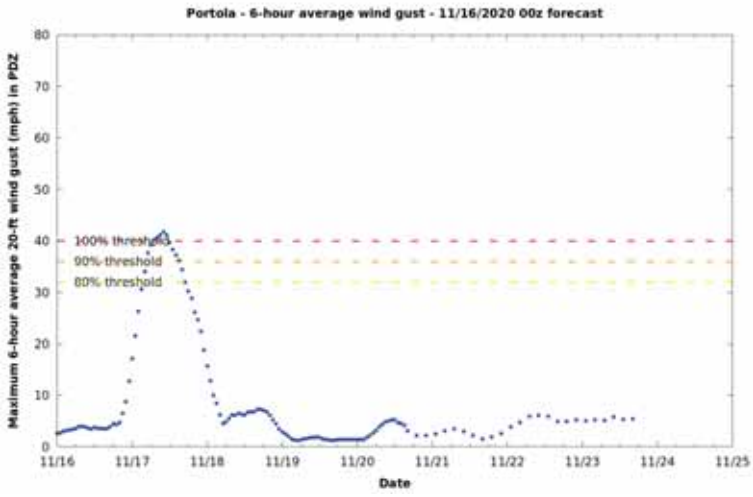
111 Line



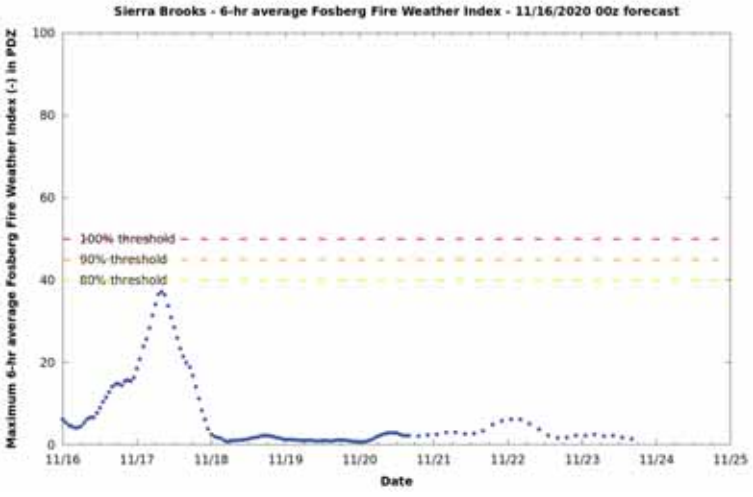


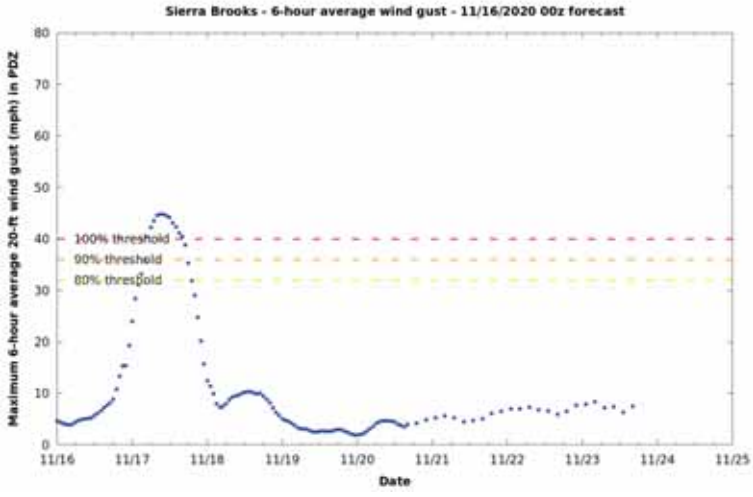
Portola



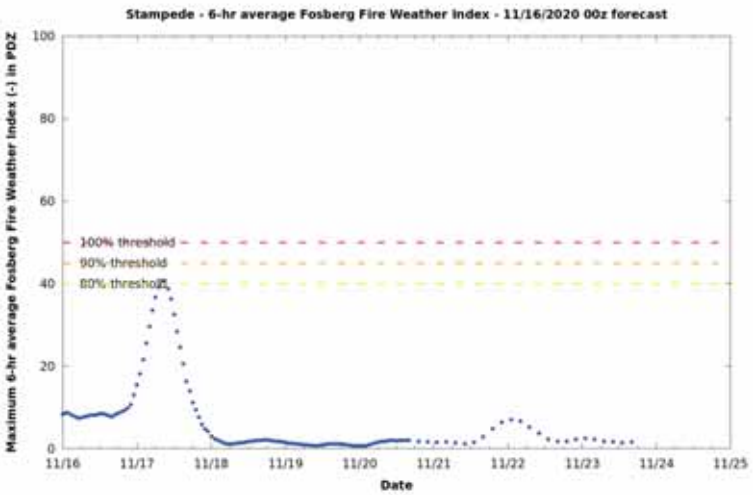


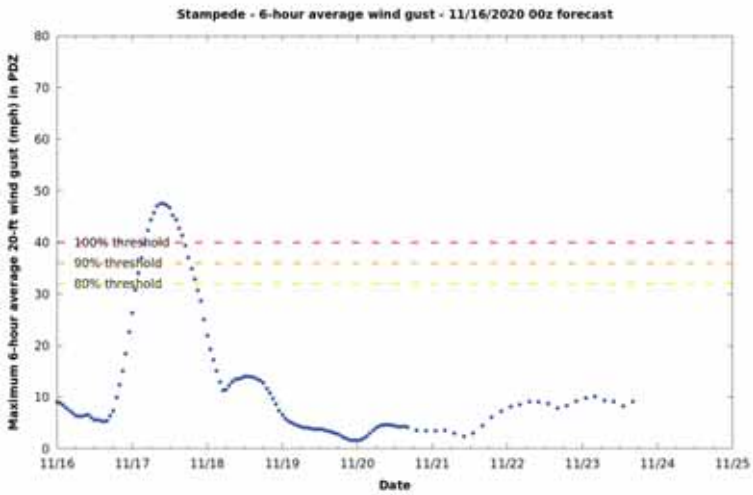
Sierra Brooks



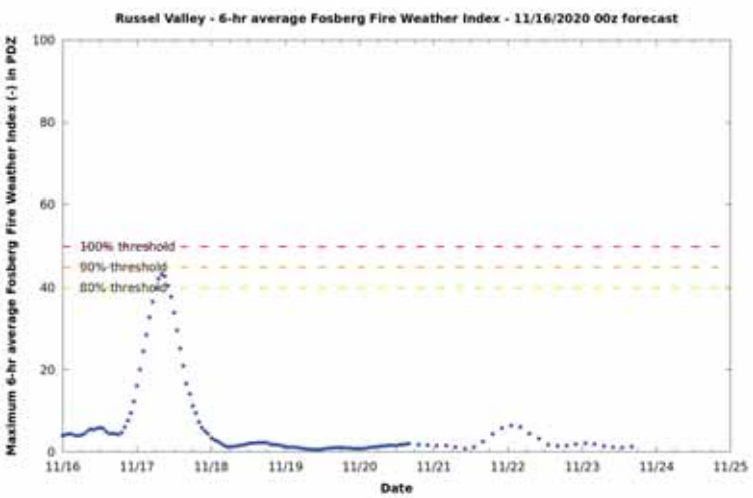


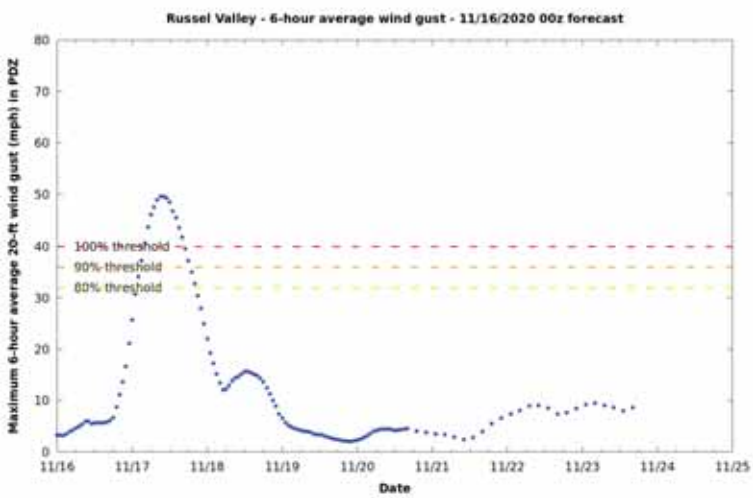
Stampede



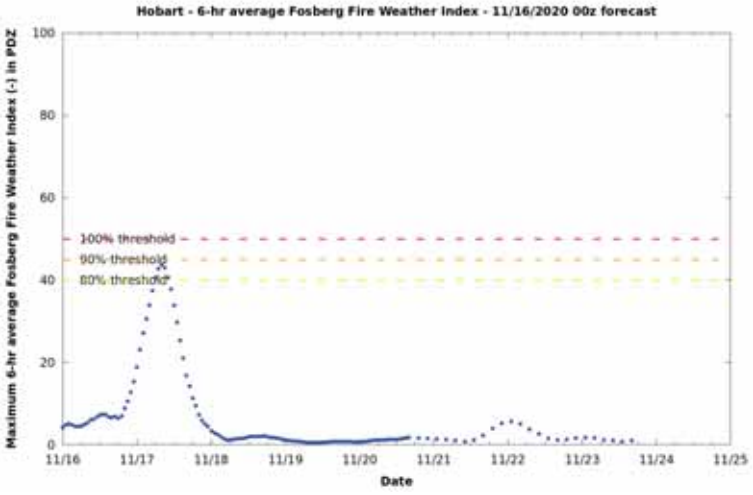


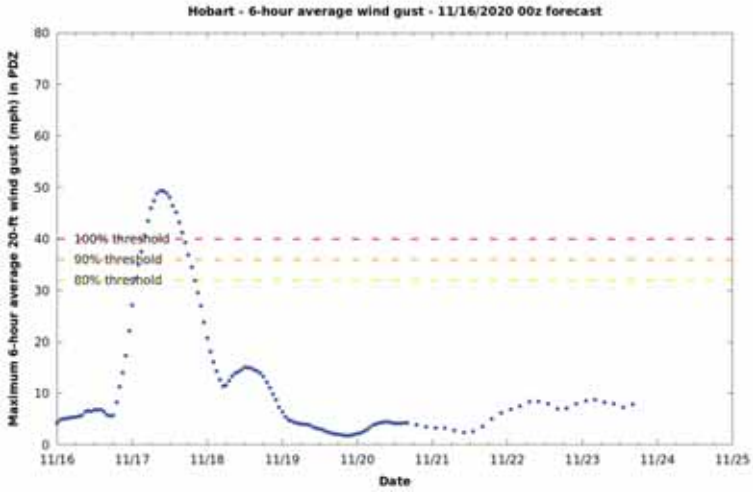
Russell Valley



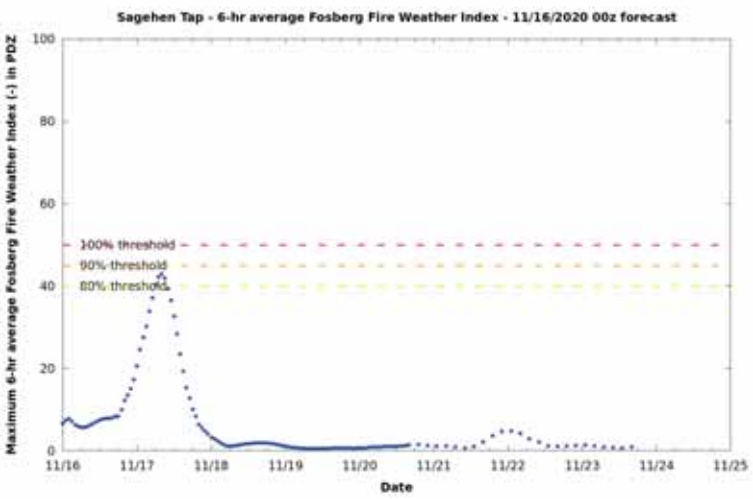


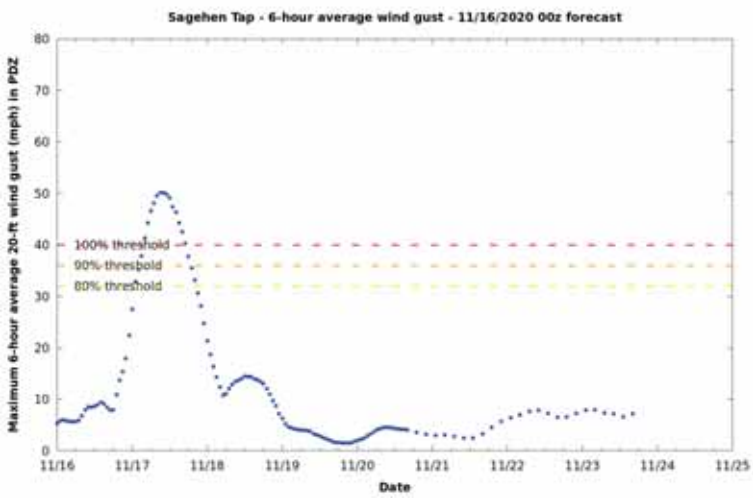
Hobart



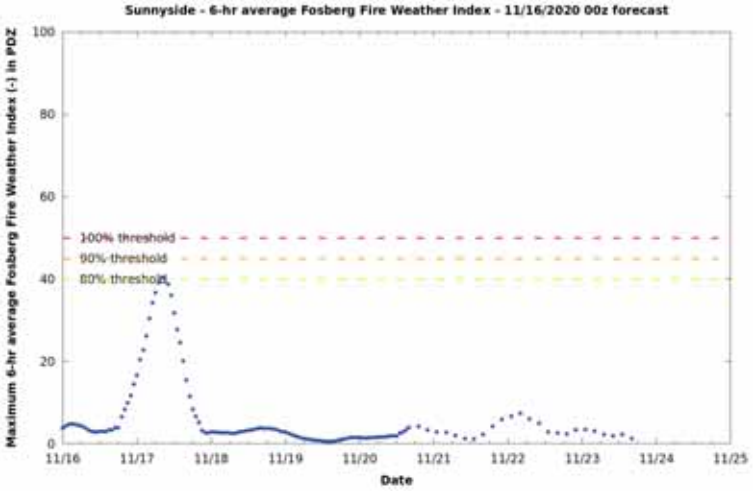


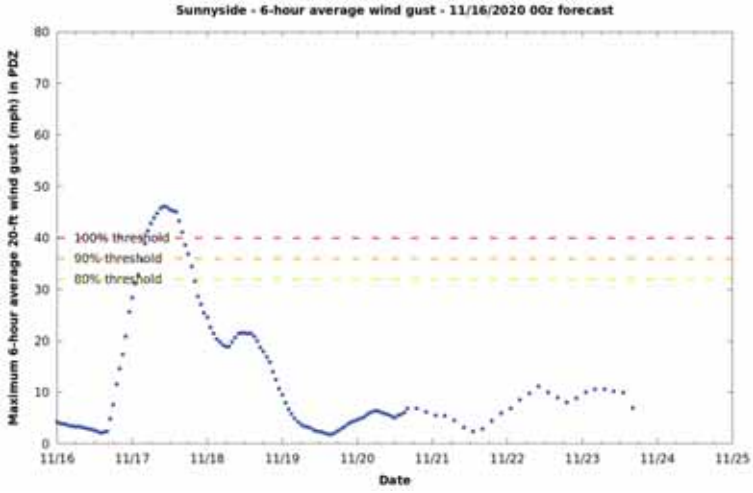
Sagehen tap



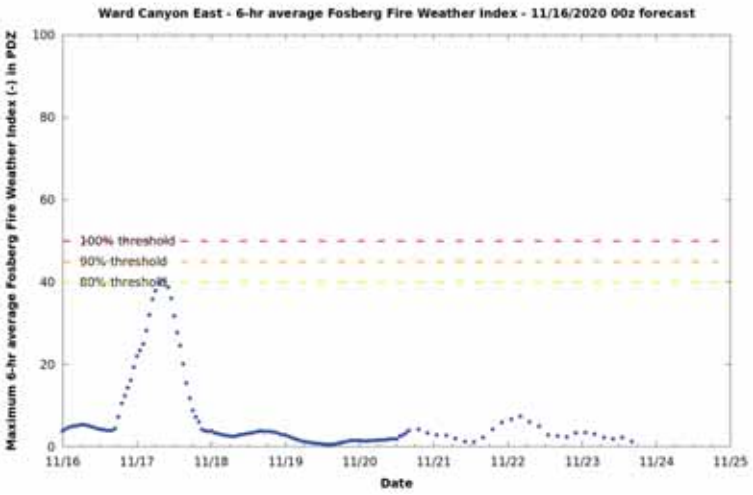


Sunnyside



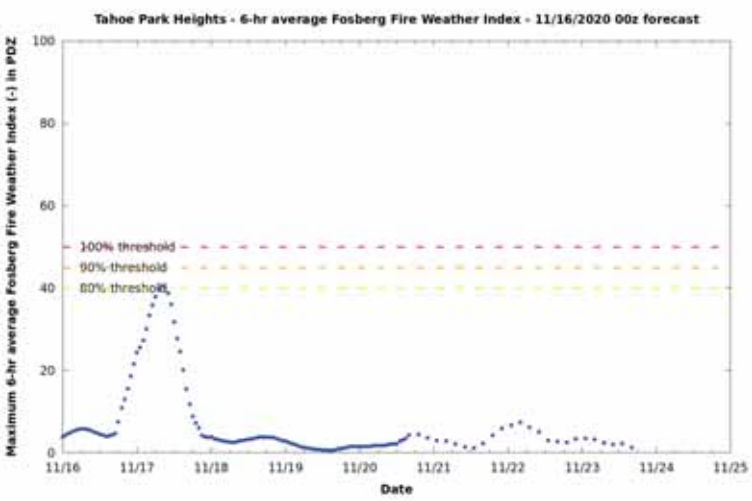


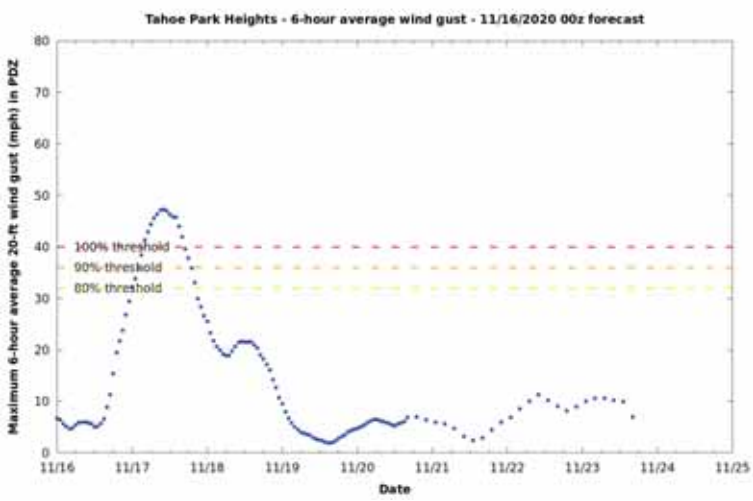
Ward Canyon East



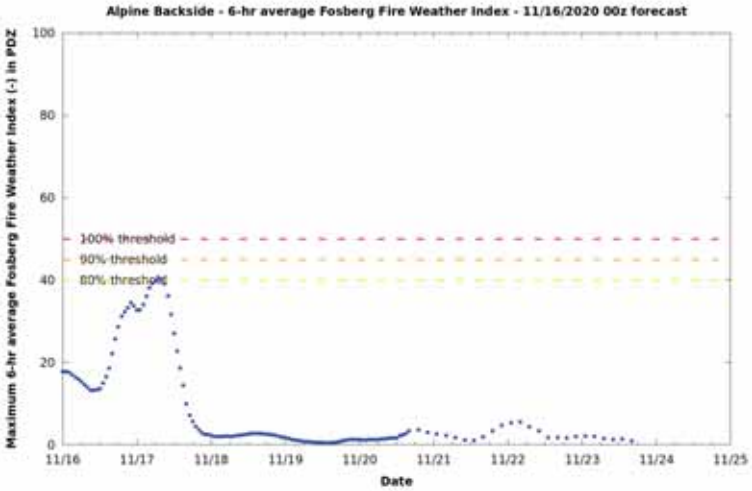


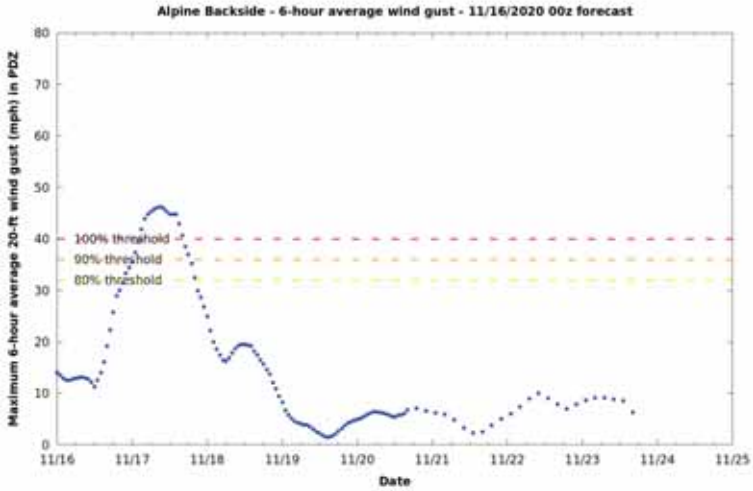
Tahoe Park Heights



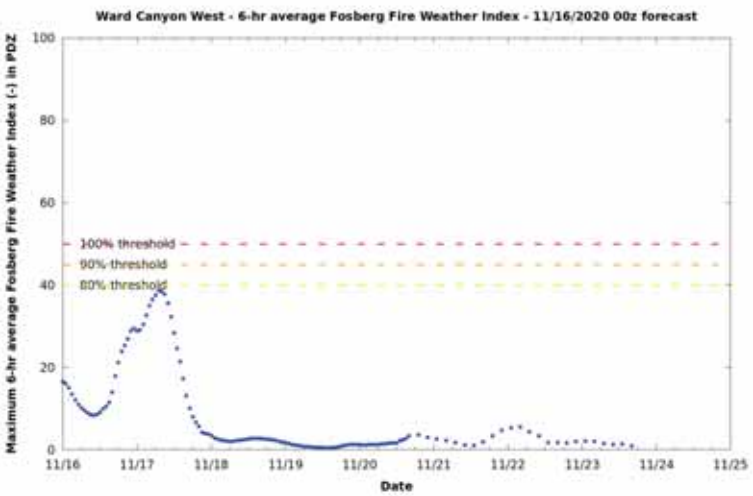


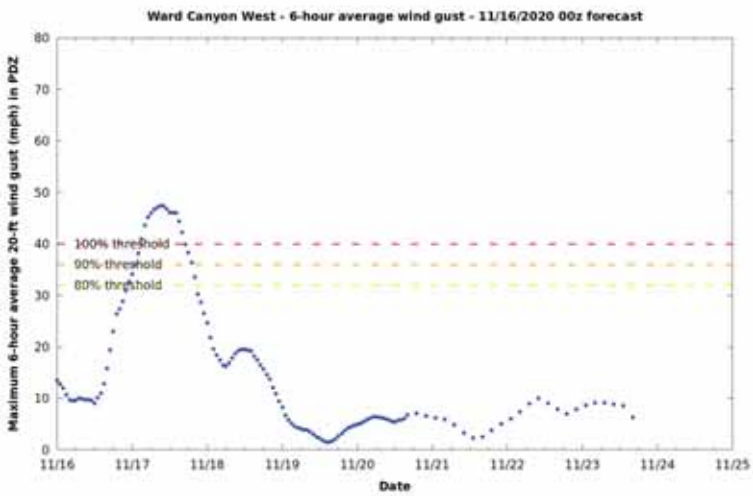
Alpine Backside



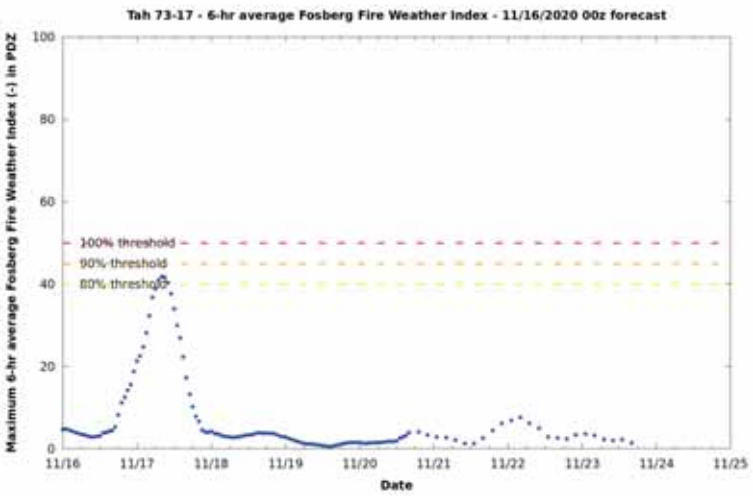


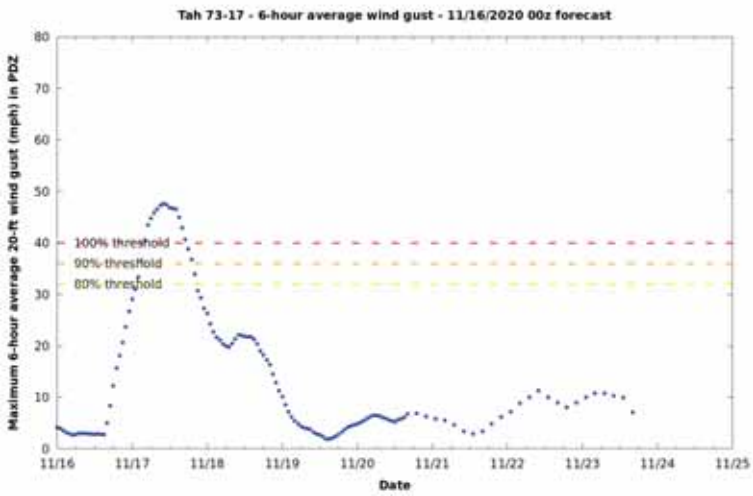
Ward Canyon West



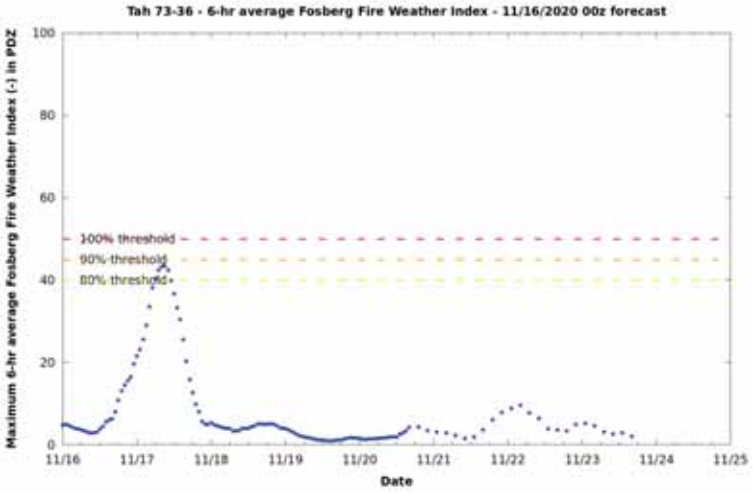


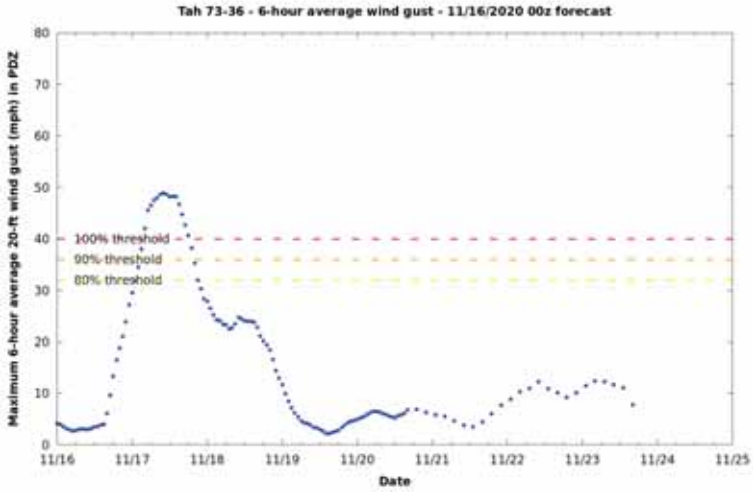
Tah 73-17



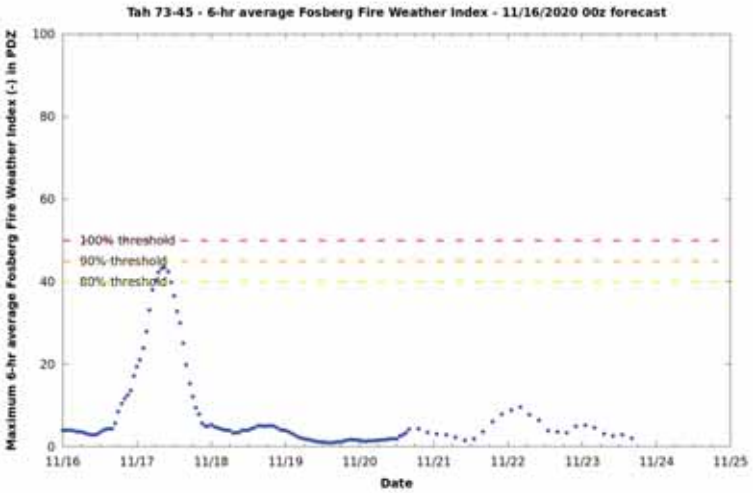


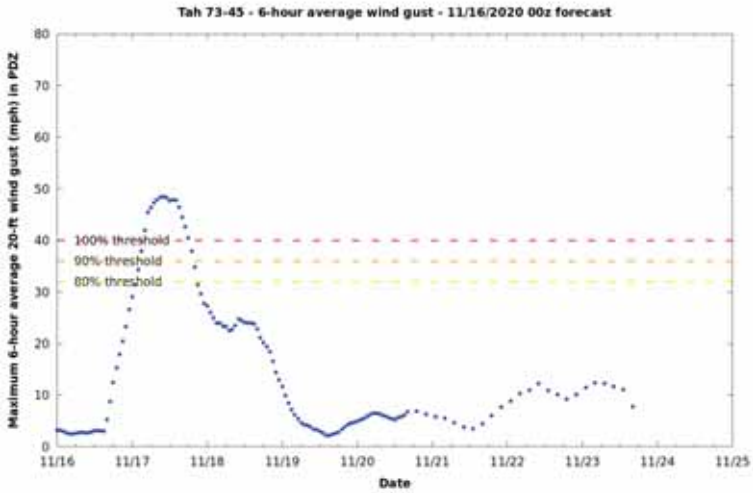
Tah 73-36



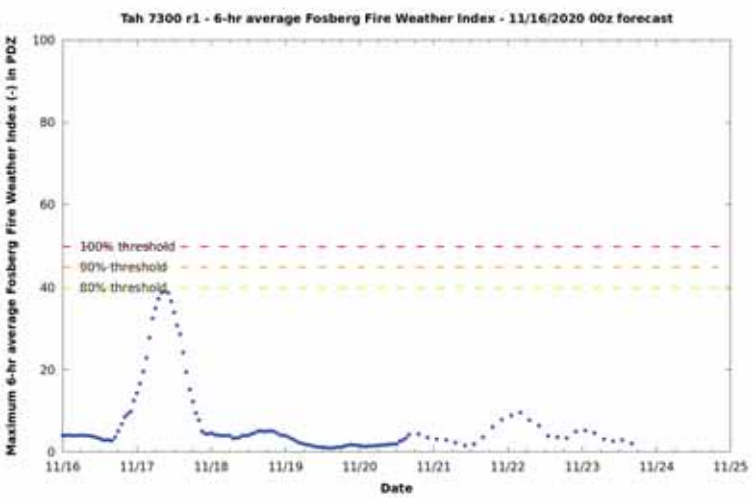


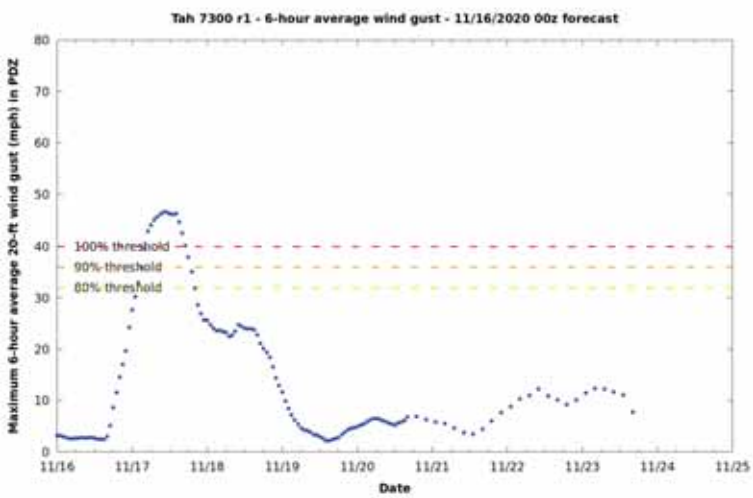
Tah 73-45



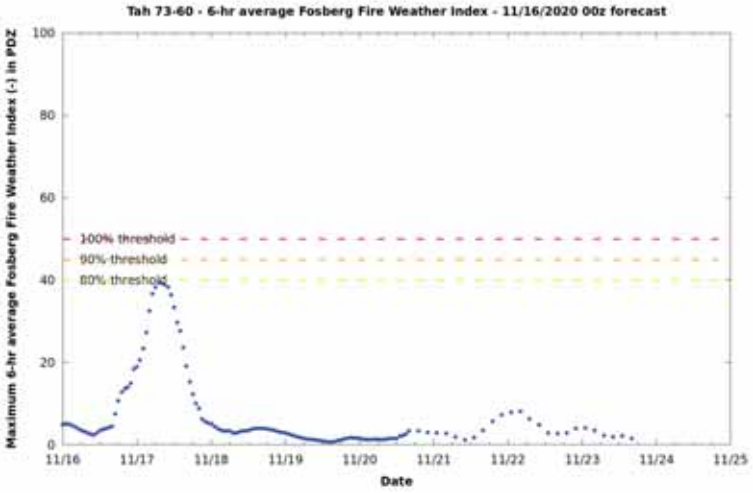


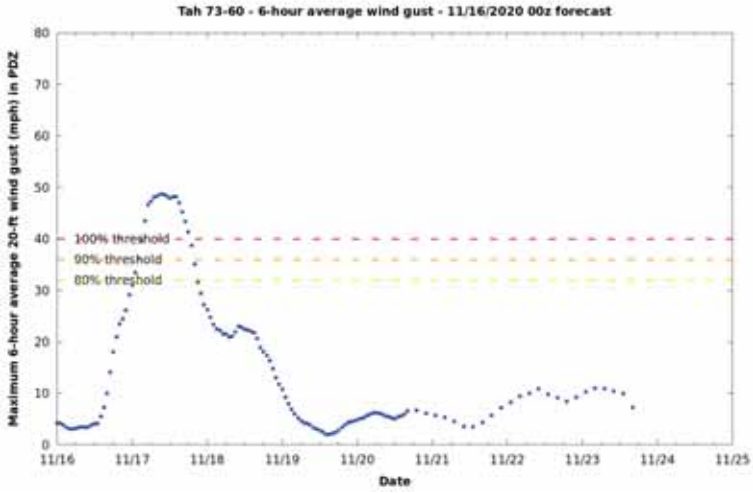
Tah 7300 r1



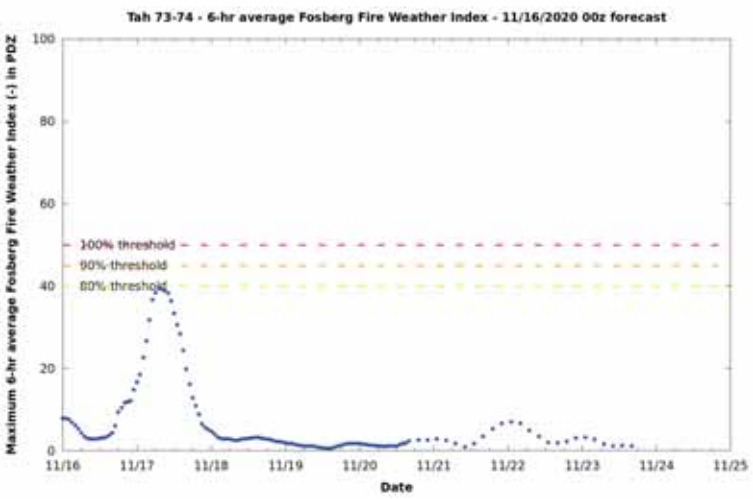


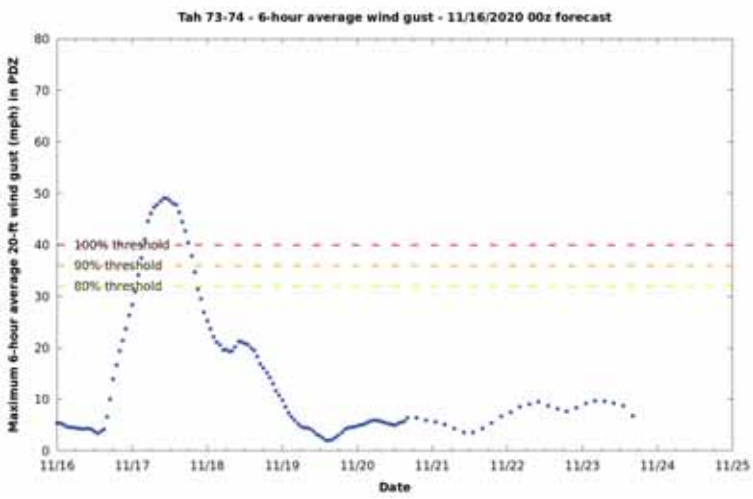
Tah 73-60



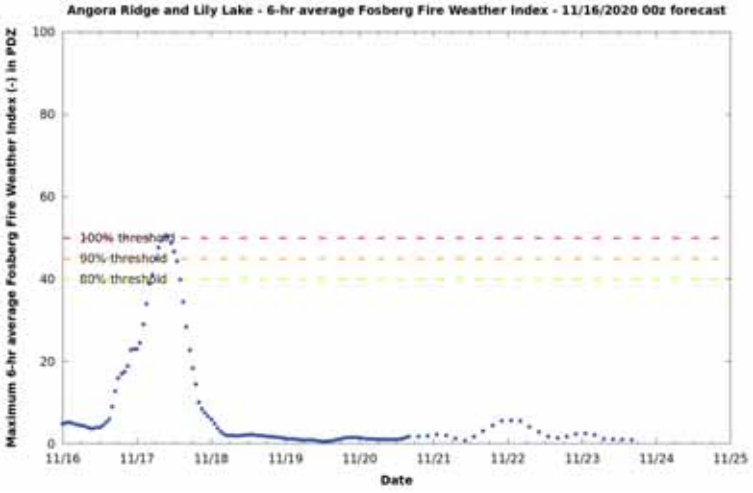


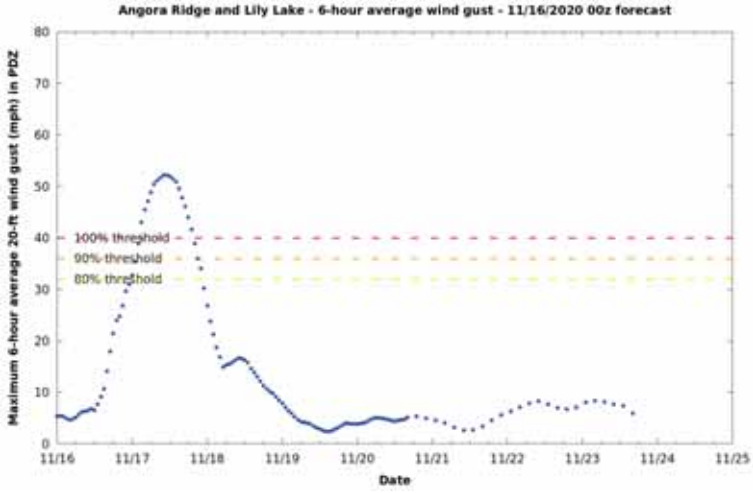
Tah 73-74



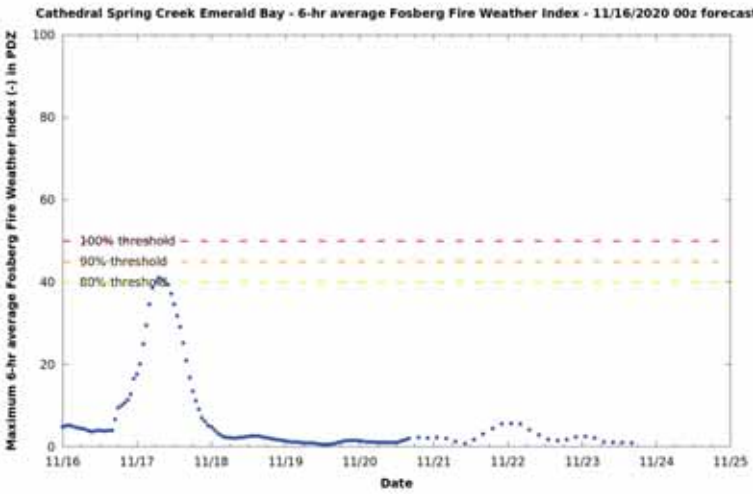


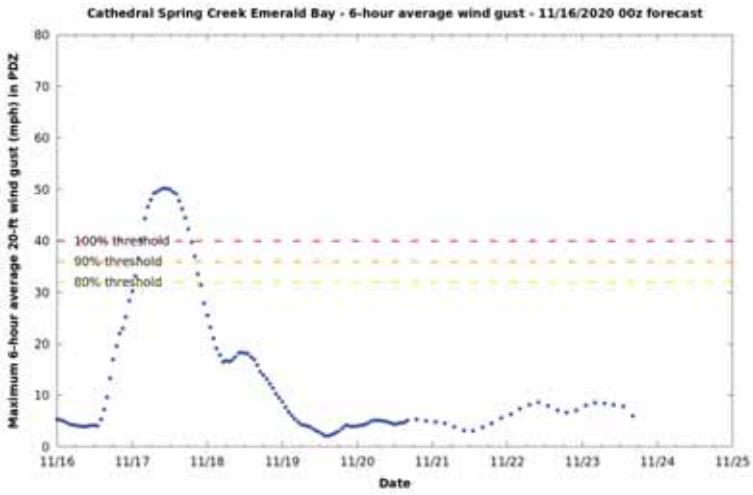
Angora Ridge and Lily Lake



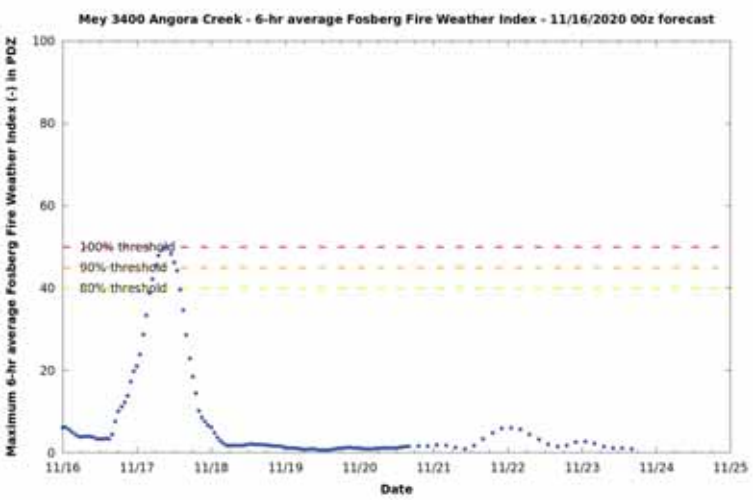


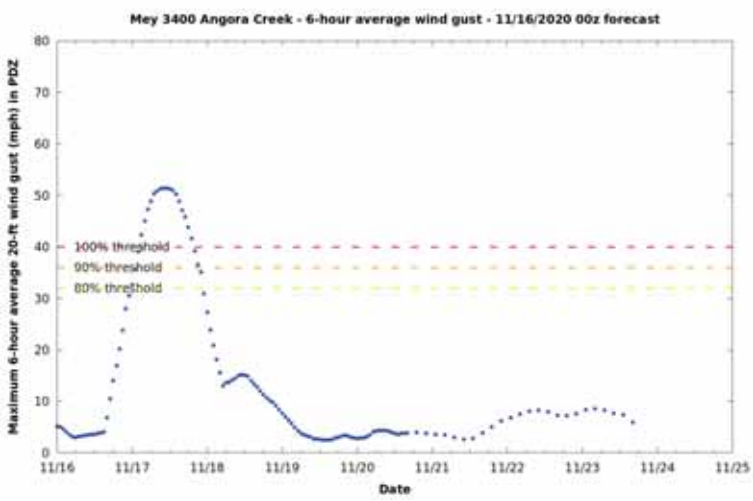
Cathedral Spring Creek Emerald Bay



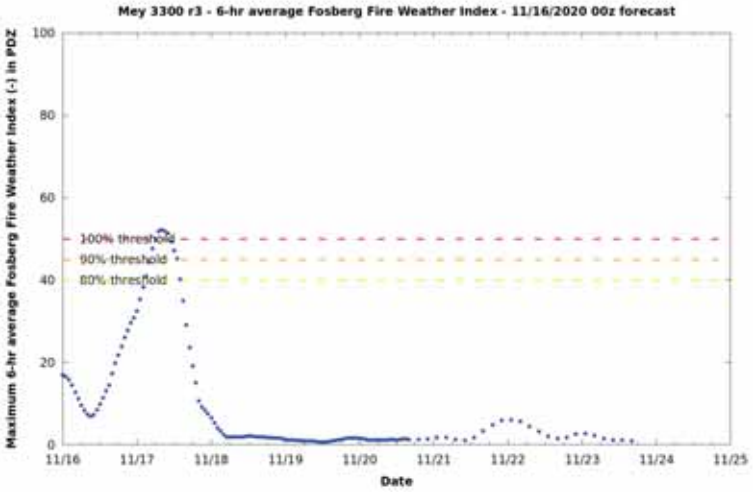


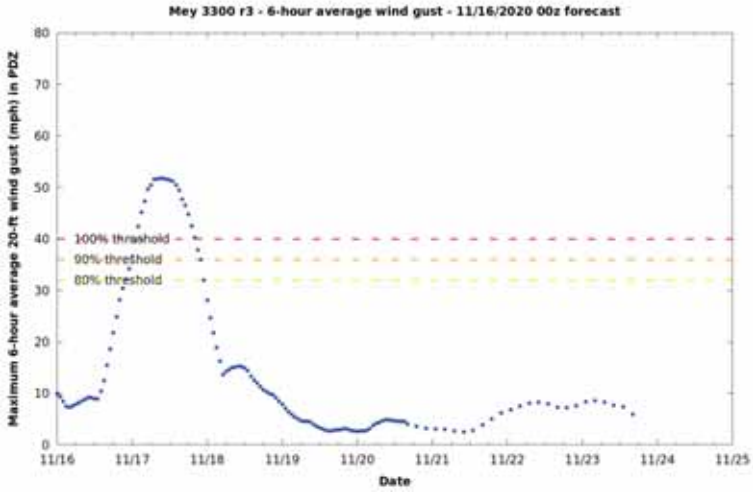
Mey 3400 Angora Creek



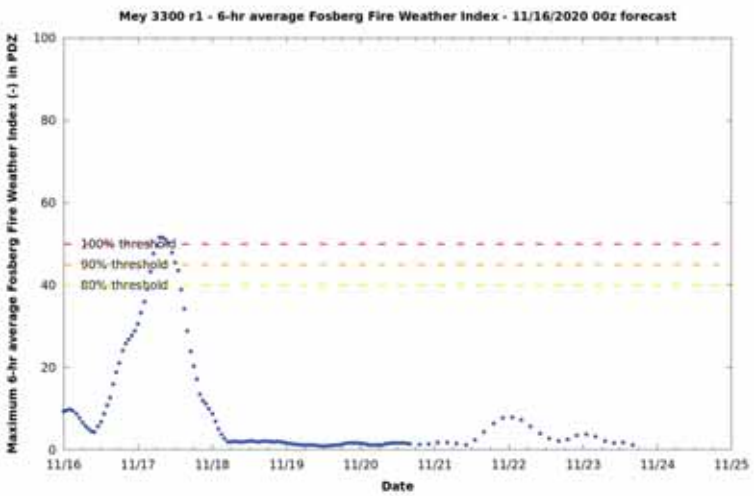


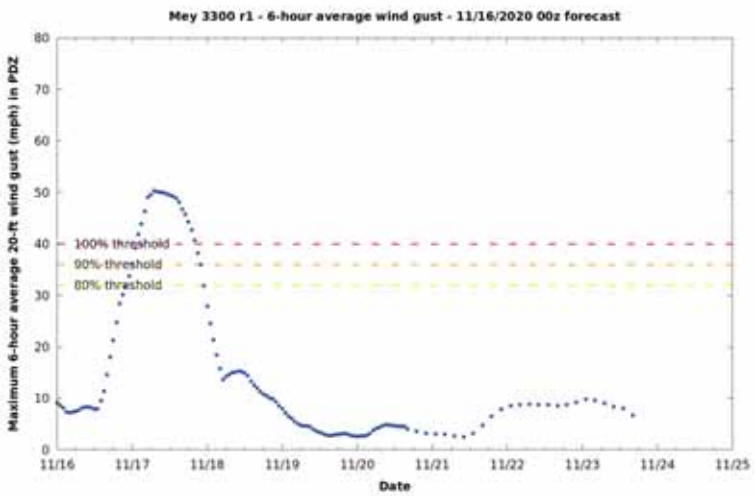
Mey 3300 r3



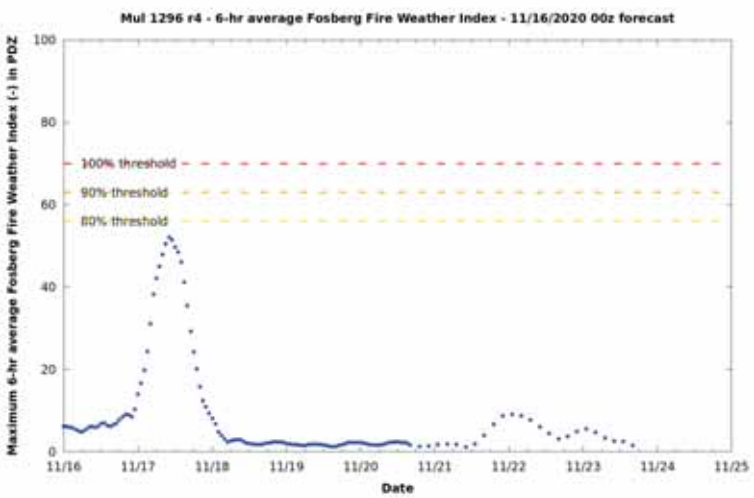


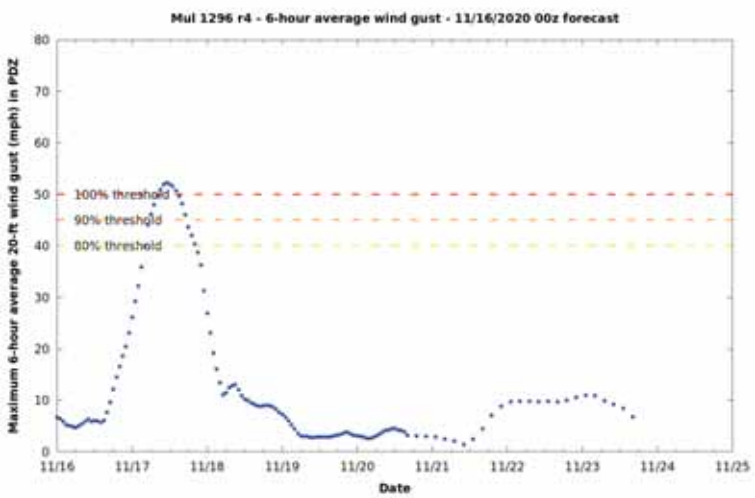
Mey 3300 r1



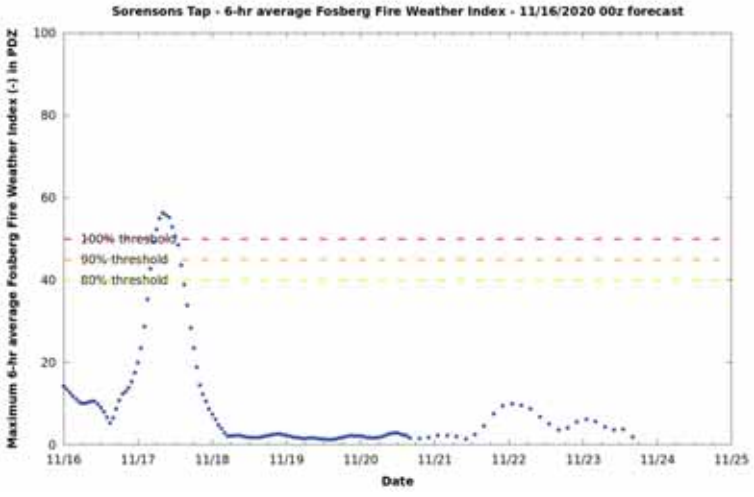


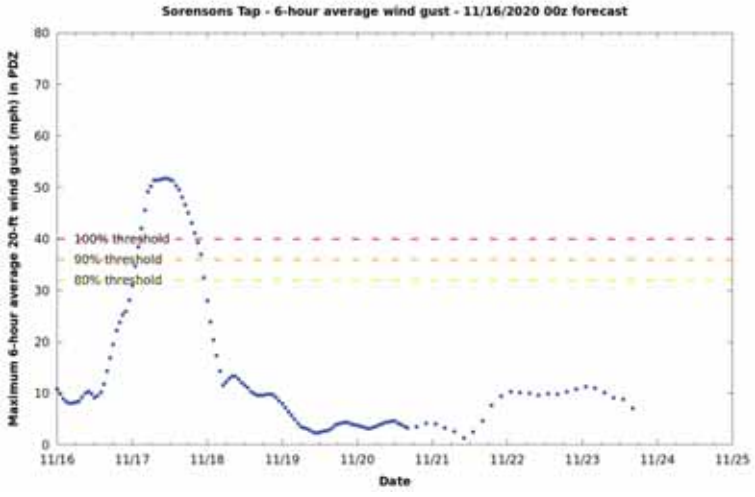
Mul 1296 r4



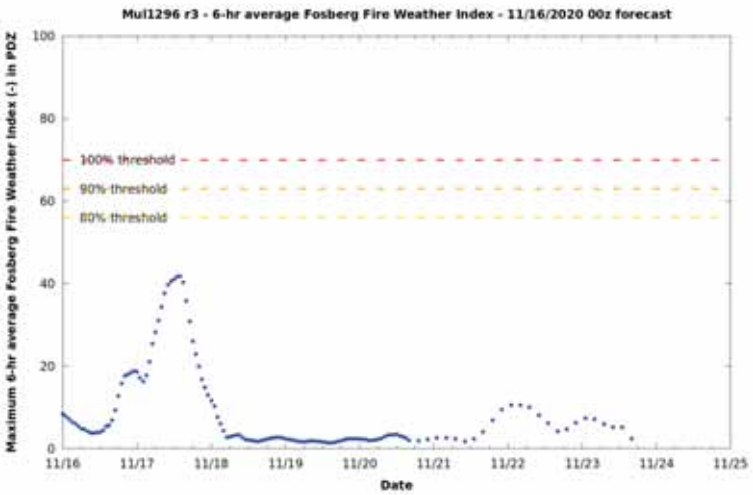


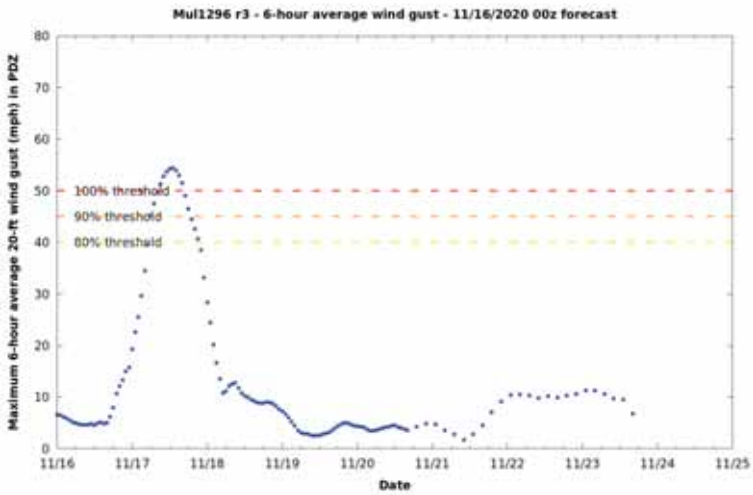
Sorensons Tap



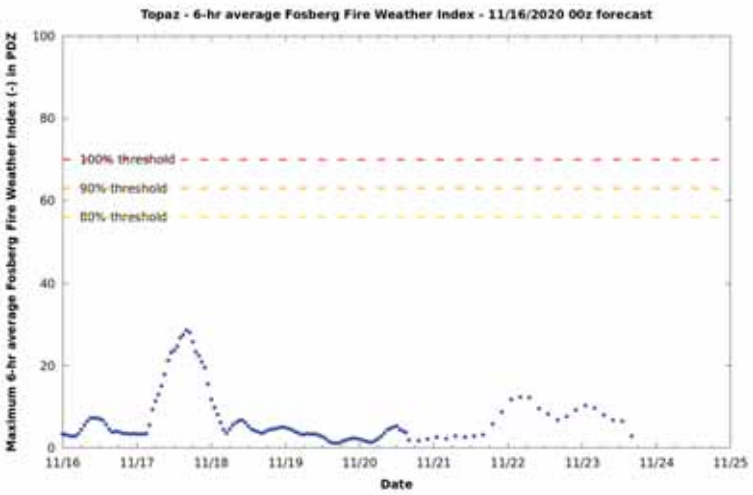


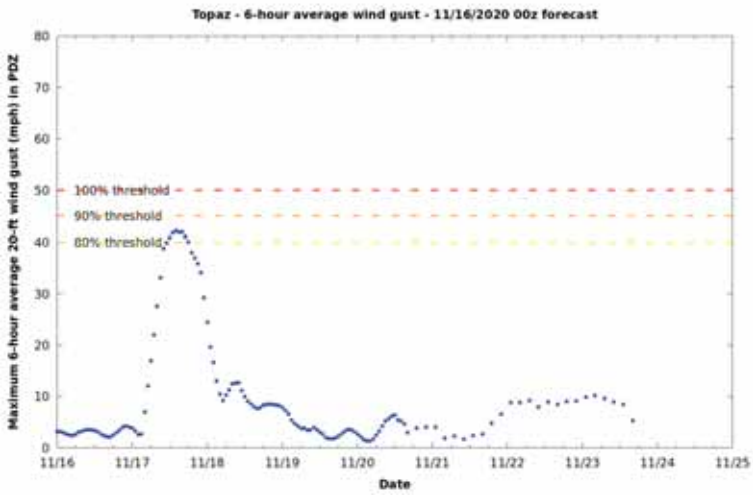
Mul 1296 r3



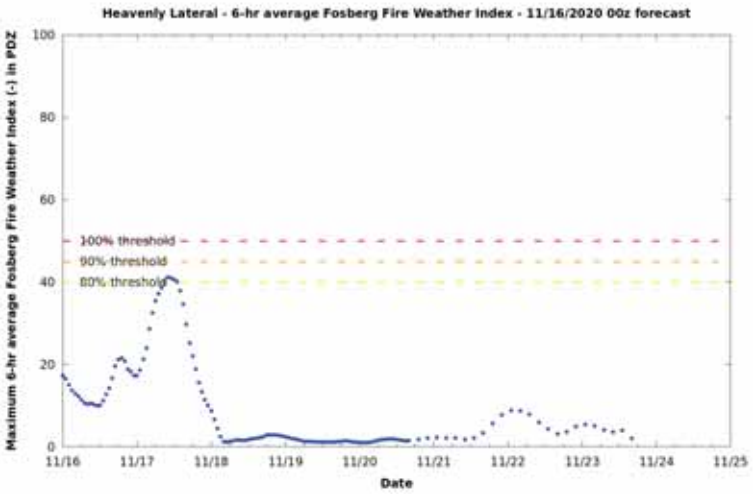


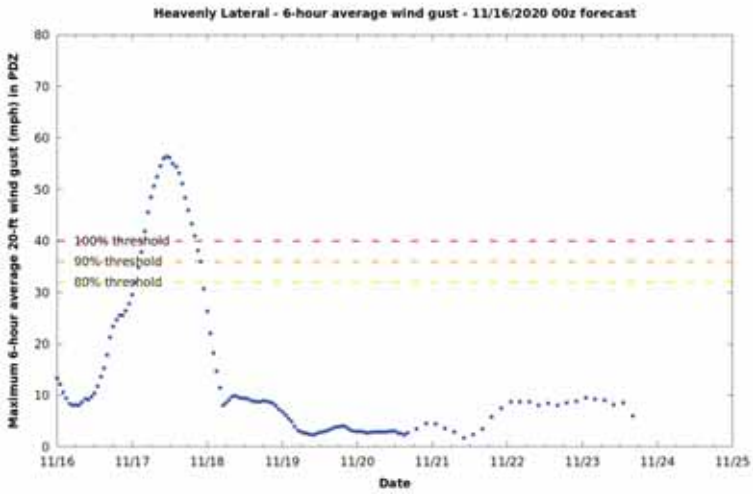
Topaz



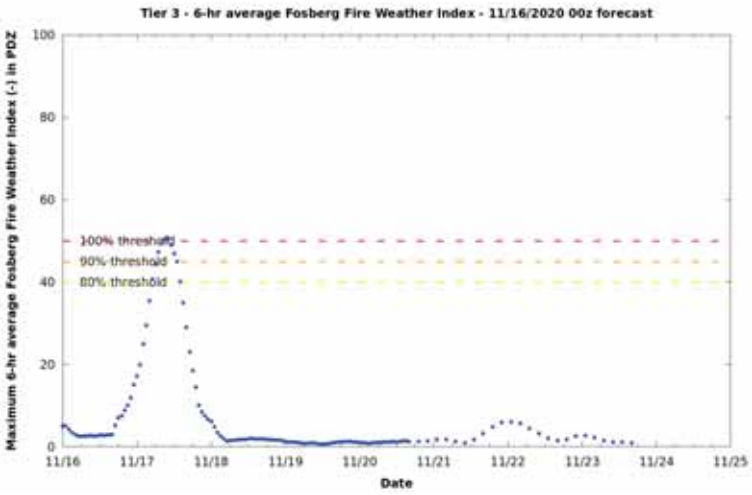


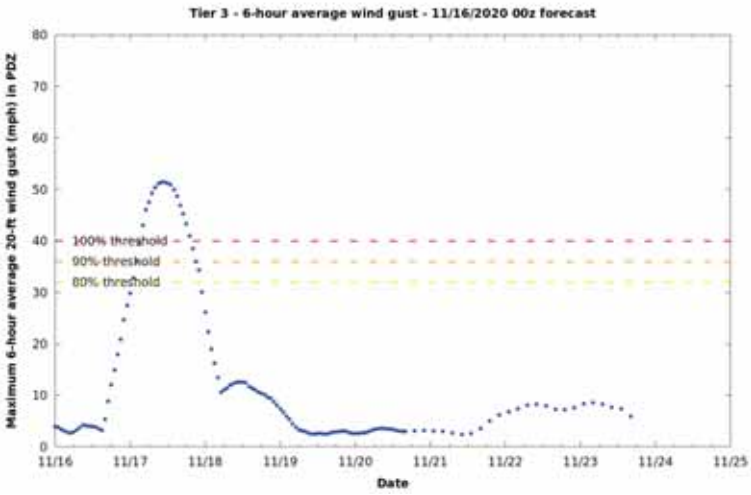
Heavenly Lateral



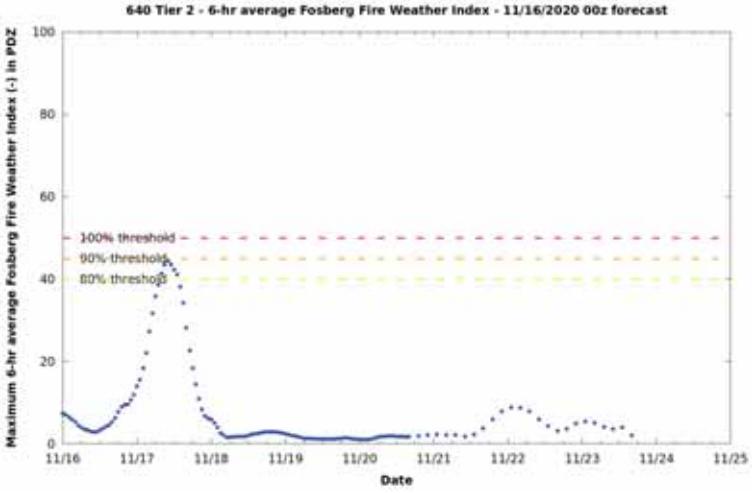


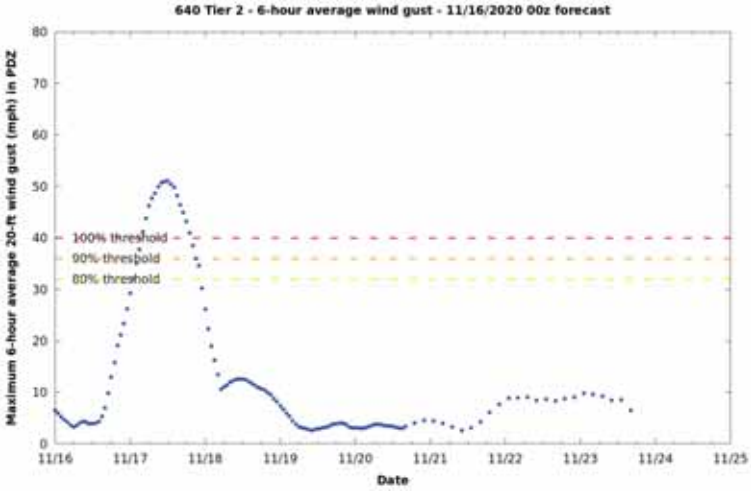
Tier 3



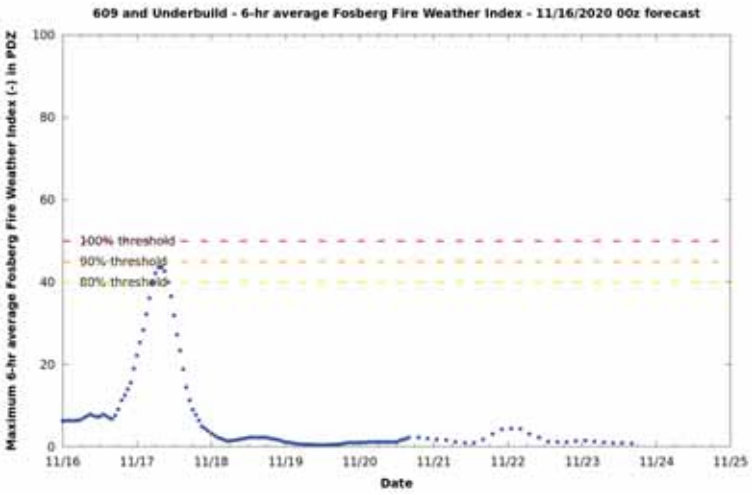


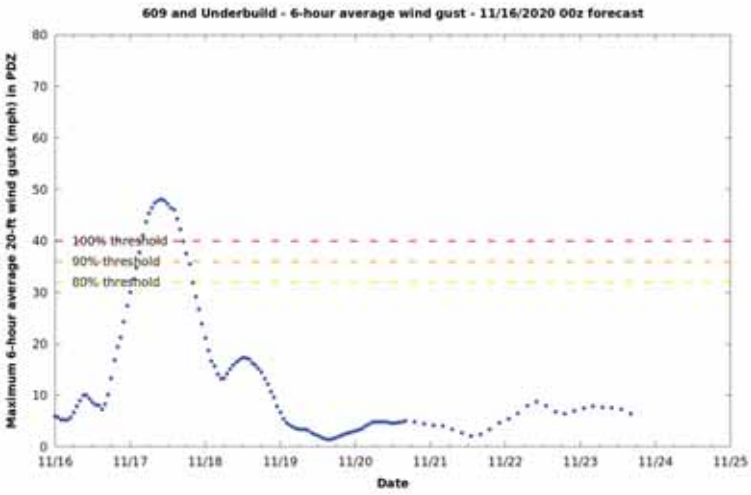
640 Tier 2



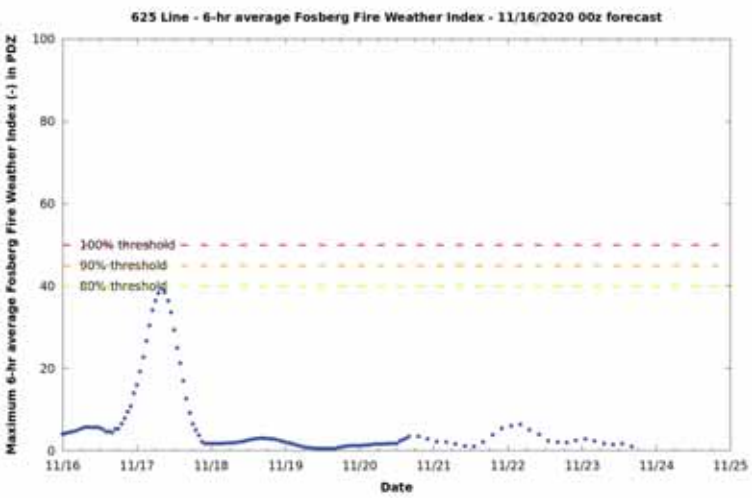


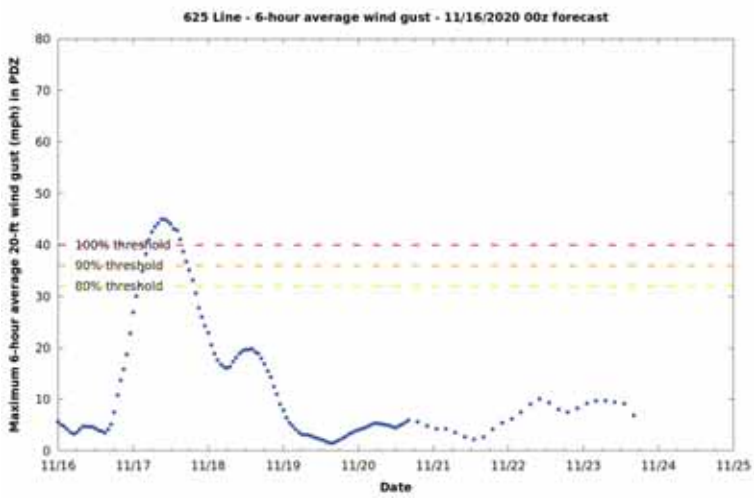
609 and Underbuild



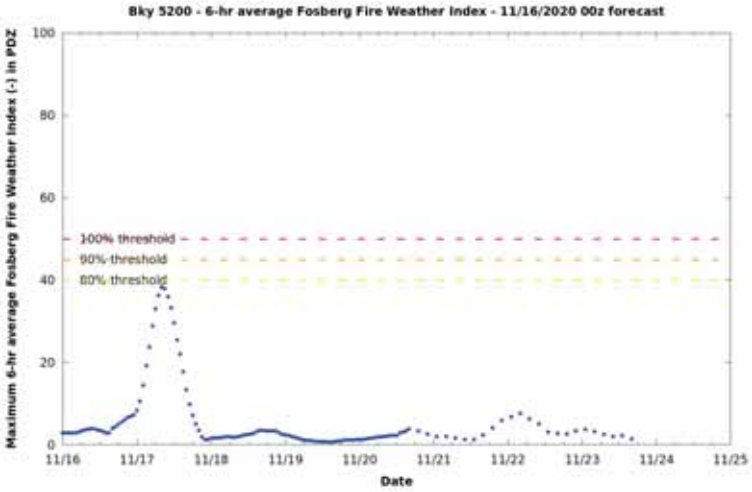


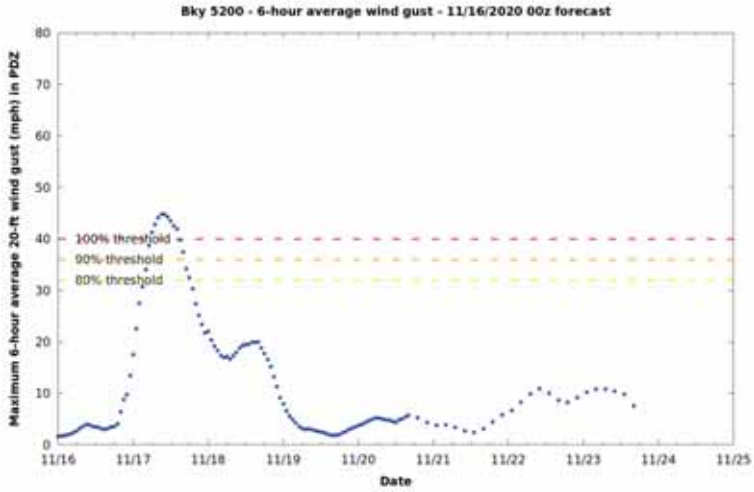
625 Line



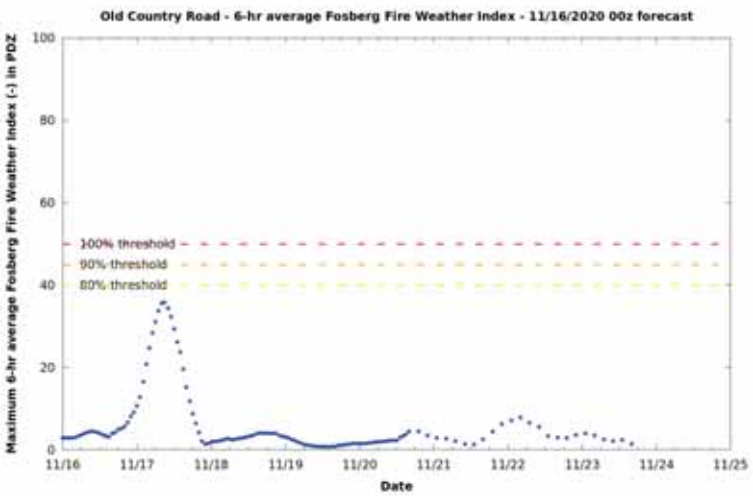


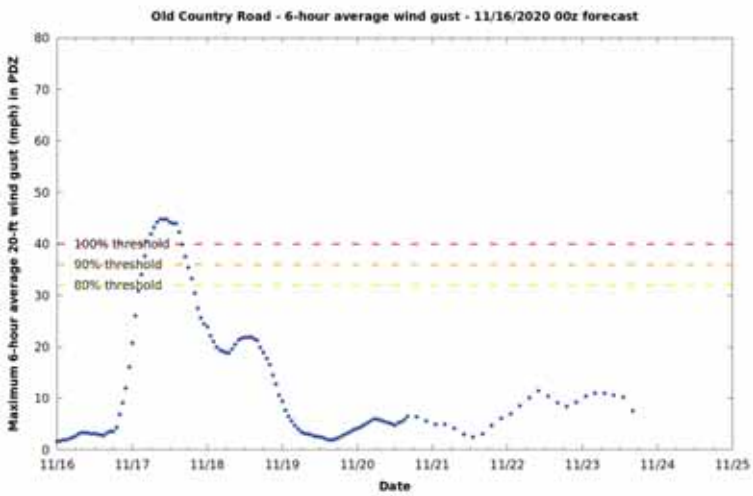
Bky 5200



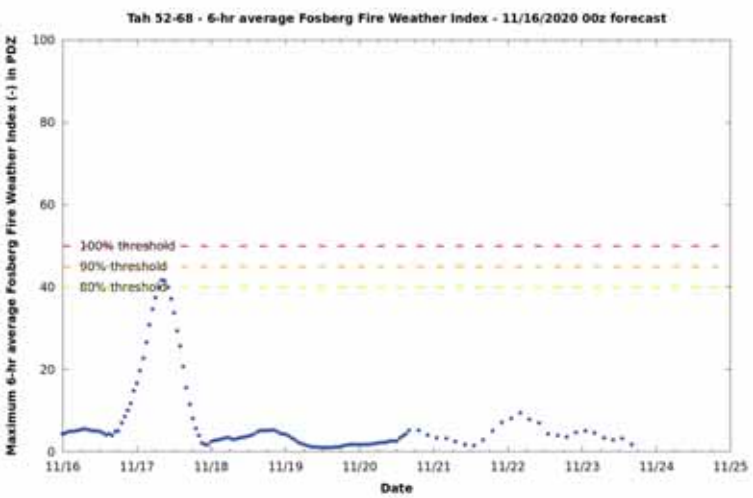


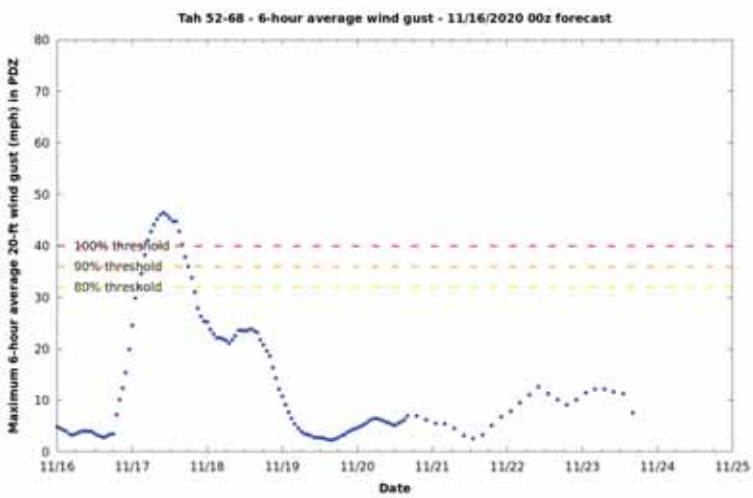
Old Country Road



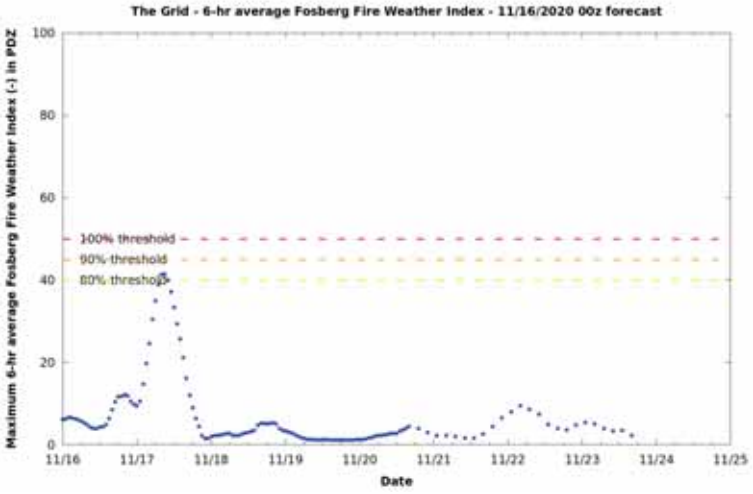


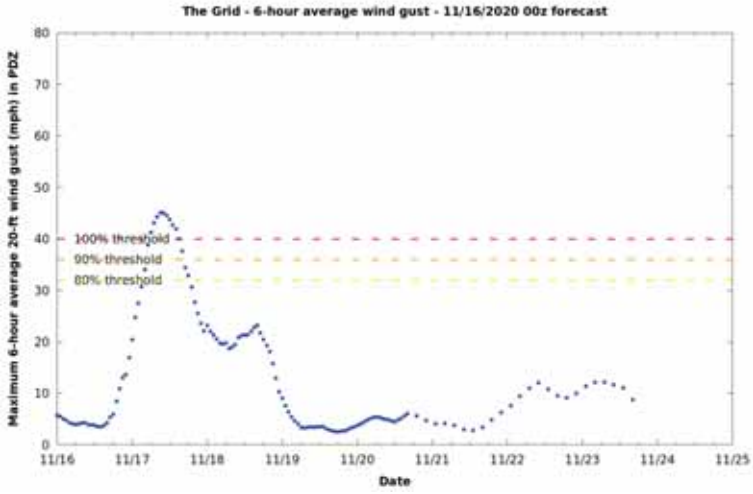
Tah 52-68



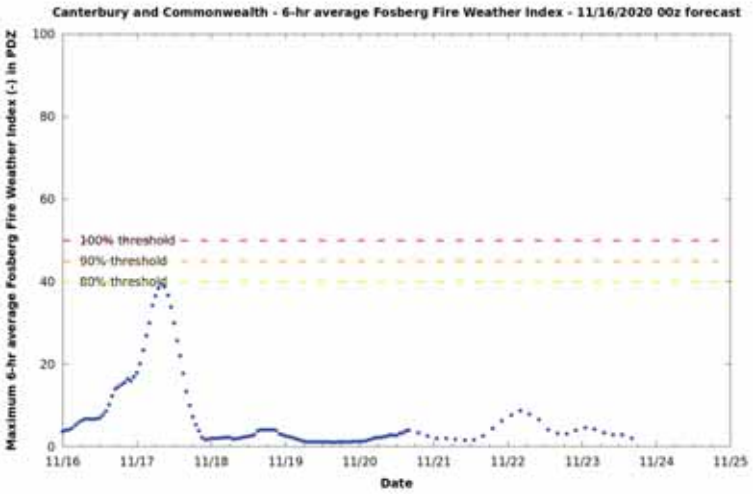


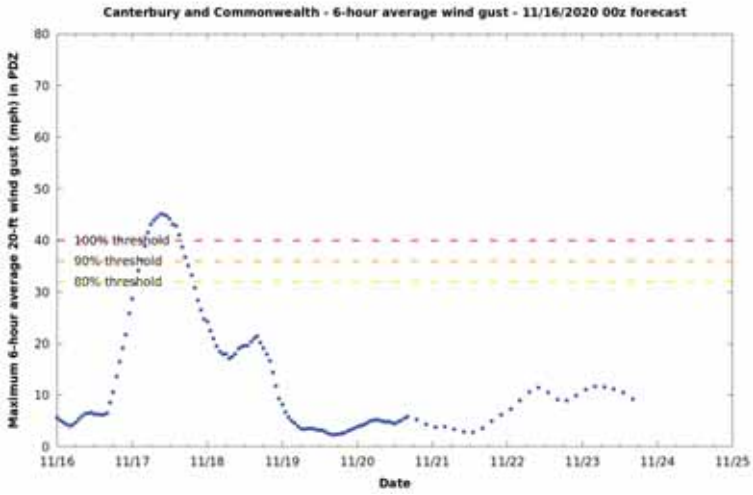
The Grid



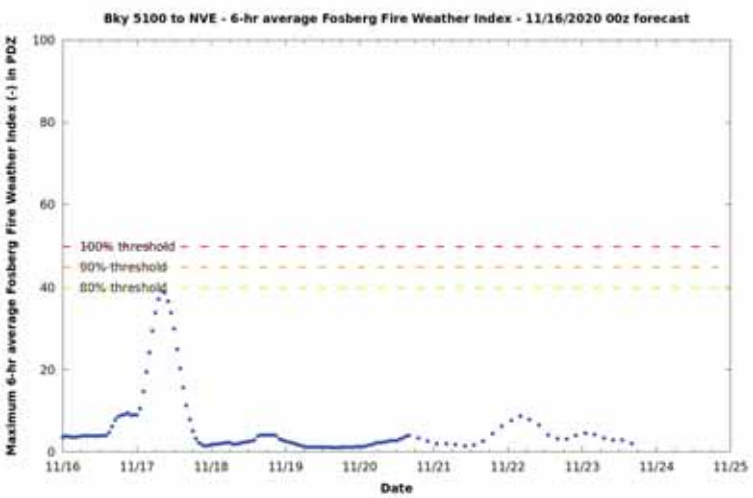


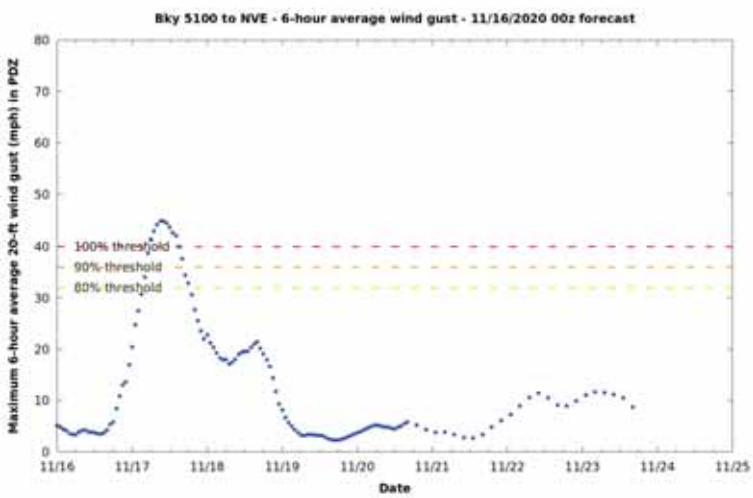
Canterbuy and Commonwealth



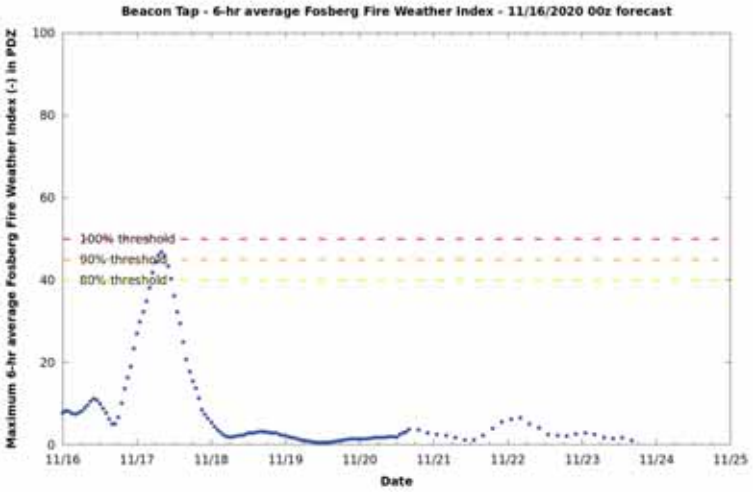


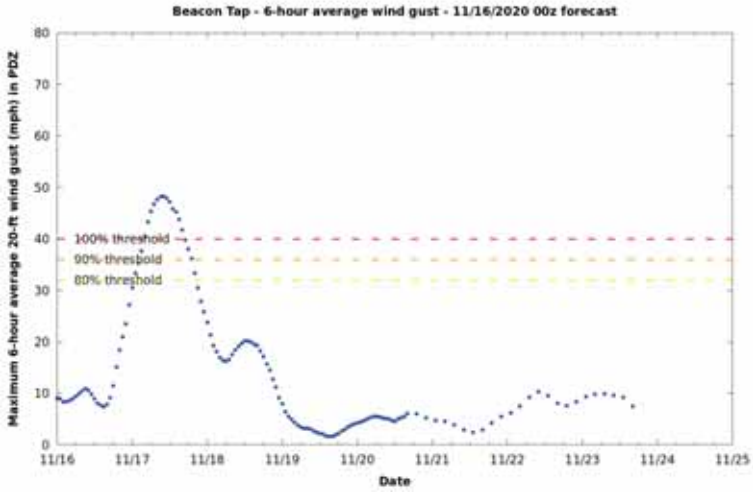
Bky 5100 to NVE



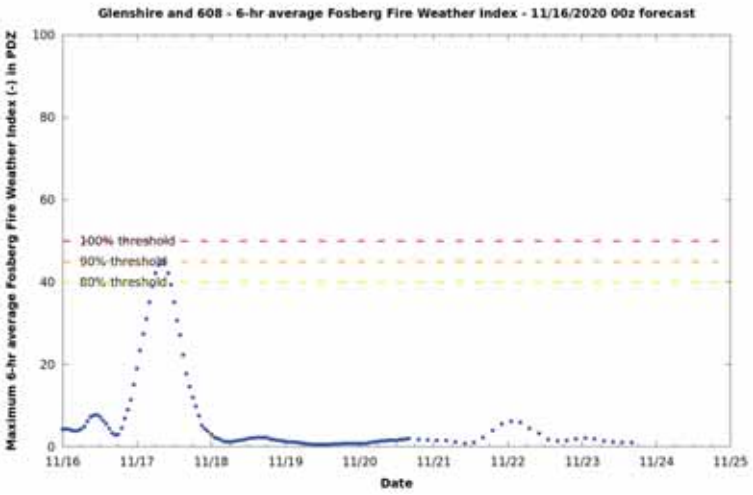


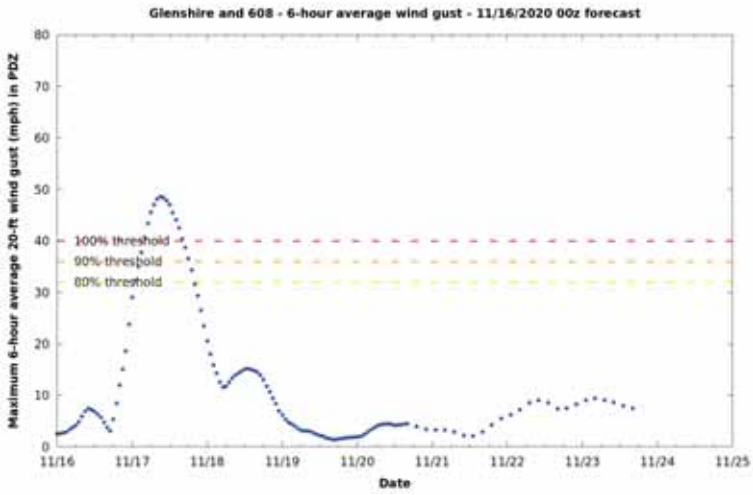
Beacon Tap



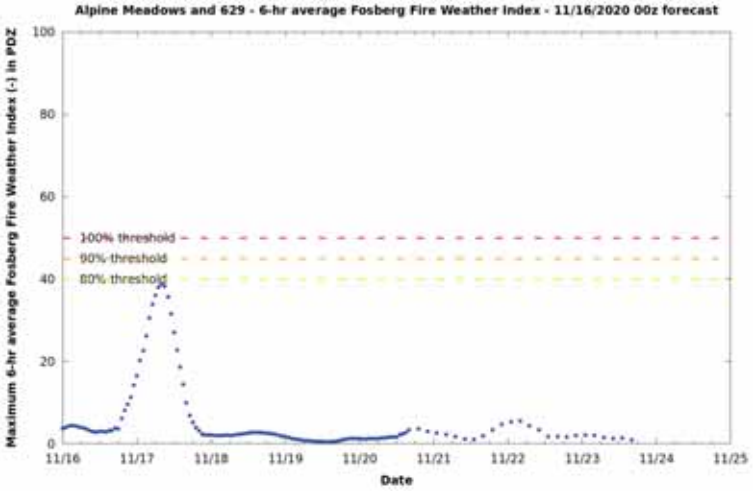


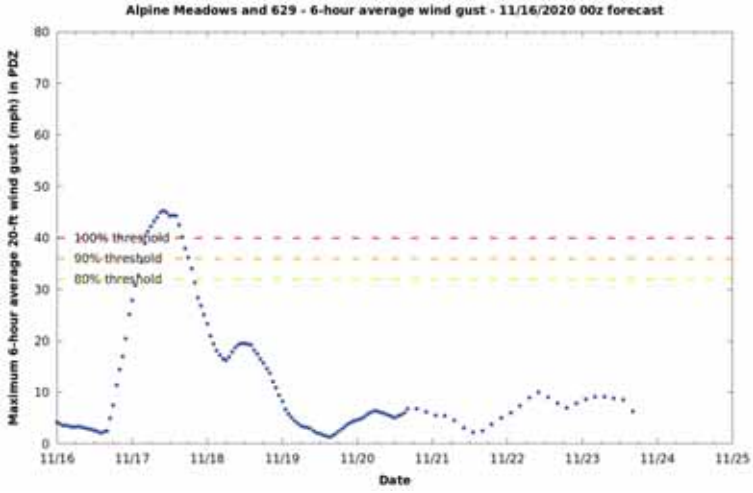
Glenshire and 608



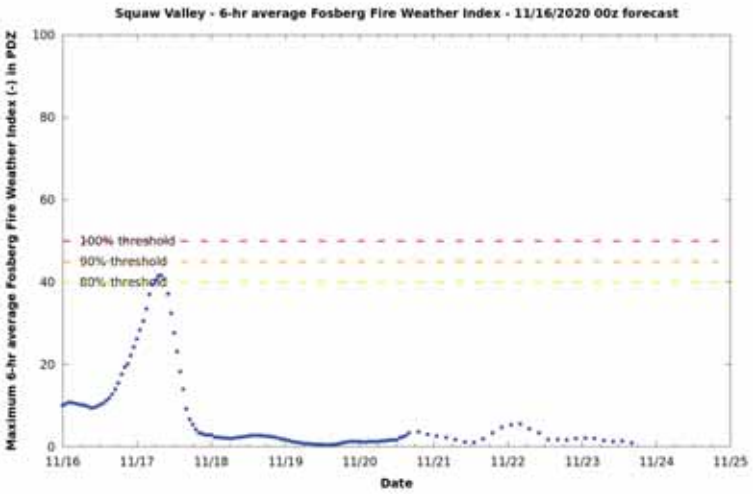


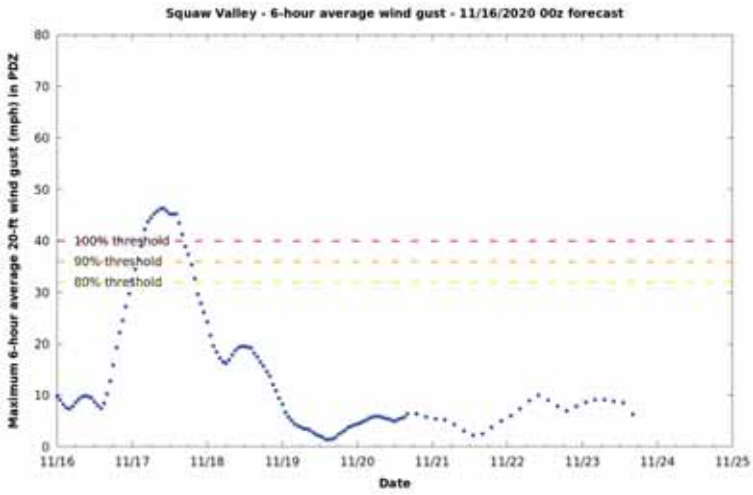
Alpine Meadows and 629



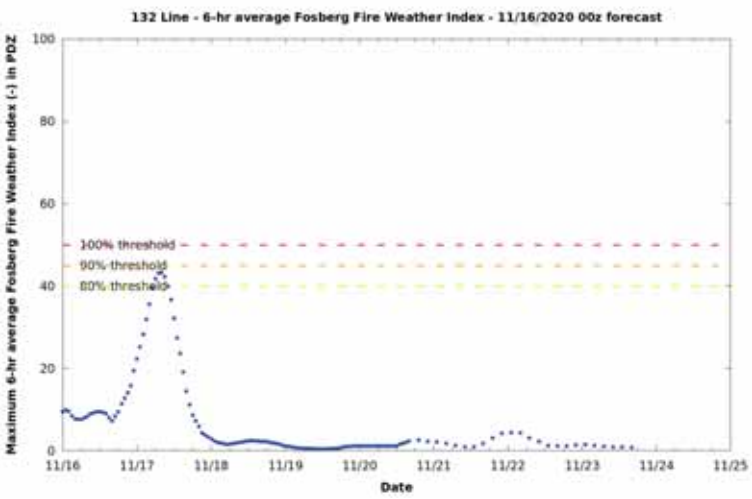


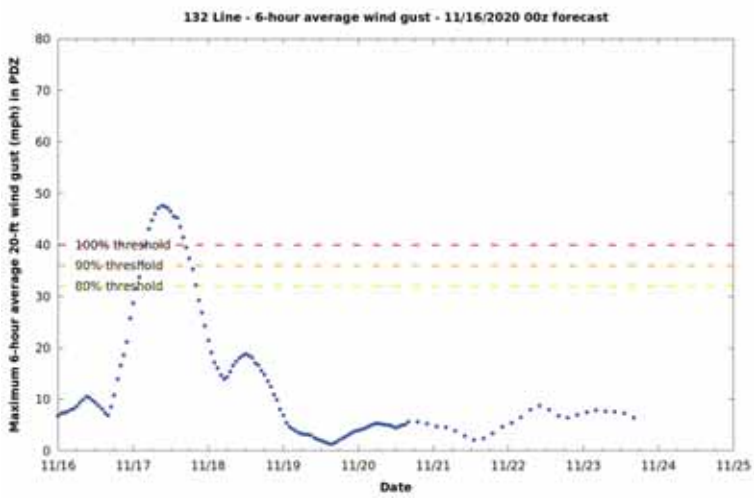
Squaw Valley



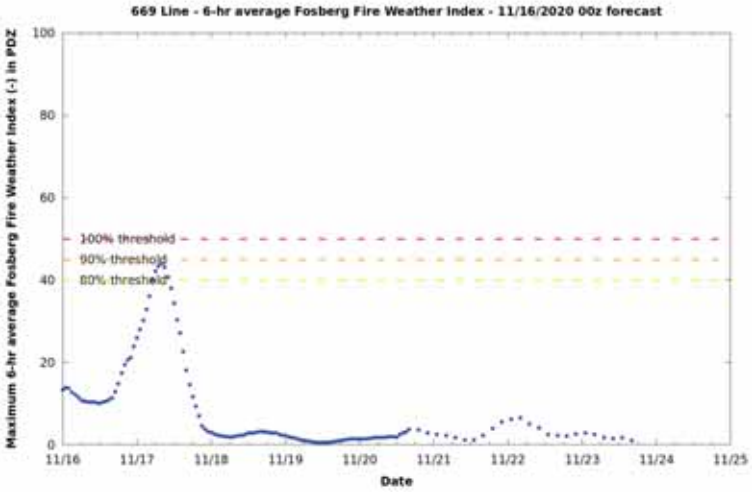


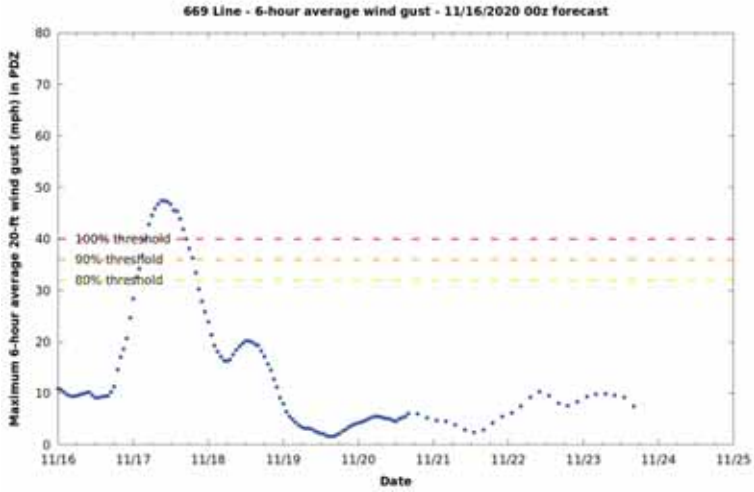
132 Line



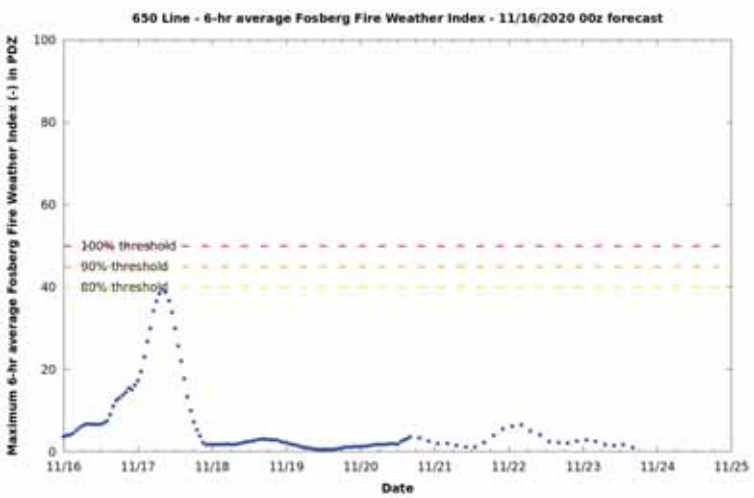


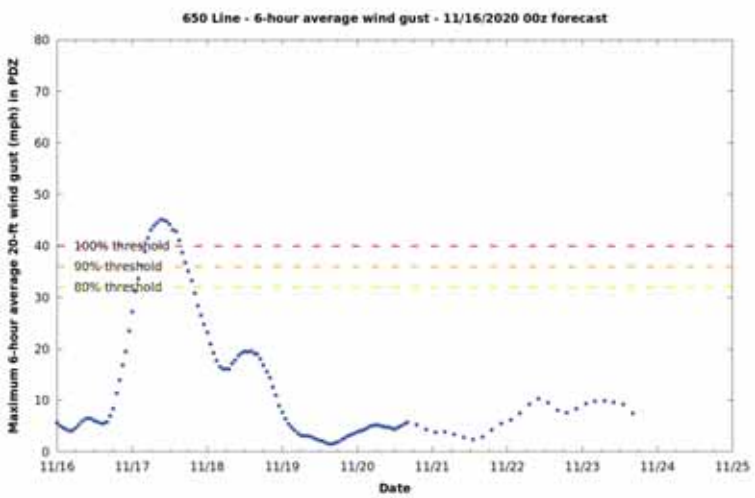
669 Line



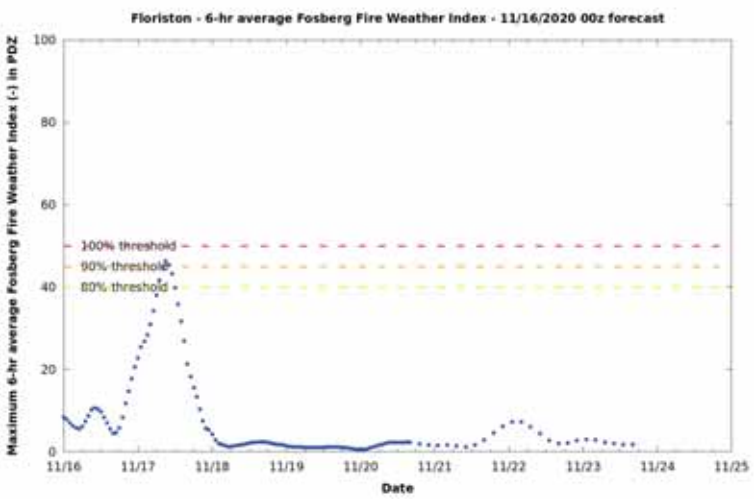


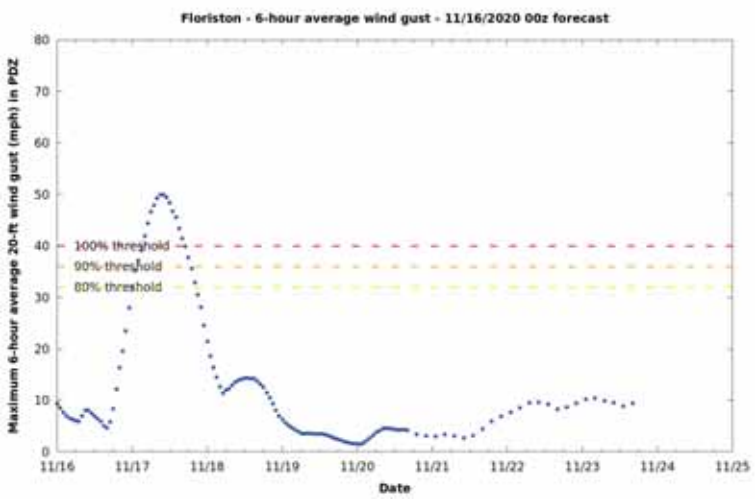
650 Line



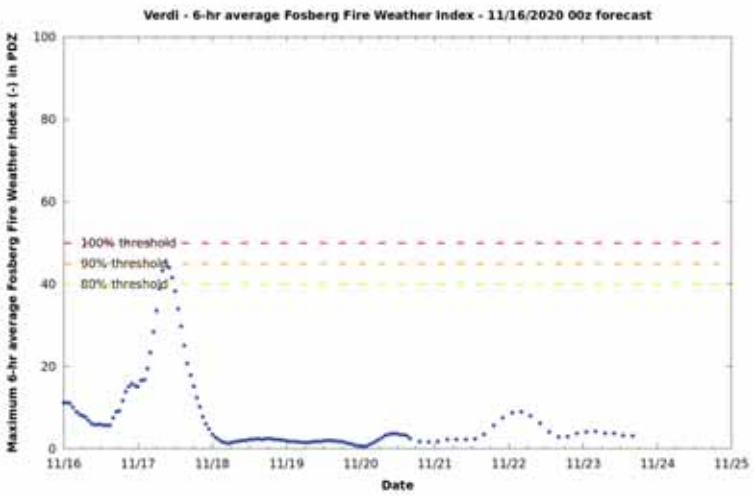


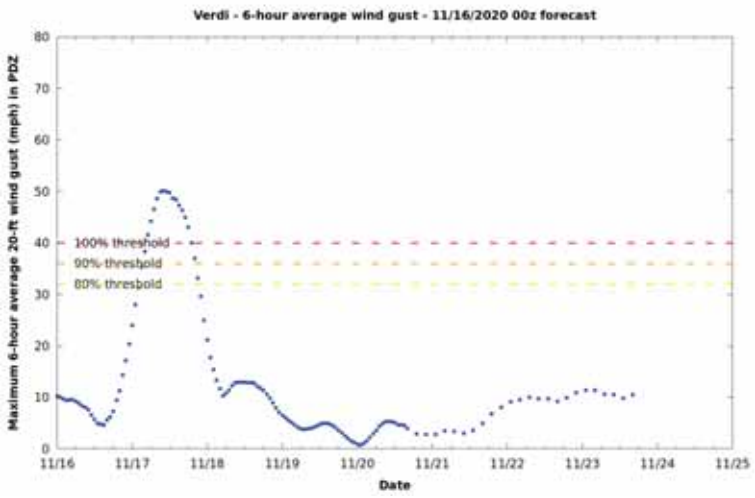
Floriston



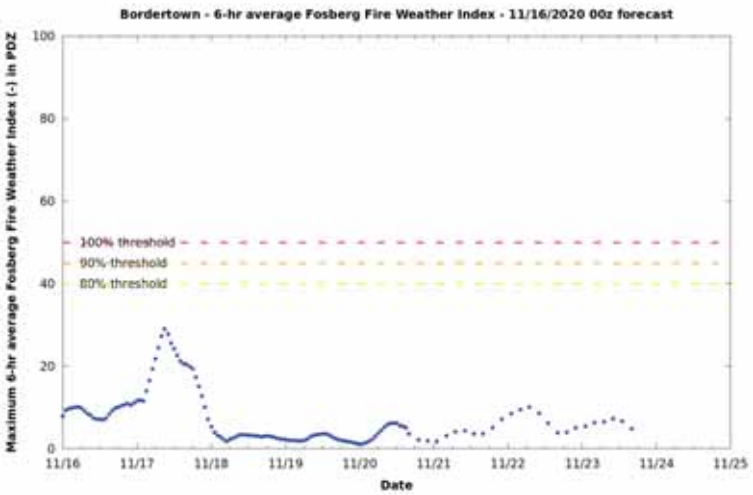


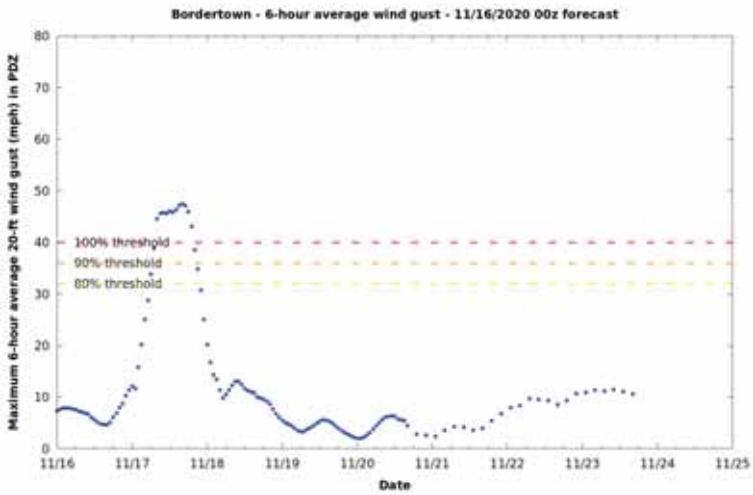
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/16/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/16/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/16/20 - 11/22/20

Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

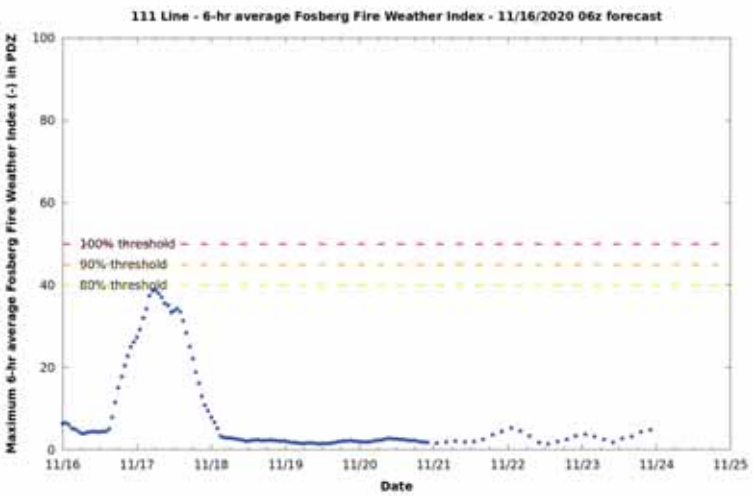
Liberty Utilities Energy Release Component Forecast for 11/16/20 - 11/22/20

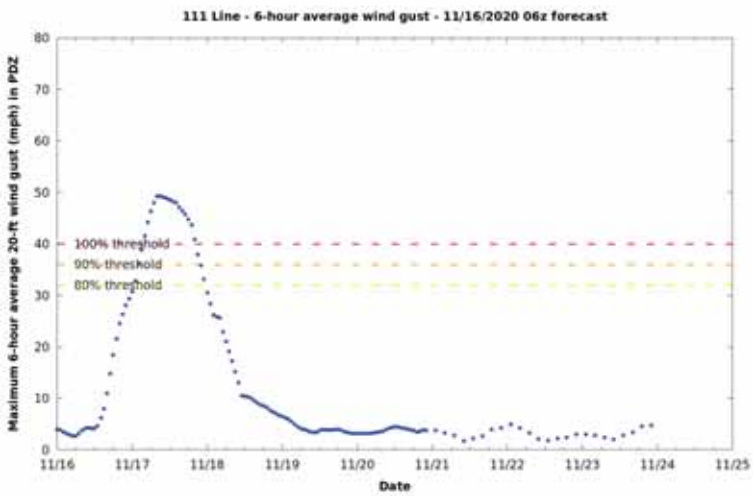
Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	47.6	49.4	47.7	33.9	33.0	34.5	36.9
Sierra Brooks	50.9	56.8	54.6	40.3	42.4	45.2	49.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.3	1.4	1.2	0.7	0.7	0.6	0.6
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	23.8	27.2	24.3	15.9	17.7	19.6	20.4
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	43.0	48.3	43.8	27.6	28.9	31.5	32.5
Topaz	53.4	57.9	54.1	36.4	39.2	40.9	42.2
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	3.4	3.8	3.4	2.1	1.9	1.9	1.8
Old Country Road	29.7	32.0	26.3	16.6	14.9	14.3	13.7
Tah 52-68	20.1	21.7	17.9	11.2	10.2	9.7	9.3
The Grid	8.3	9.5	8.1	4.6	4.3	3.8	3.6
Canterbury and Commonwealth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5100 to NVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
650 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Floriston	24.1	24.1	23.0	15.4	15.6	15.5	16.8
Verdi	51.1	51.1	47.8	31.7	34.6	36.6	41.1
Bordertown	54.6	54.6	52.1	35.8	37.8	40.5	44.7

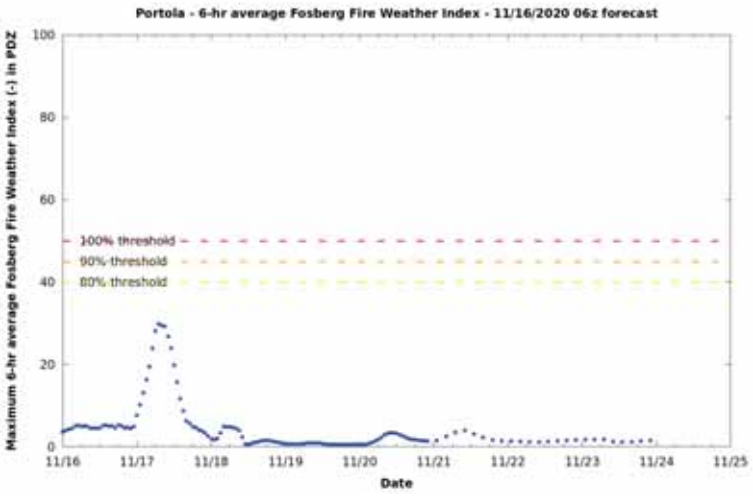
Liberty Utilities Fire Weather Summary Plots - 11/16/2020 06z forecast

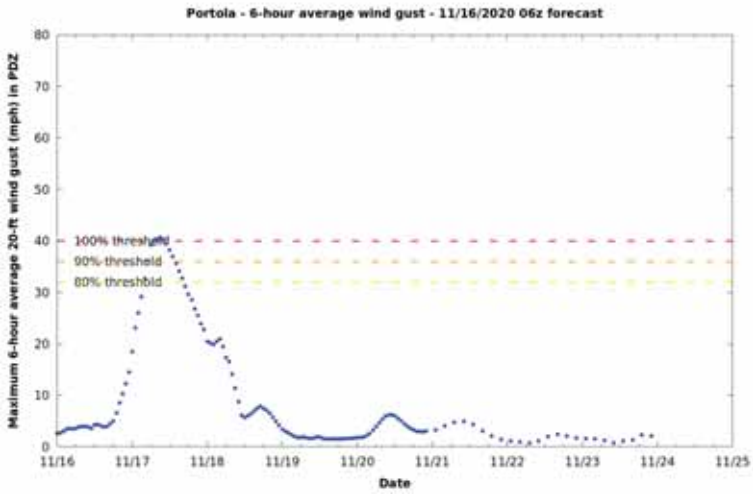
111 Line



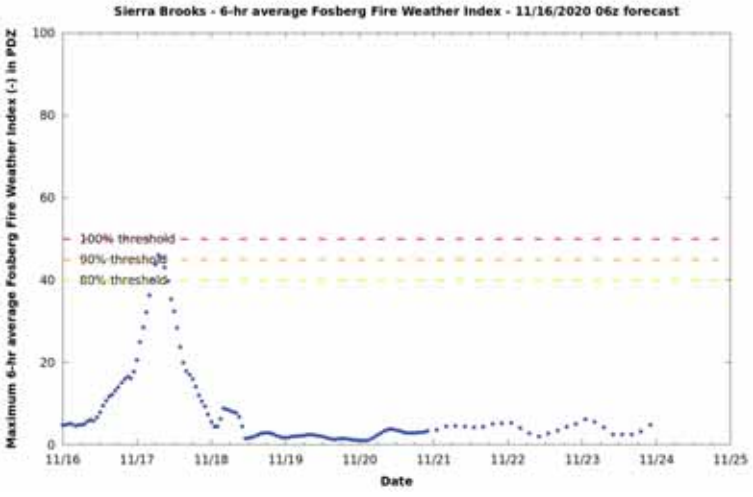


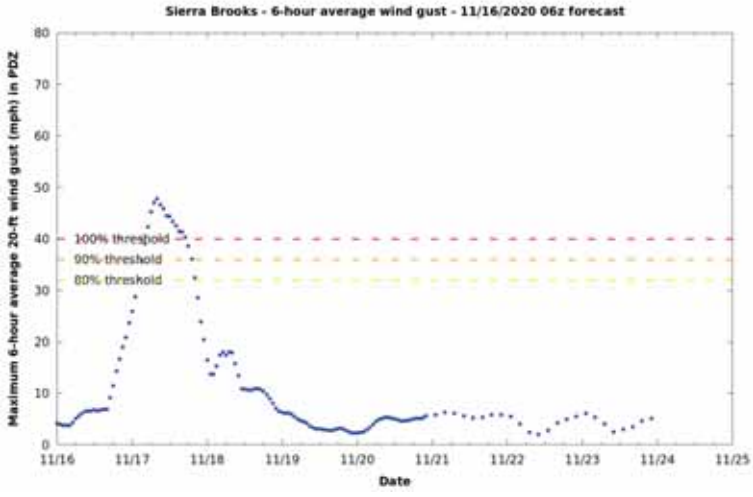
Portola



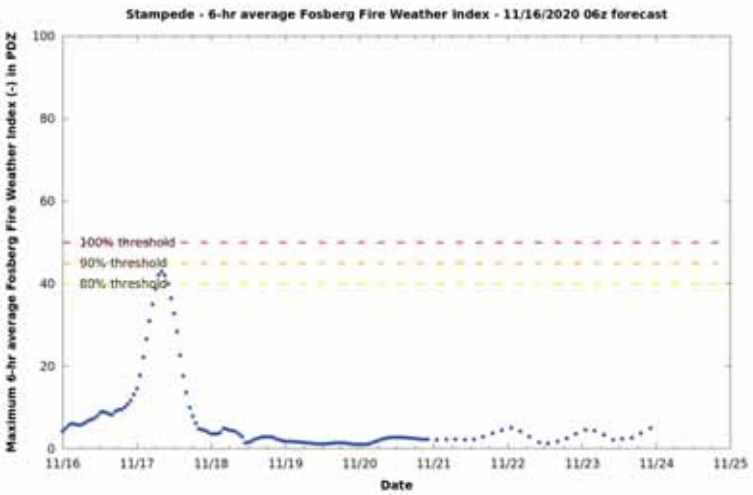


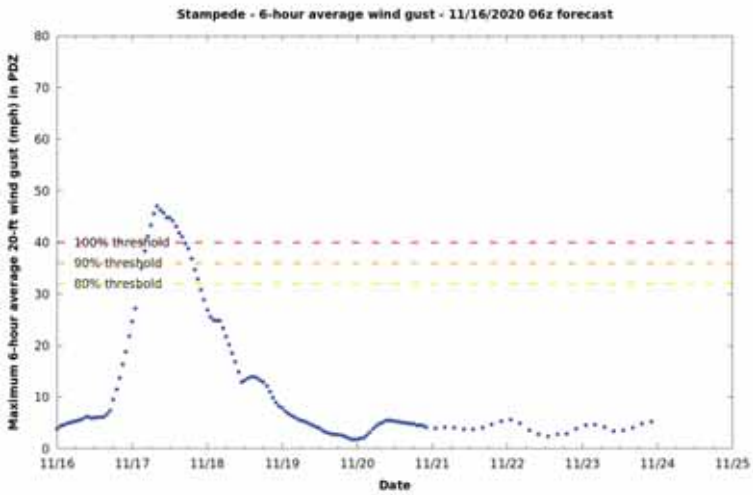
Sierra Brooks



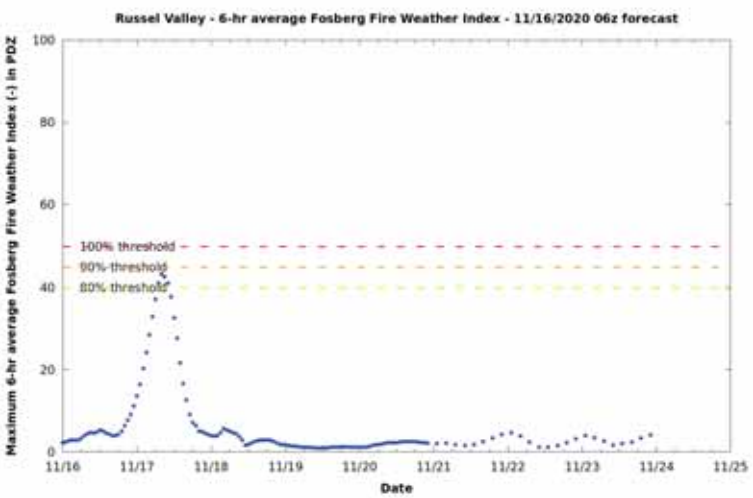


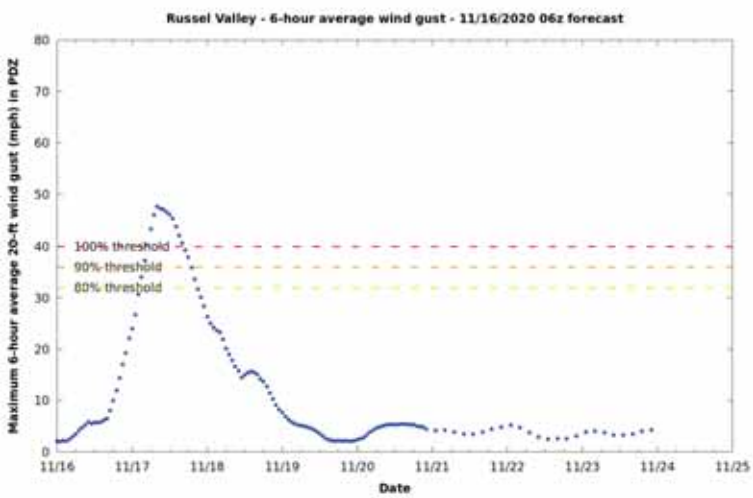
Stampede



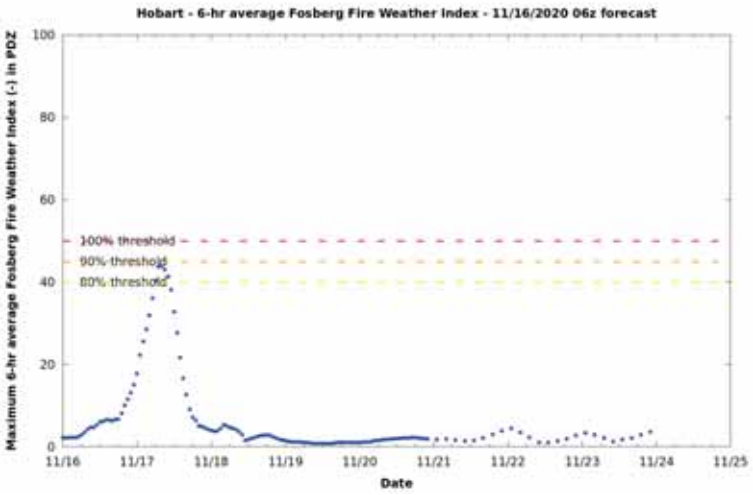


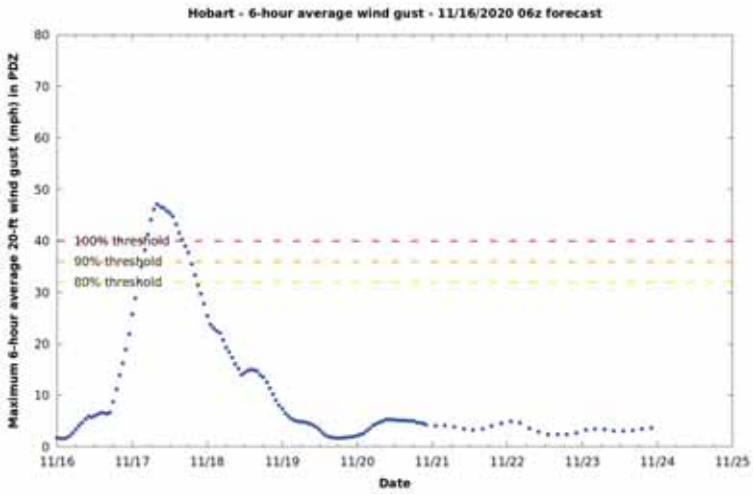
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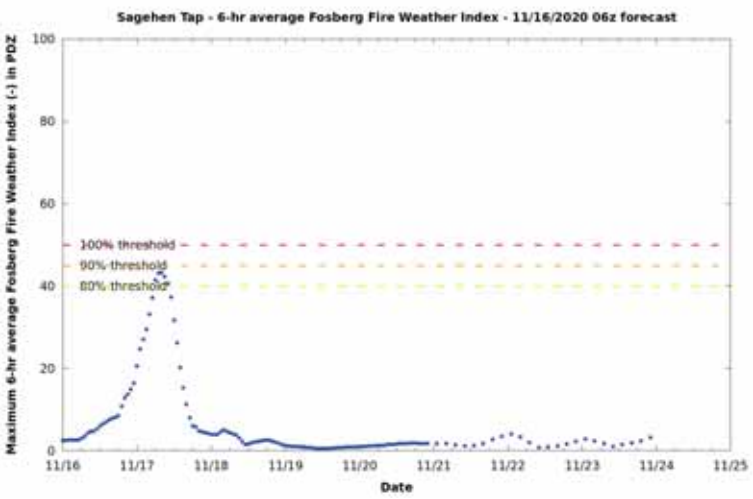


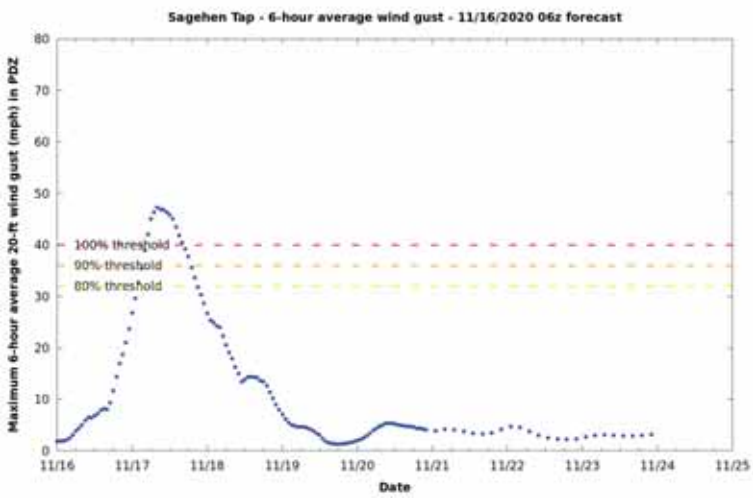
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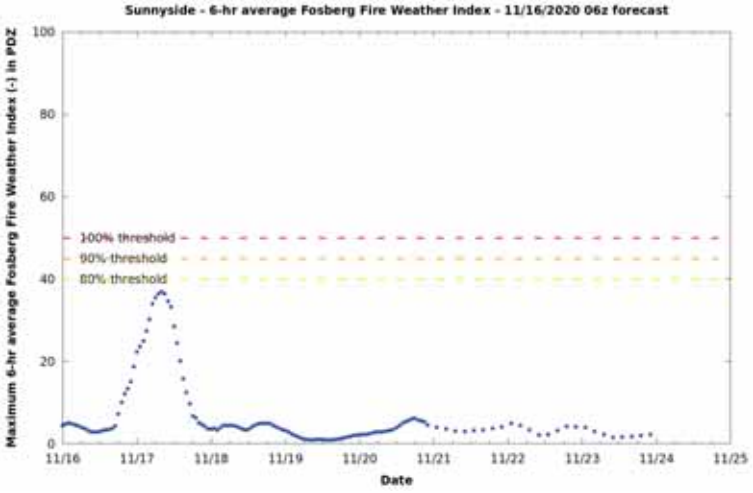


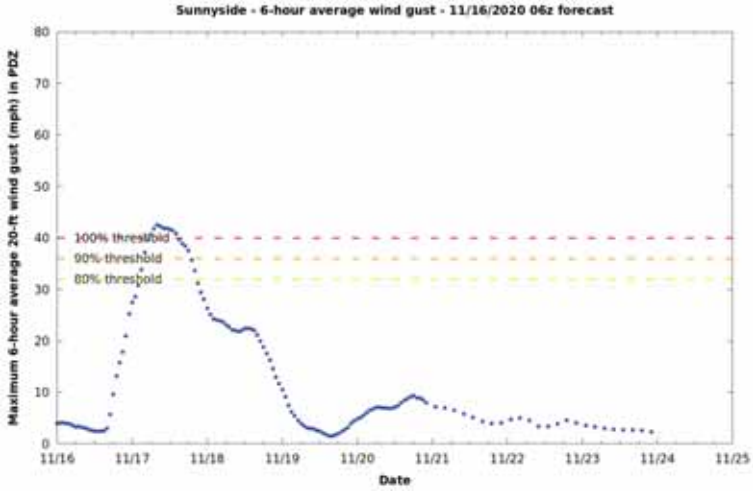
Sagehen tap



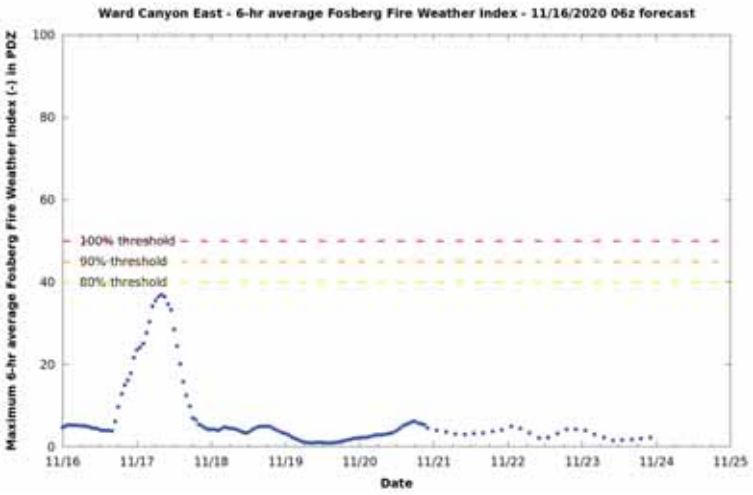


Sunnyside



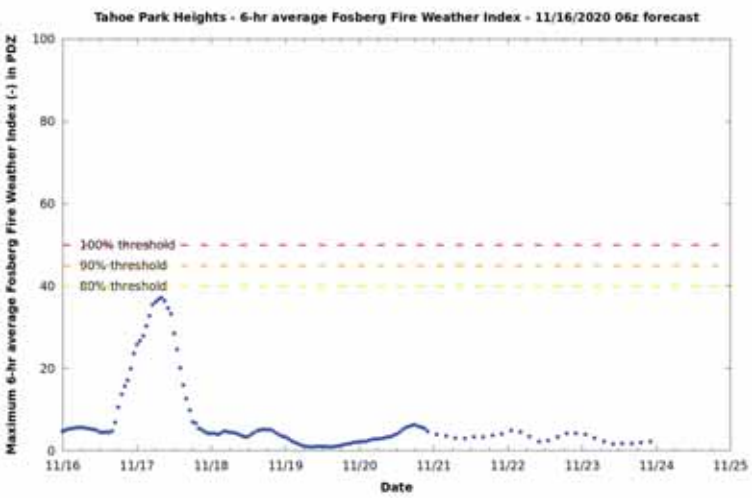


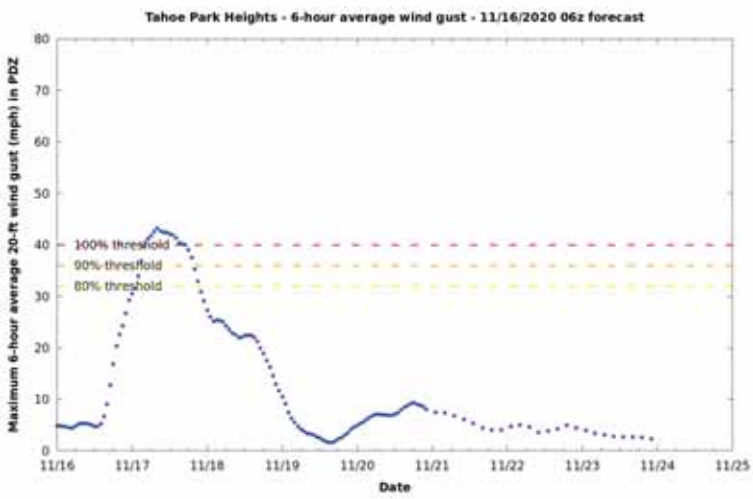
Ward Canyon East



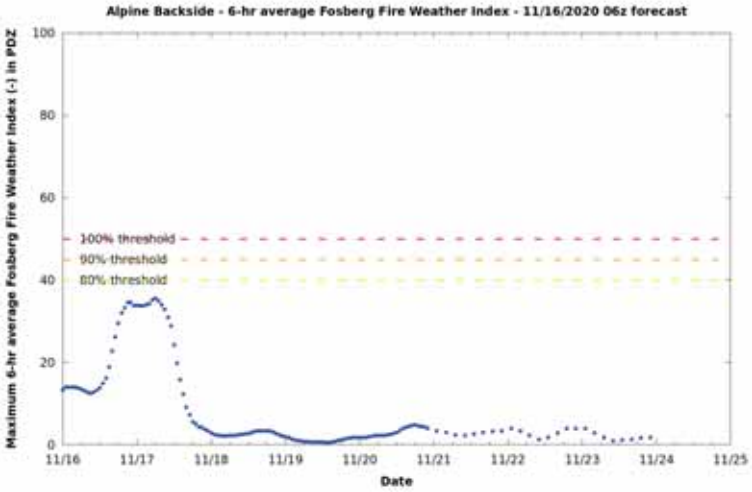


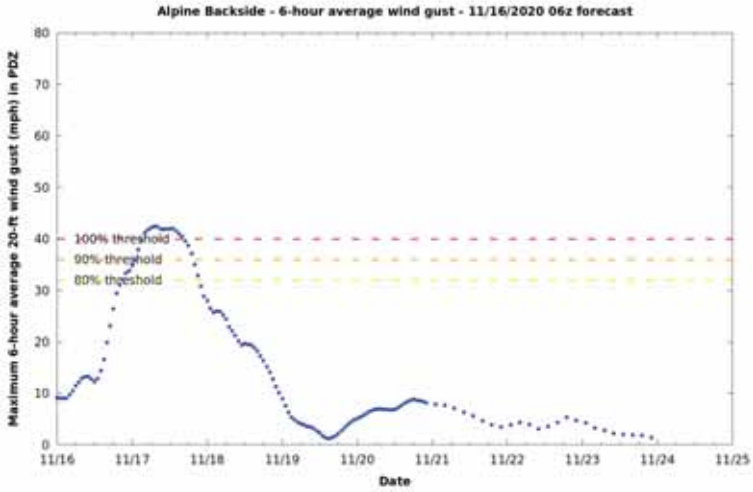
Tahoe Park Heights



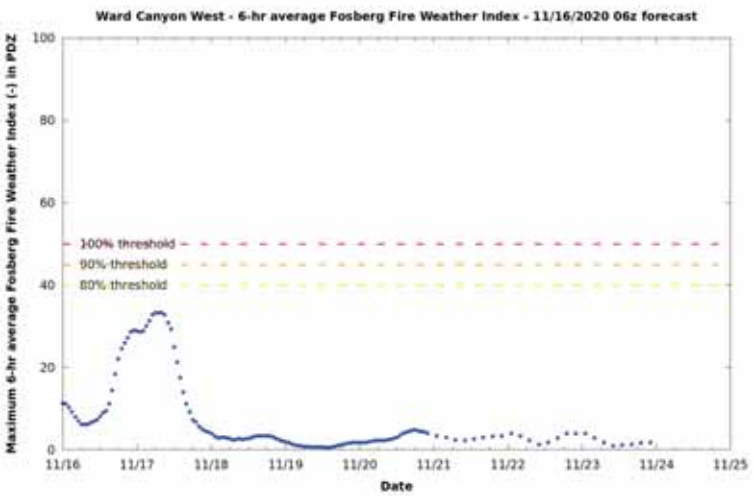


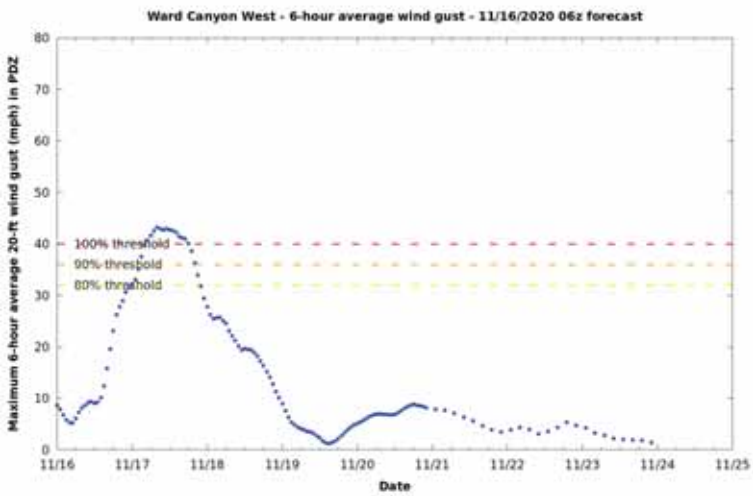
Alpine Backside



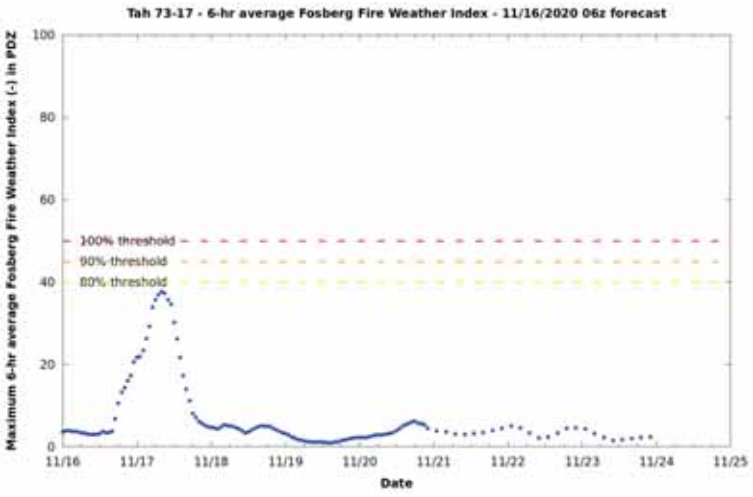


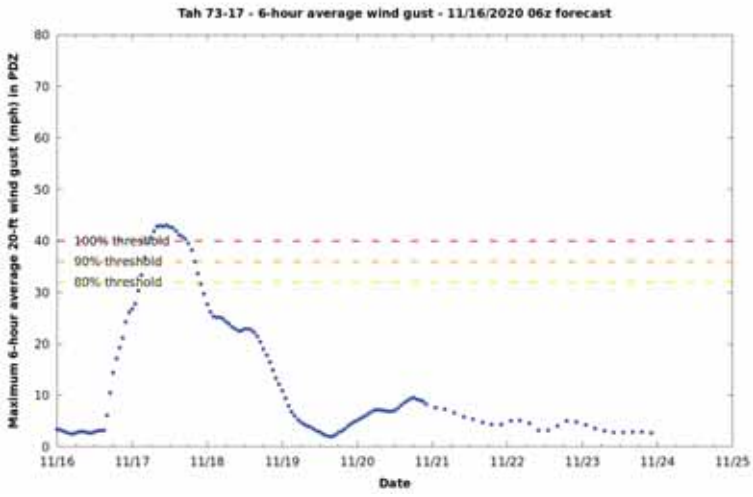
Ward Canyon West



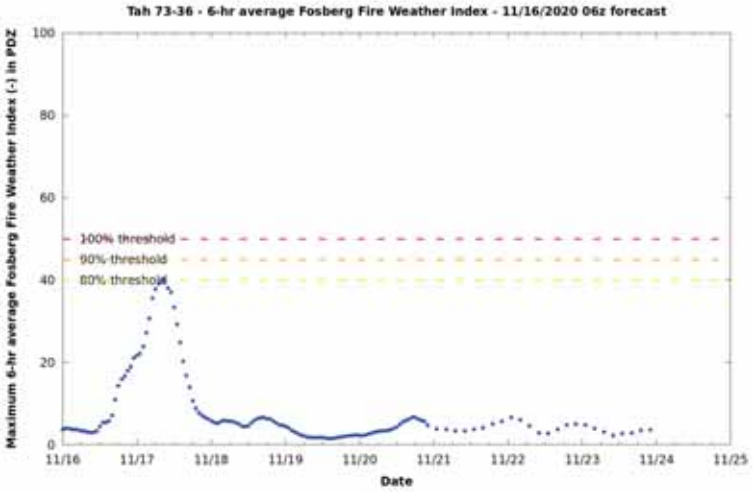


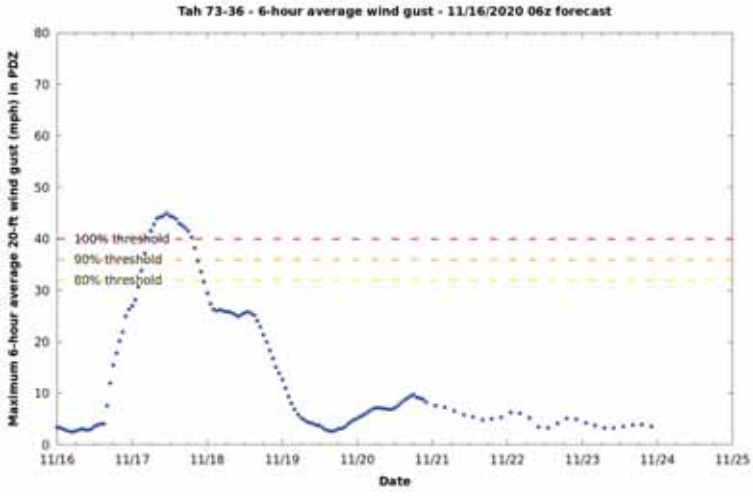
Tah 73-17



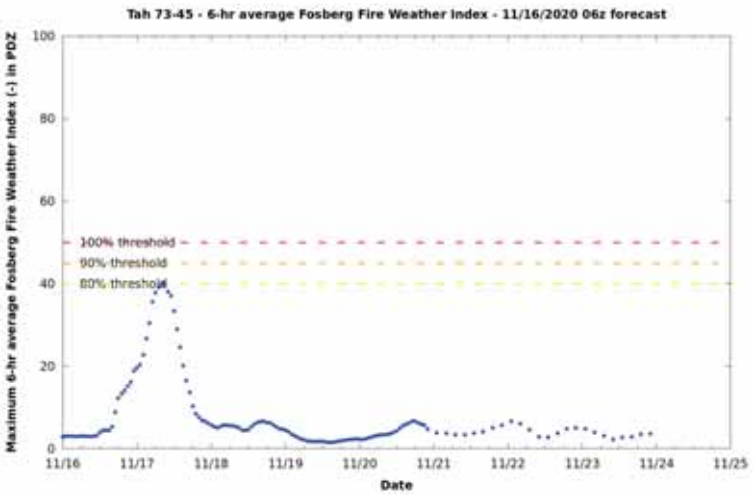


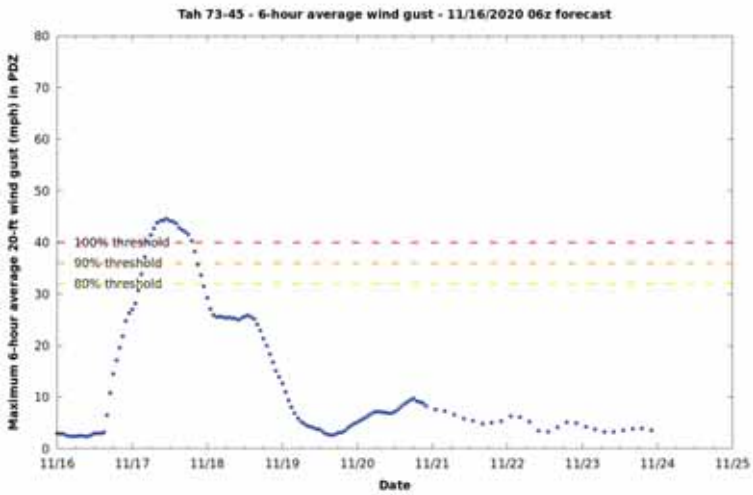
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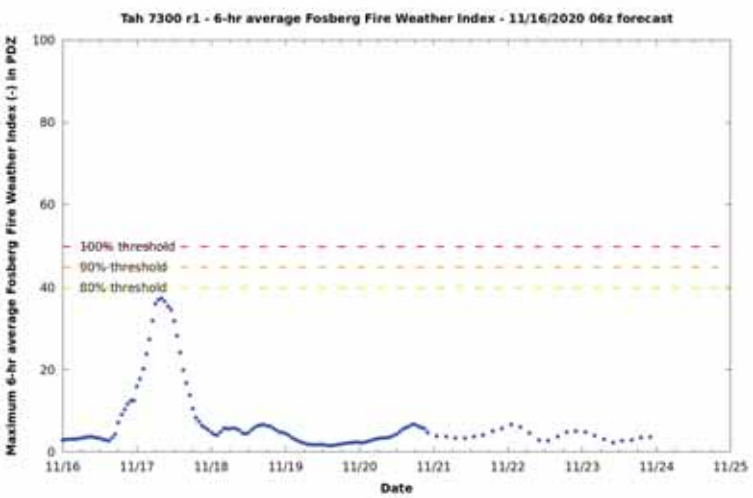


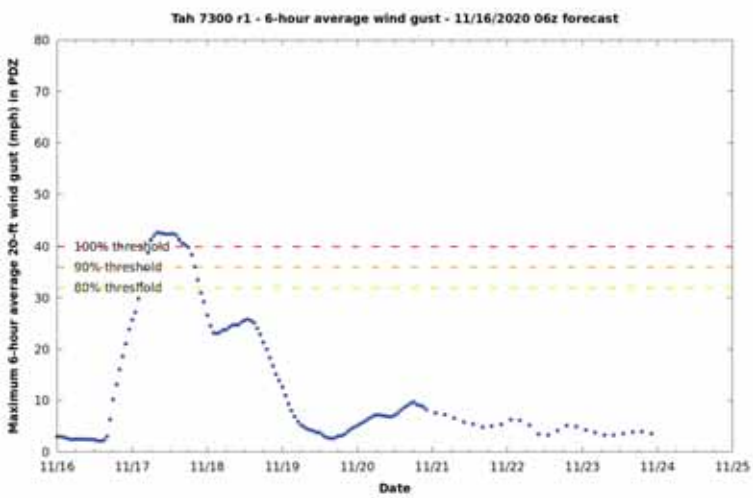
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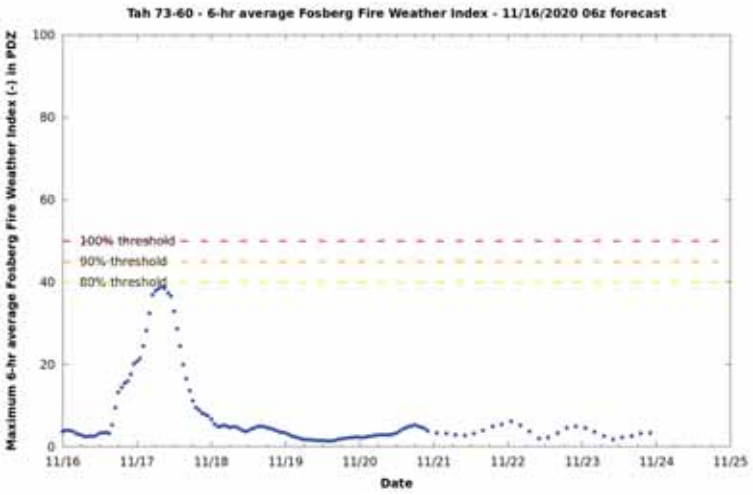


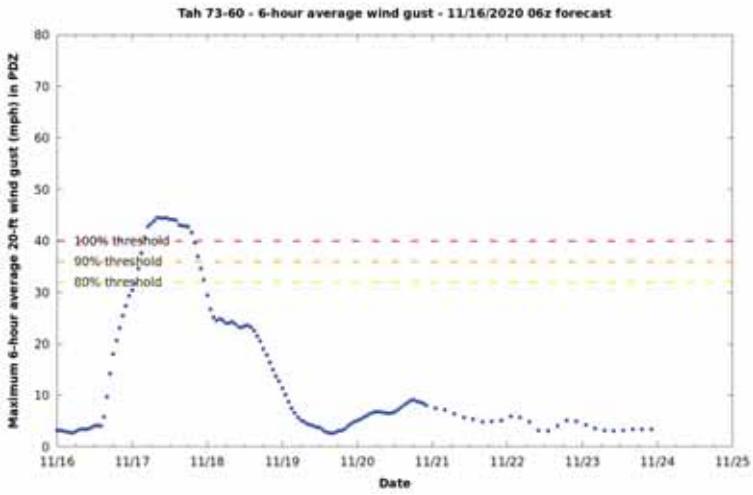
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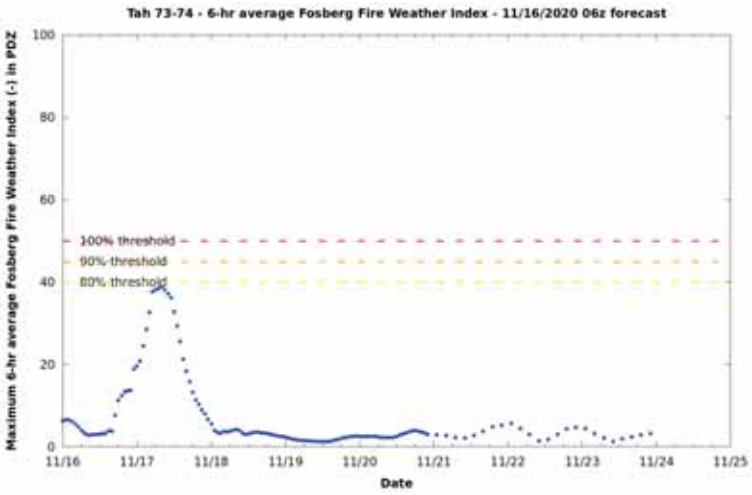


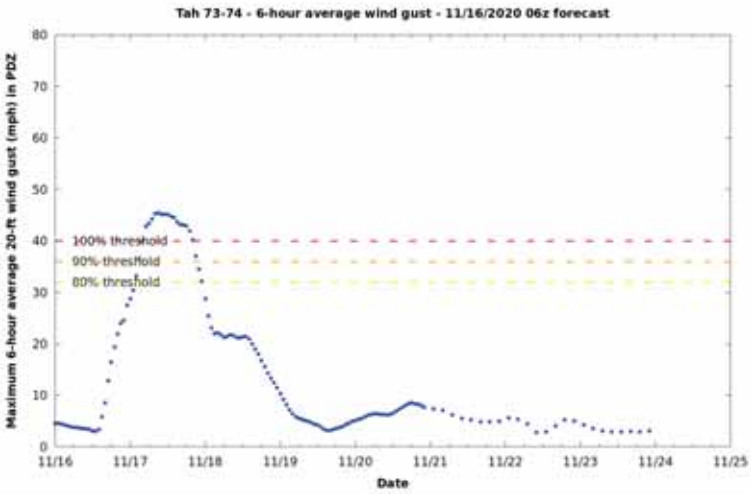
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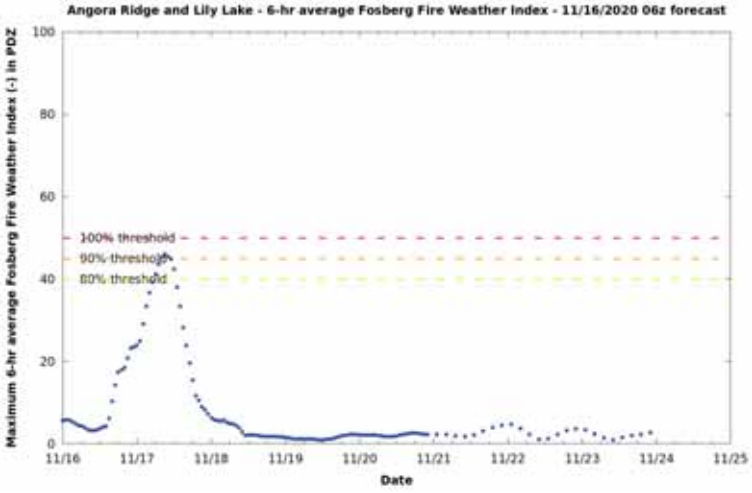


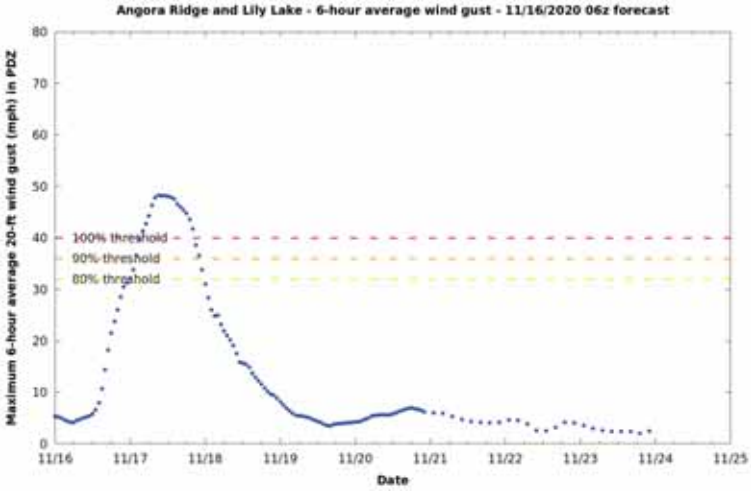
Tah 73-74



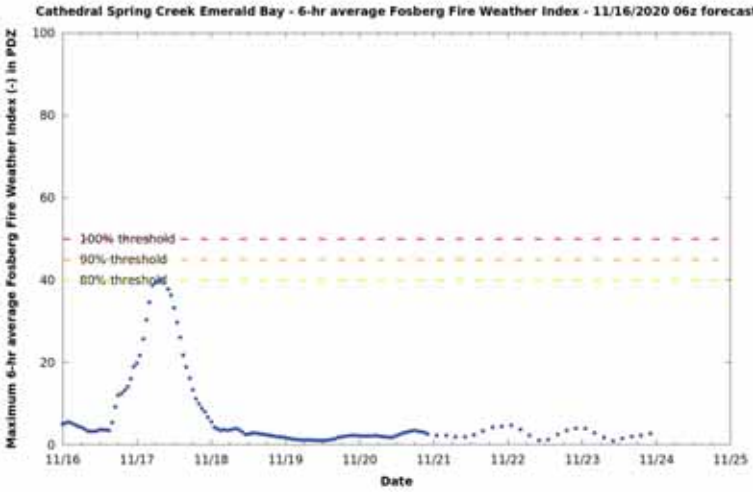


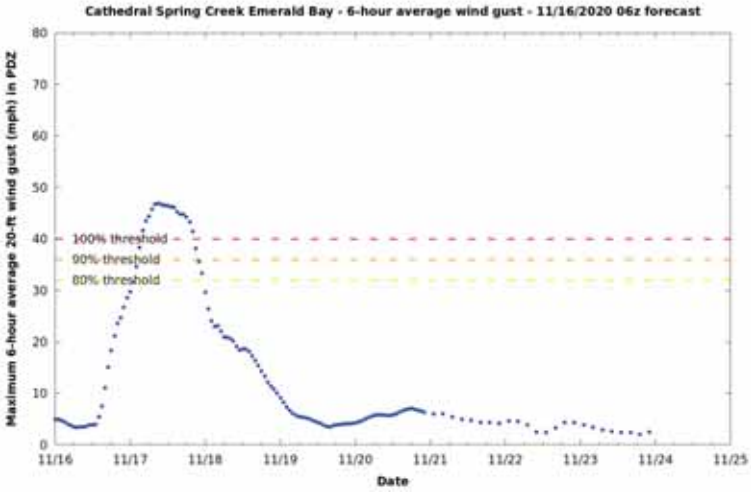
Angora Ridge and Lily Lake



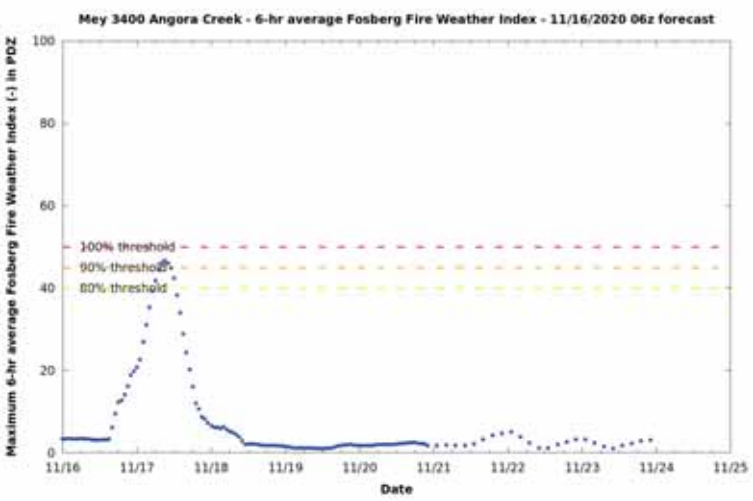


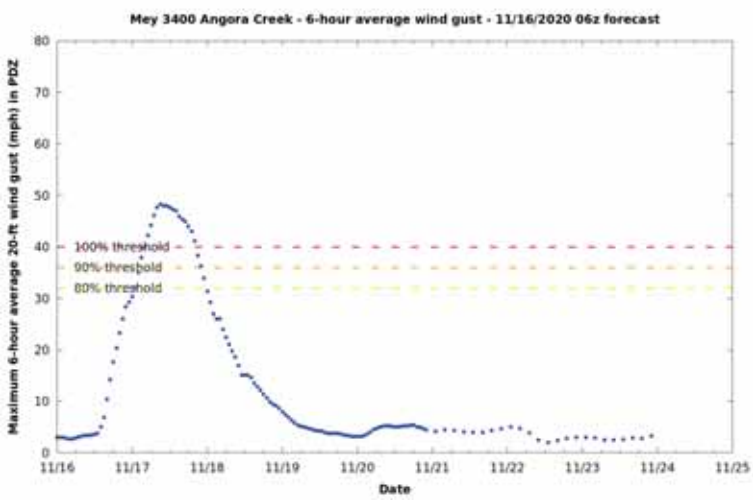
Cathedral Spring Creek Emerald Bay



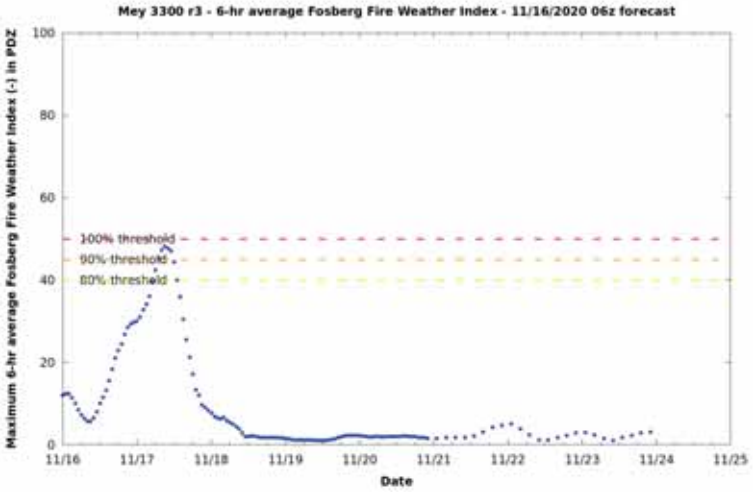


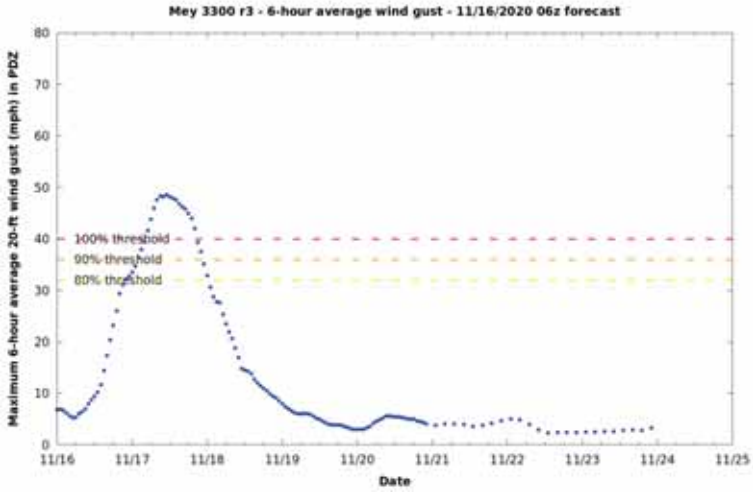
Mey 3400 Angora Creek



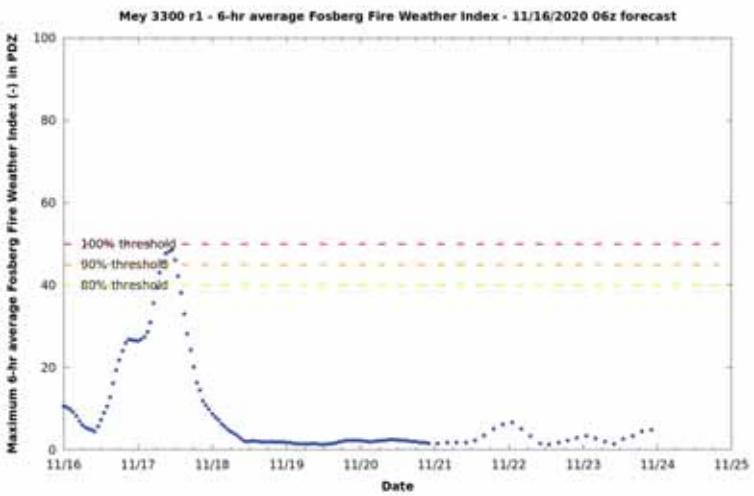


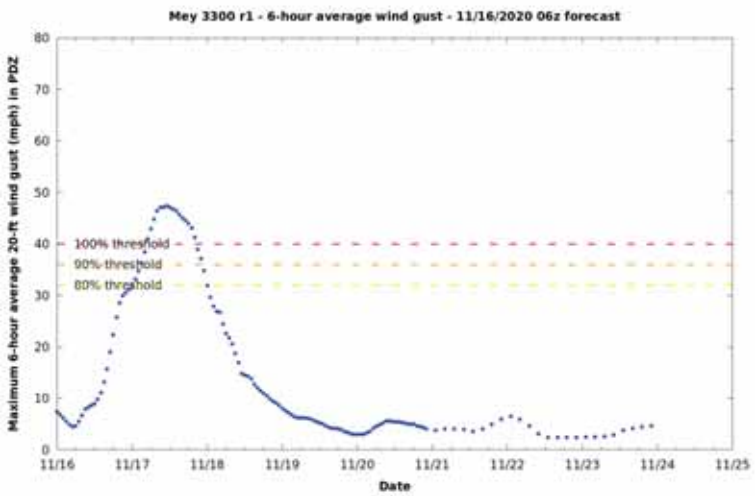
Mey 3300 r3



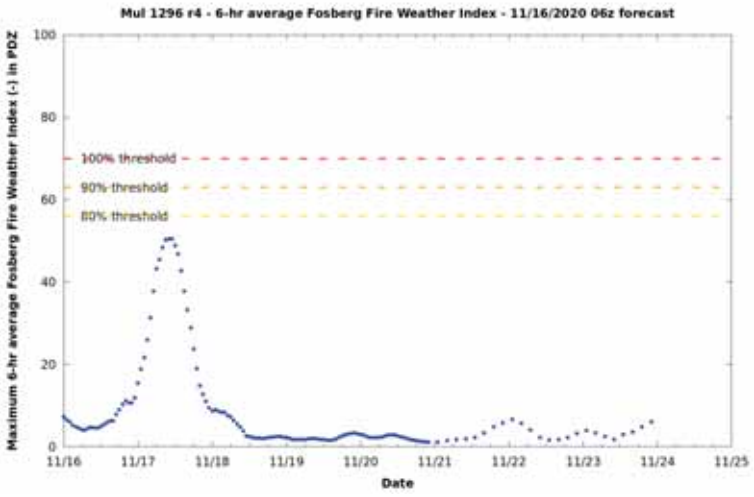


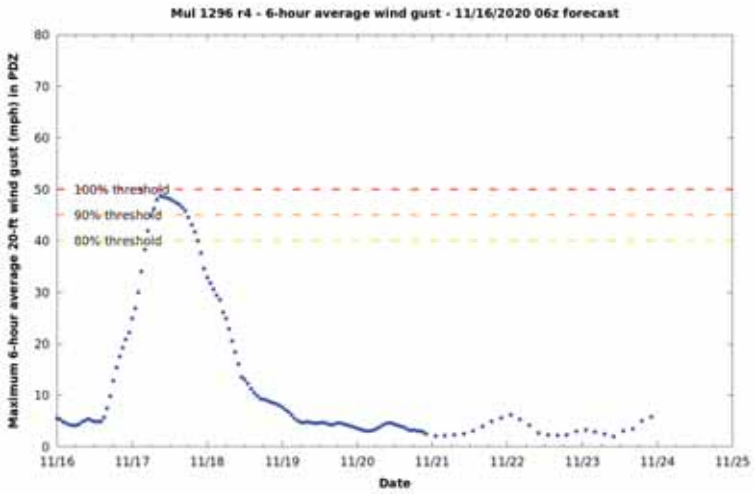
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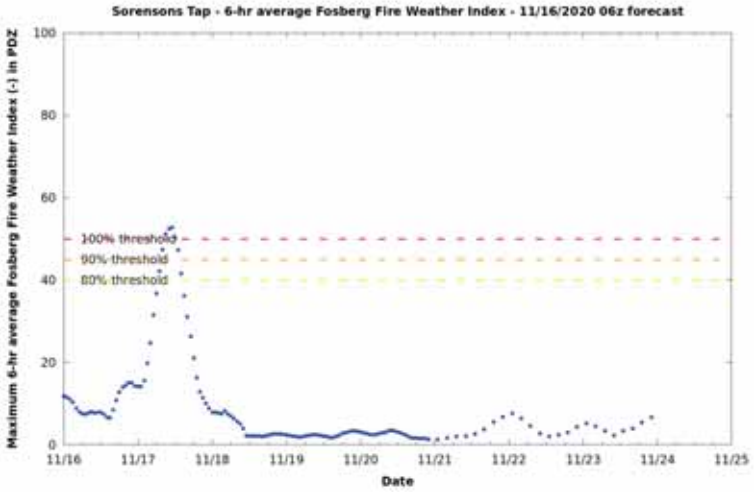


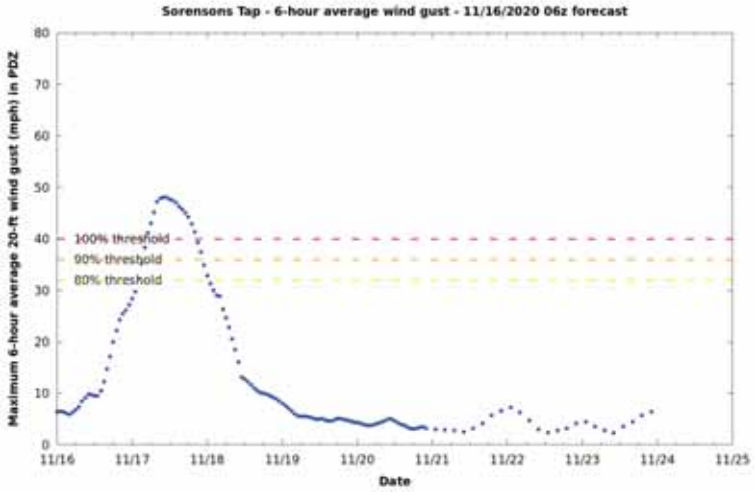
Mul 1296 r4



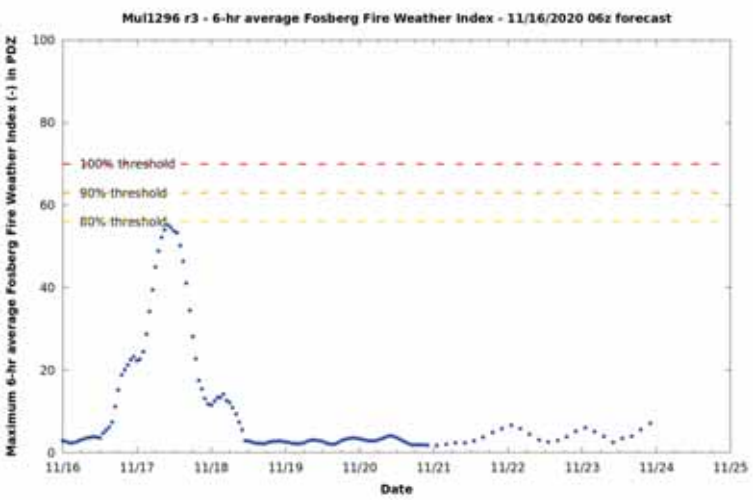


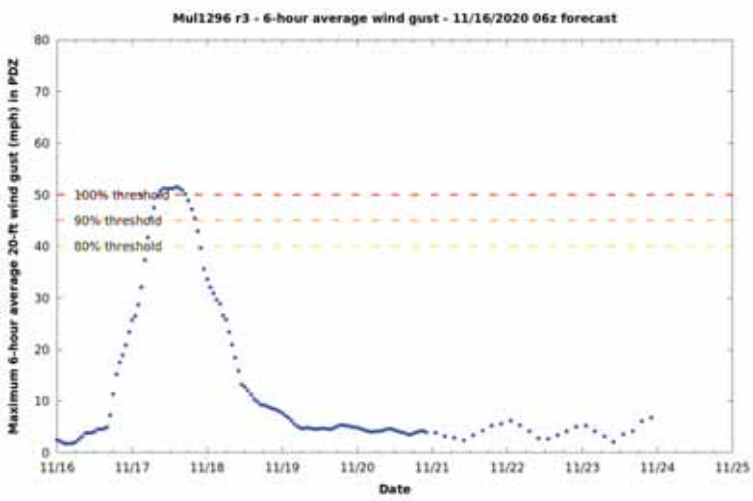
Sorensons Tap



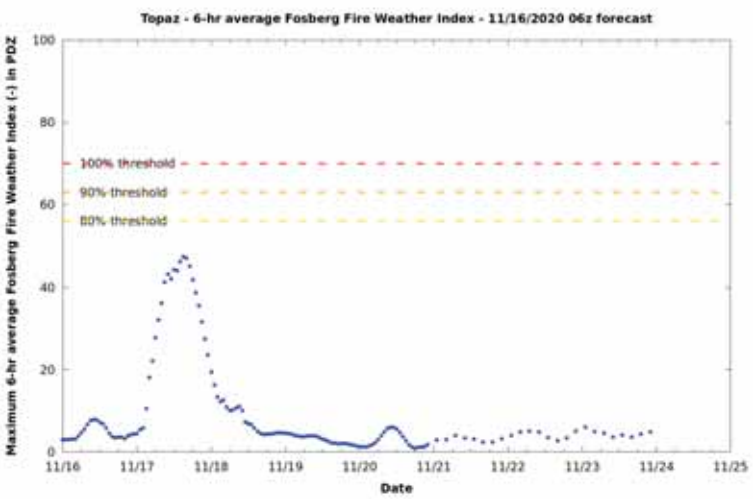


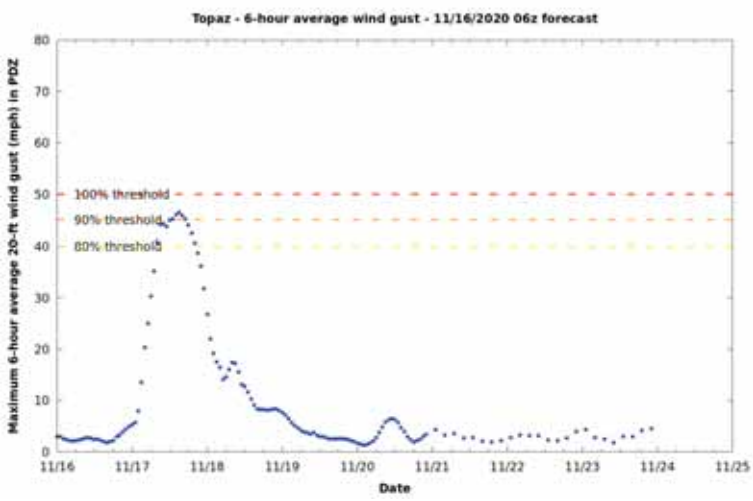
Mul 1296 r3



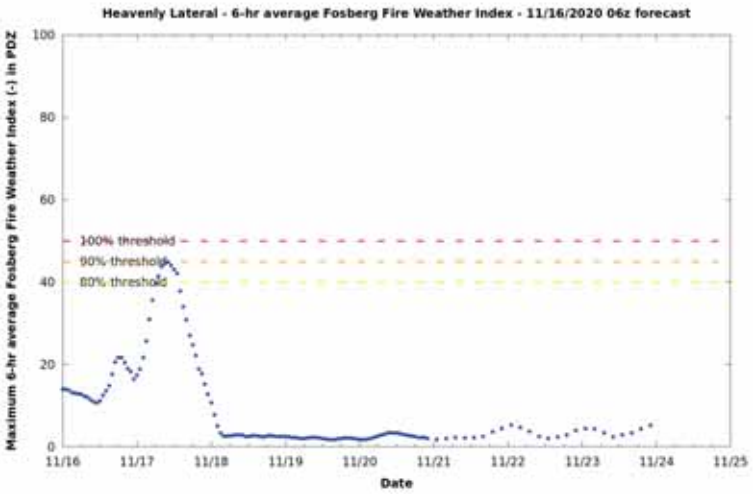


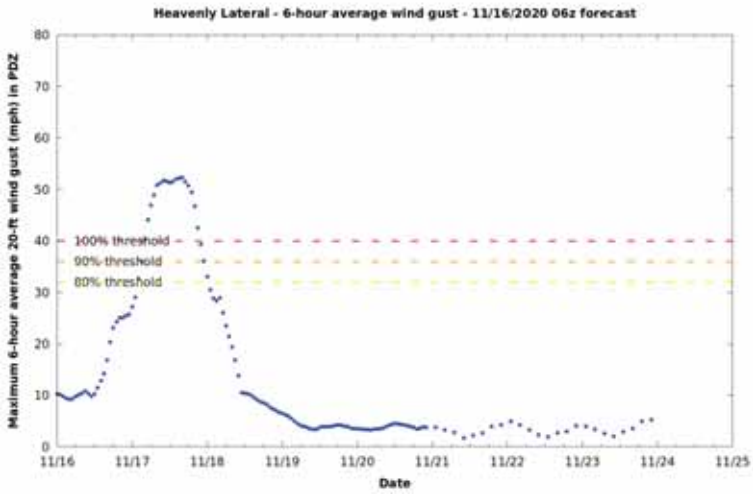
Topaz



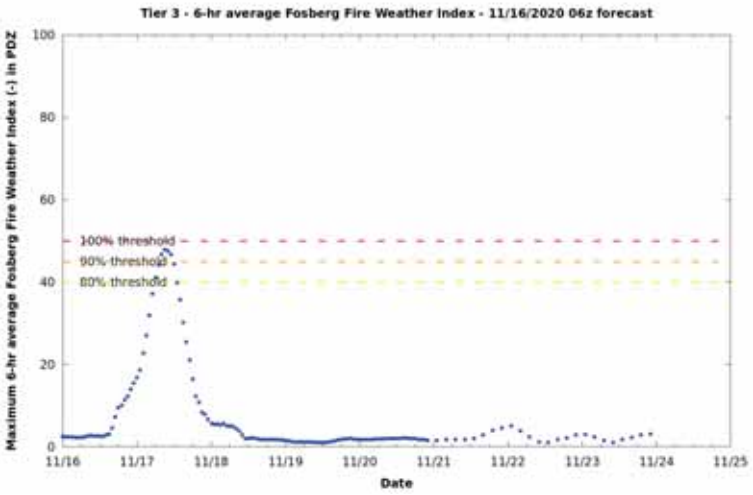


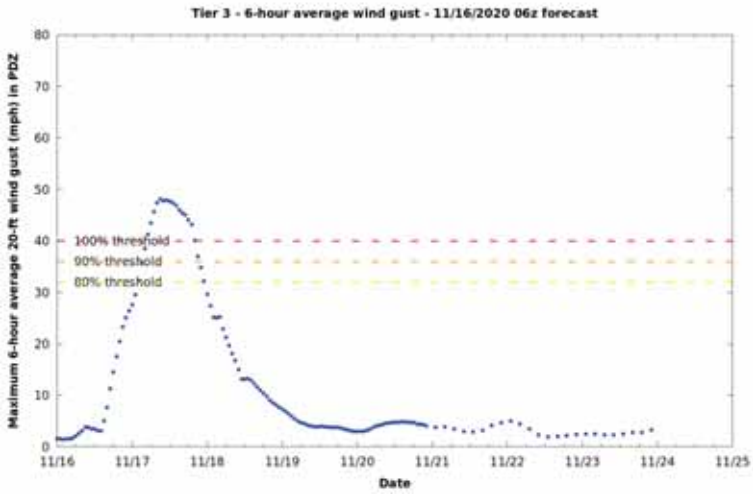
Heavenly Lateral



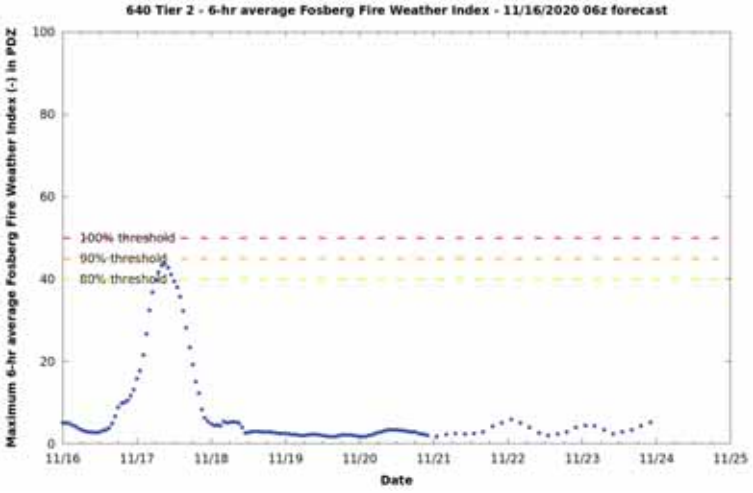


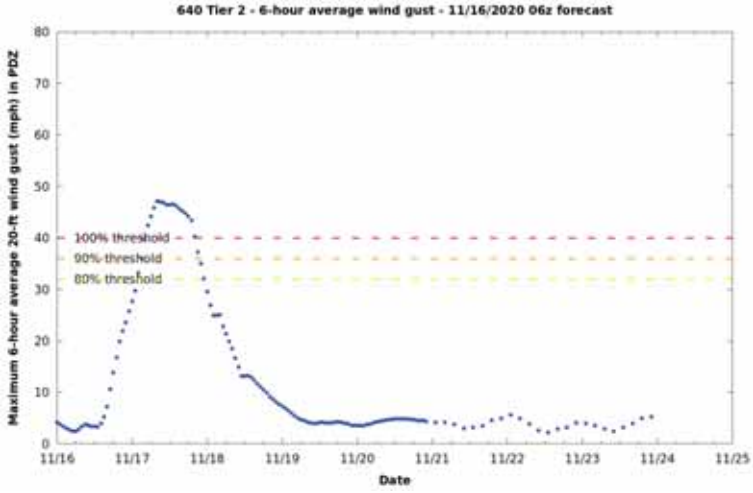
Tier 3



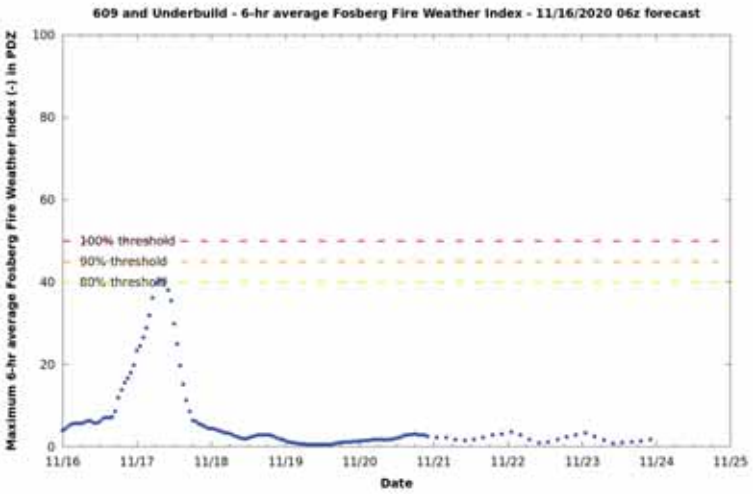


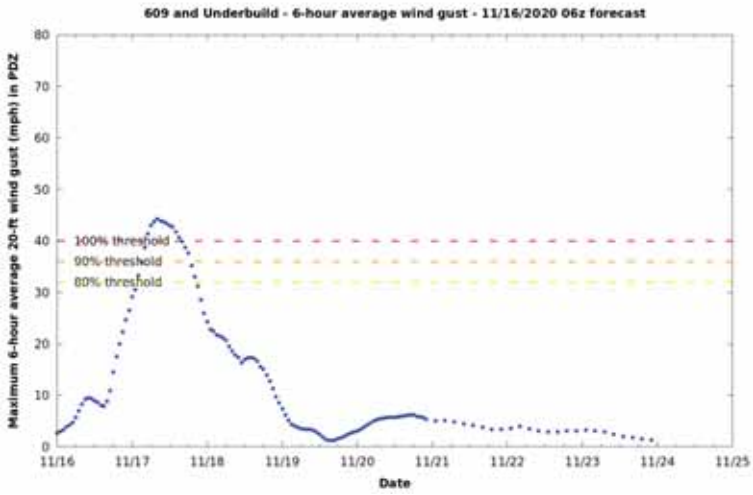
640 Tier 2



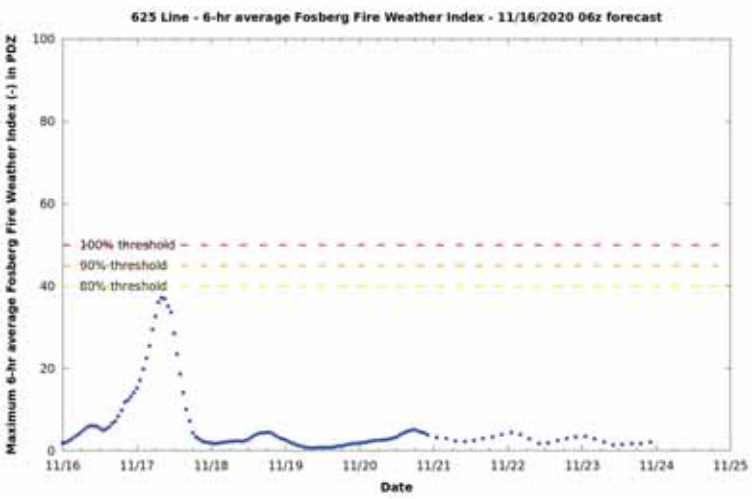


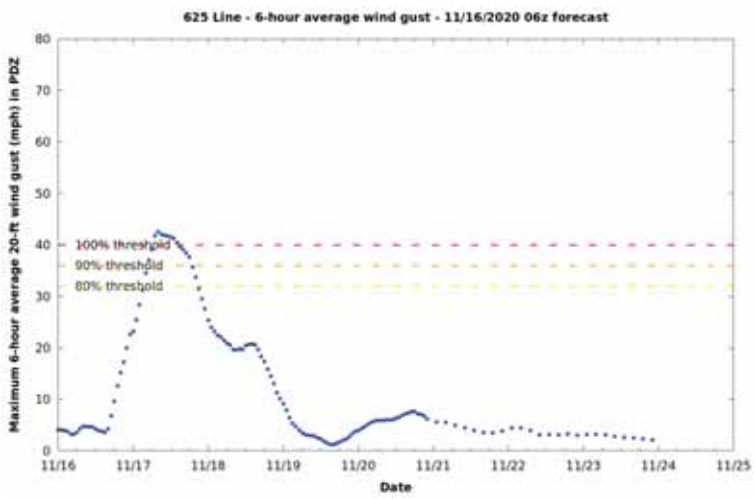
609 and Underbuild



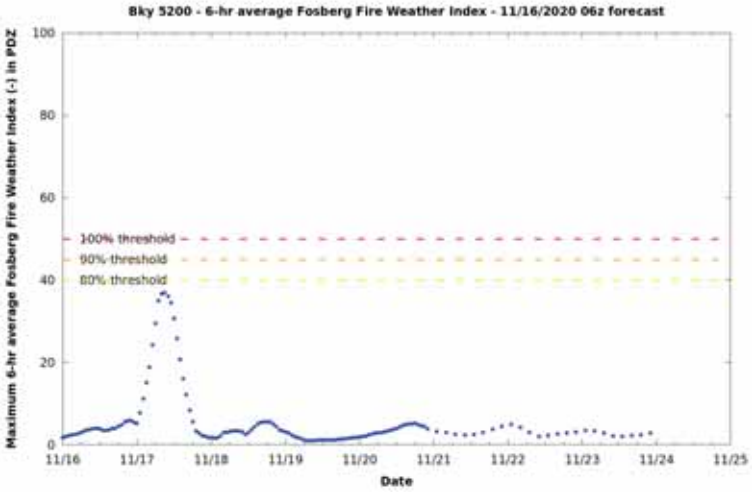


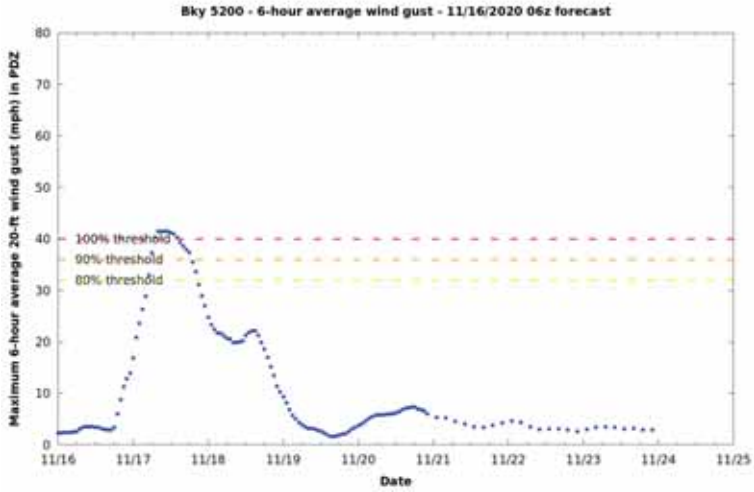
625 Line



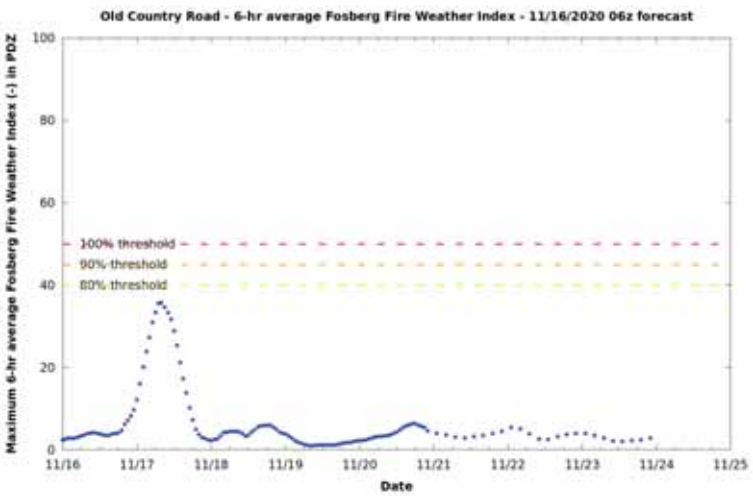


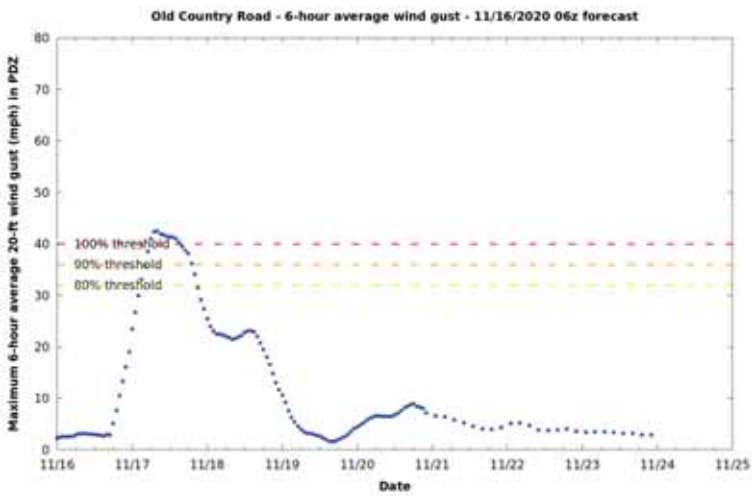
Bky 5200



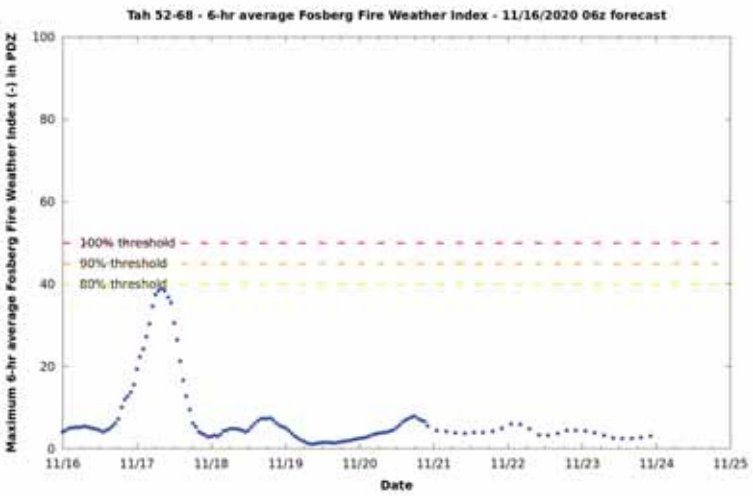


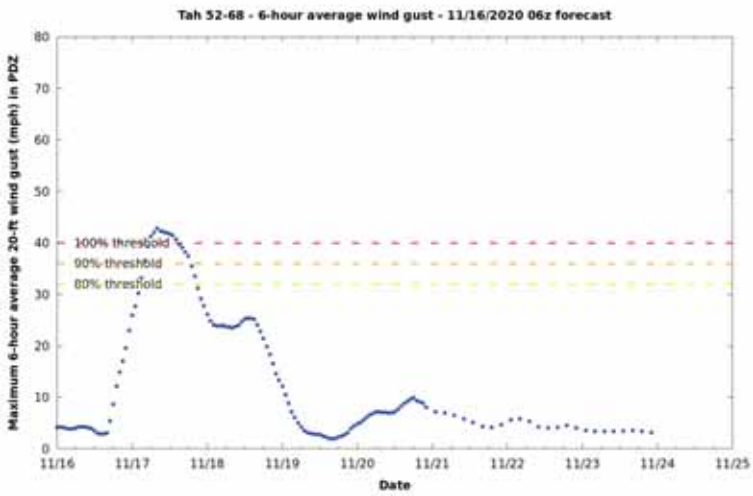
Old Country Road



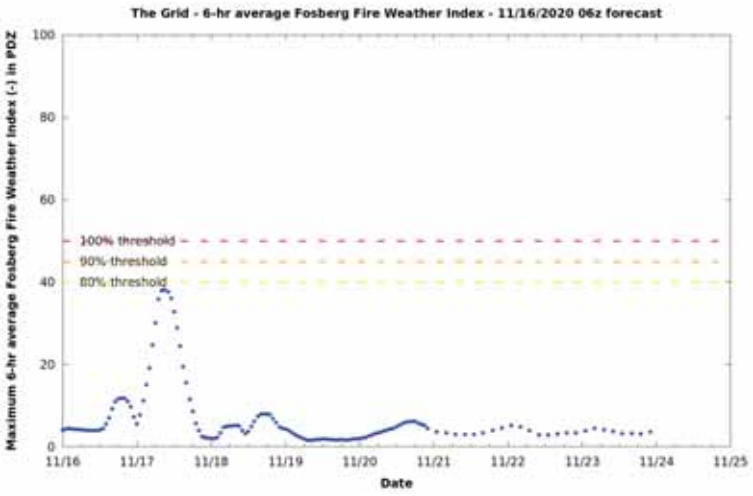


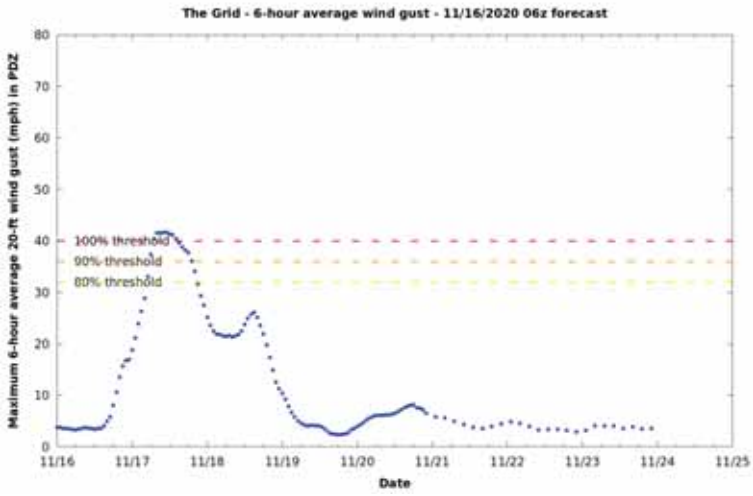
Tah 52-68



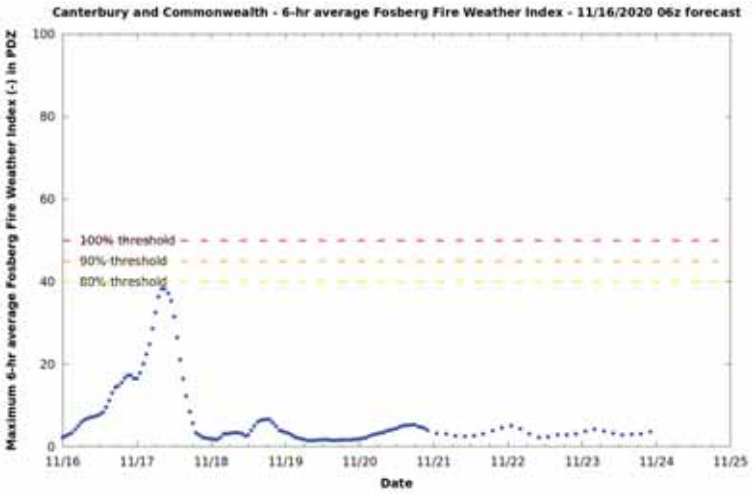


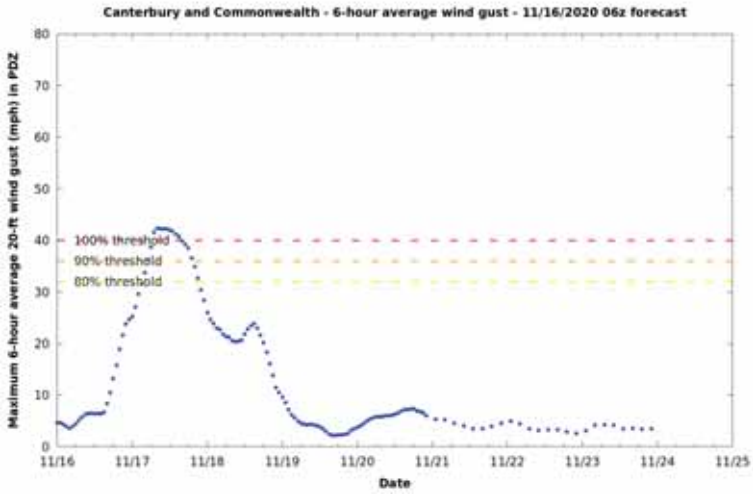
The Grid



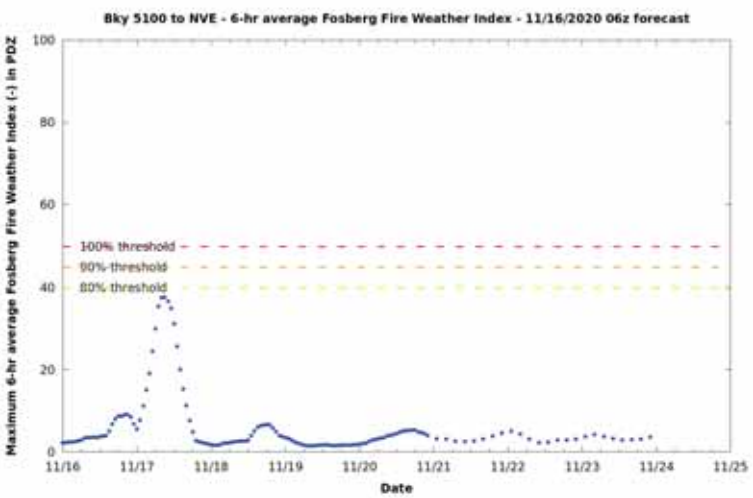


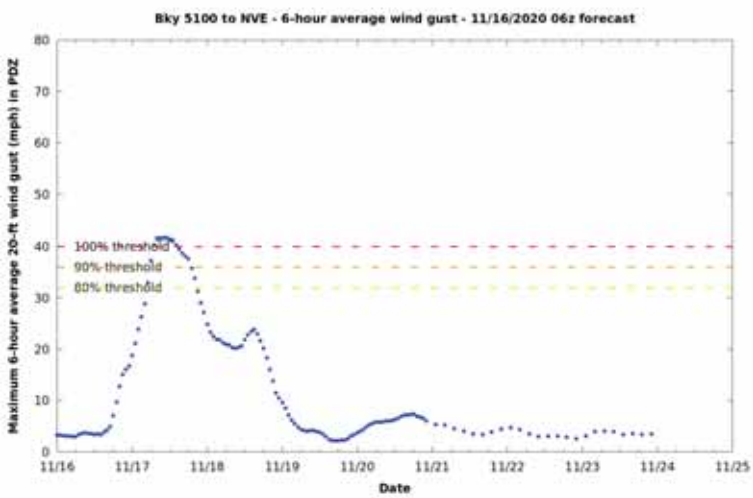
Canterbuy and Commonwealth



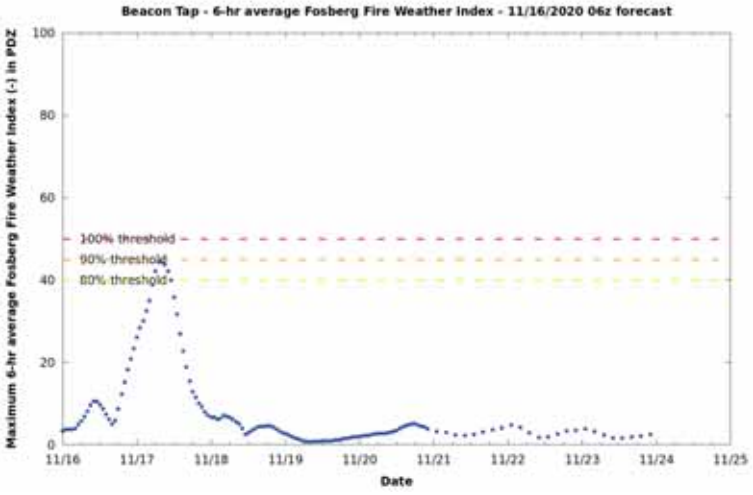


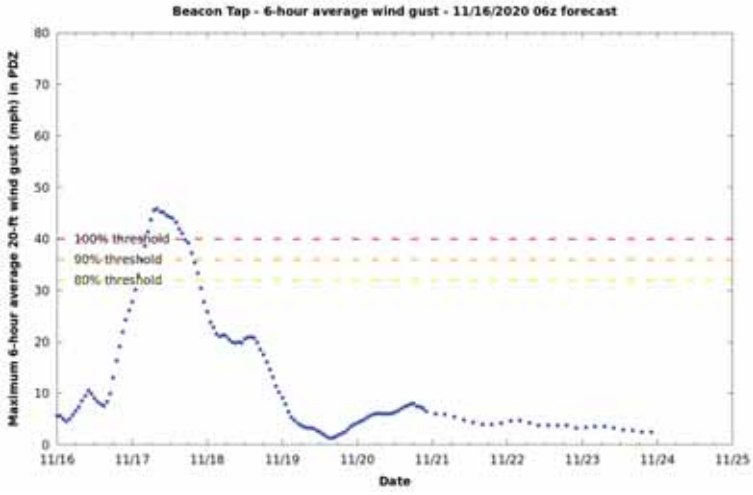
Bky 5100 to NVE



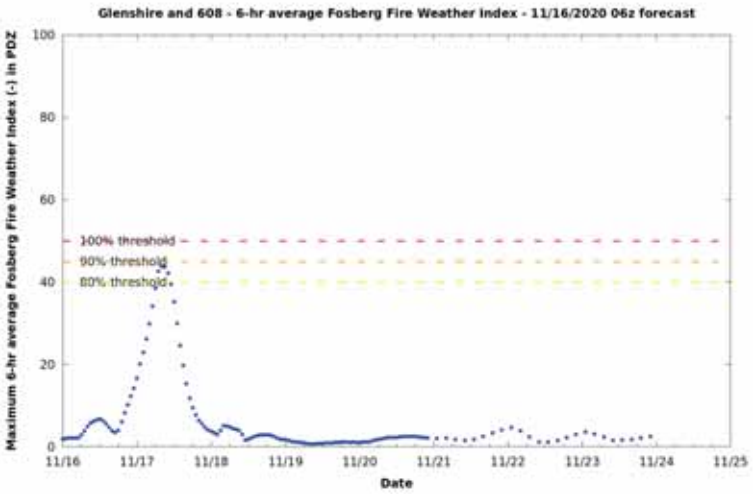


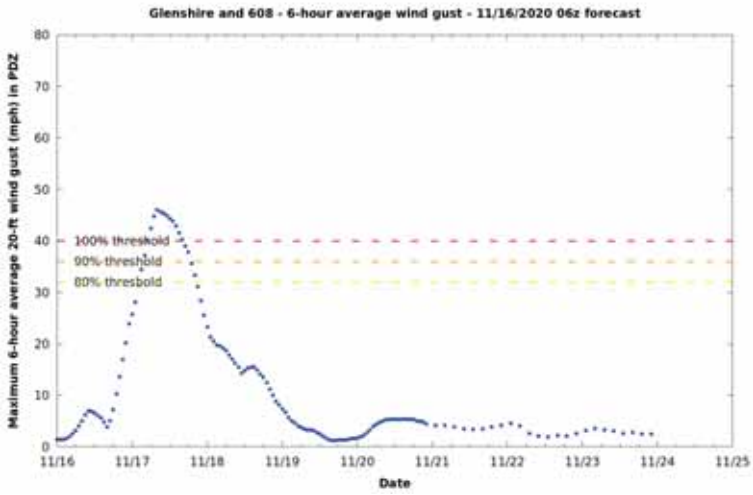
Beacon Tap



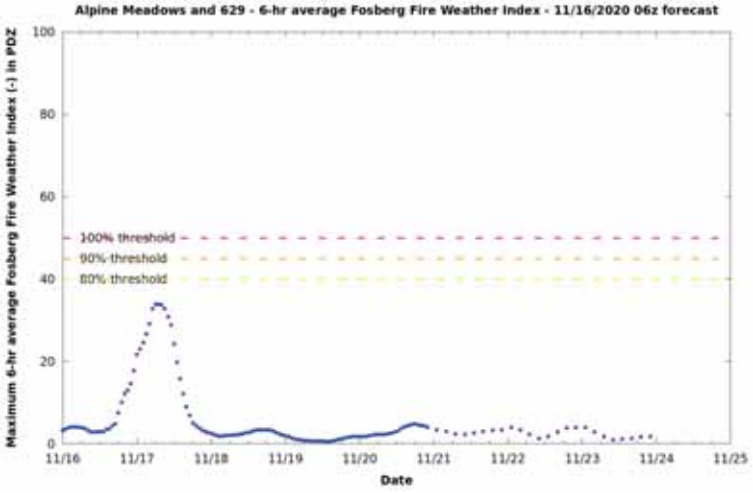


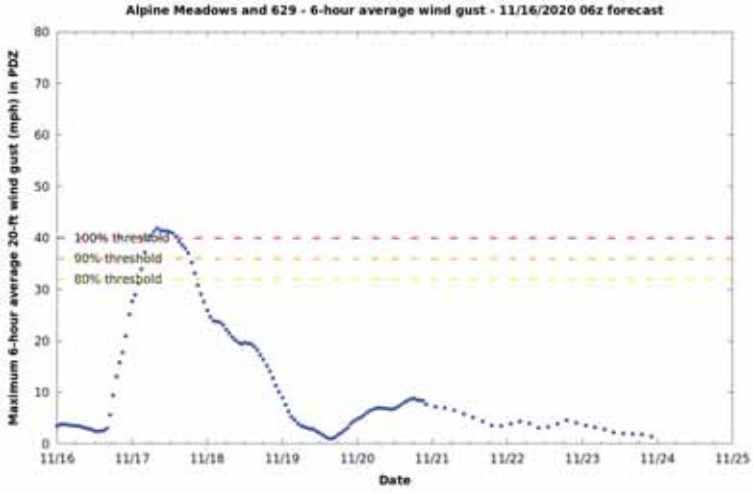
Glenshire and 608



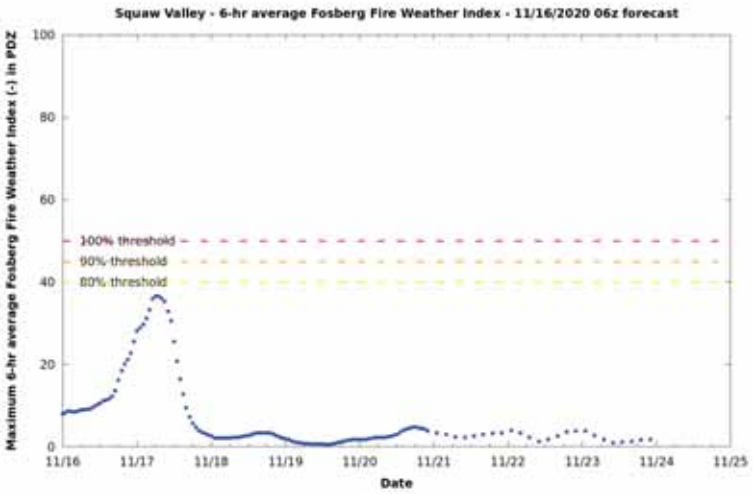


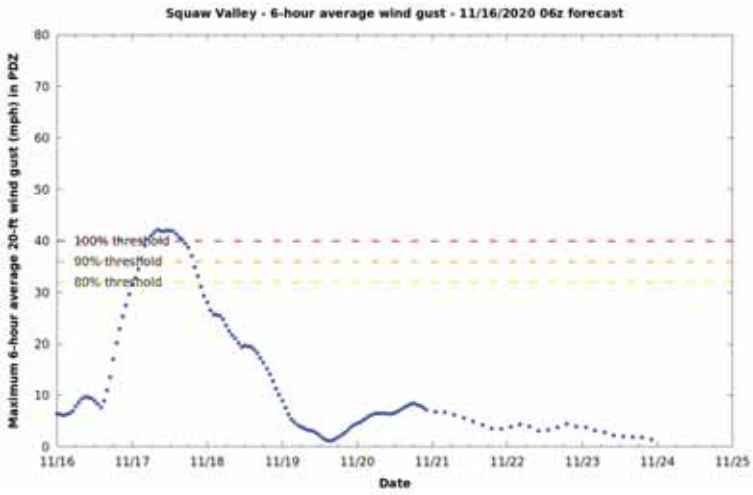
Alpine Meadows and 629



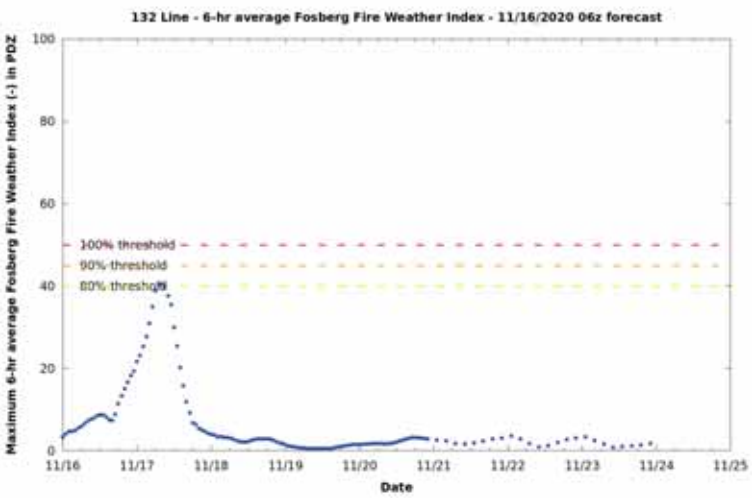


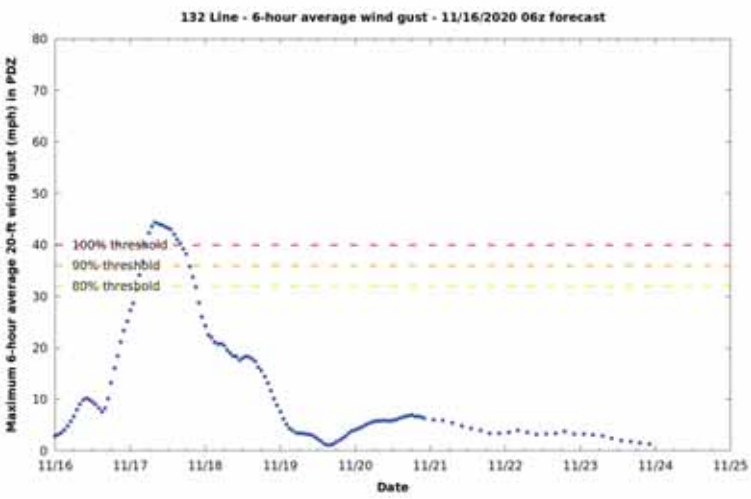
Squaw Valley



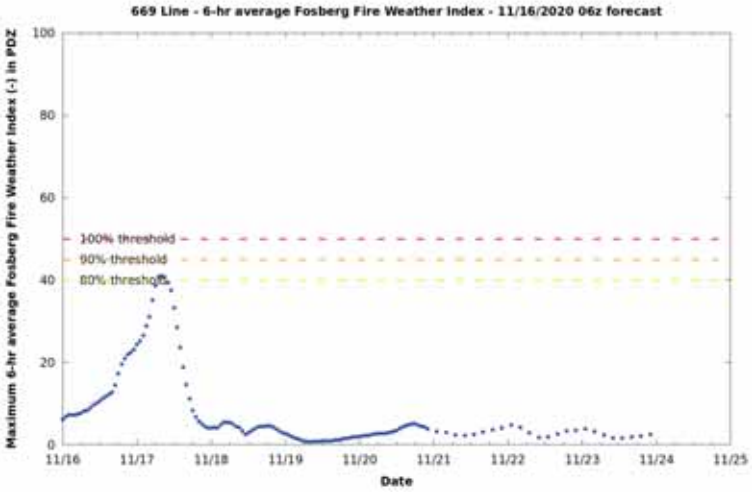


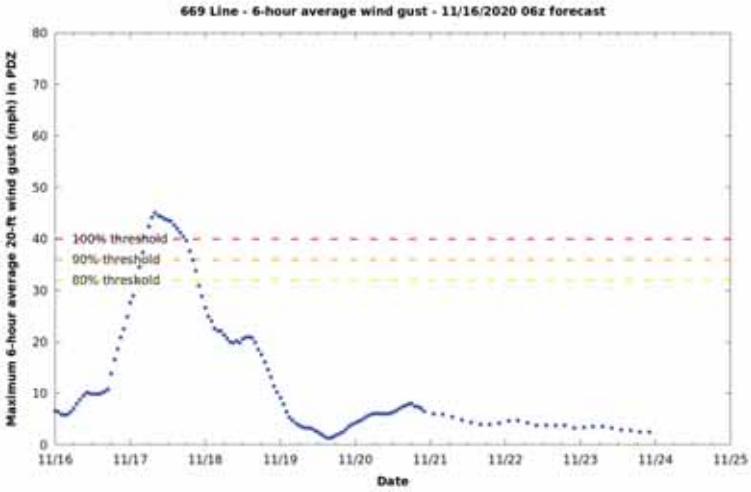
132 Line



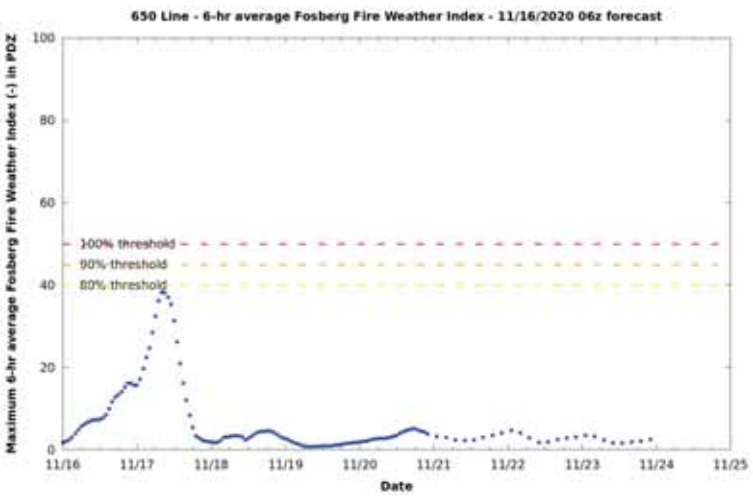


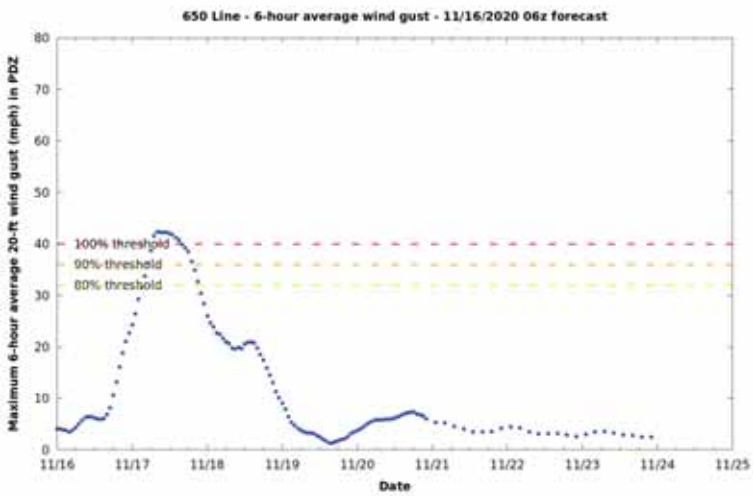
669 Line



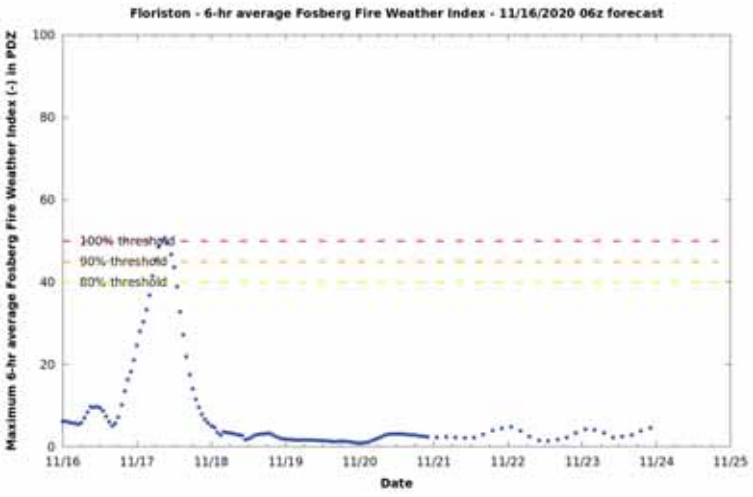


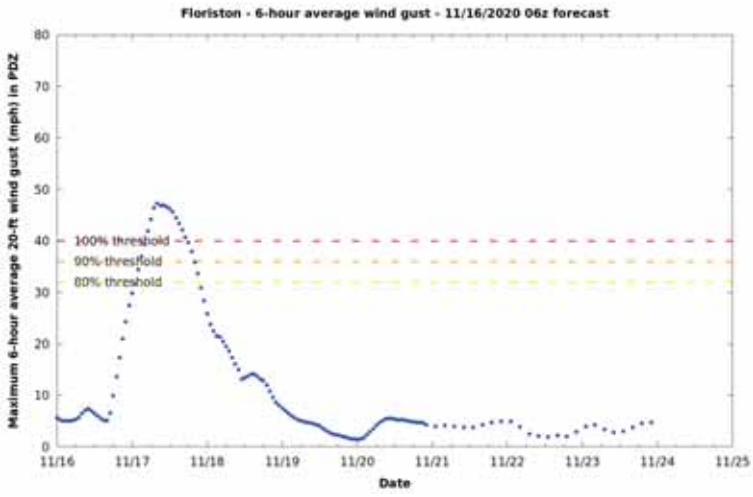
650 Line



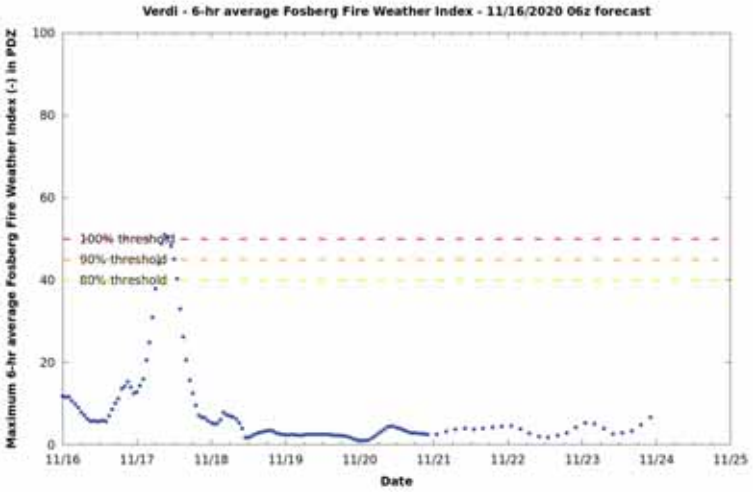


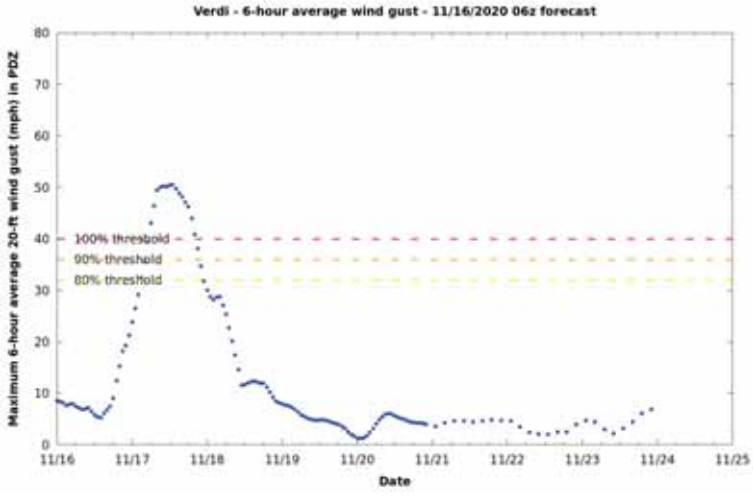
Floriston



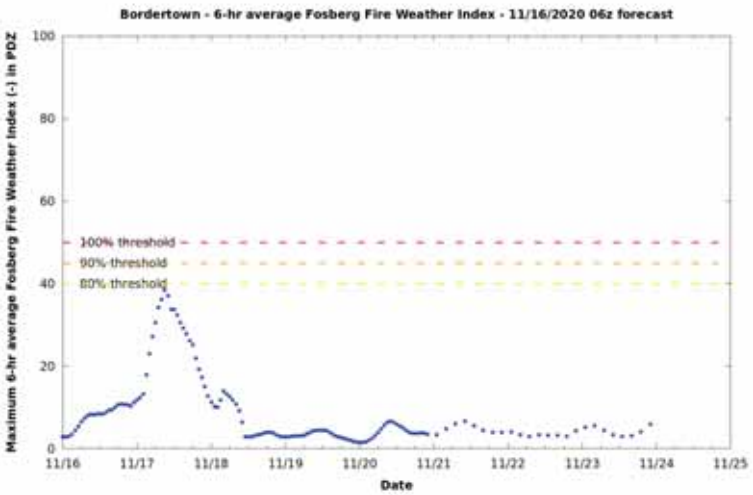


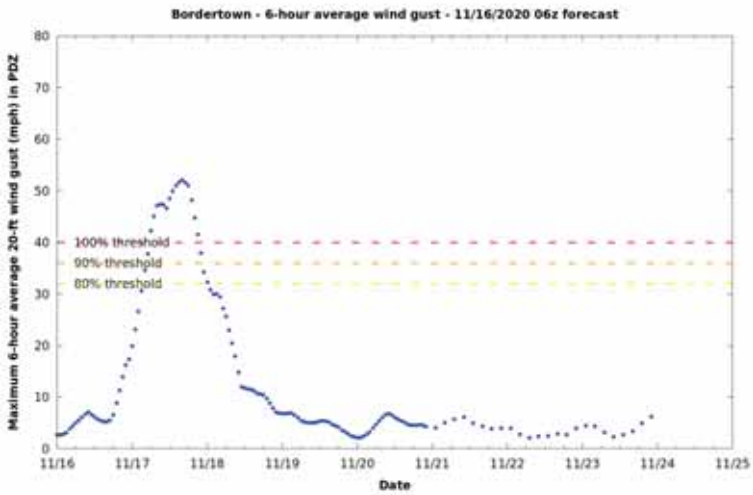
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/16/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25


Bordertown - 6-hour average wind gust - 11/16/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25

Liberty Utilities Fire Potential Index Forecast for 11/16/20 - 11/22/20

Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	moderate	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

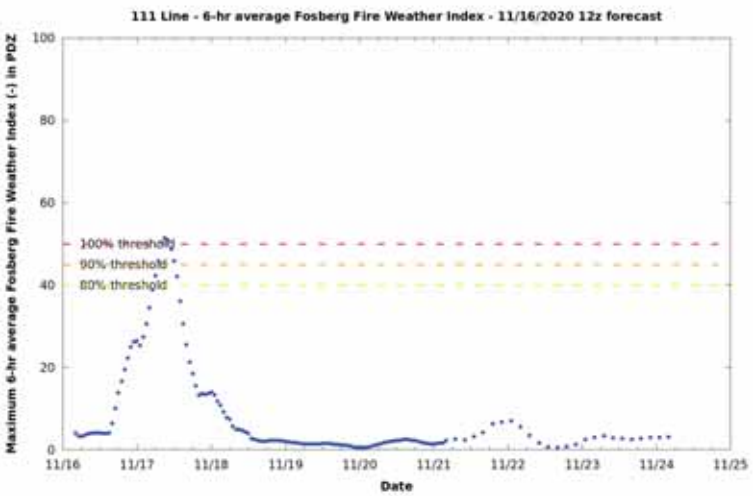
Liberty Utilities Energy Release Component Forecast for 11/16/20 - 11/22/20

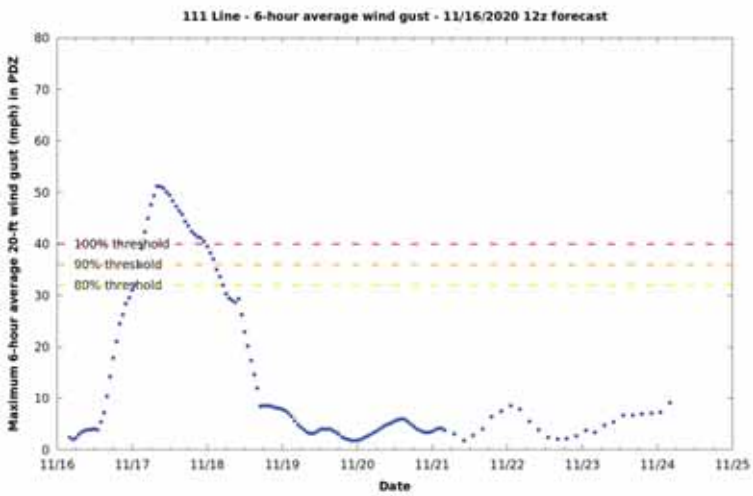
Zone	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	56.9	55.7	44.6	39.3	41.2	42.2	45.3
Sierra Brooks	59.8	60.7	49.5	44.4	45.0	48.8	53.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	13.0	12.8	9.8	8.2	7.5	7.5	7.7
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.5	1.4	1.1	1.1	1.0	1.0	1.1
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	40.0	41.8	29.9	25.4	26.6	27.9	32.7
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	49.2	51.7	36.8	30.1	30.2	32.5	34.7
Topaz	60.5	61.3	44.8	38.0	38.4	39.2	45.1
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	34.0	33.4	24.7	23.0	23.9	24.4	25.7
Old Country Road	60.9	57.6	45.7	43.9	44.3	45.3	47.6
Tah 52-68	23.2	21.3	17.0	16.7	16.7	17.0	17.4
The Grid	57.2	55.8	39.0	36.3	38.1	38.9	39.4
Canterbury and Commonwealth	41.8	41.1	28.6	26.4	27.9	28.6	29.3
Bky 5100 to NVE	23.9	23.5	16.4	15.1	15.9	16.4	16.8
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	24.2	23.3	18.7	15.8	14.7	14.1	14.7
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	33.4	33.4	27.0	25.0	25.0	25.5	27.5
650 Line	1.9	1.9	1.3	1.2	1.3	1.3	1.4
Floriston	46.6	46.6	34.7	31.2	31.1	33.6	36.2
Verdi	55.7	55.7	44.1	36.2	39.6	44.1	46.8
Bordertown	58.8	58.8	47.7	40.0	41.6	45.7	48.9

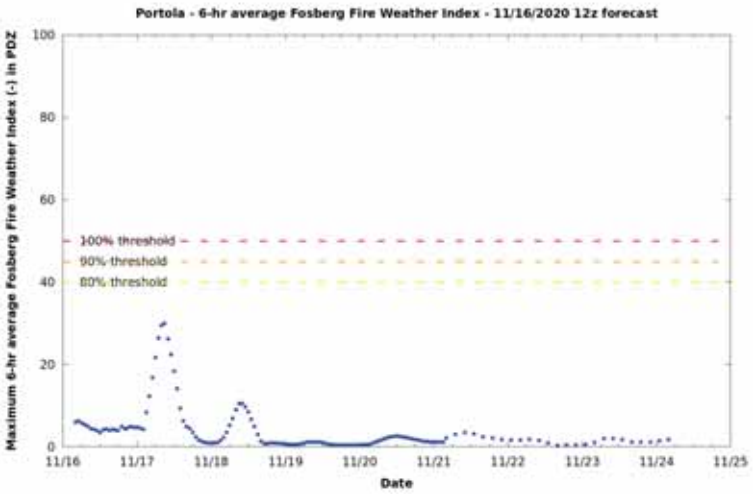
Liberty Utilities Fire Weather Summary Plots - 11/16/2020 12z forecast

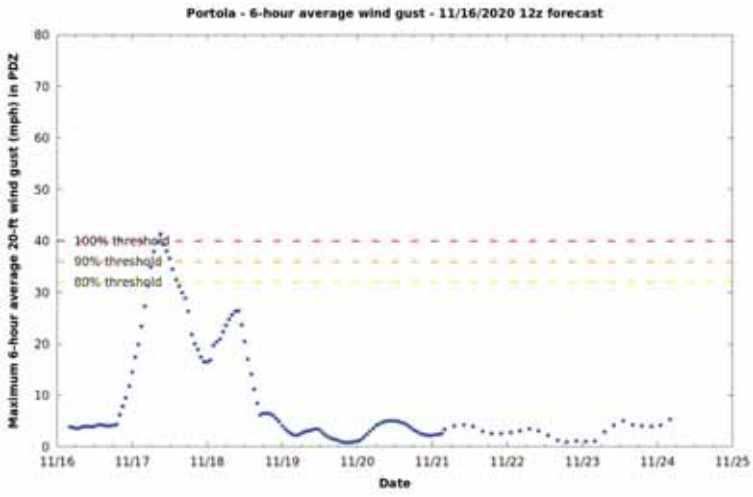
111 Line



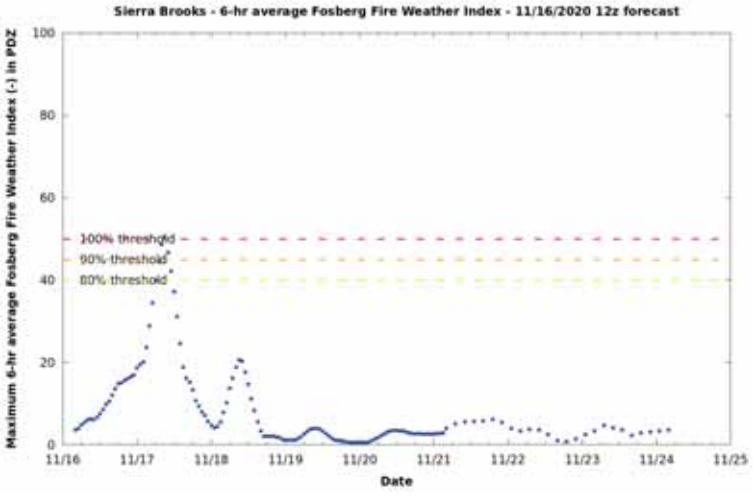


Portola



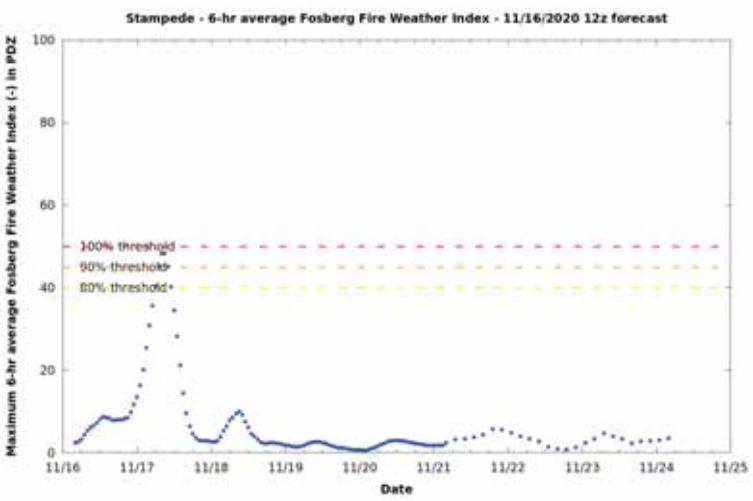


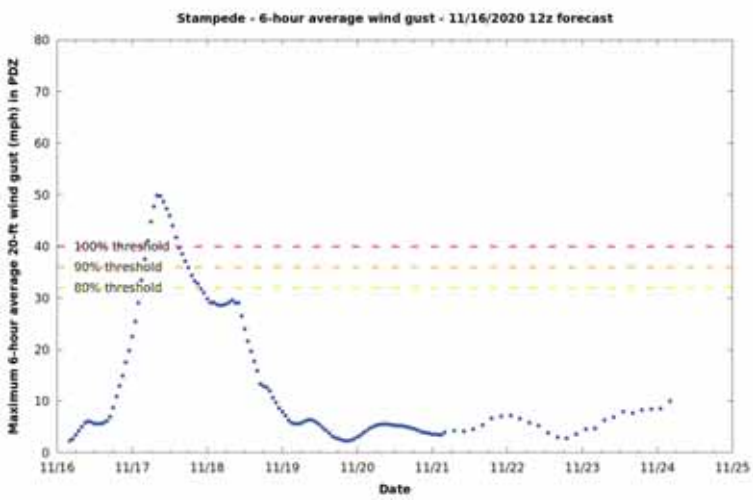
Sierra Brooks



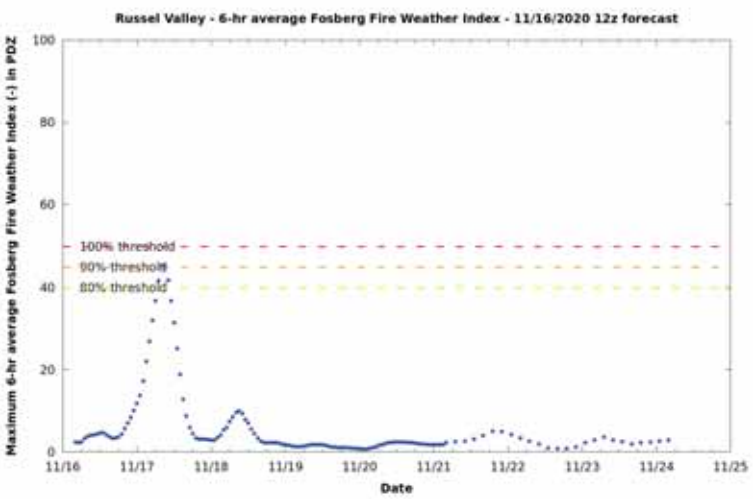


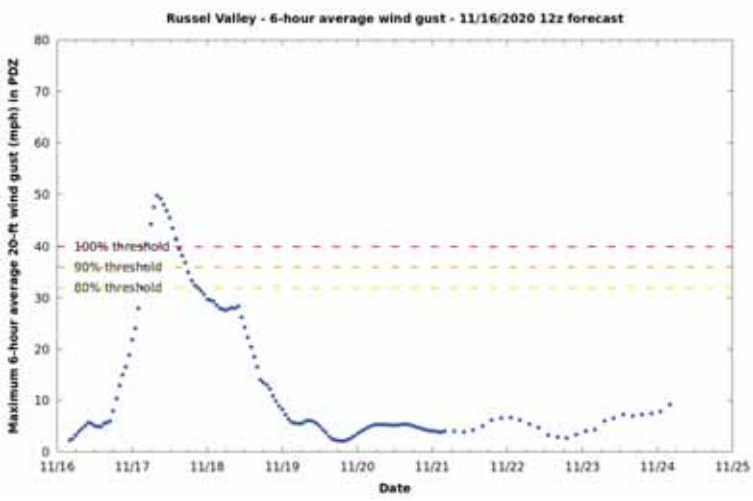
Stampede



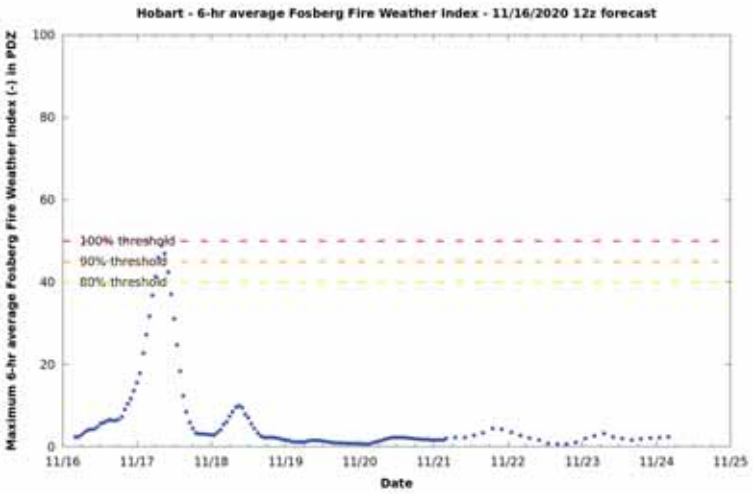


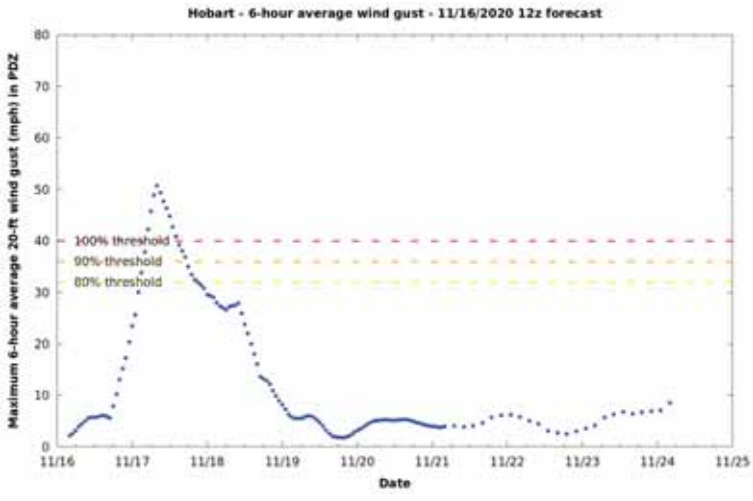
Russell Valley



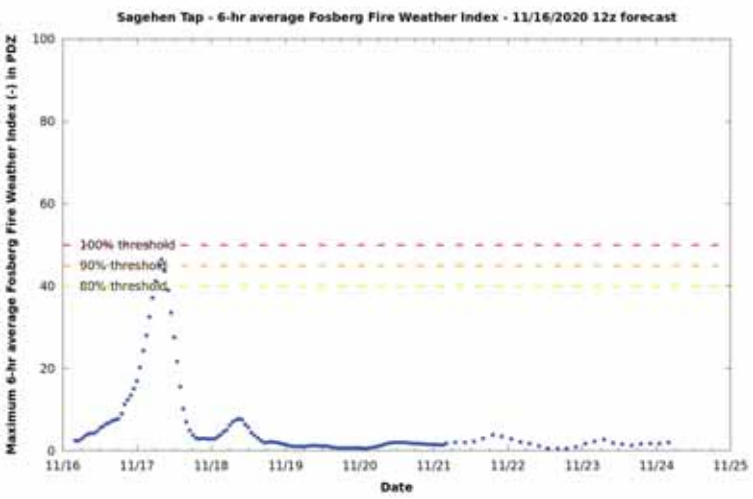


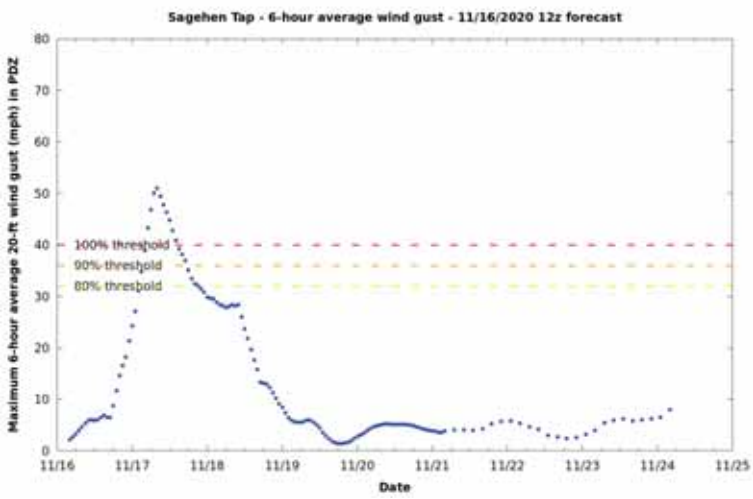
Hobart



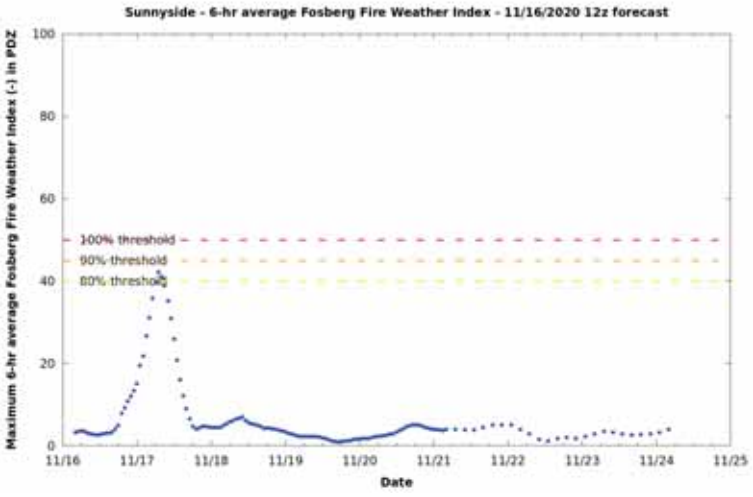


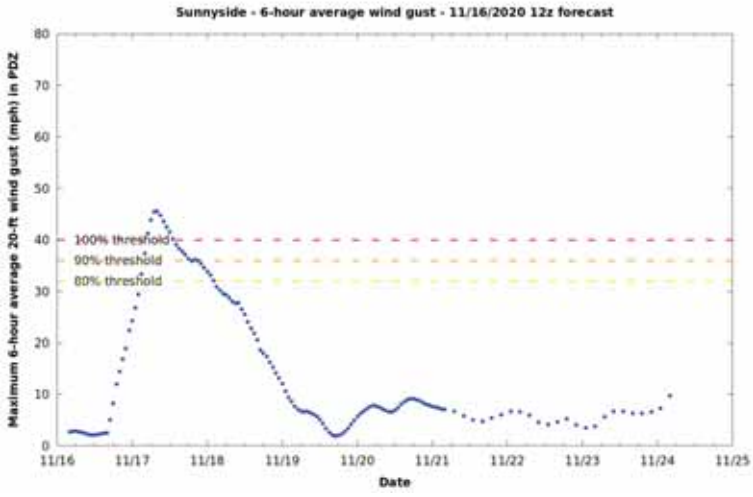
Sagehen tap



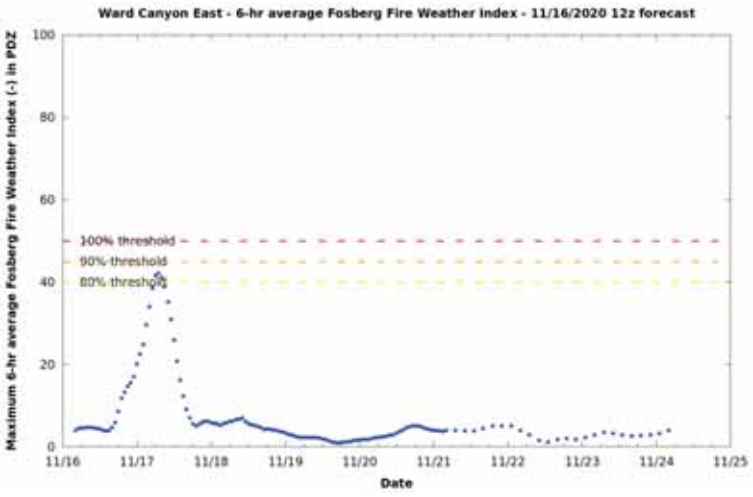


Sunnyside



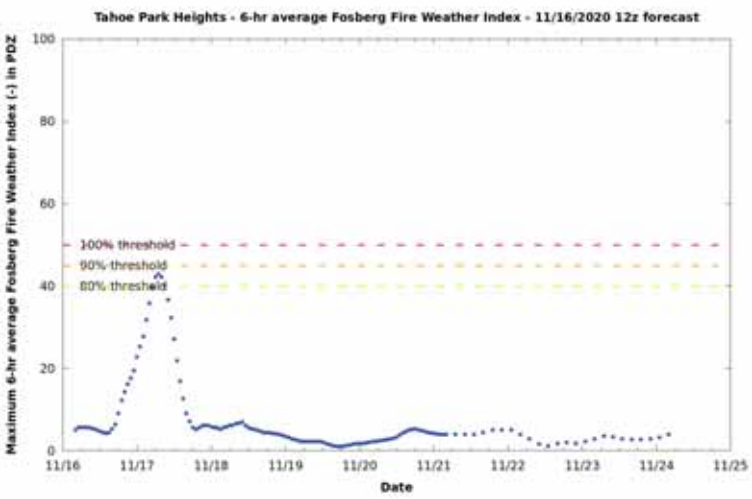


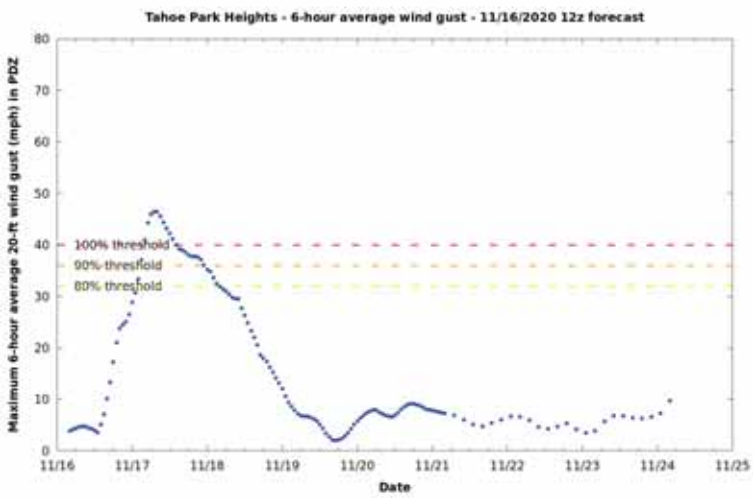
Ward Canyon East



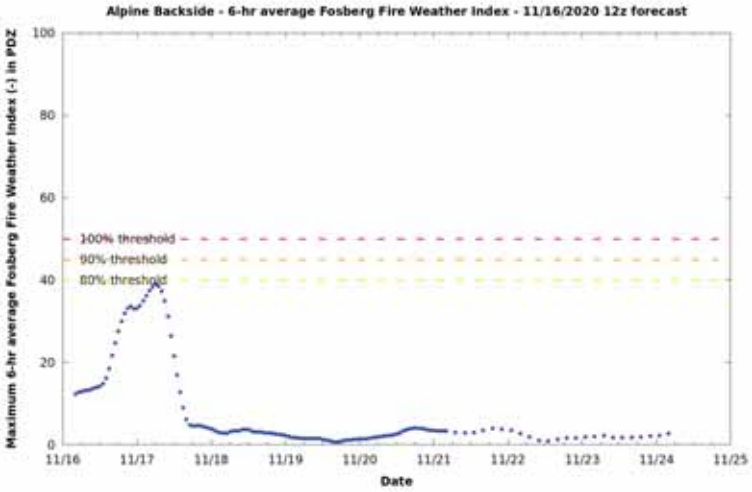


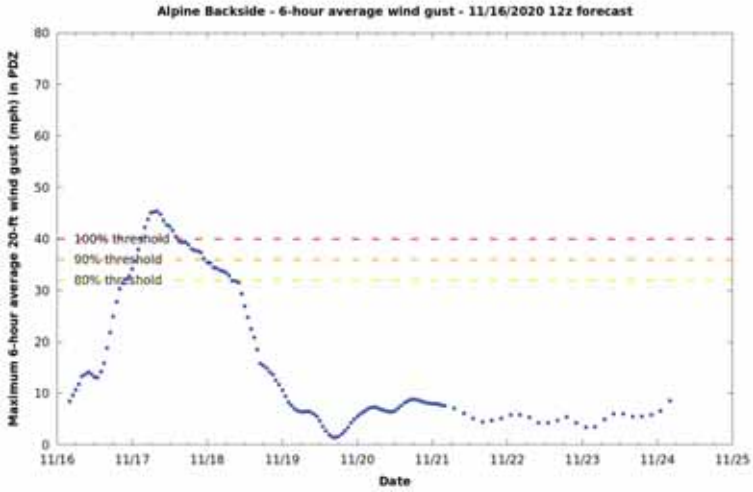
Tahoe Park Heights



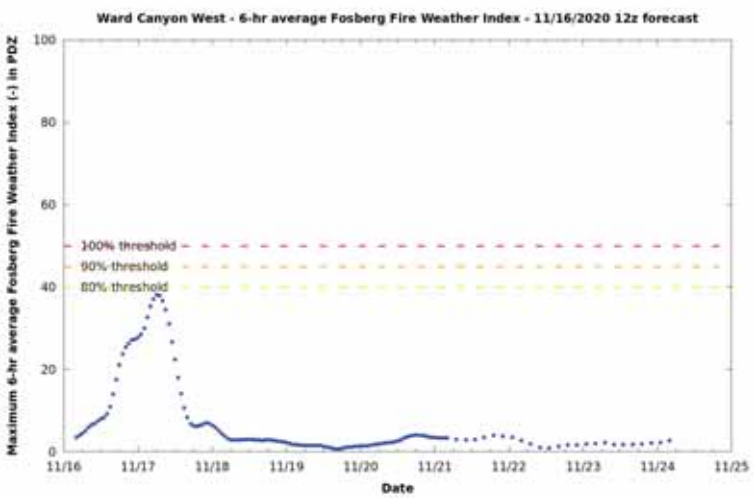


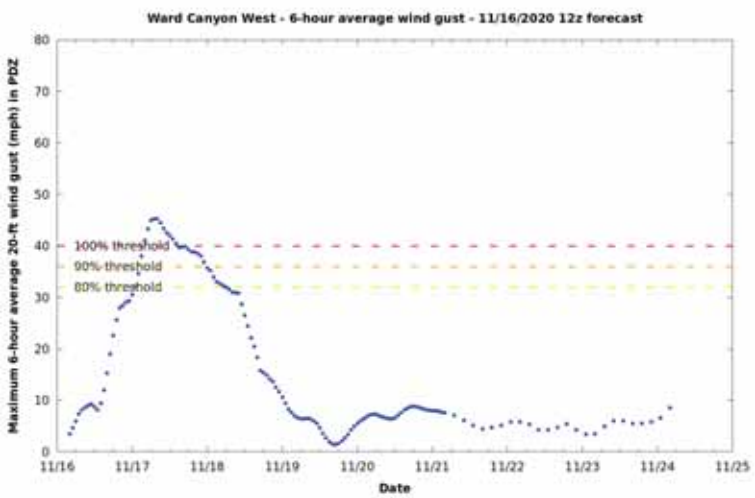
Alpine Backside



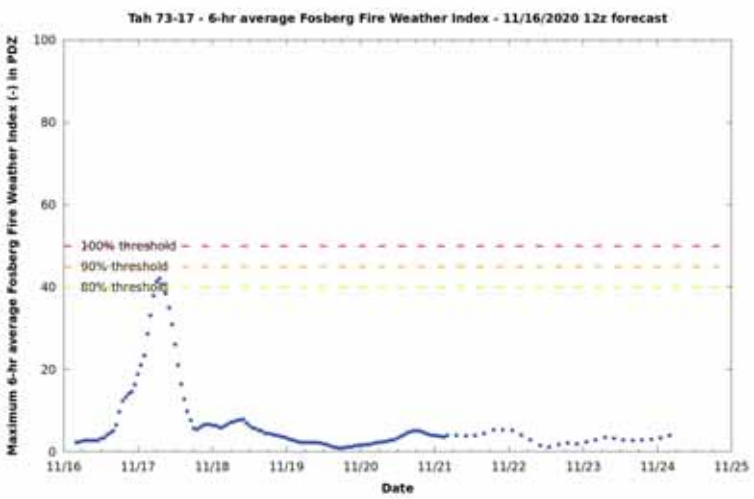


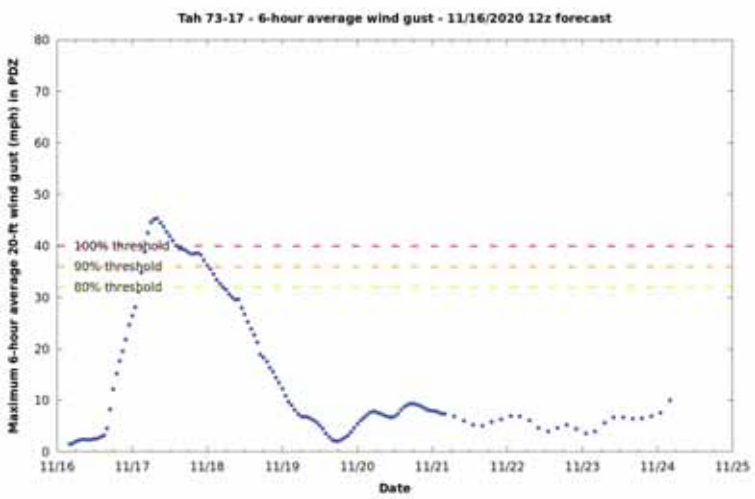
Ward Canyon West



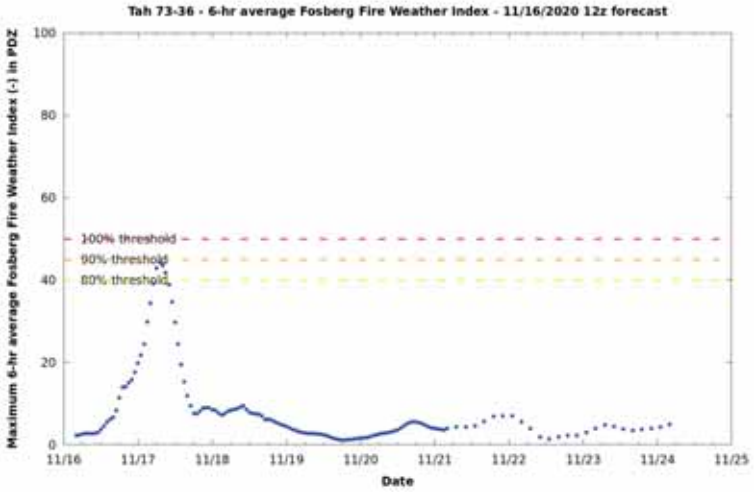


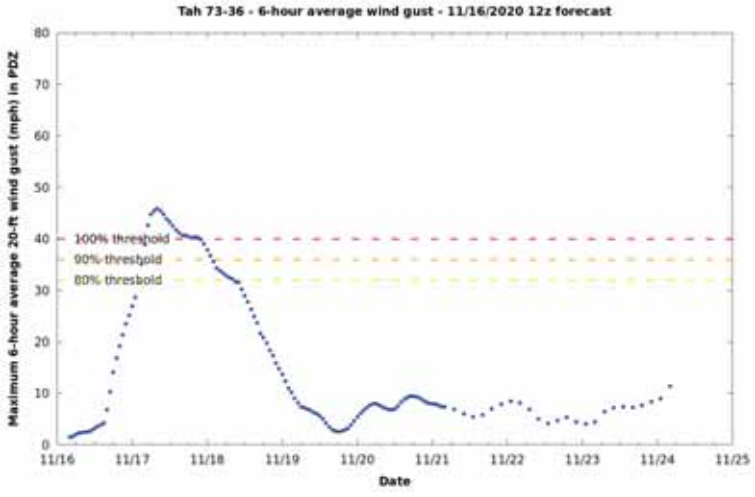
Tah 73-17



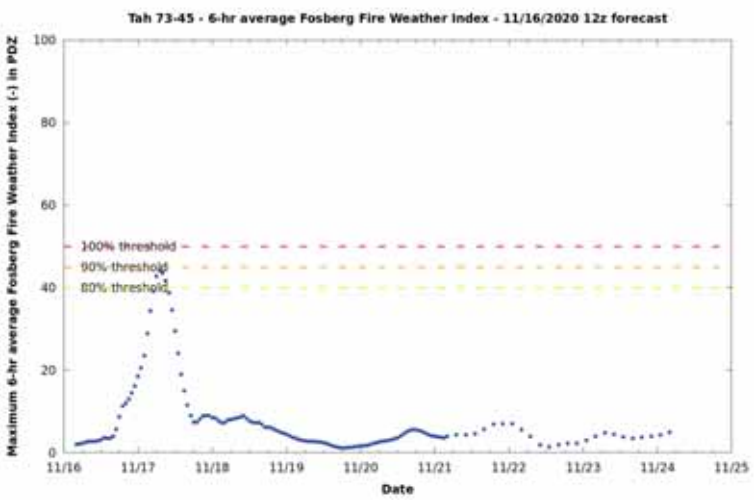


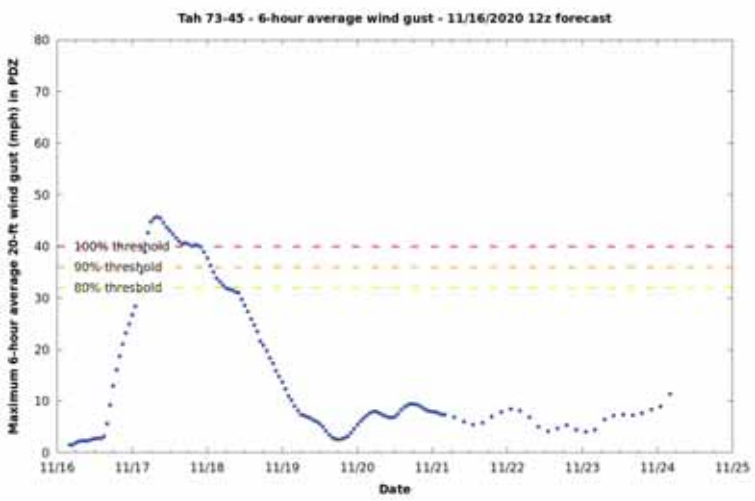
Tah 73-36



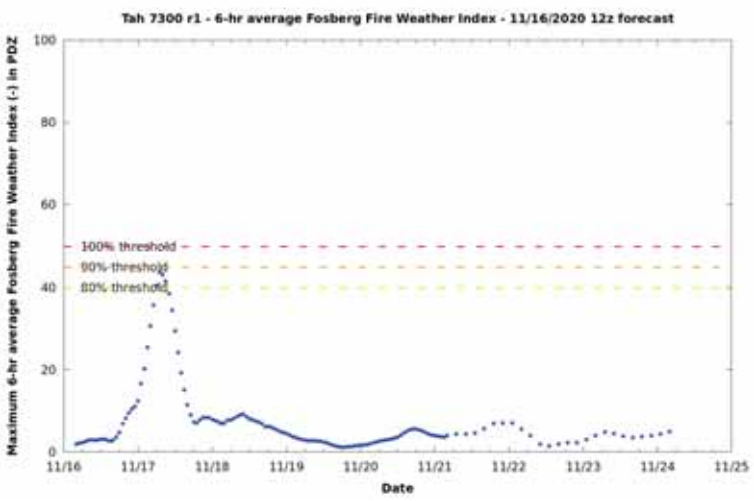


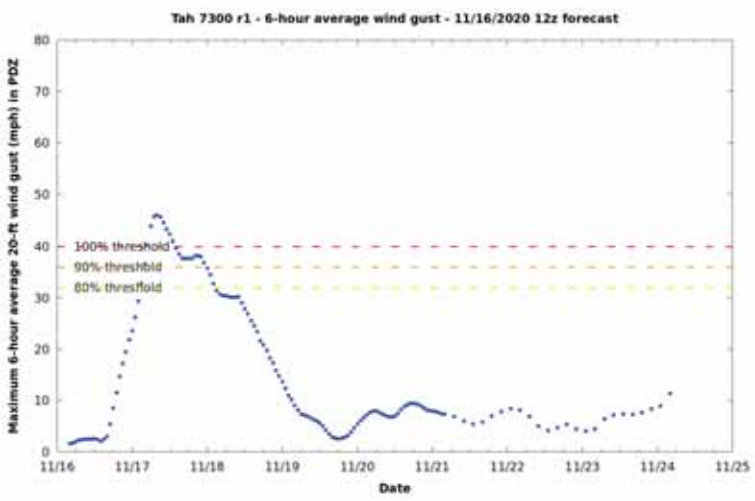
Tah 73-45



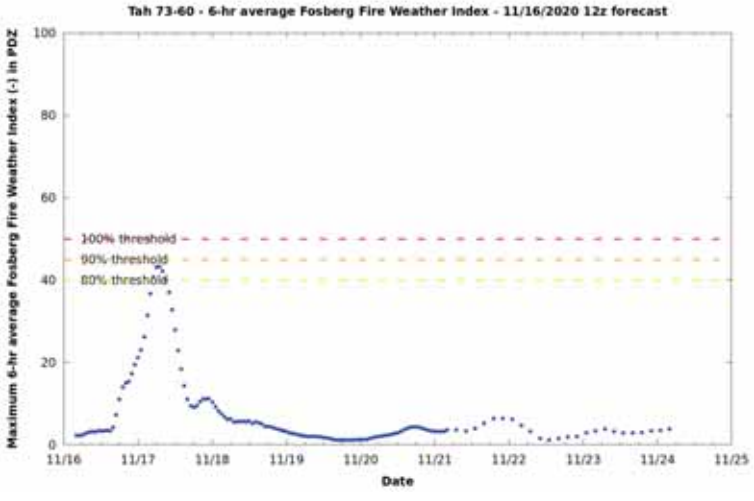


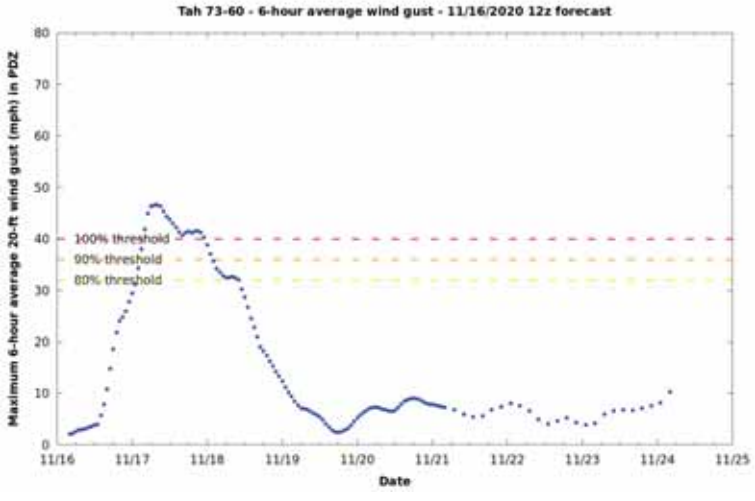
Tah 7300 r1



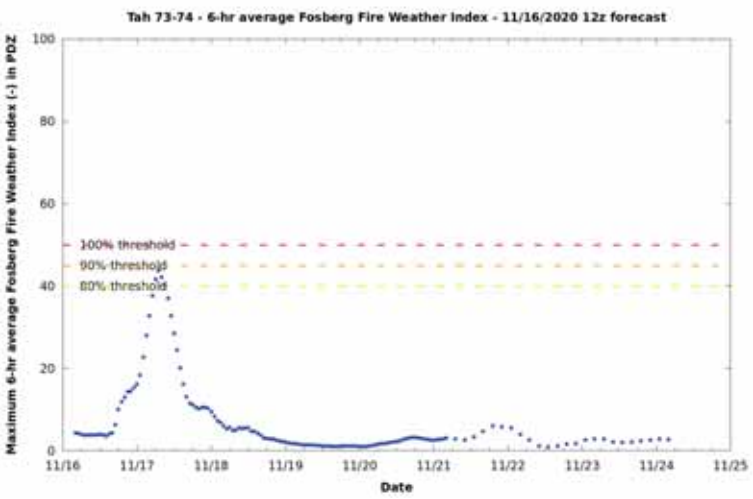


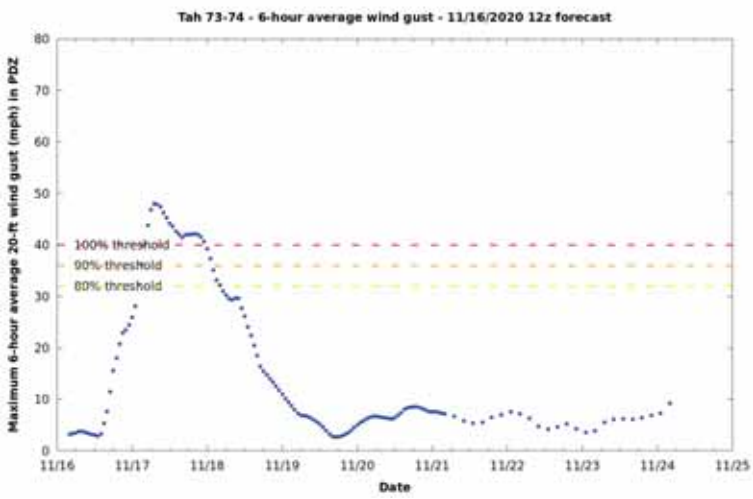
Tah 73-60



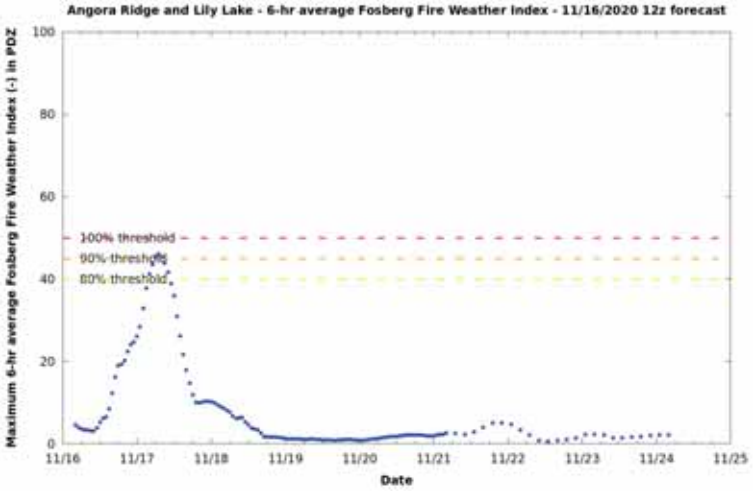


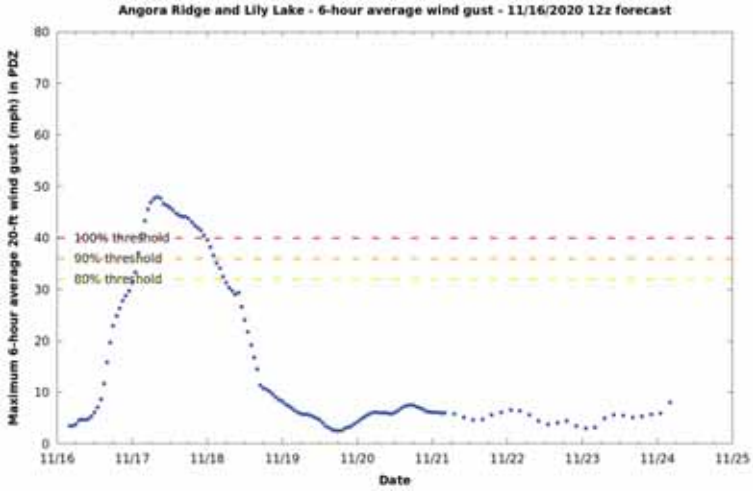
Tah 73-74



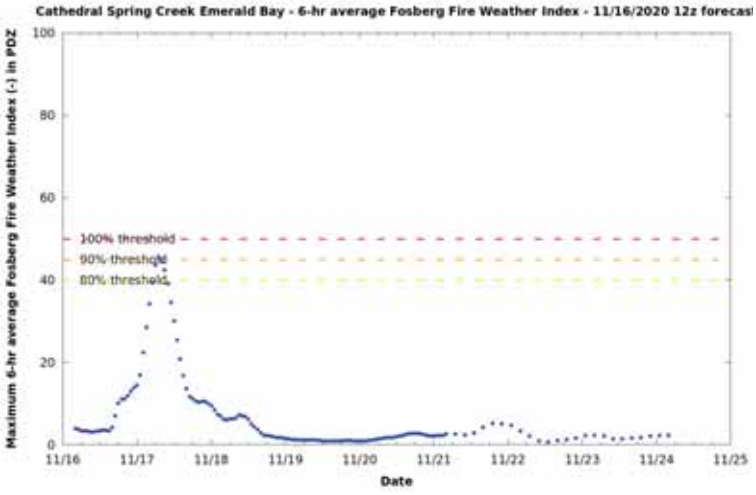


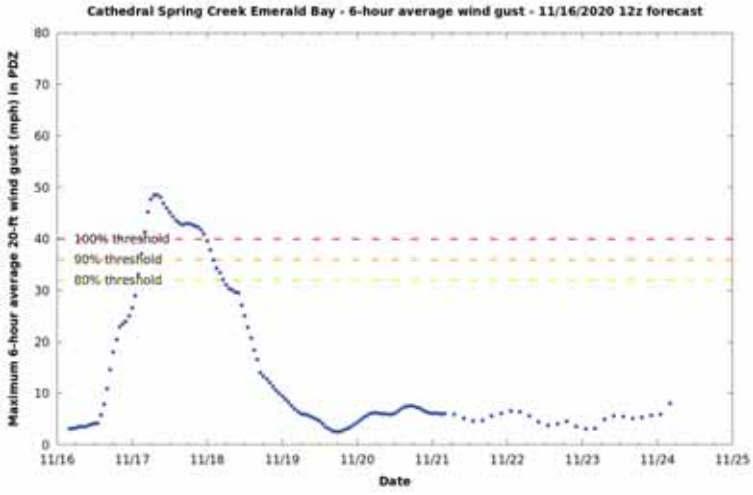
Angora Ridge and Lily Lake



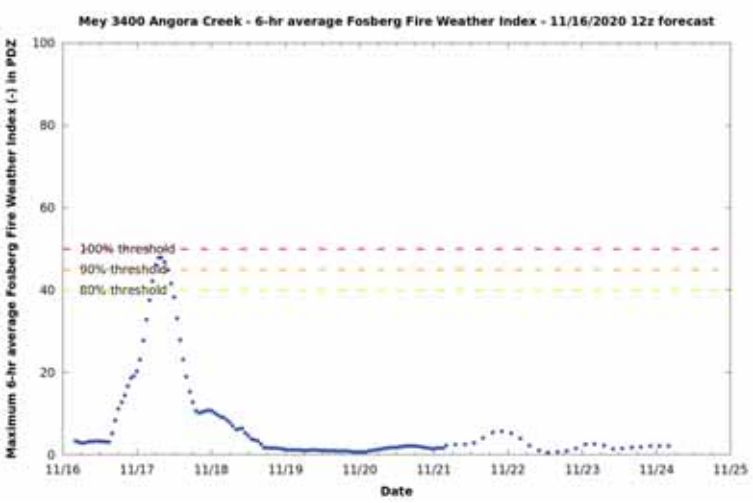


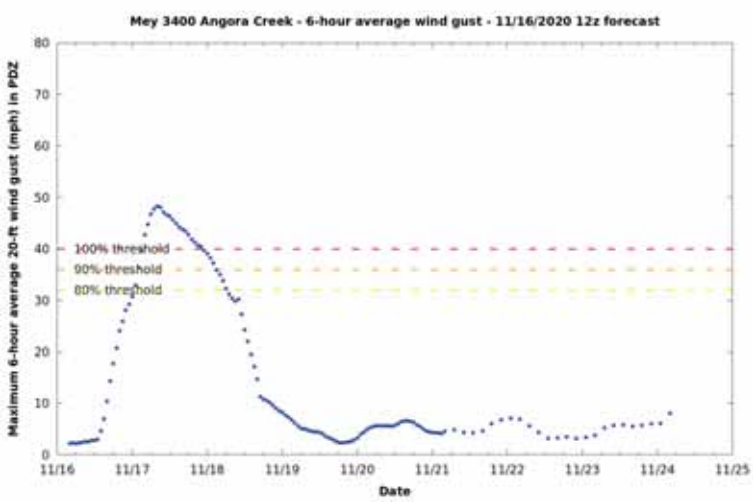
Cathedral Spring Creek Emerald Bay



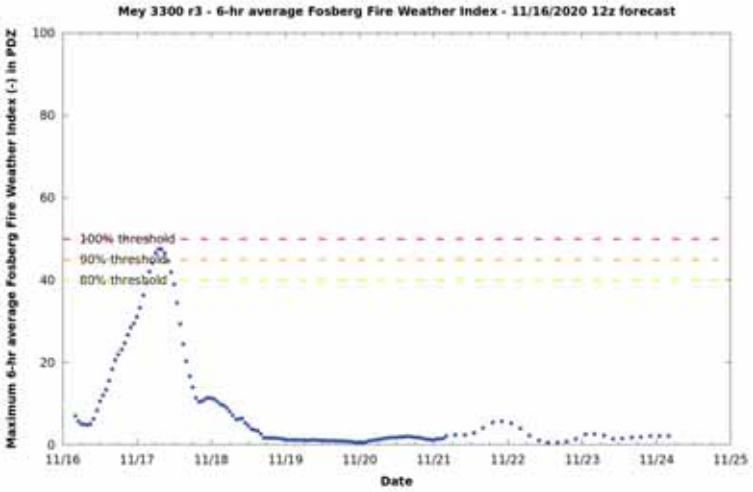


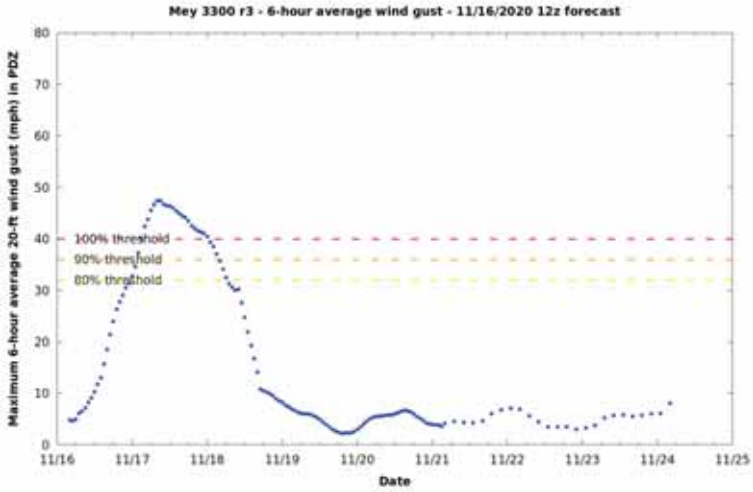
Mey 3400 Angora Creek



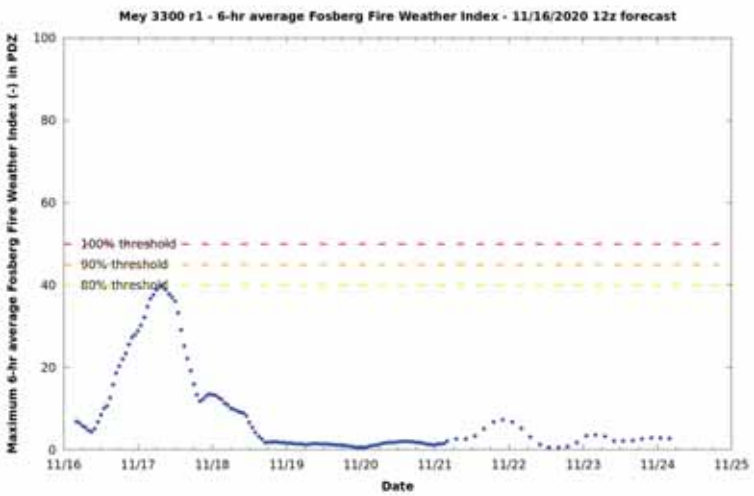


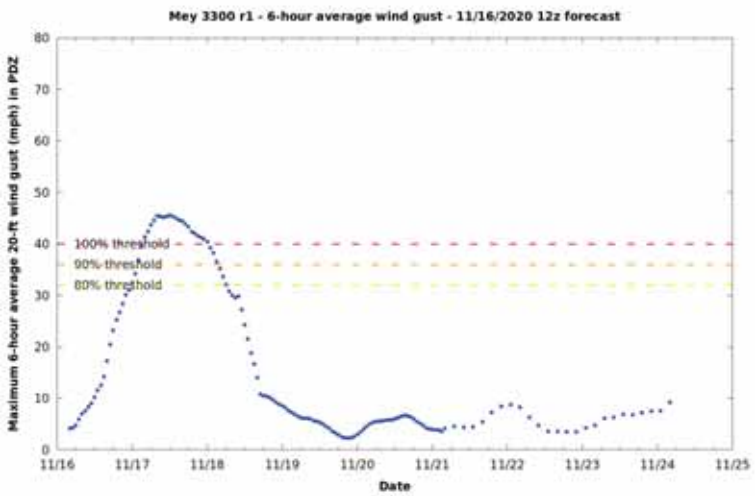
Mey 3300 r3



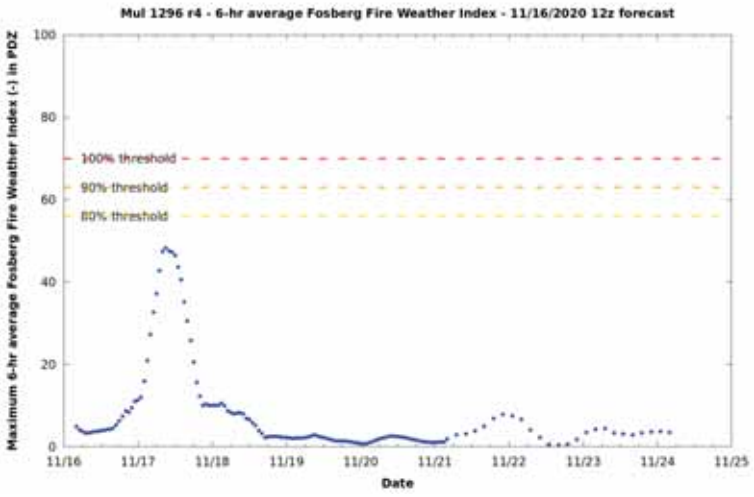


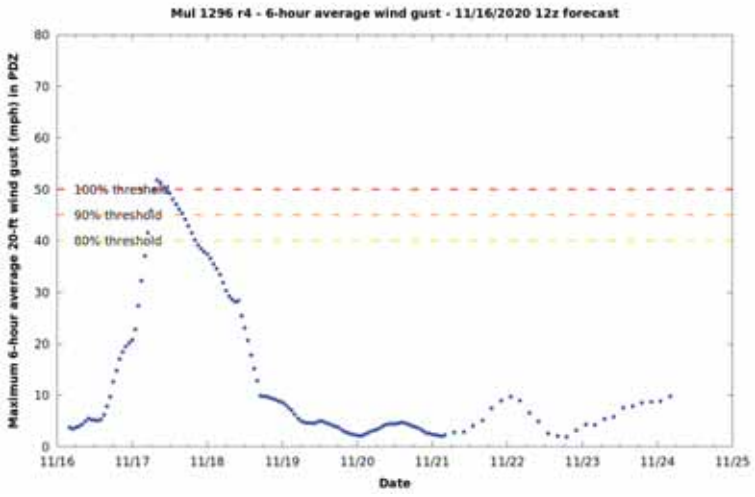
Mey 3300 r1



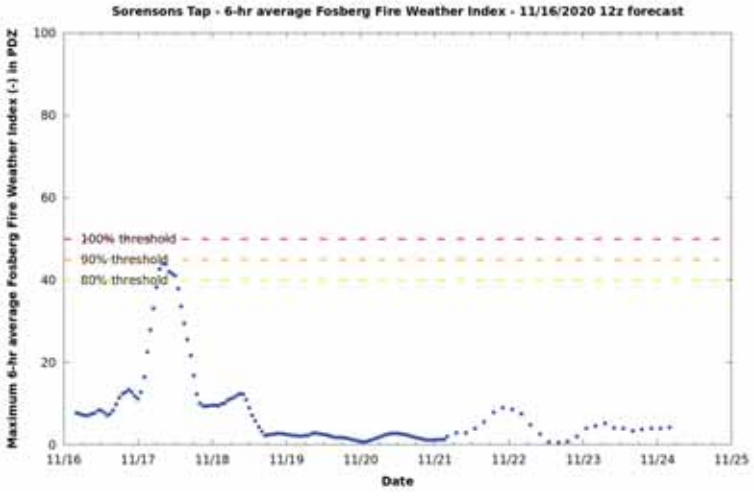


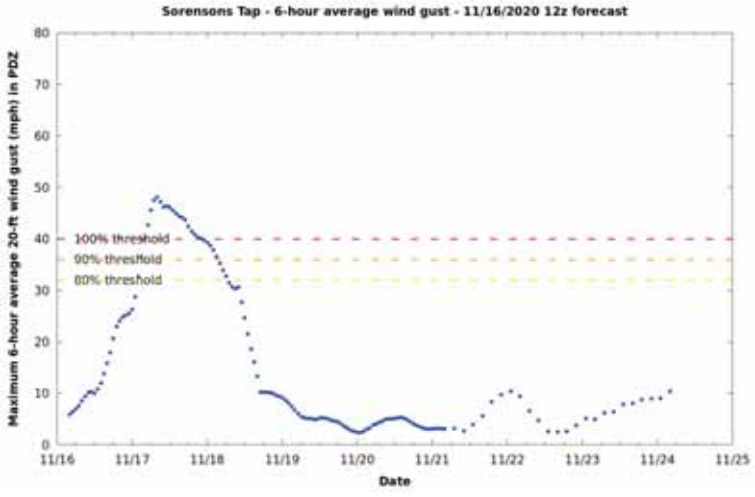
Mul 1296 r4



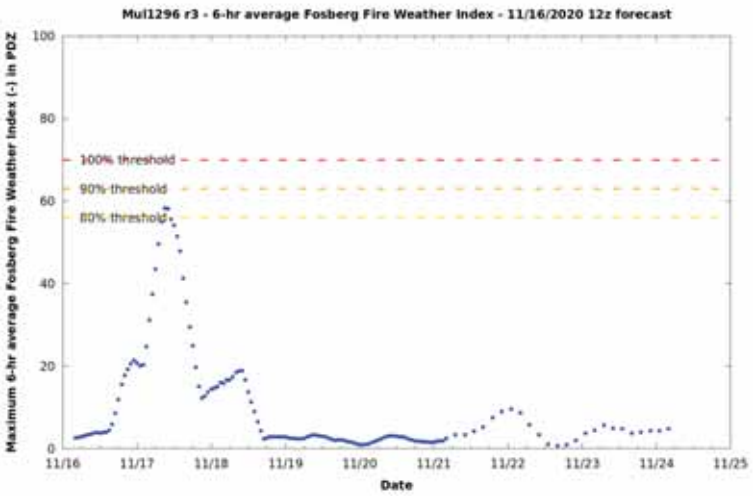


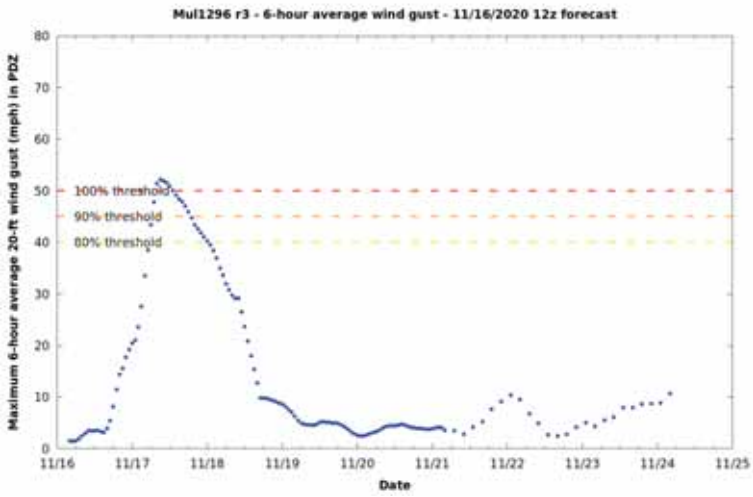
Sorensons Tap



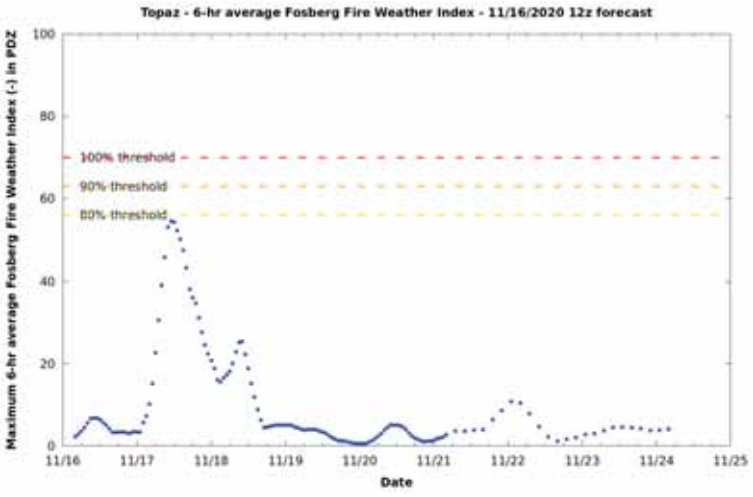


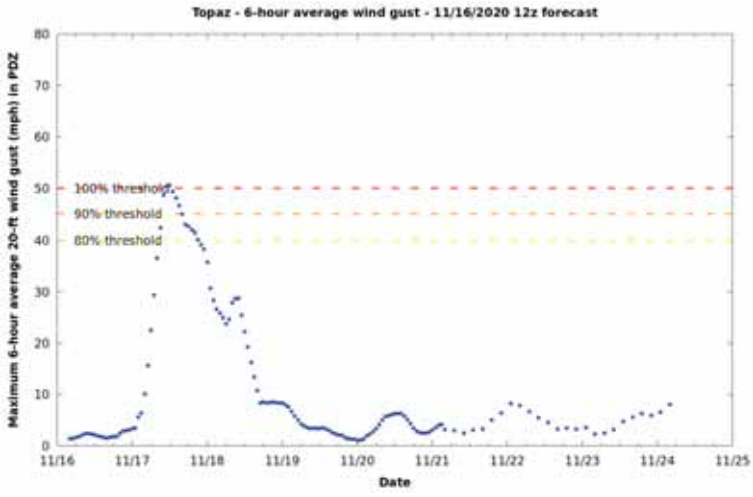
Mul 1296 r3



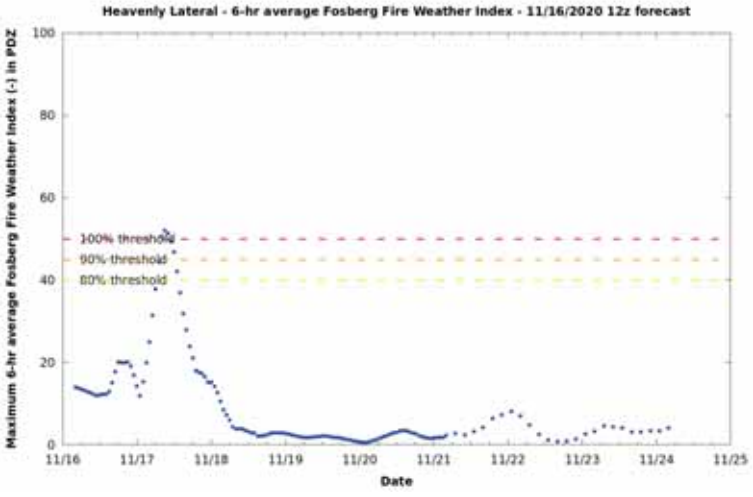


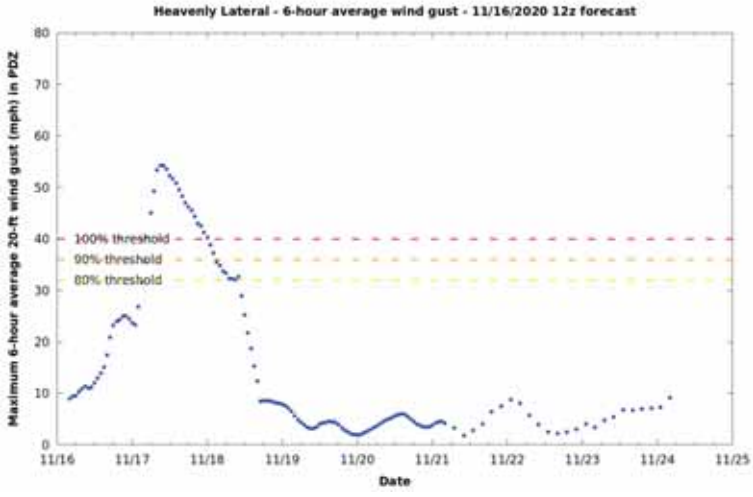
Topaz



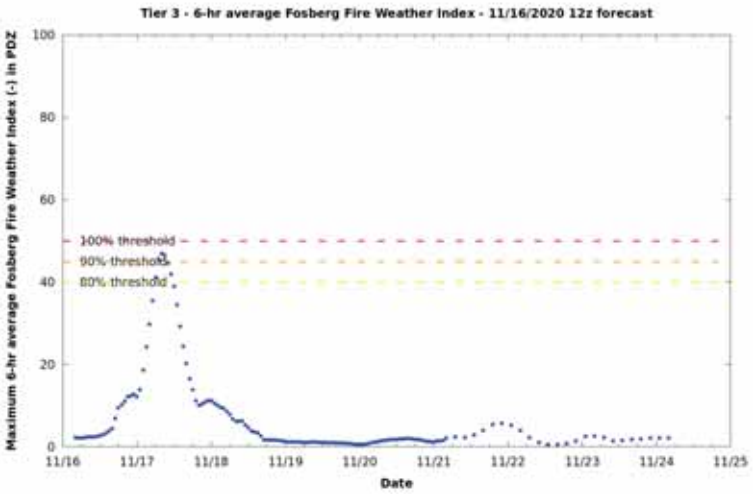


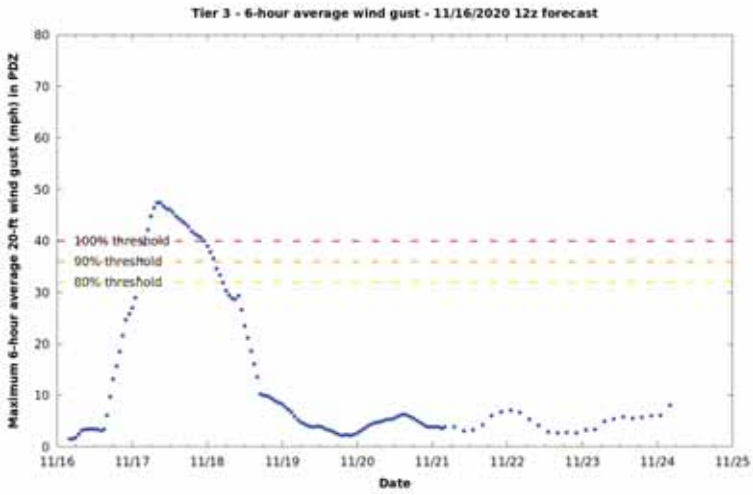
Heavenly Lateral



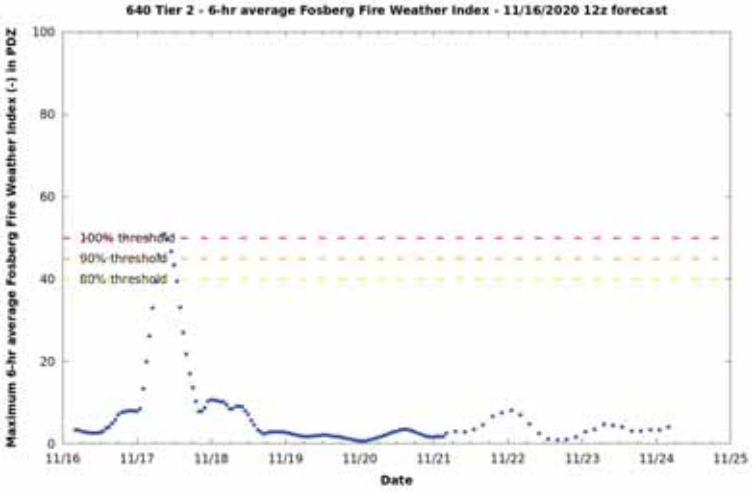


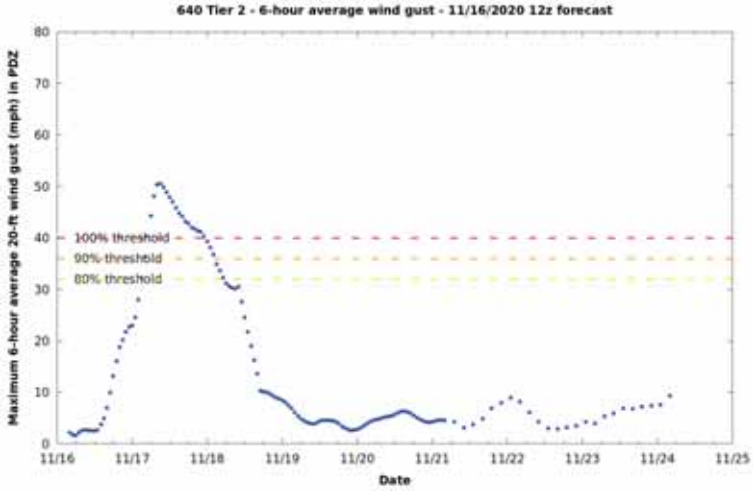
Tier 3



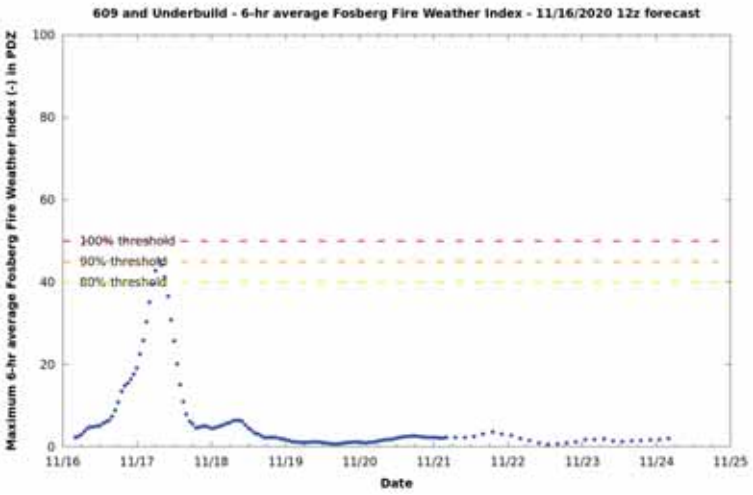


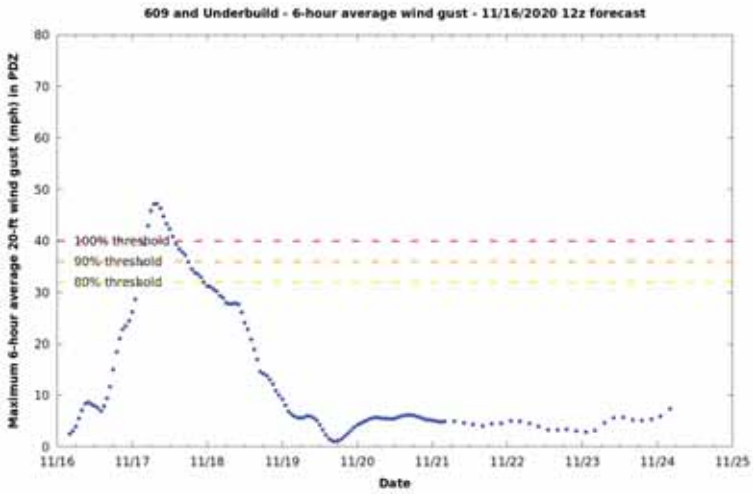
640 Tier 2



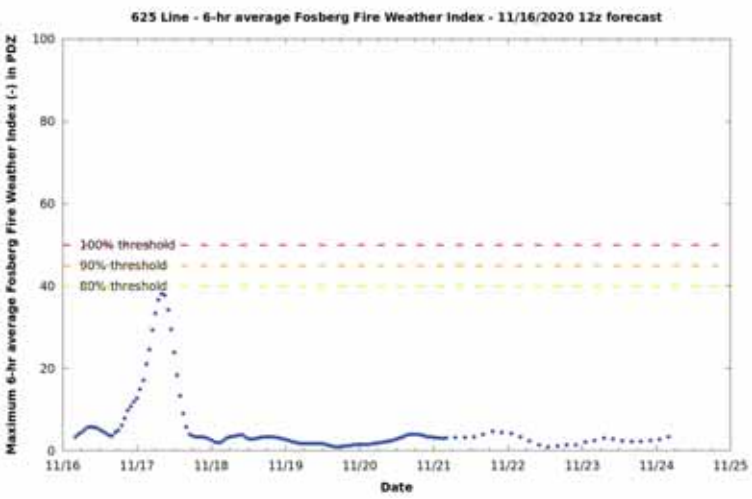


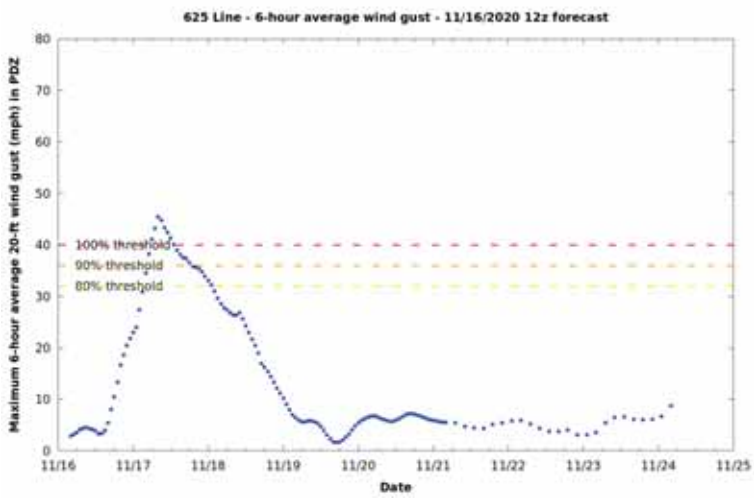
609 and Underbuild



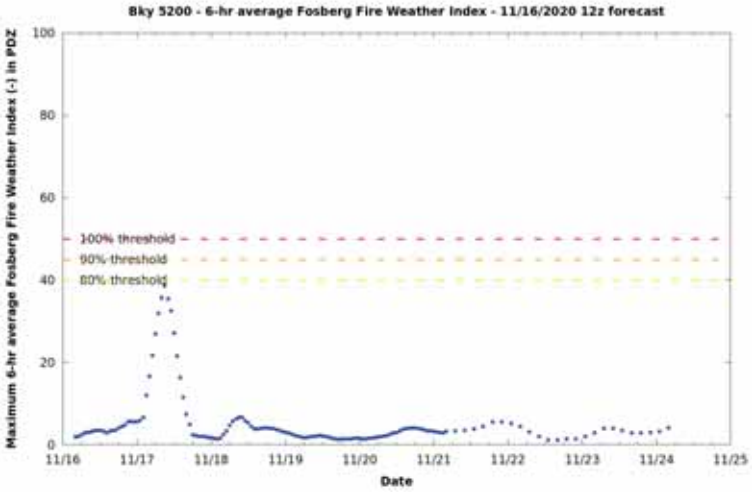


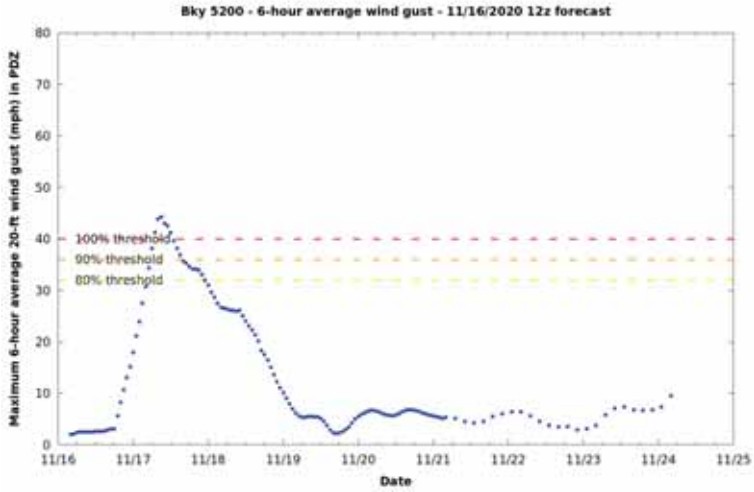
625 Line



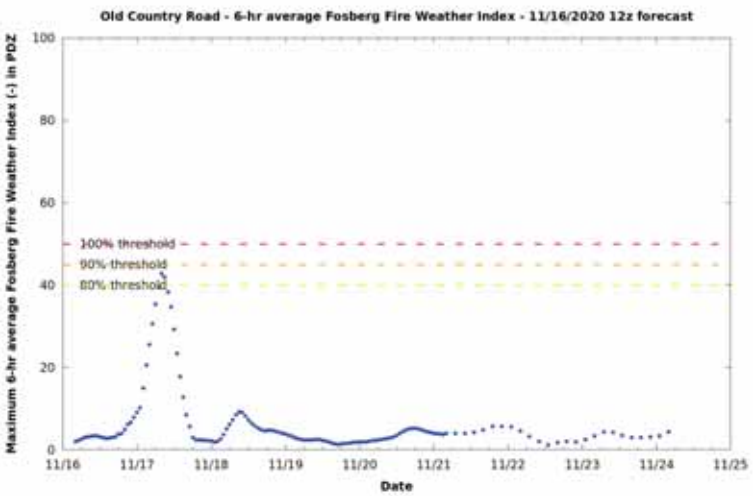


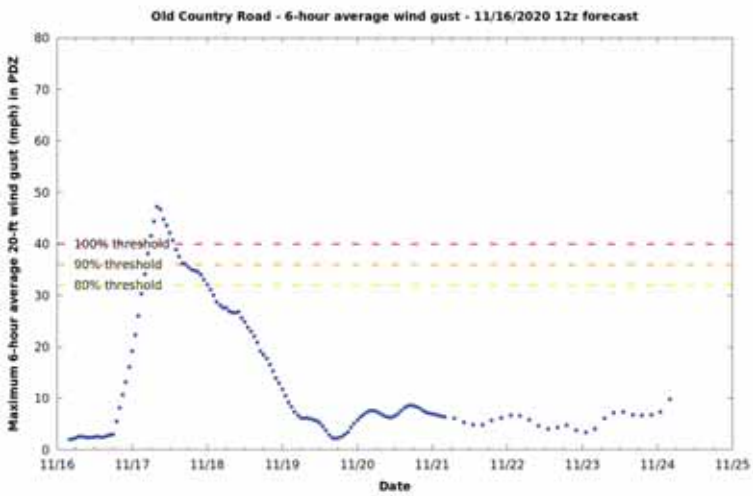
Bky 5200



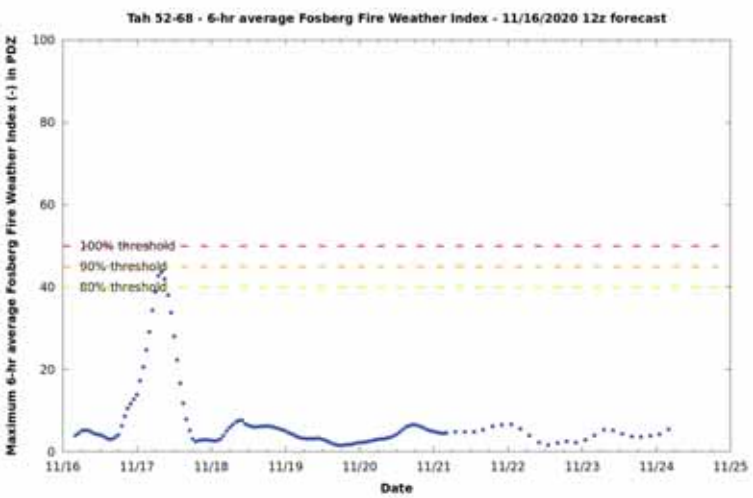


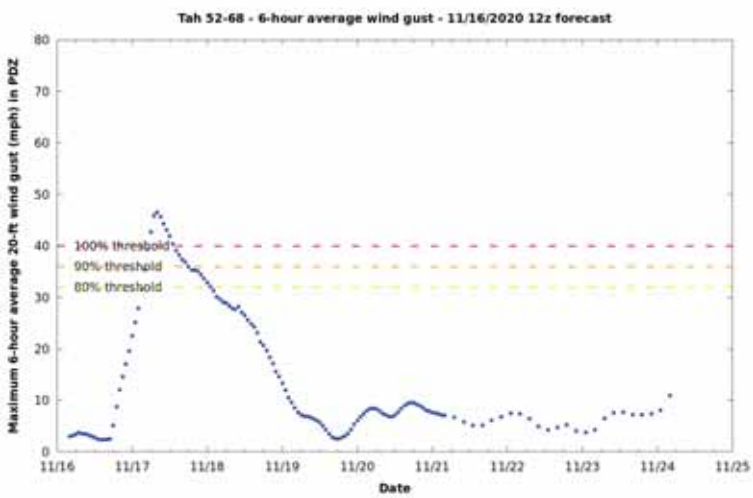
Old Country Road



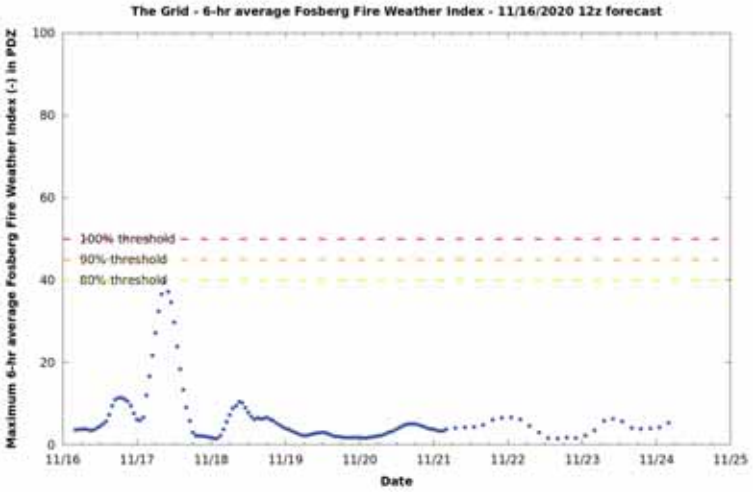


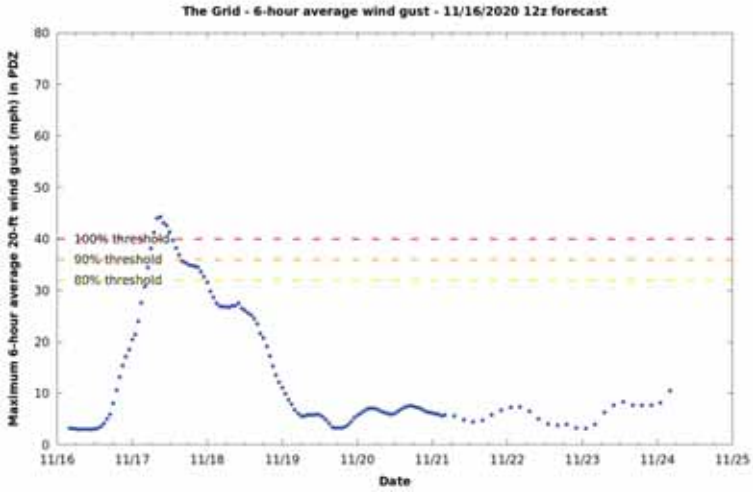
Tah 52-68



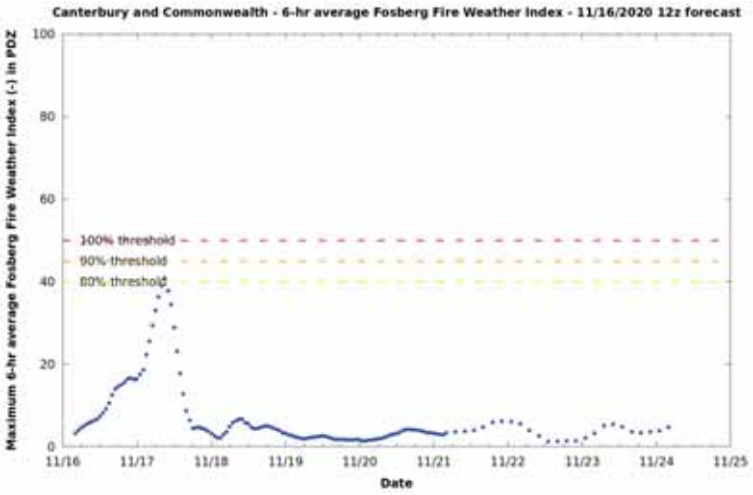


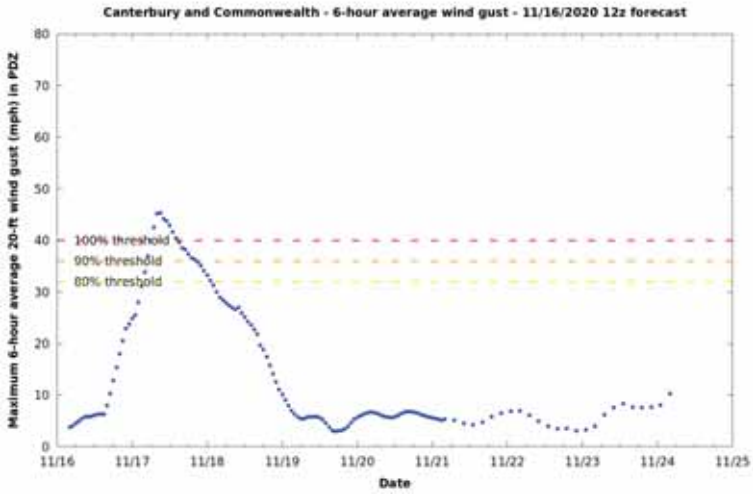
The Grid



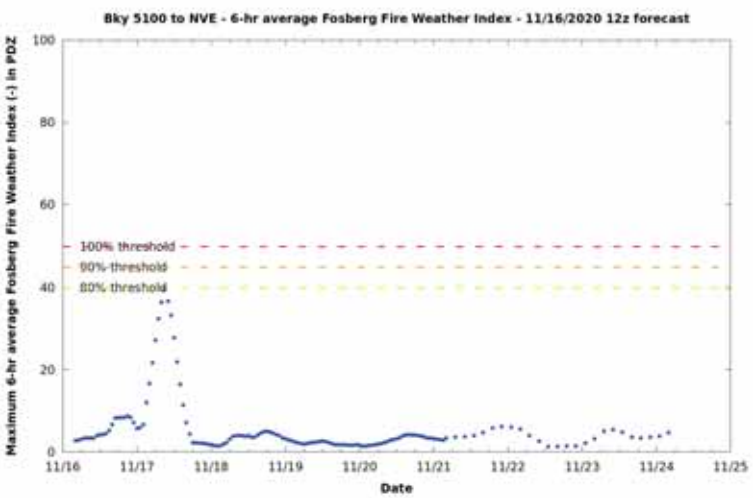


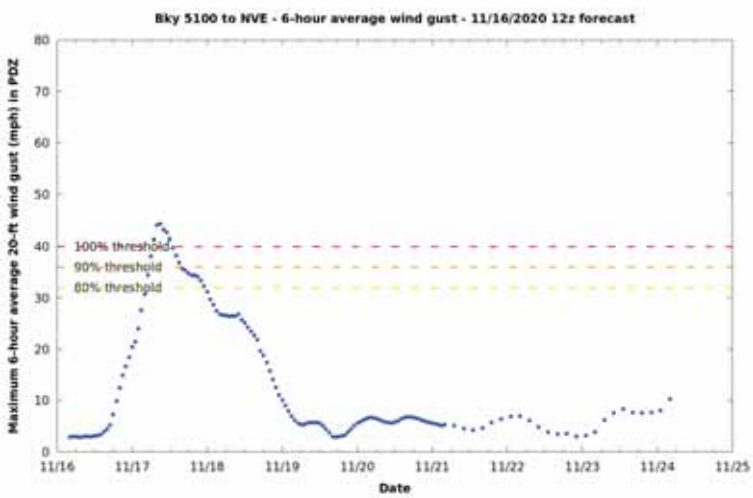
Canterbuy and Commonwealth



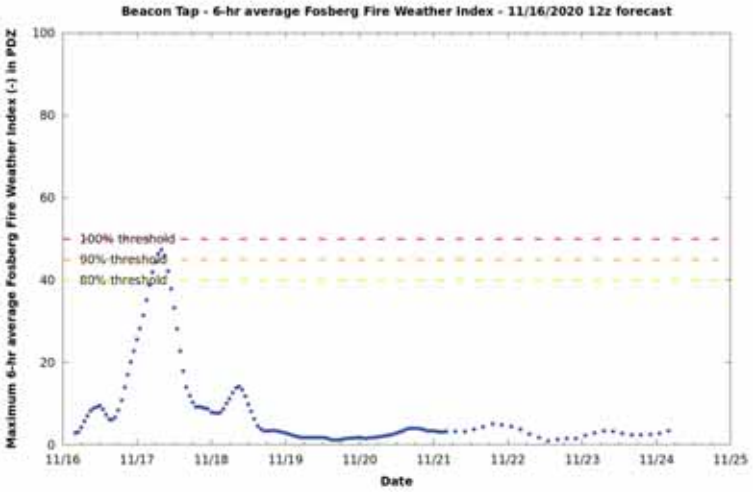


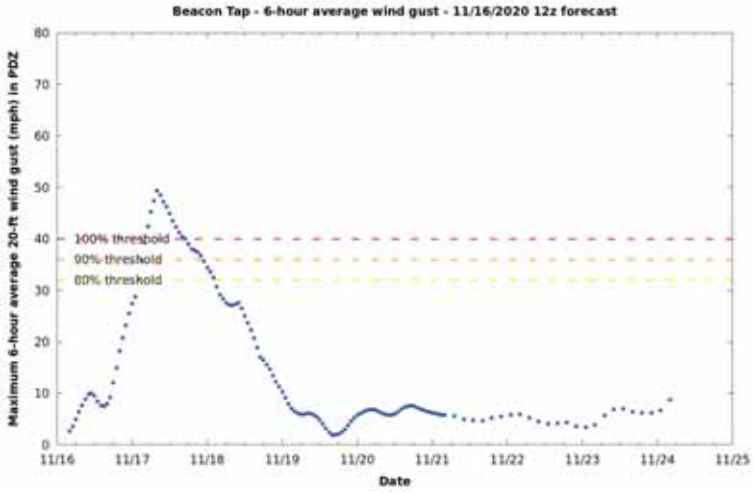
Bky 5100 to NVE



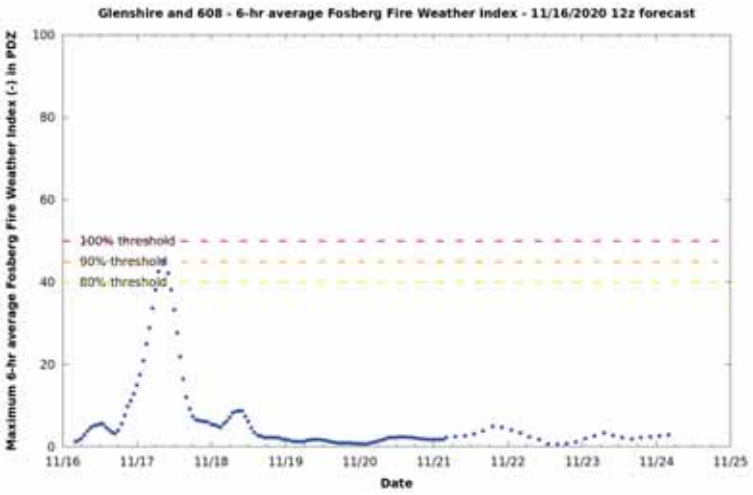


Beacon Tap



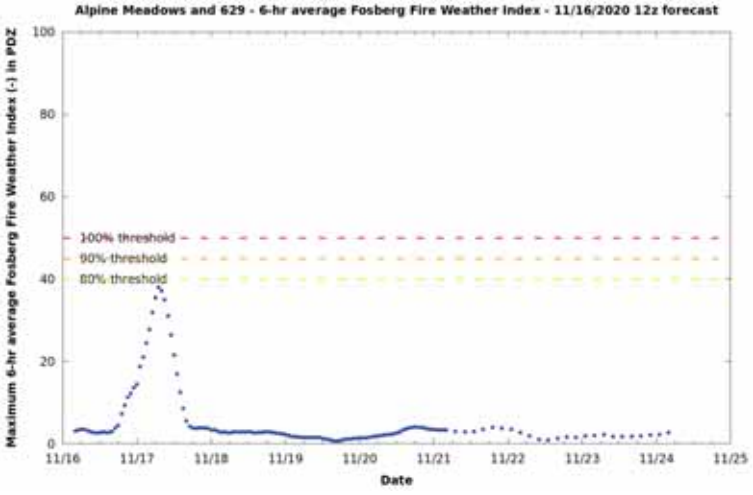


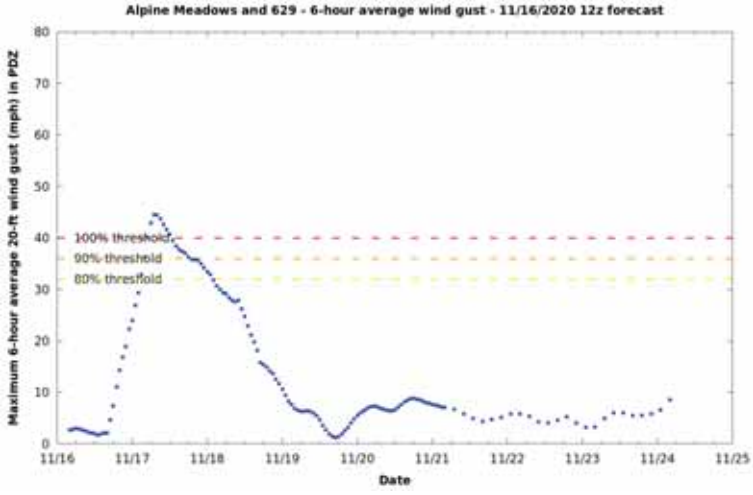
Glenshire and 608



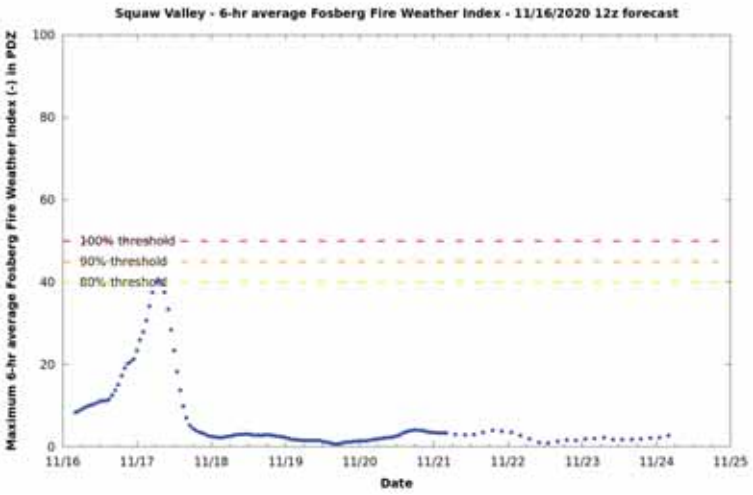


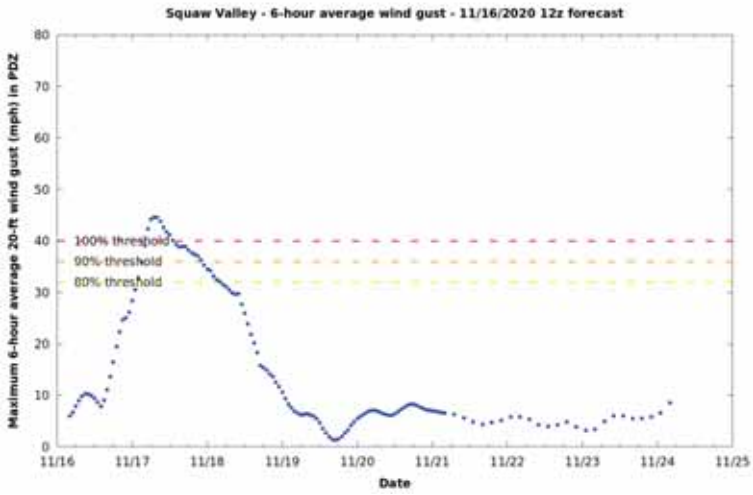
Alpine Meadows and 629



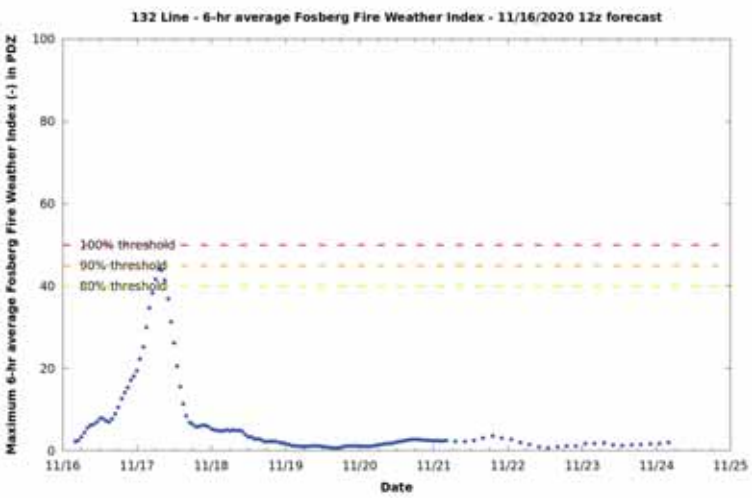


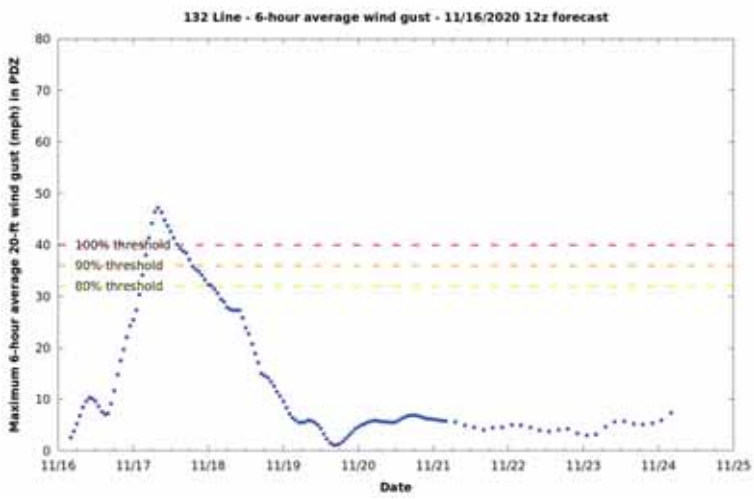
Squaw Valley



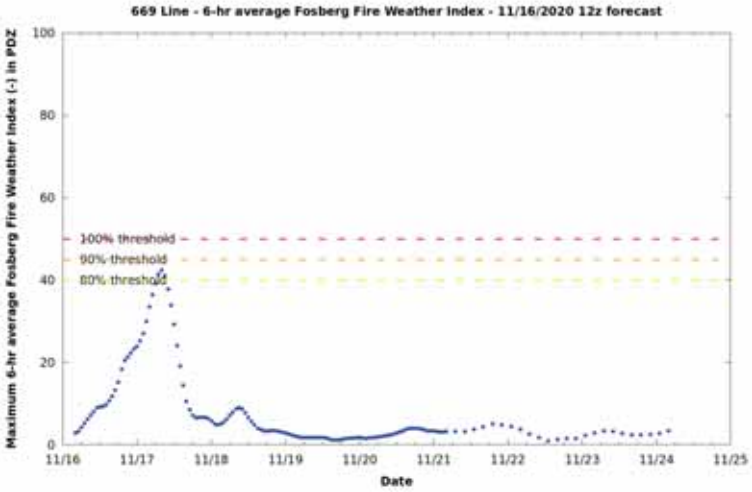


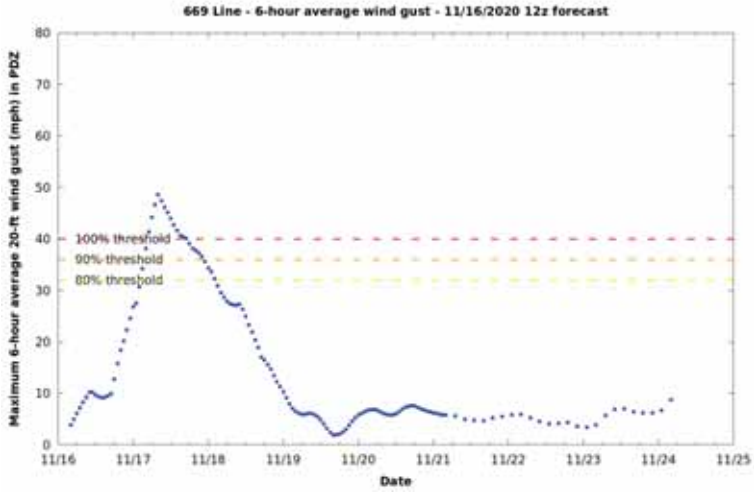
132 Line



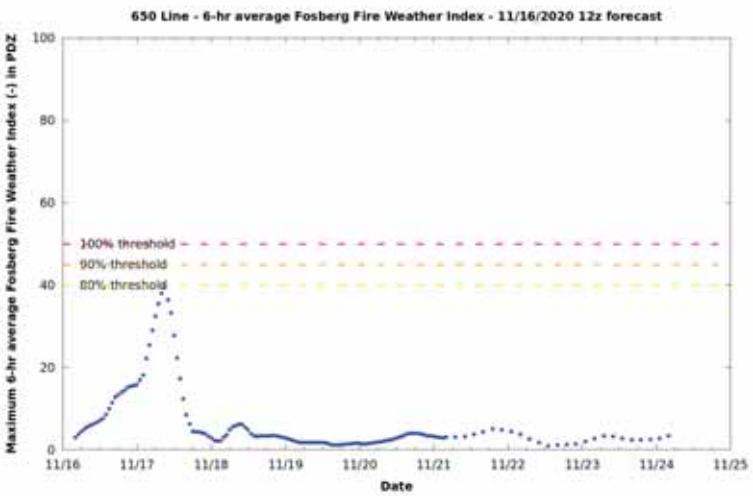


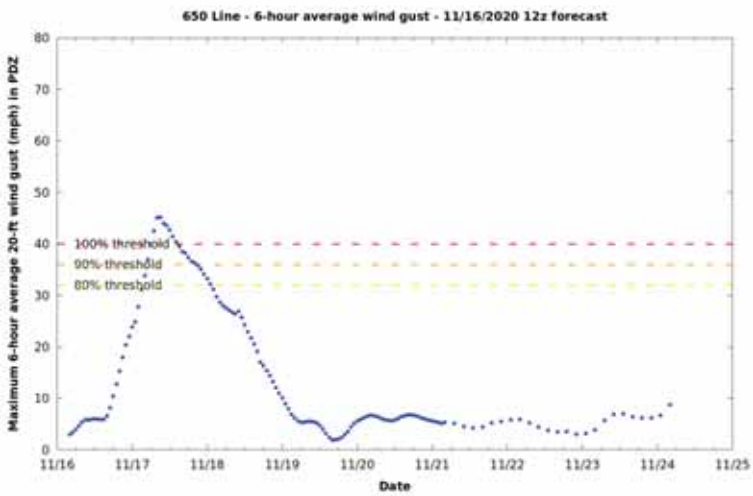
669 Line



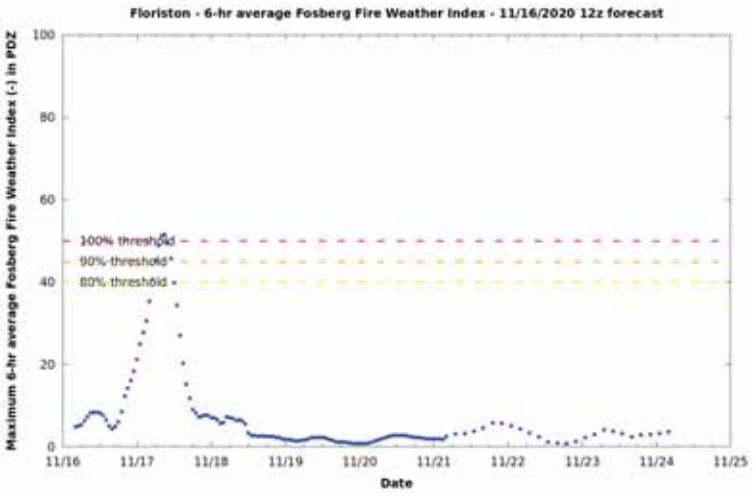


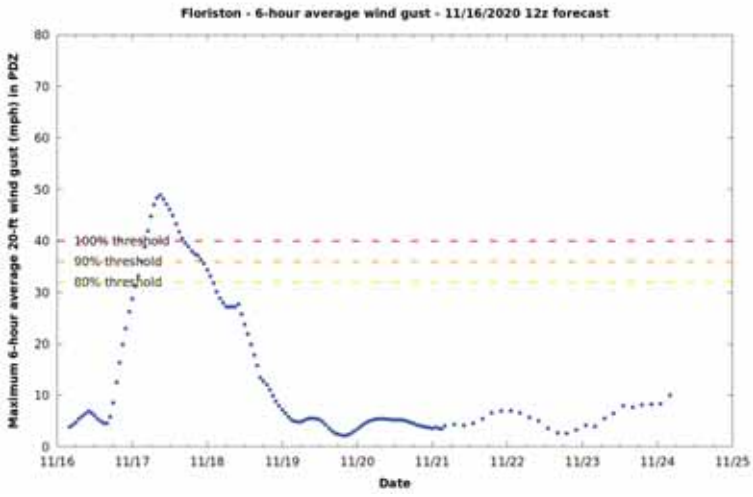
650 Line



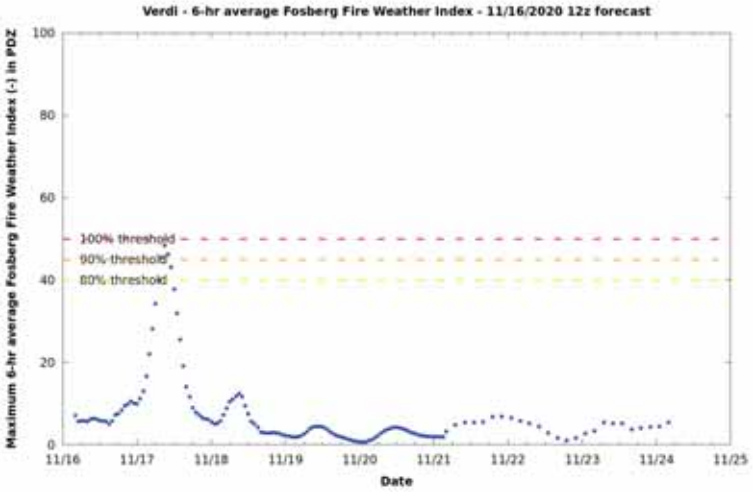


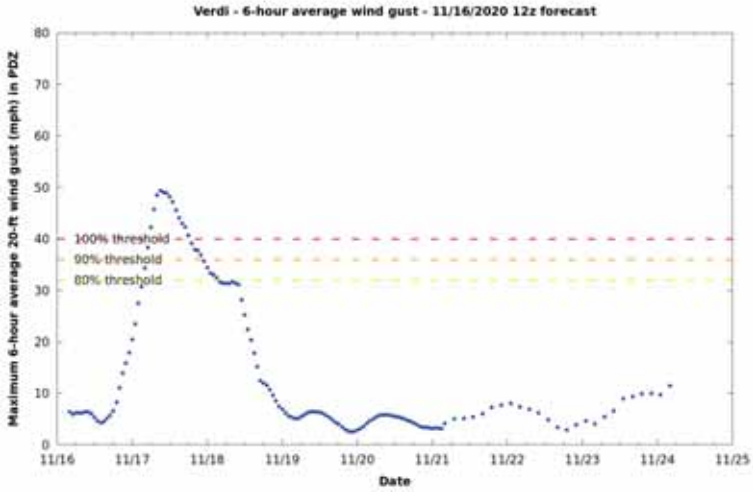
Floriston



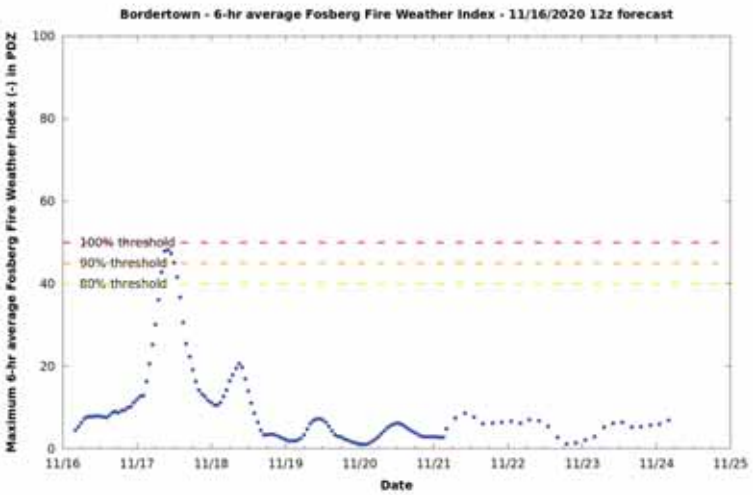


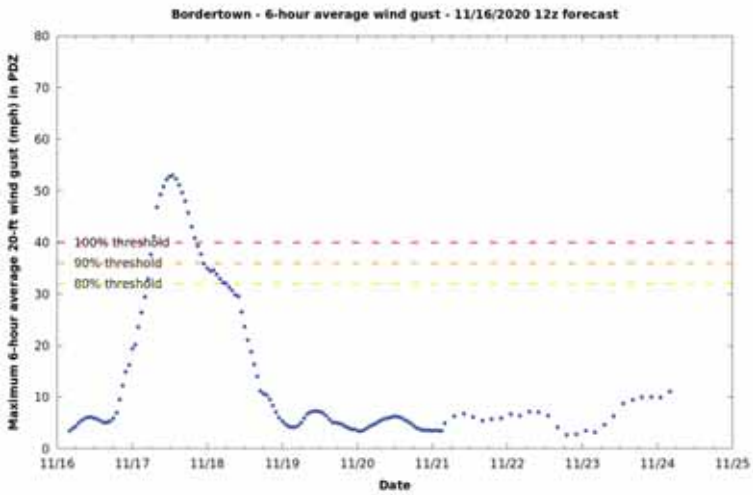
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/16/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25


Bordertown - 6-hour average wind gust - 11/16/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25

Liberty Utilities Fire Potential Index Forecast for 11/17/20 - 11/23/20

Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	moderate	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

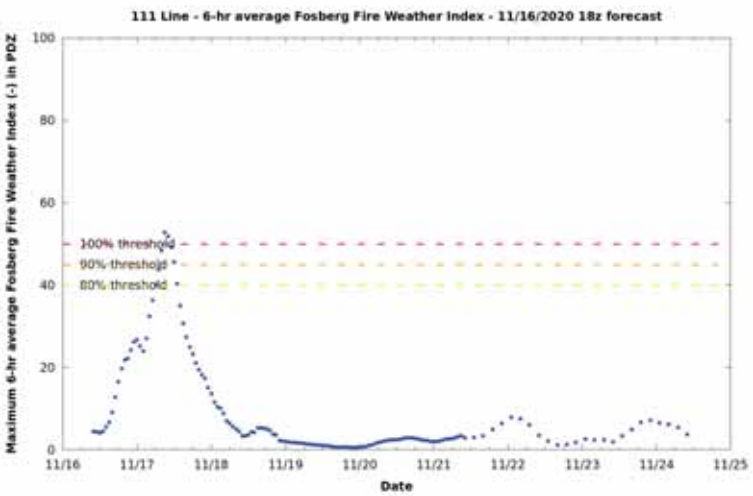
Liberty Utilities Energy Release Component Forecast for 11/17/20 - 11/23/20

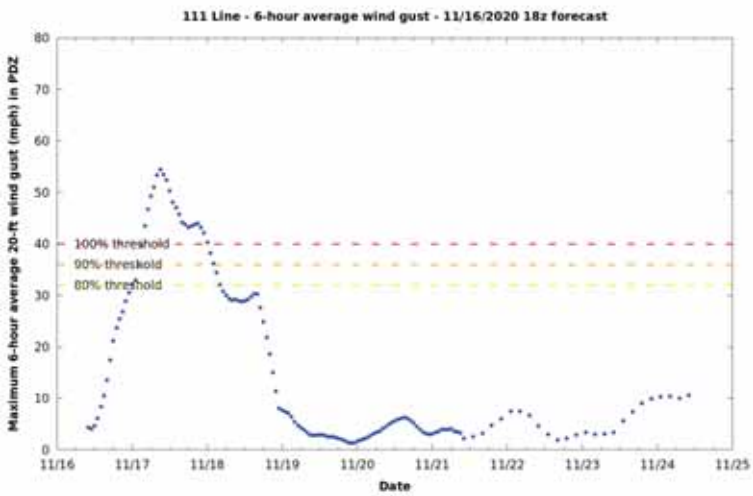
Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	56.9	55.7	44.6	39.3	41.2	42.2	45.3
Sierra Brooks	59.8	60.7	49.5	44.4	45.0	48.8	53.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	13.0	12.8	9.8	8.2	7.5	7.5	7.7
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.5	1.4	1.1	1.1	1.0	1.0	1.1
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	40.0	41.8	29.9	25.4	26.6	27.9	32.7
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	49.2	51.7	36.8	30.1	30.2	32.5	34.7
Topaz	60.5	61.3	44.8	38.0	38.4	39.2	45.1
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	34.0	33.4	24.7	23.0	23.9	24.4	25.7
Old Country Road	60.9	57.6	45.7	43.9	44.3	45.3	47.6
Tah 52-68	23.2	21.3	17.0	16.7	16.7	17.0	17.4
The Grid	57.2	55.8	39.0	36.3	38.1	38.9	39.4
Canterbury and Commonwealth	41.8	41.1	28.6	26.4	27.9	28.6	29.3
Bky 5100 to NVE	23.9	23.5	16.4	15.1	15.9	16.4	16.8
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	24.2	23.3	18.7	15.8	14.7	14.1	14.7
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	33.4	33.4	27.0	25.0	25.0	25.5	27.5
650 Line	1.9	1.9	1.3	1.2	1.3	1.3	1.4
Floriston	46.6	46.6	34.7	31.2	31.1	33.6	36.2
Verdi	55.7	55.7	44.1	36.2	39.6	44.1	46.8
Bordertown	58.8	58.8	47.7	40.0	41.6	45.7	48.9

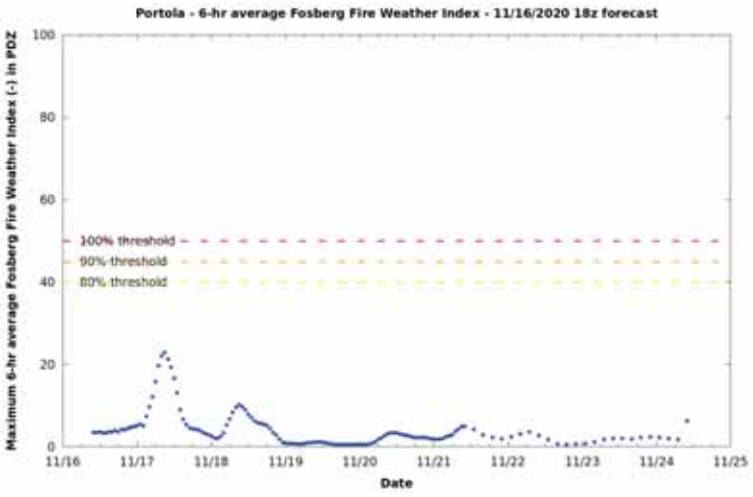
Liberty Utilities Fire Weather Summary Plots - 11/16/2020 18z forecast

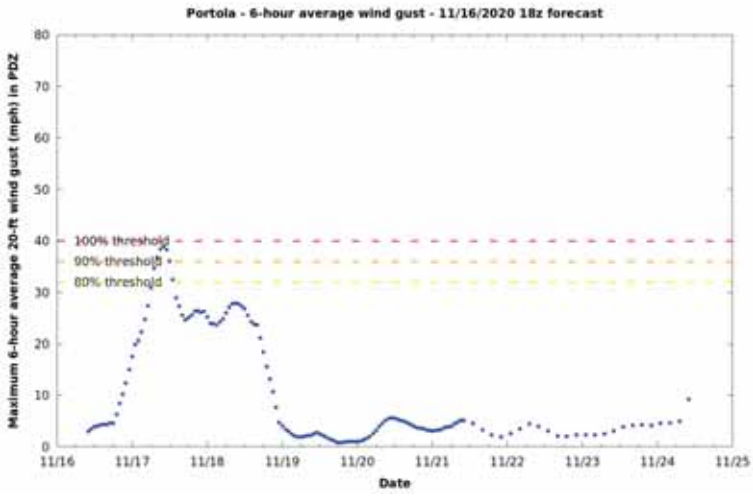
111 Line



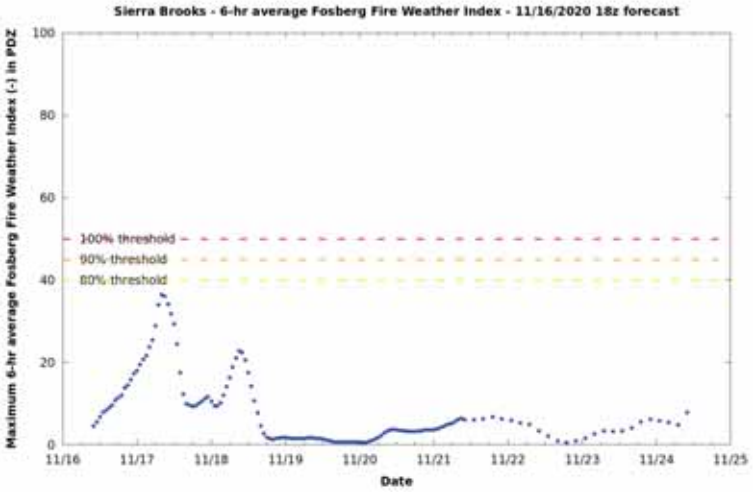


Portola



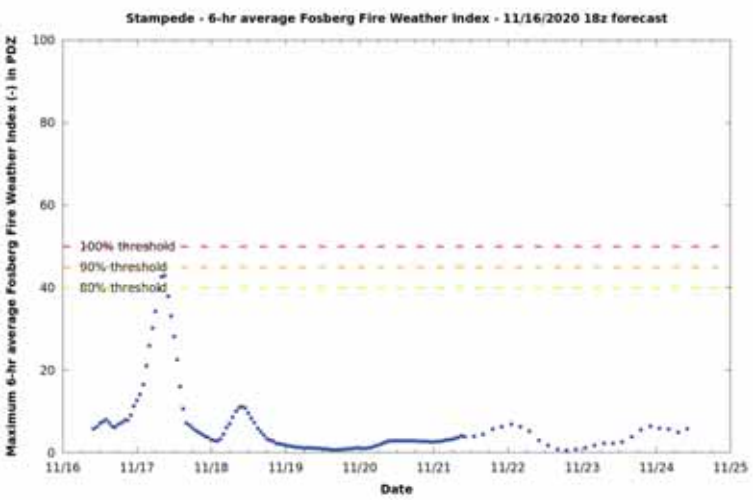


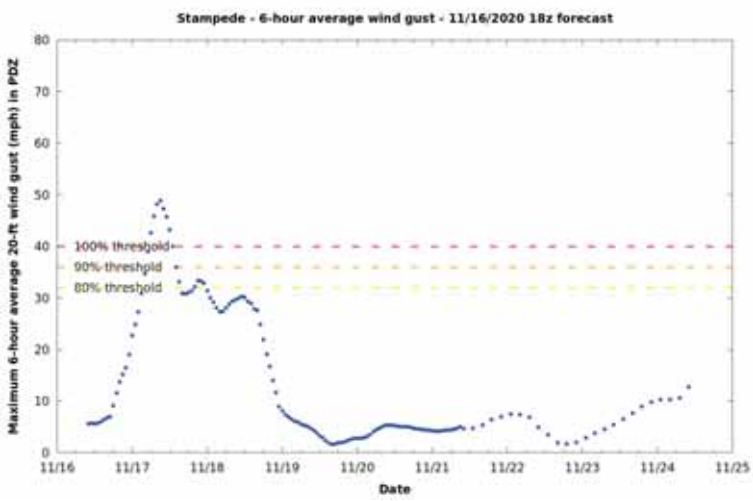
Sierra Brooks



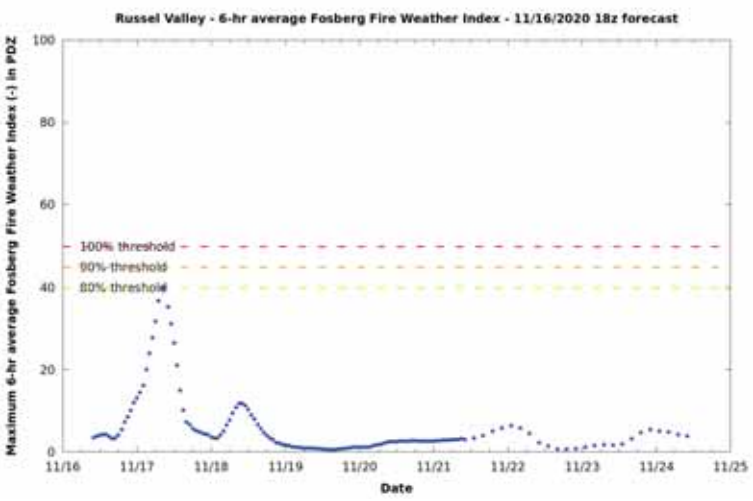


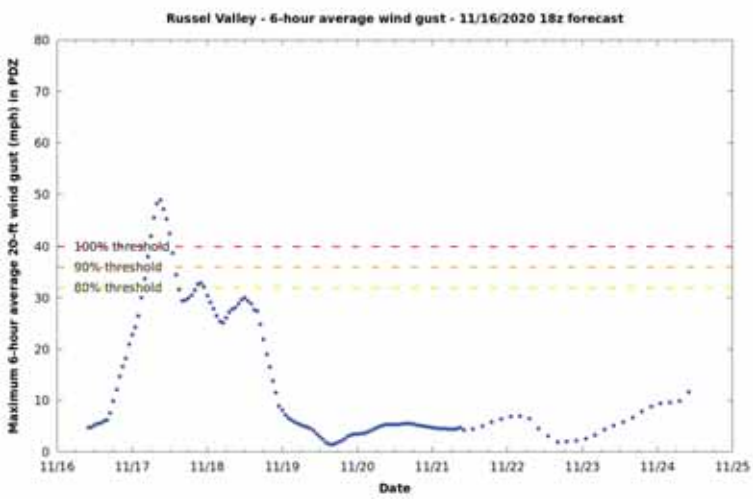
Stampede



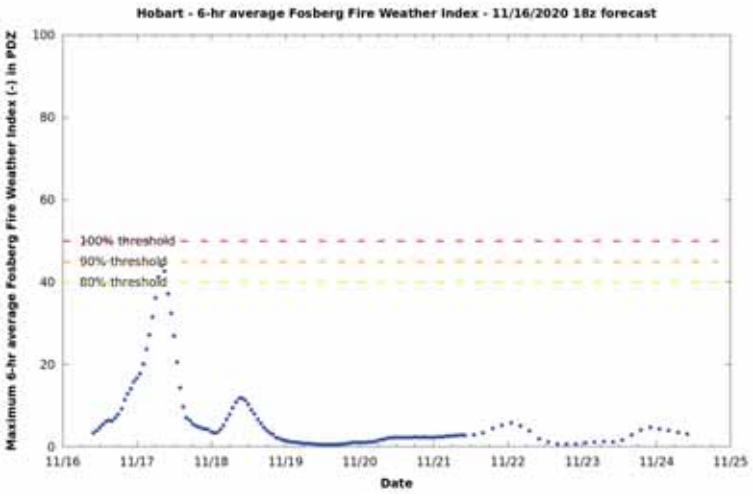


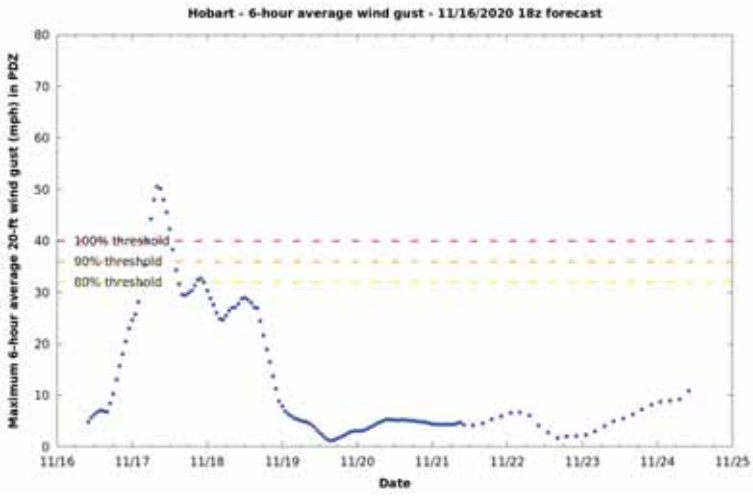
Russell Valley



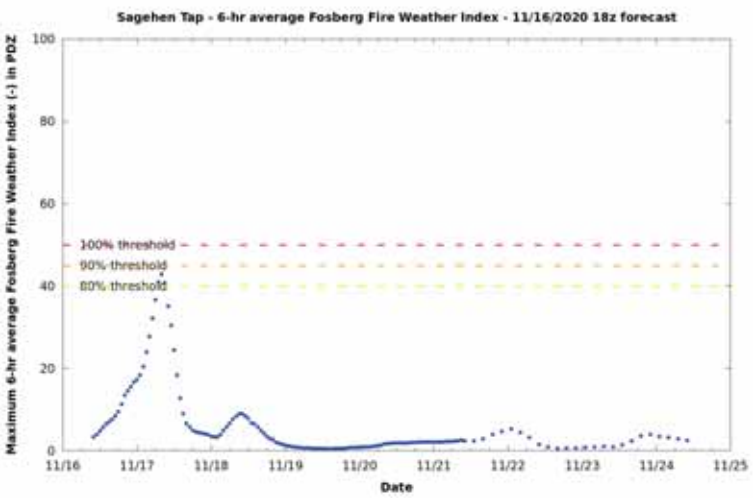


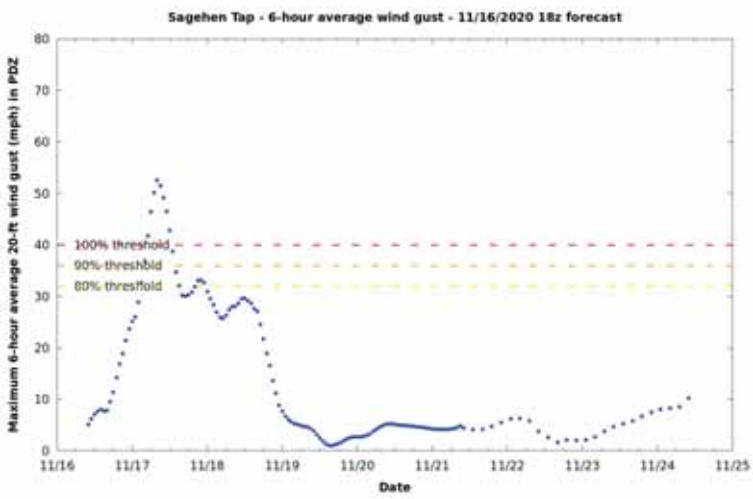
Hobart



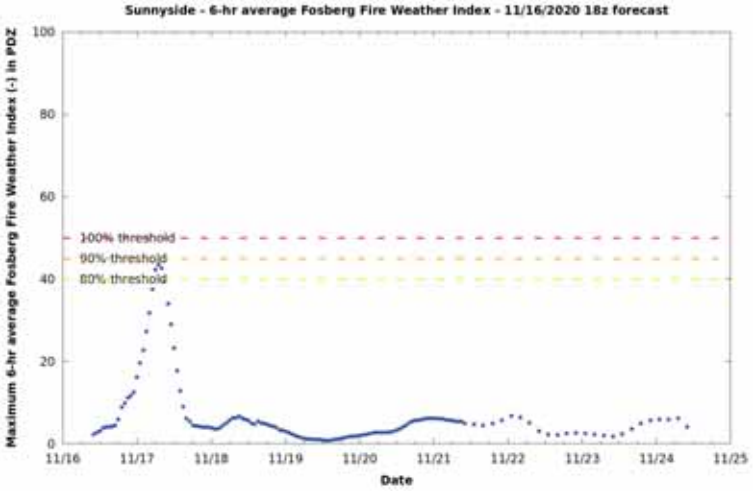


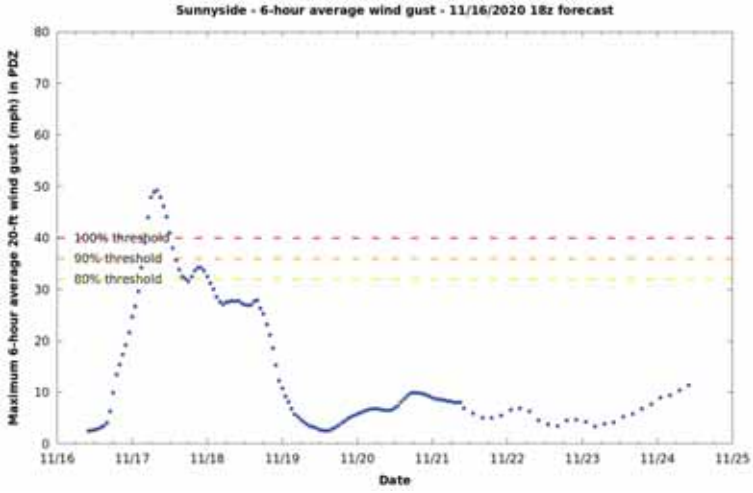
Sagehen tap



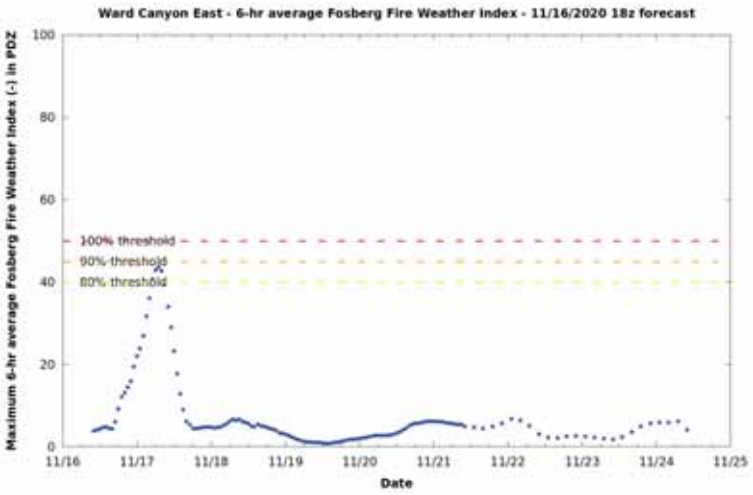


Sunnyside



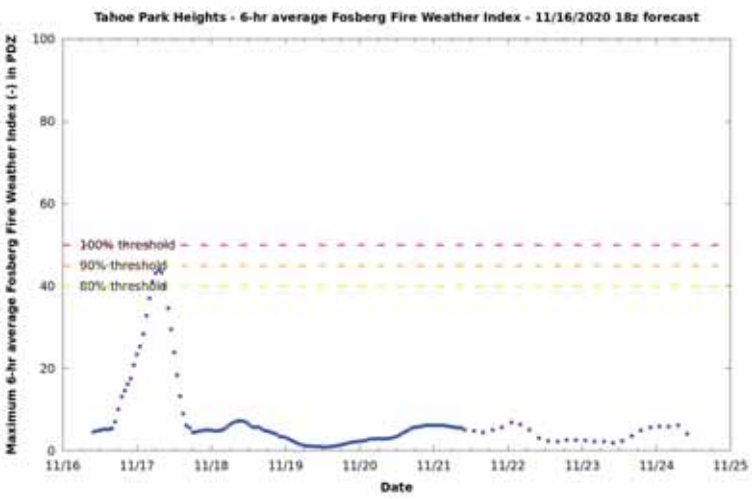


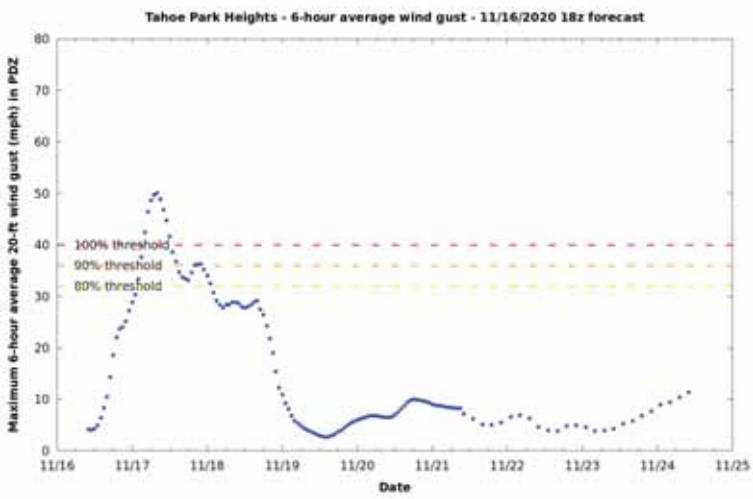
Ward Canyon East



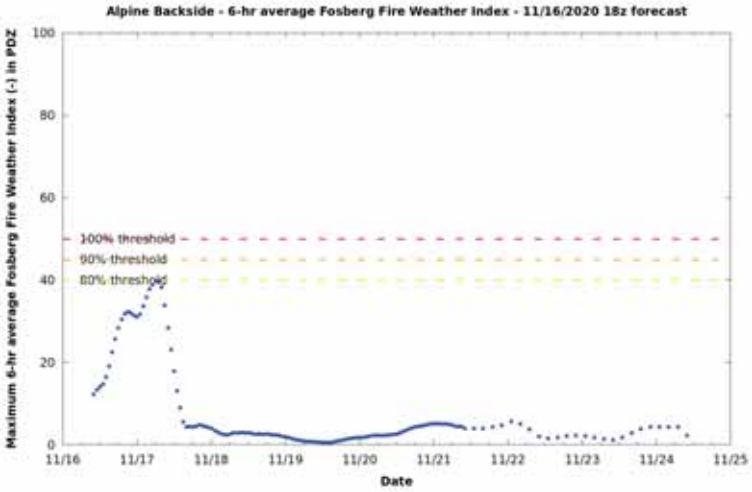


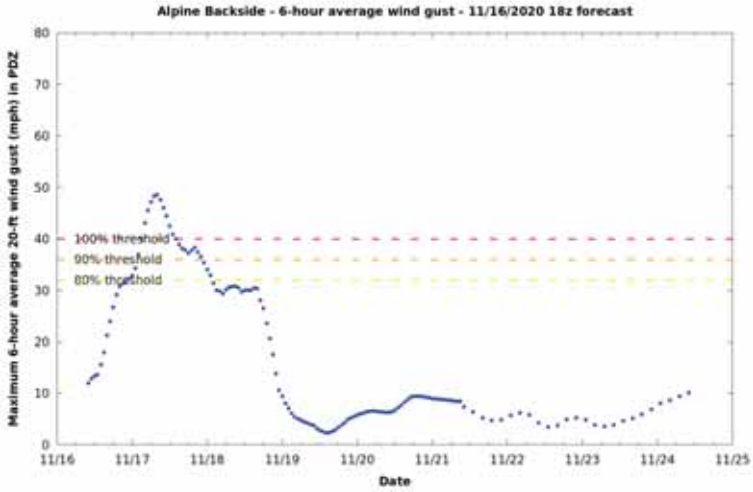
Tahoe Park Heights



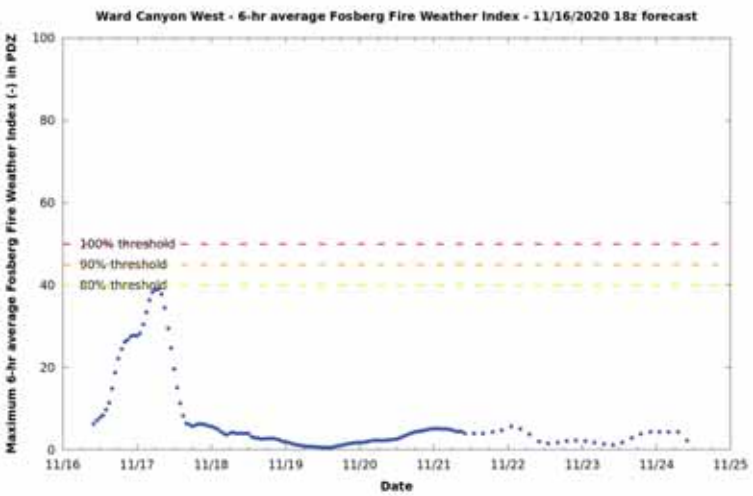


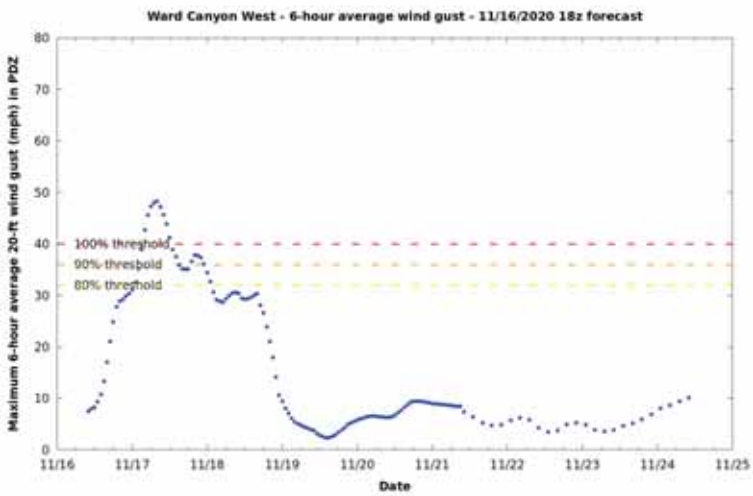
Alpine Backside



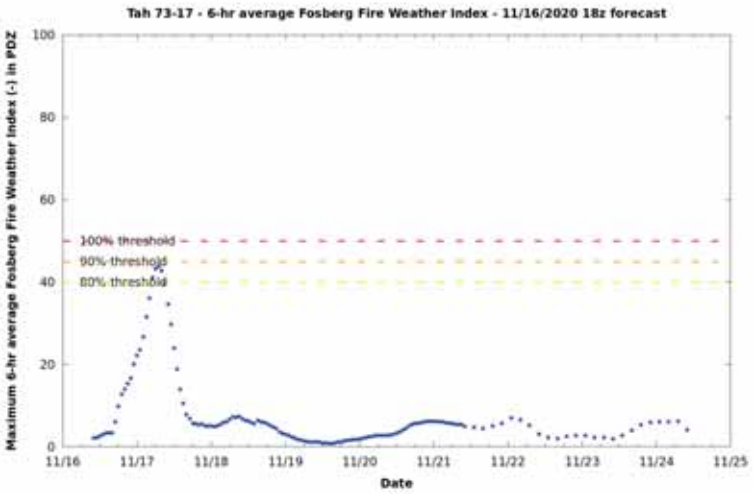


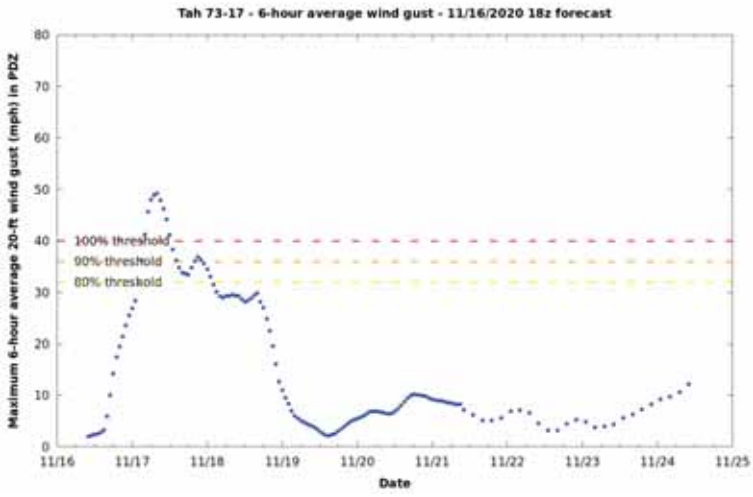
Ward Canyon West



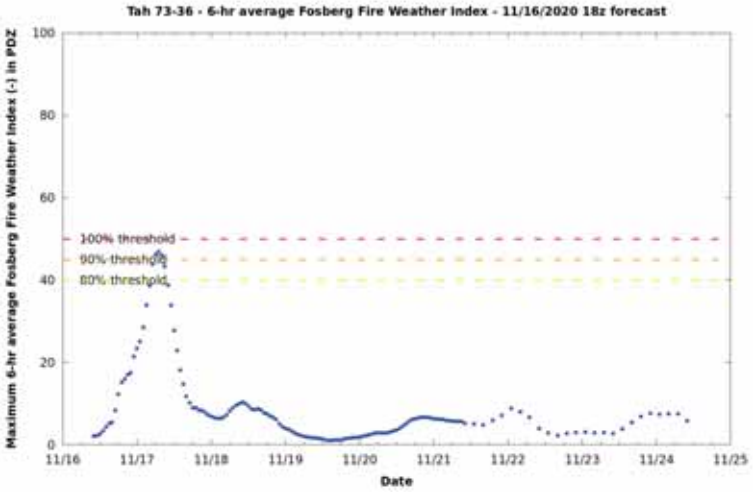


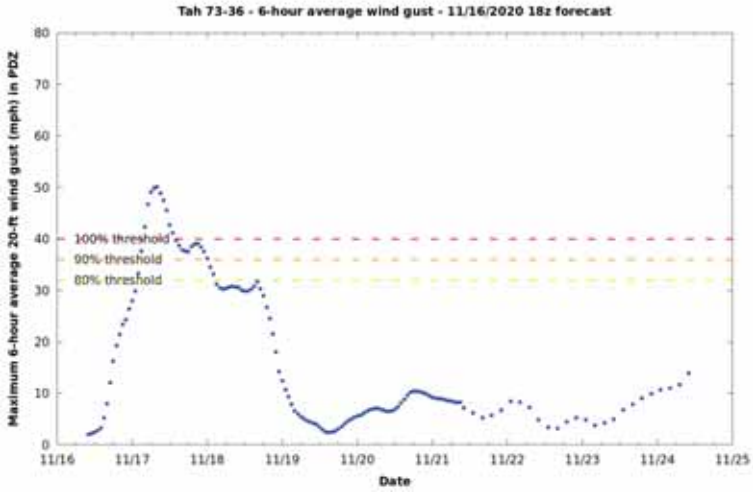
Tah 73-17



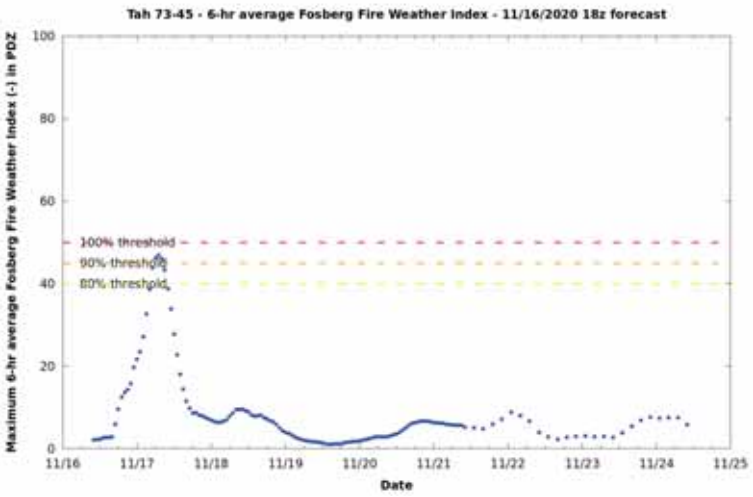


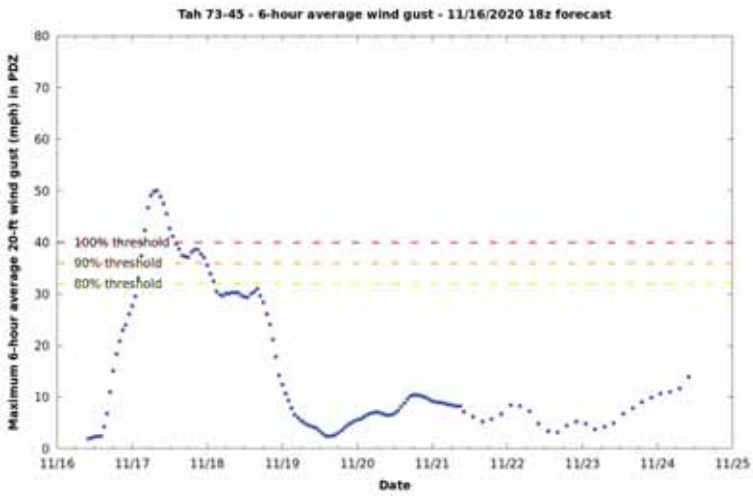
Tah 73-36



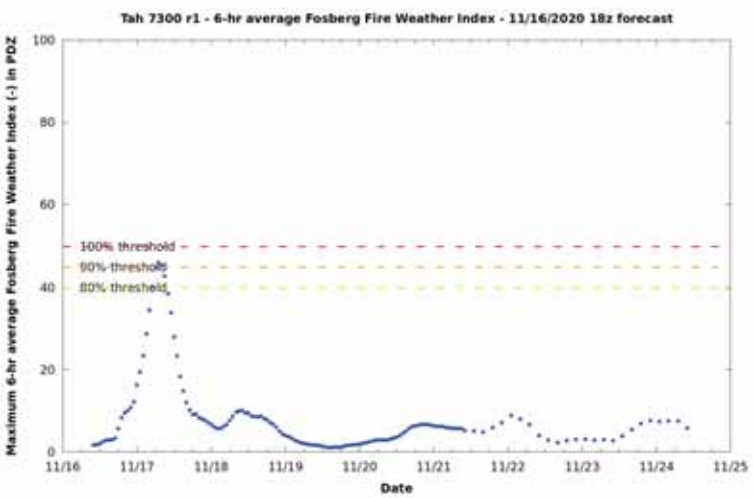


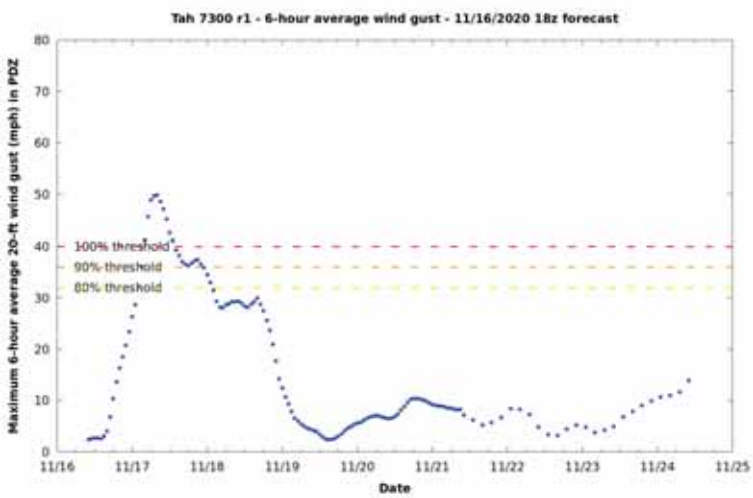
Tah 73-45



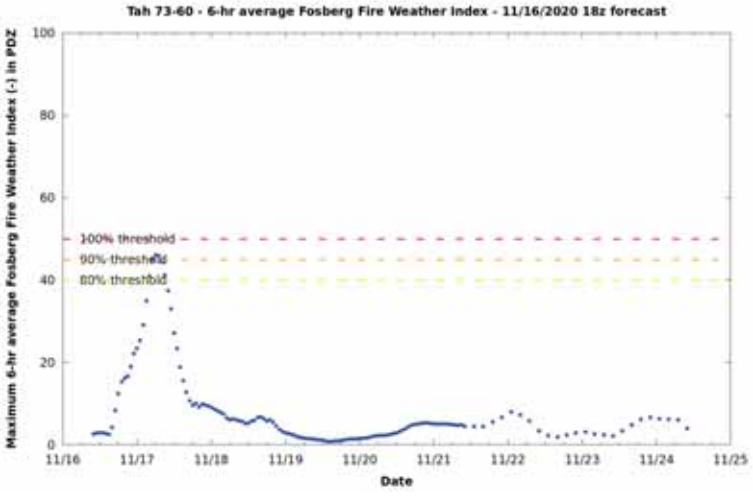


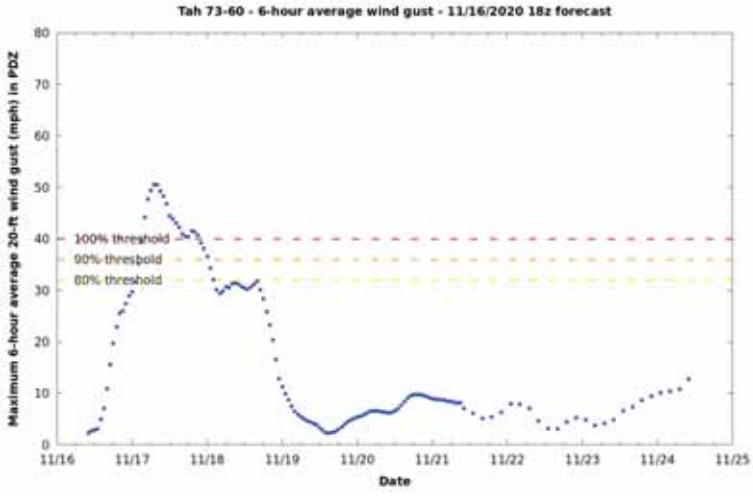
Tah 7300 r1



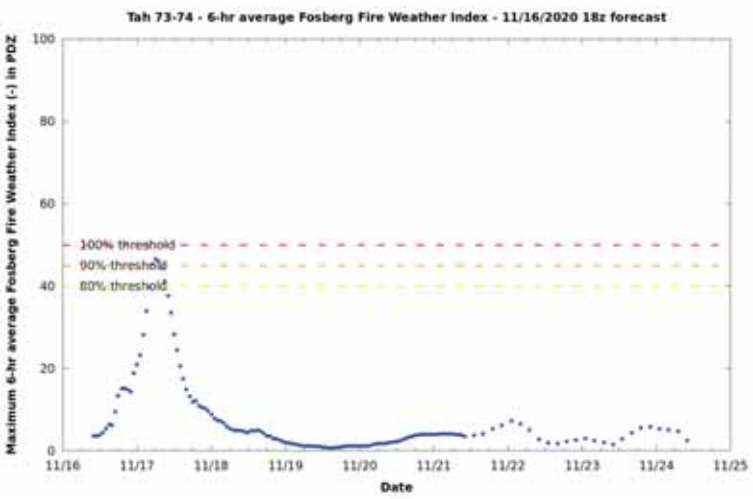


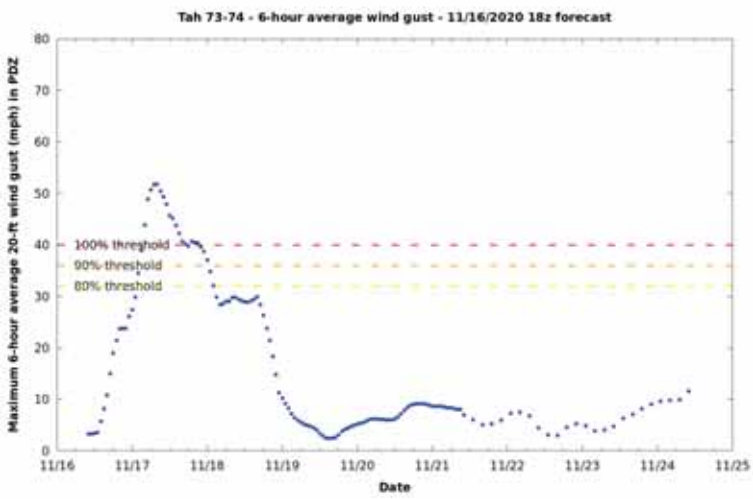
Tah 73-60



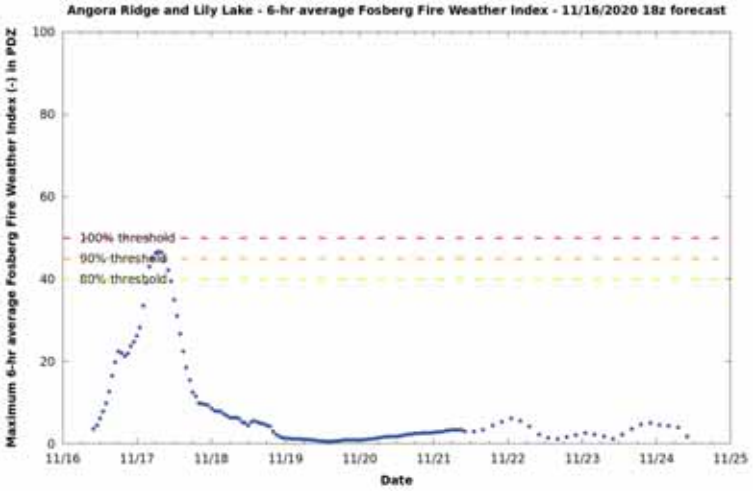


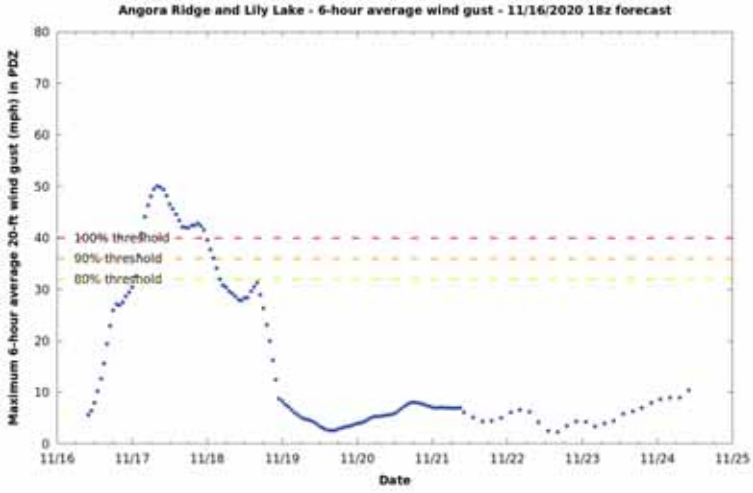
Tah 73-74



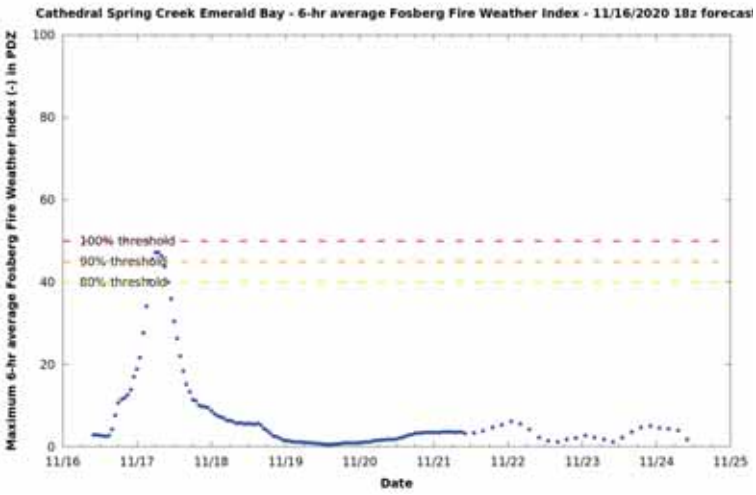


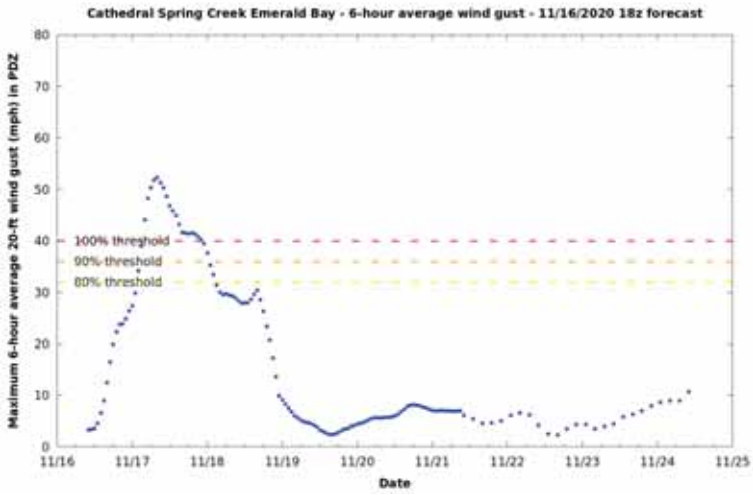
Angora Ridge and Lily Lake



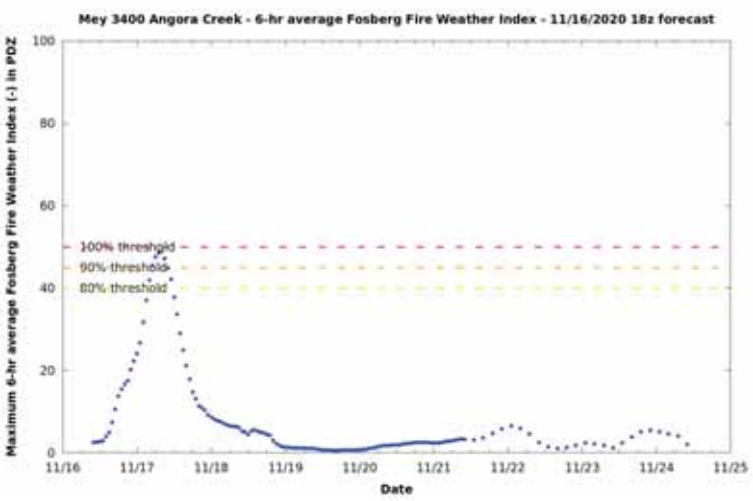


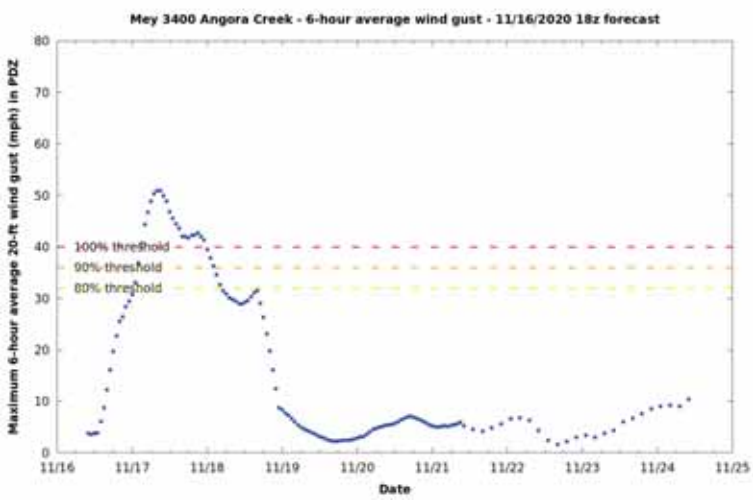
Cathedral Spring Creek Emerald Bay



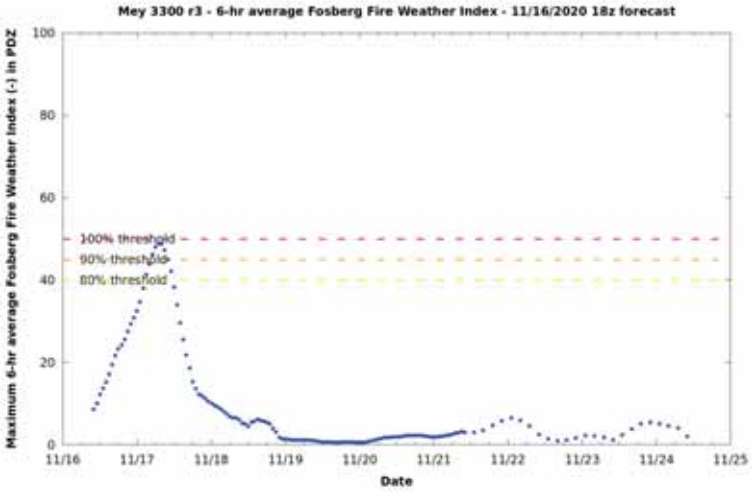


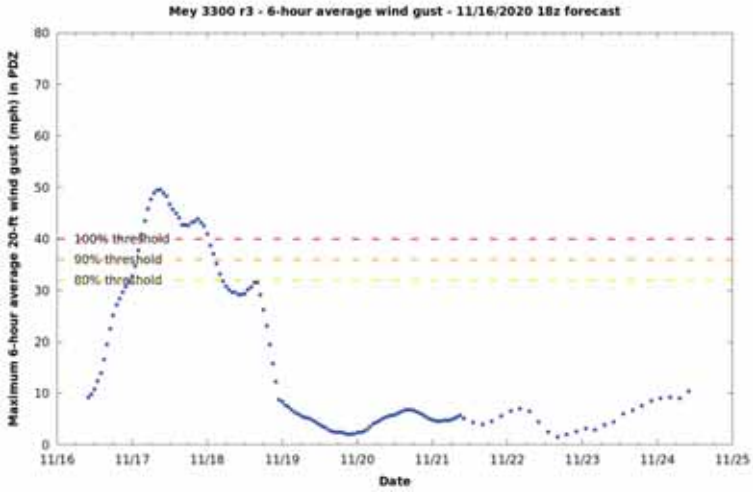
Mey 3400 Angora Creek



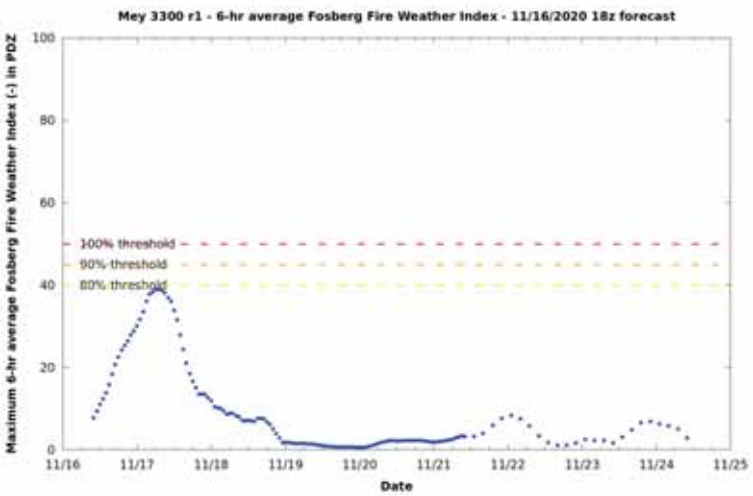


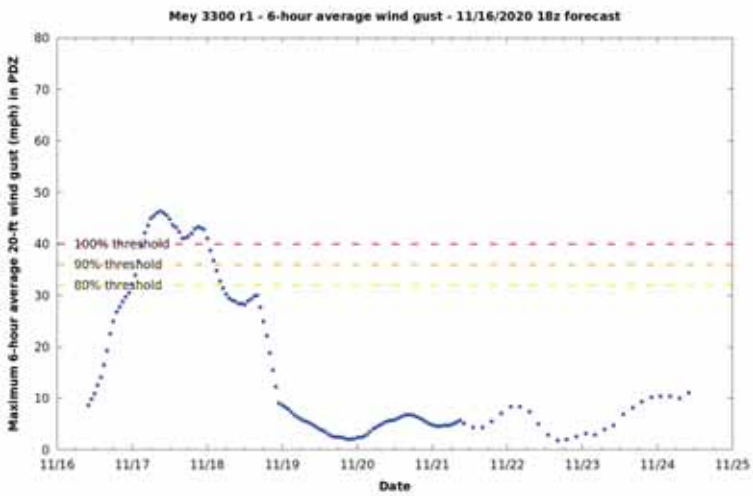
Mey 3300 r3



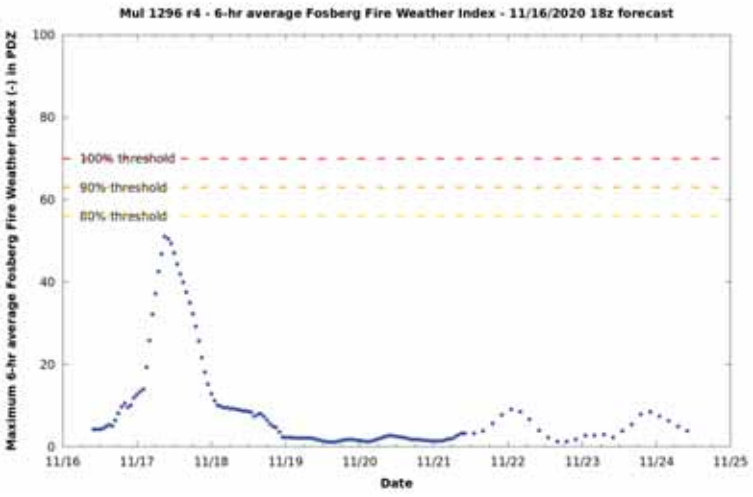


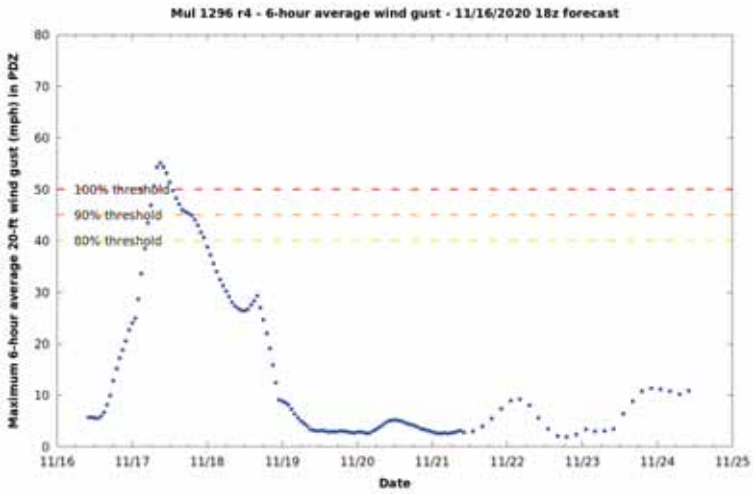
Mey 3300 r1



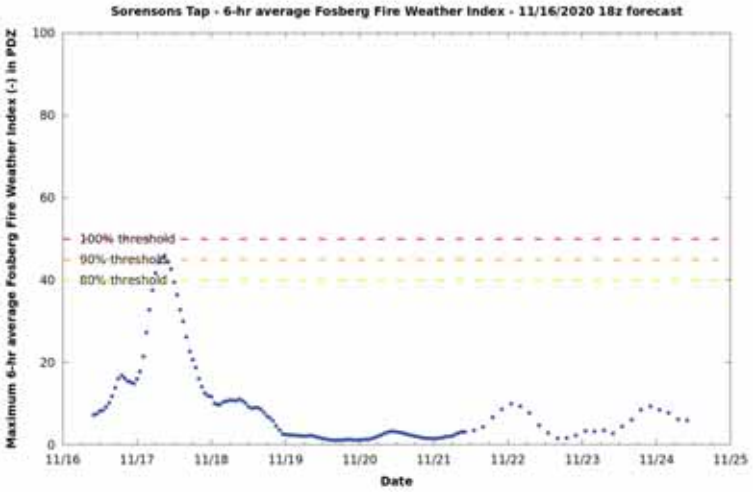


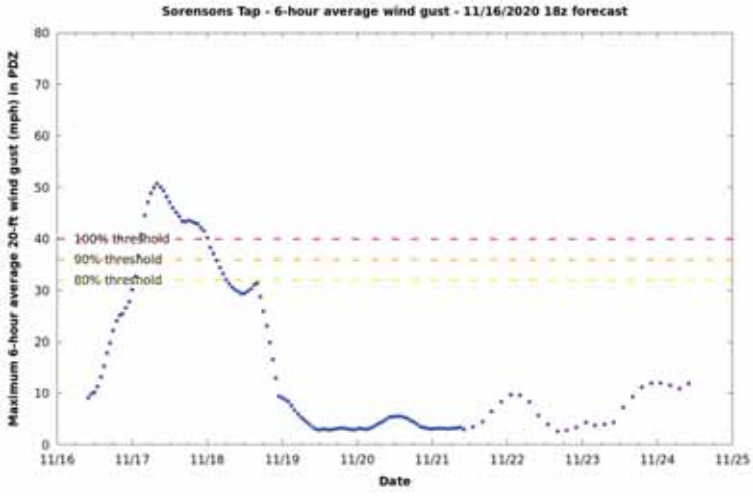
Mul 1296 r4



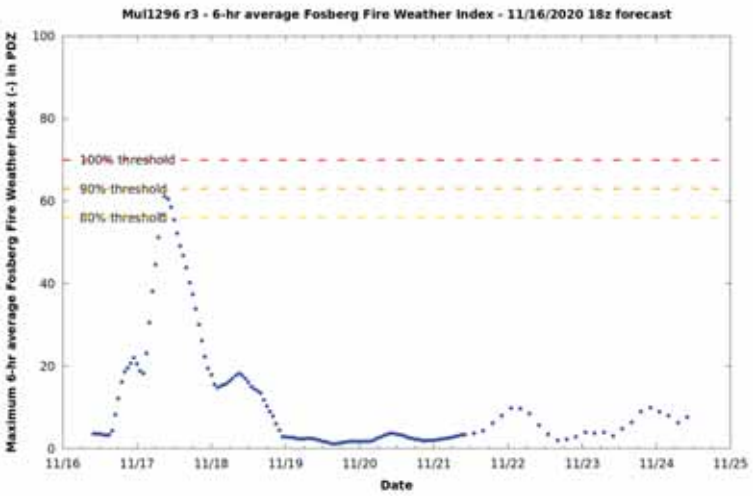


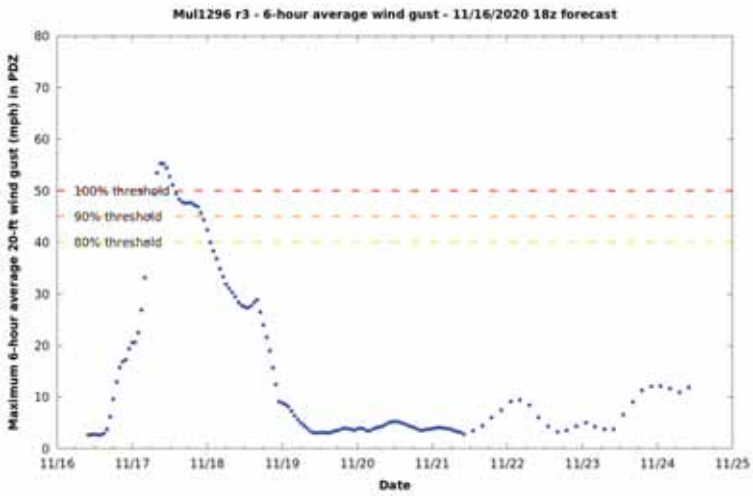
Sorensons Tap



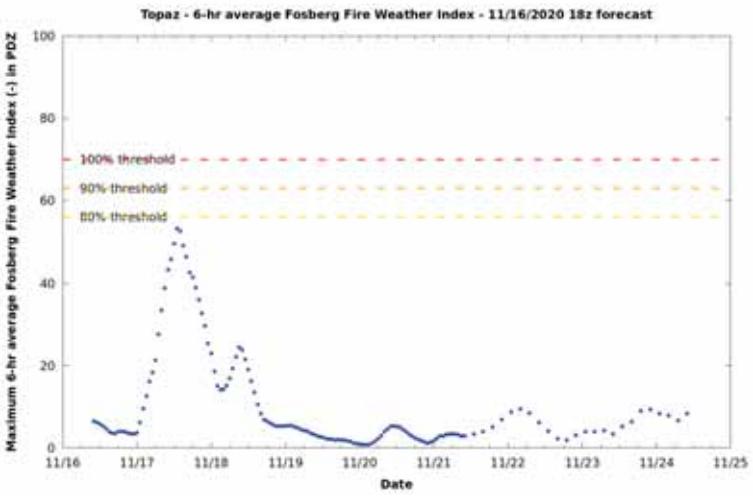


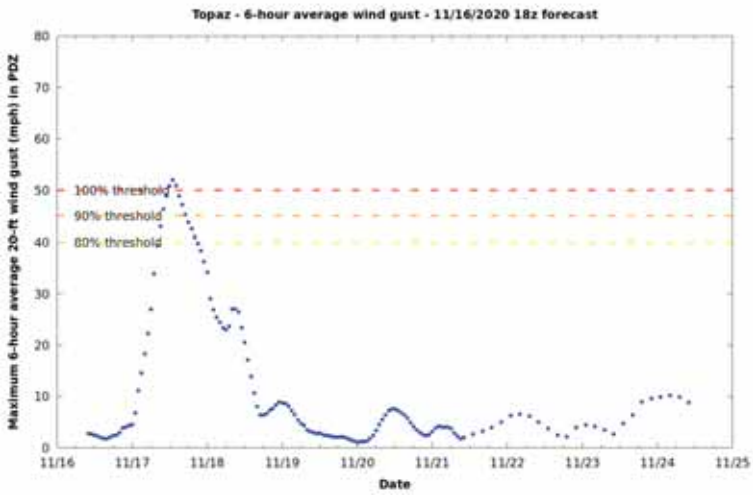
Mul 1296 r3



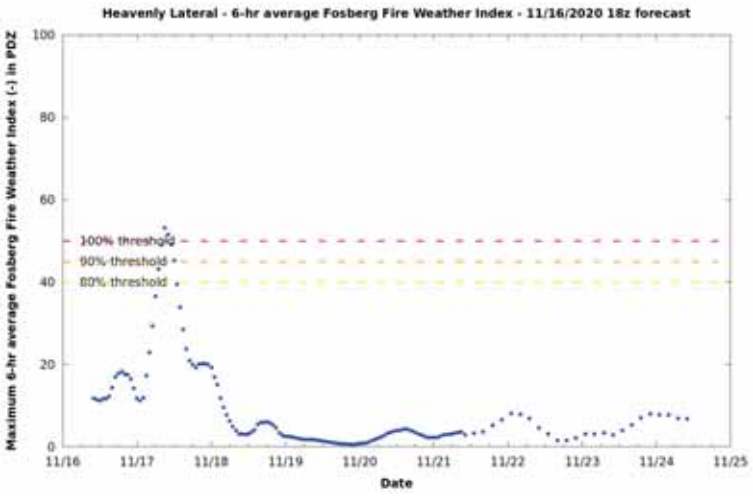


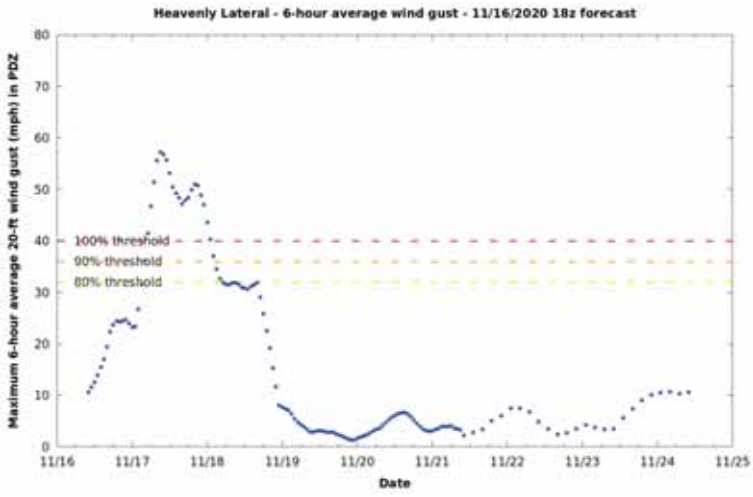
Topaz



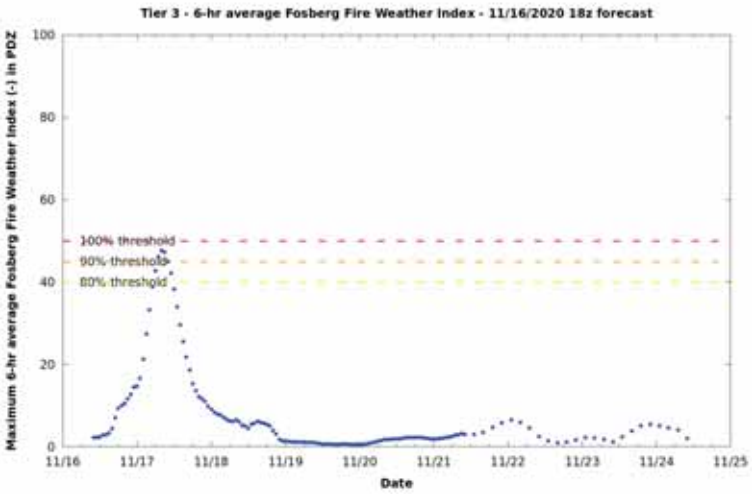


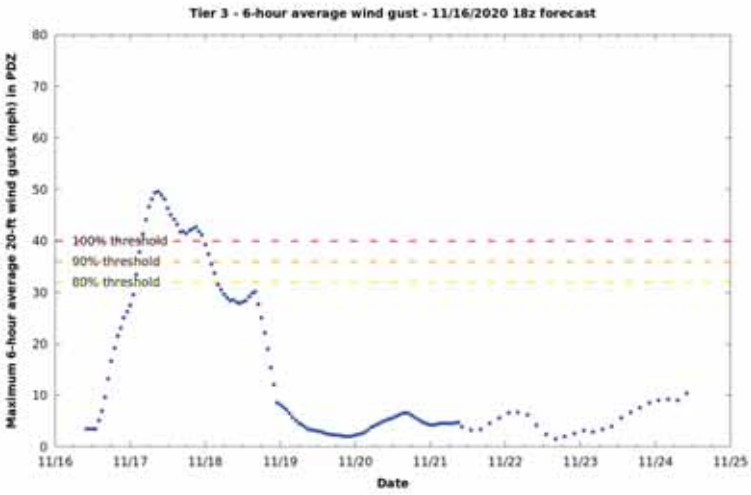
Heavenly Lateral



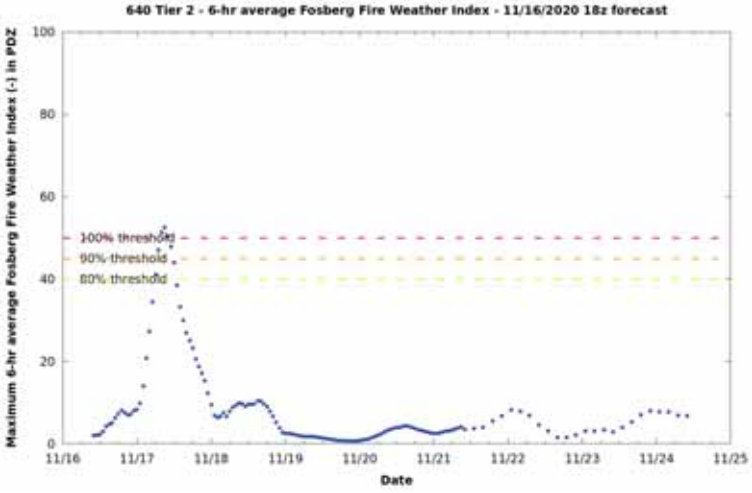


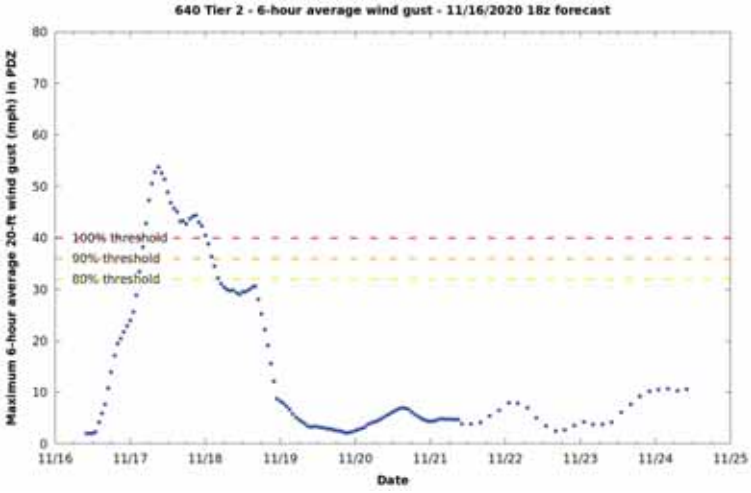
Tier 3



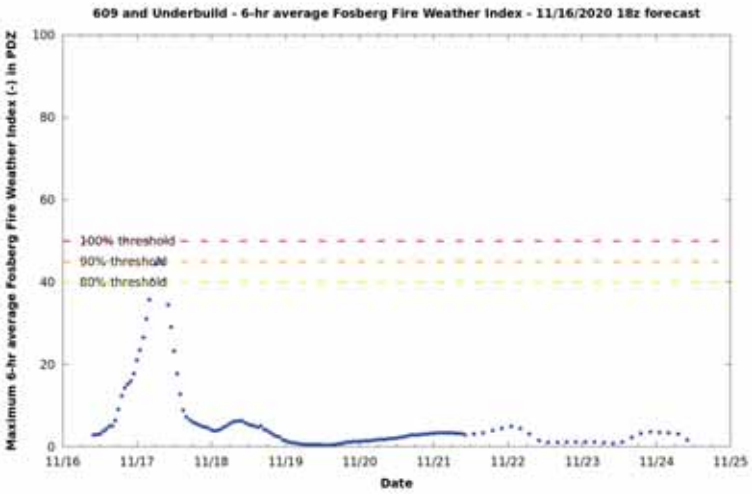


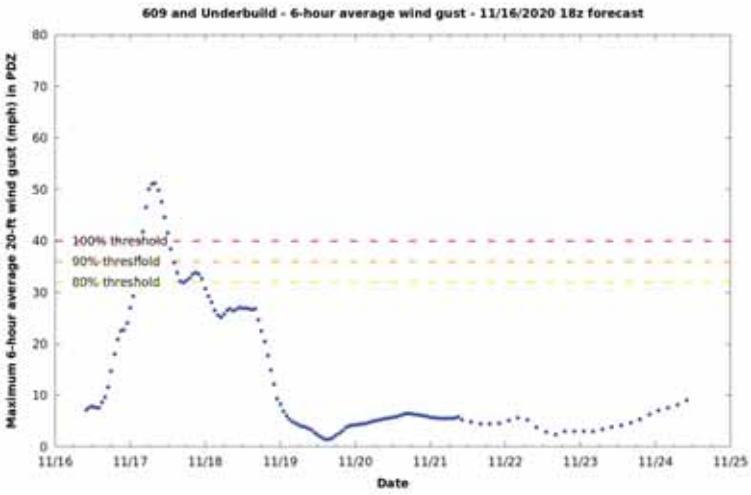
640 Tier 2



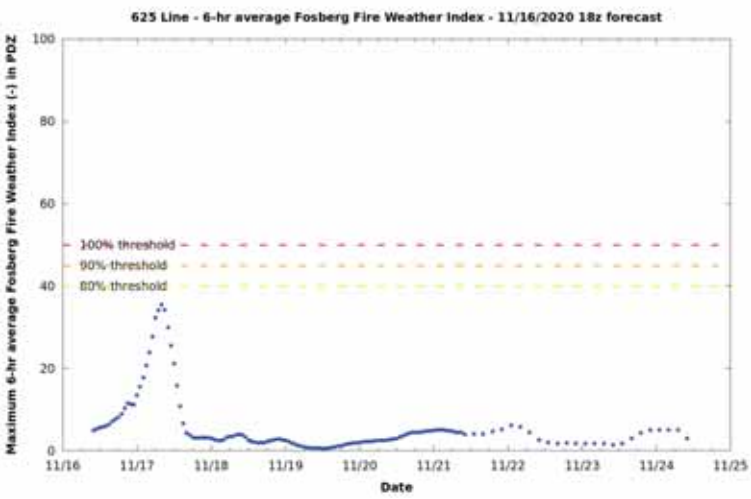


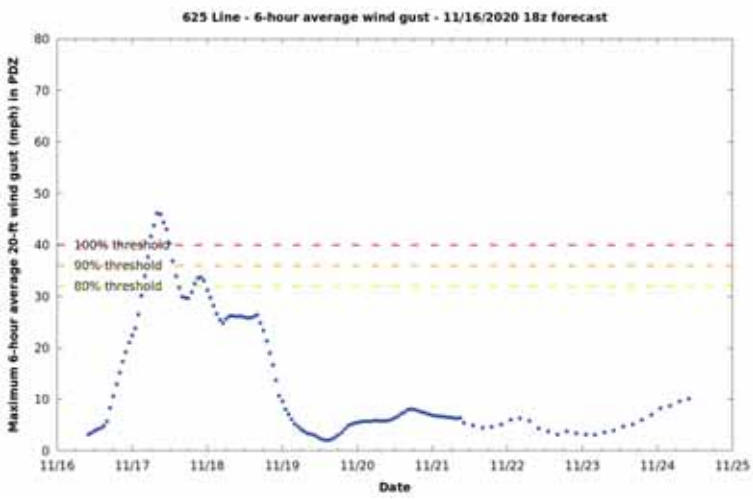
609 and Underbuild



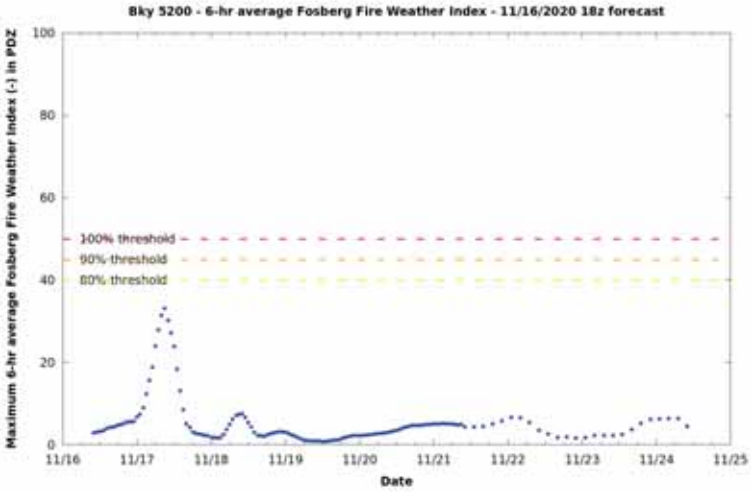


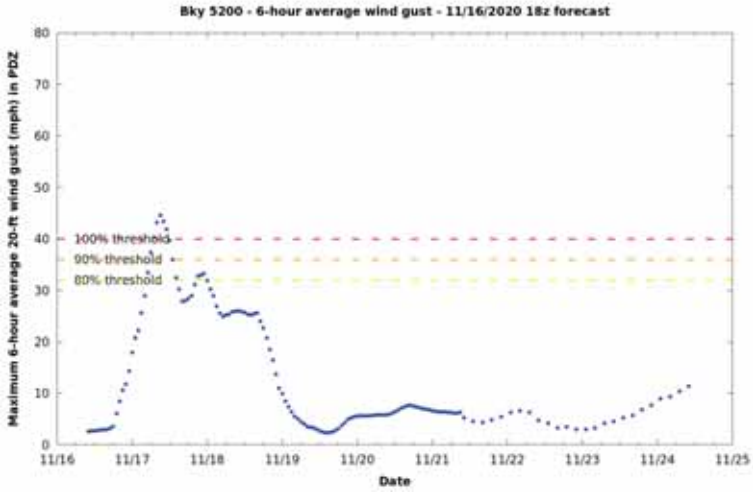
625 Line



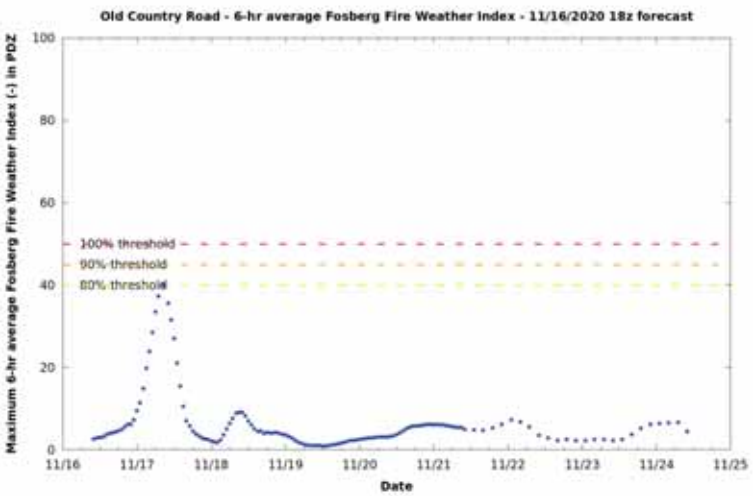


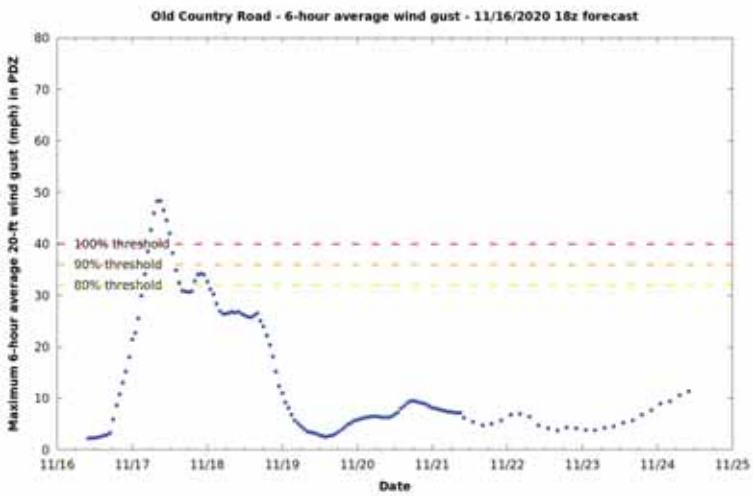
Bky 5200



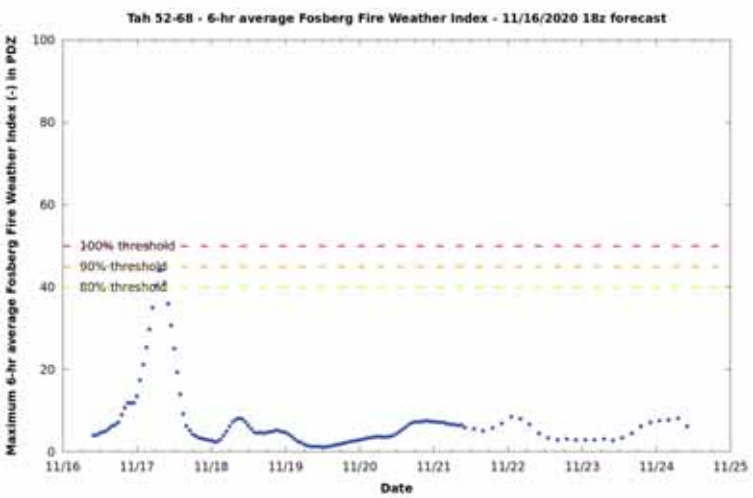


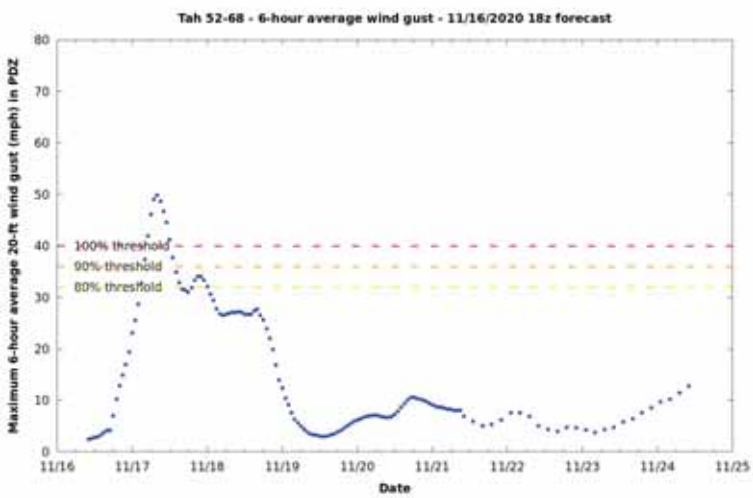
Old Country Road



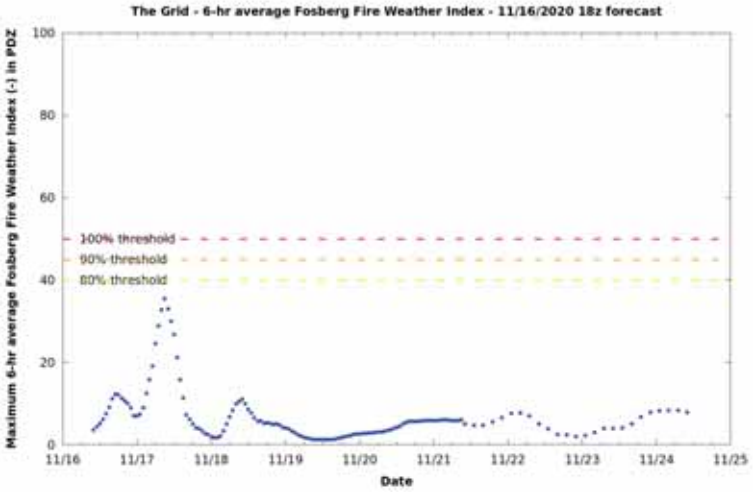


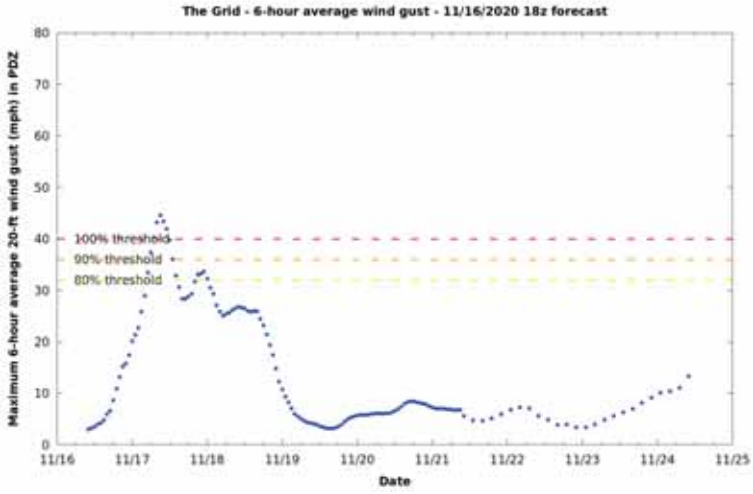
Tah 52-68



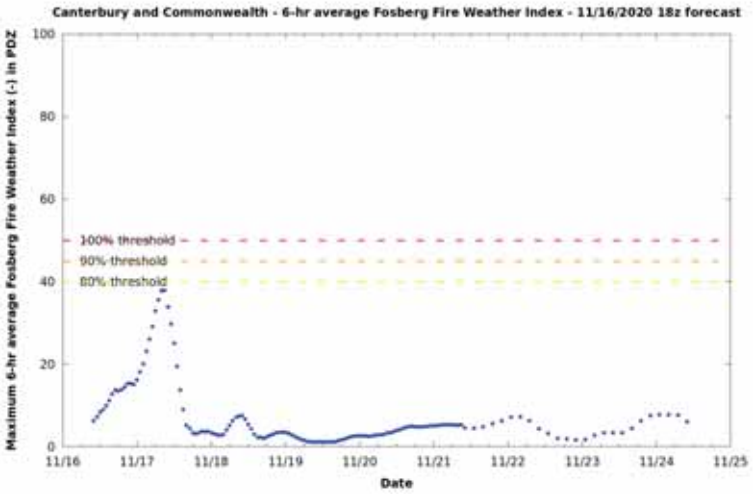


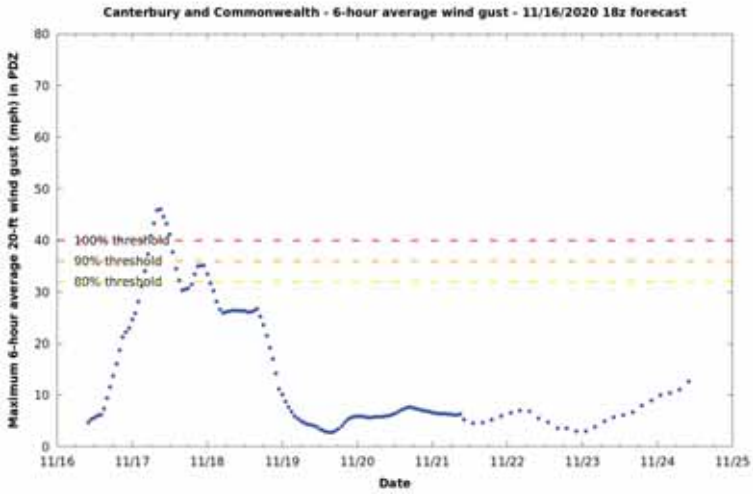
The Grid



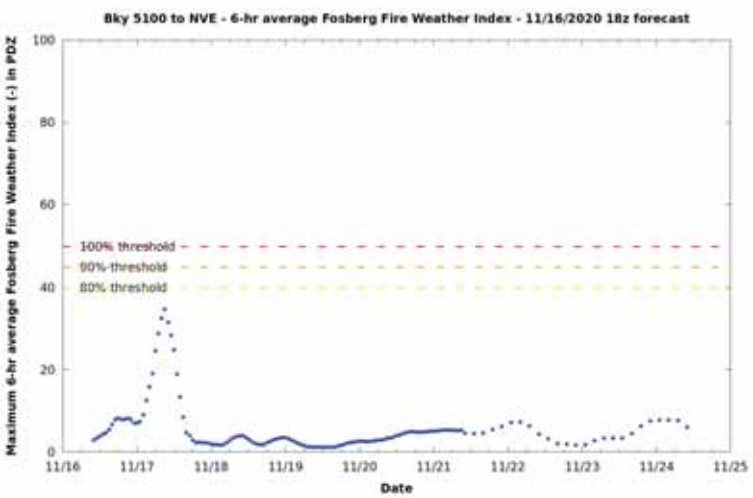


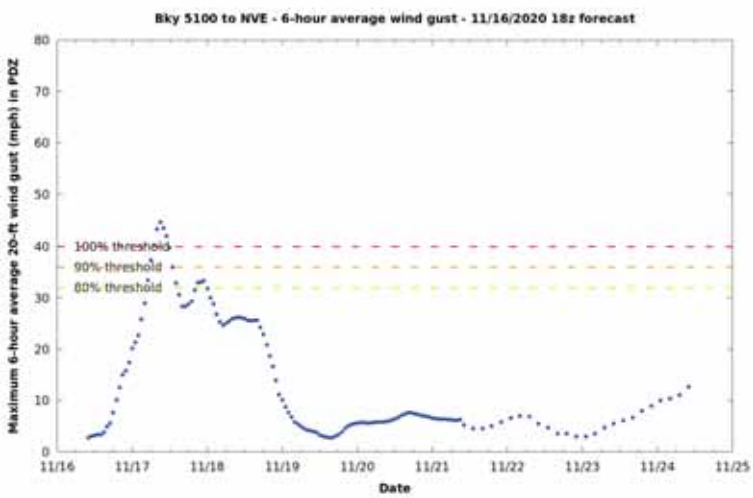
Canterbuy and Commonwealth



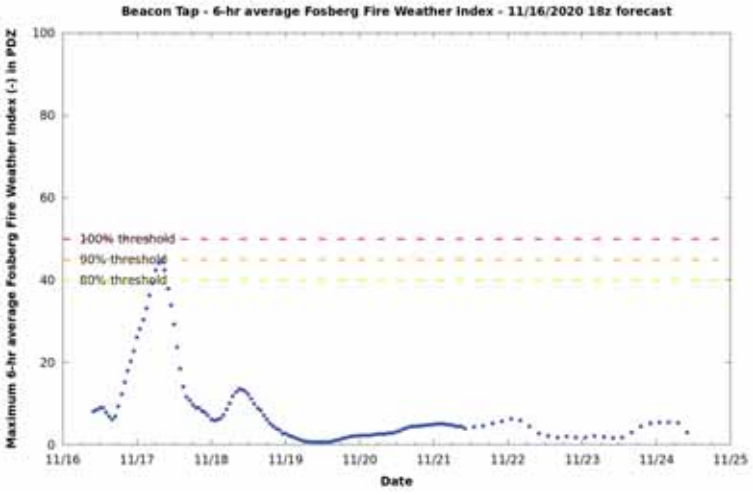


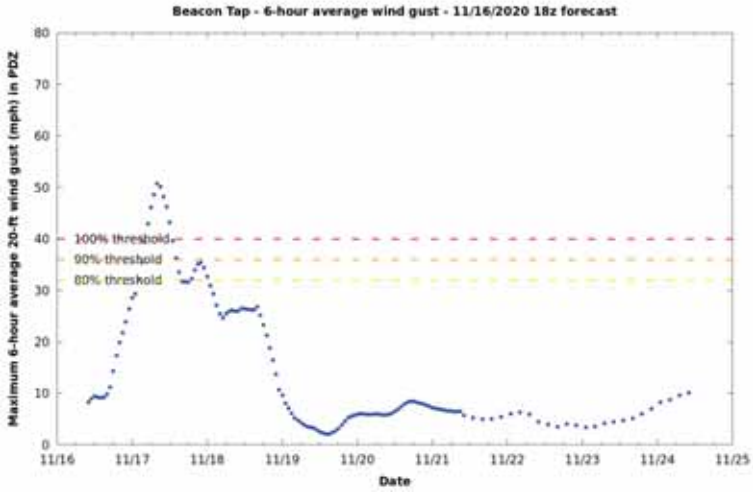
Bky 5100 to NVE



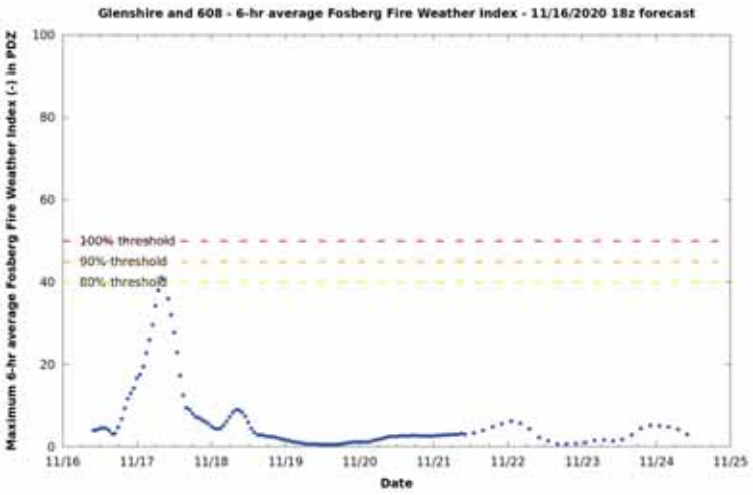


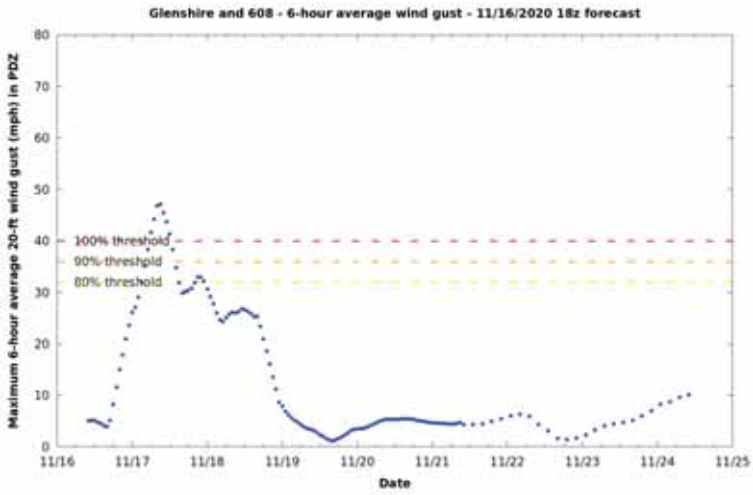
Beacon Tap



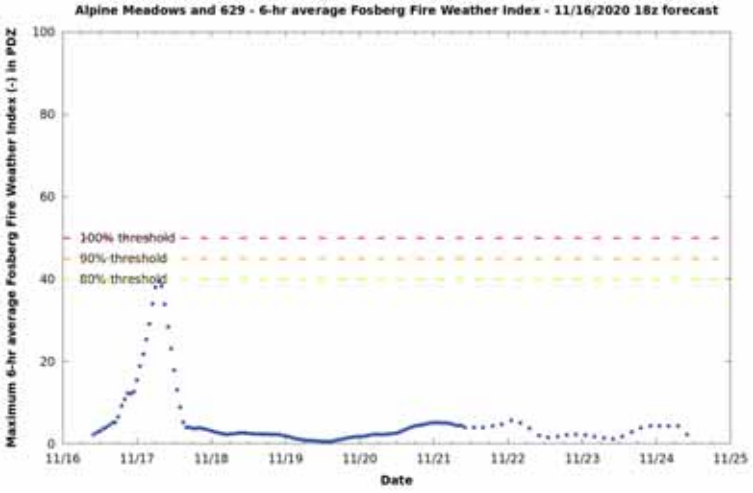


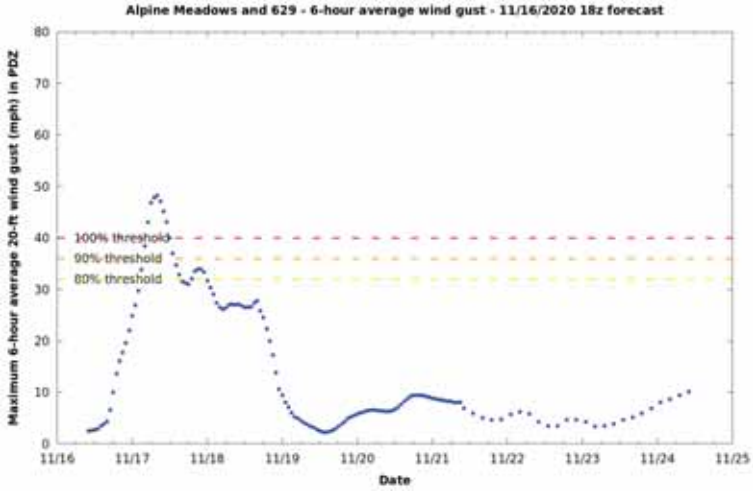
Glenshire and 608



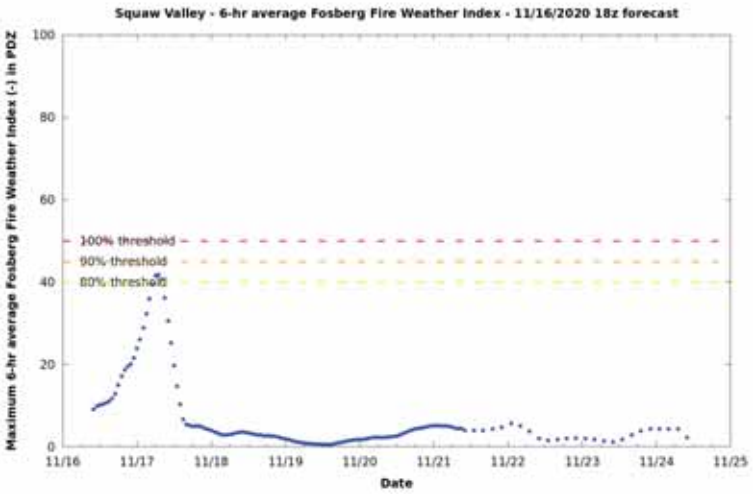


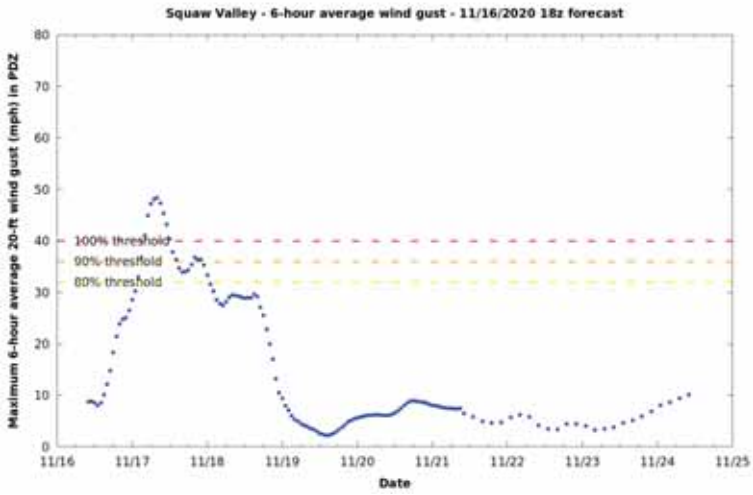
Alpine Meadows and 629



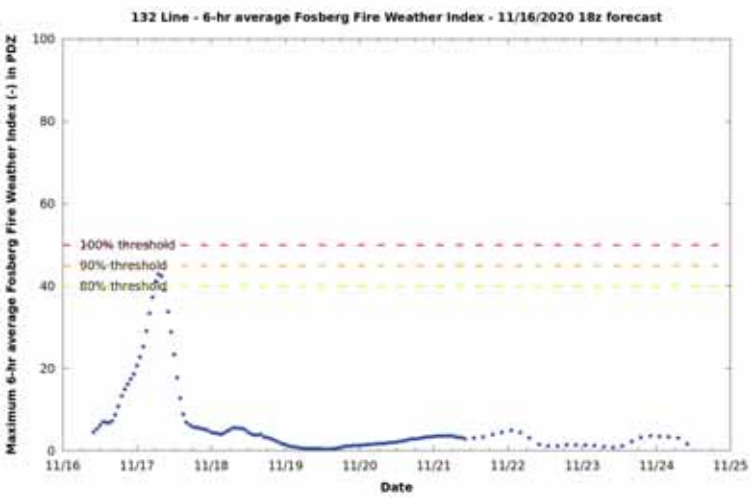


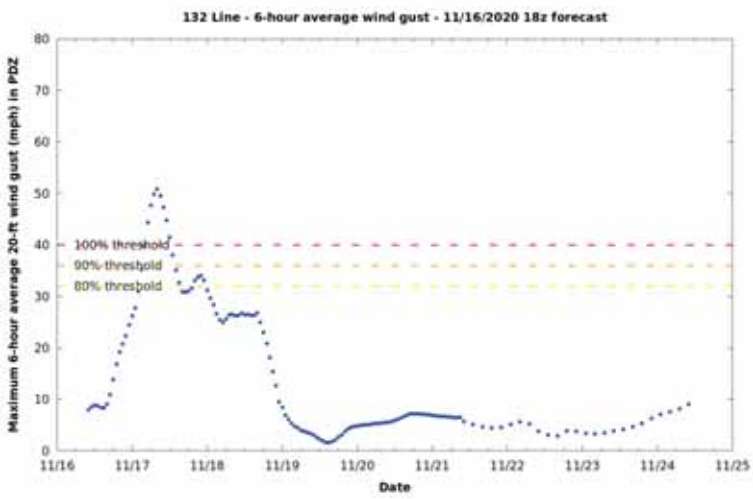
Squaw Valley



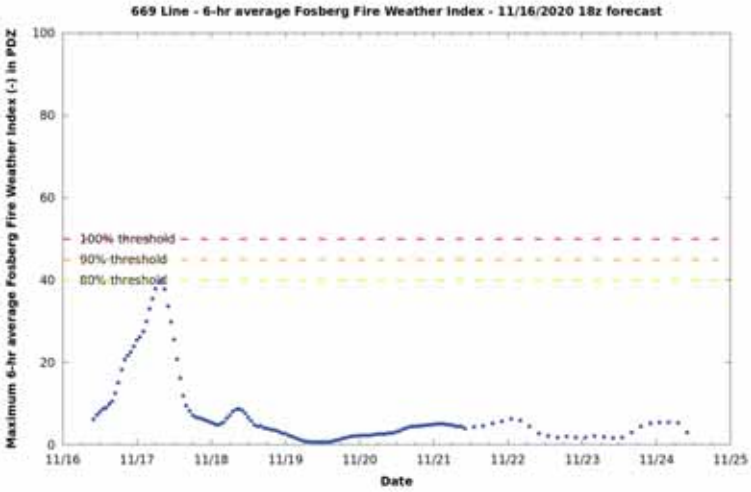


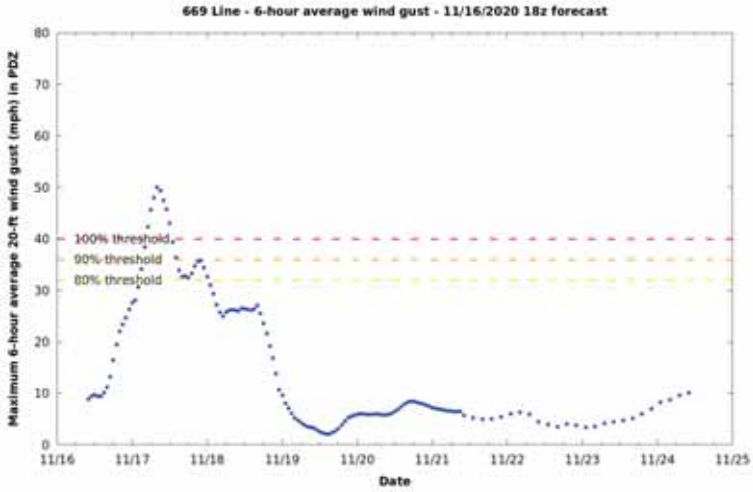
132 Line



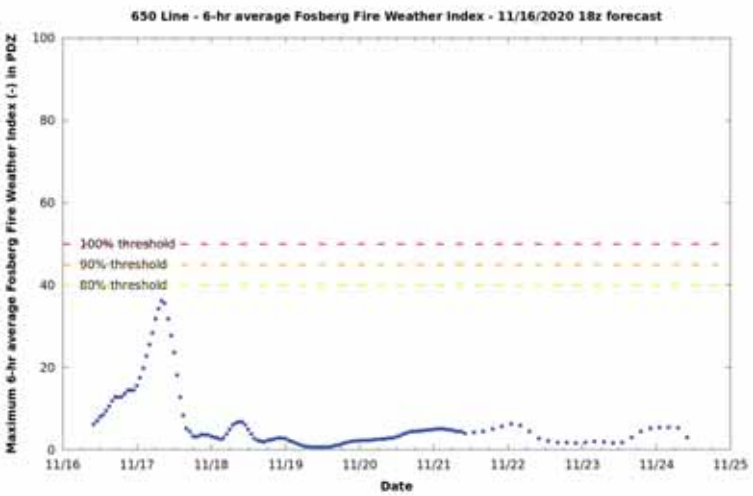


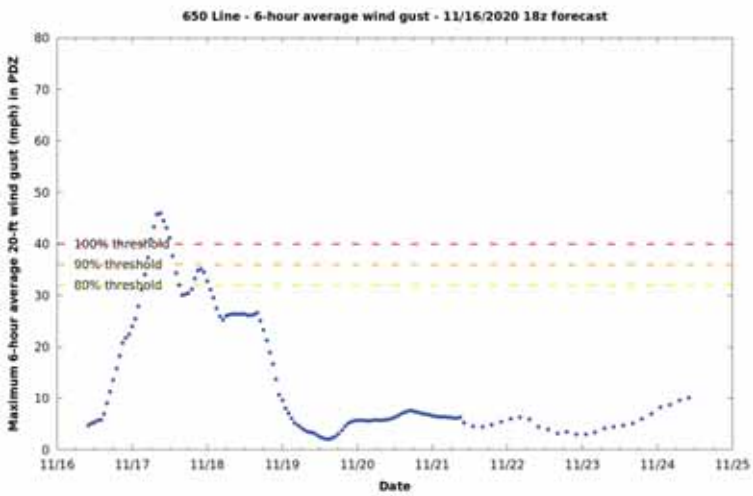
669 Line



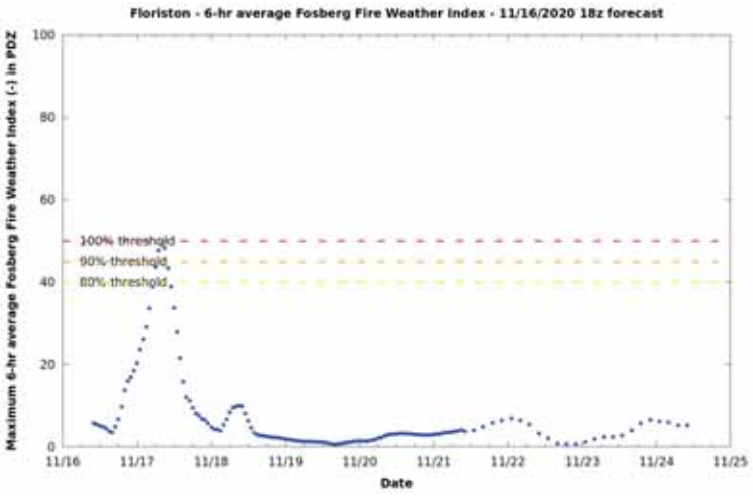


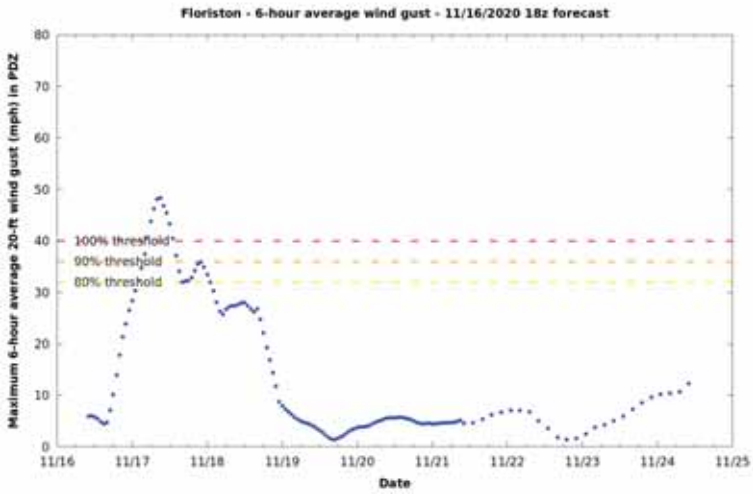
650 Line



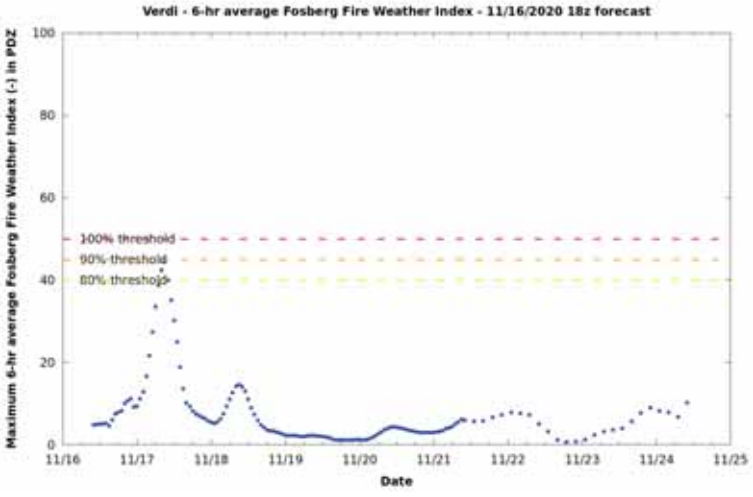


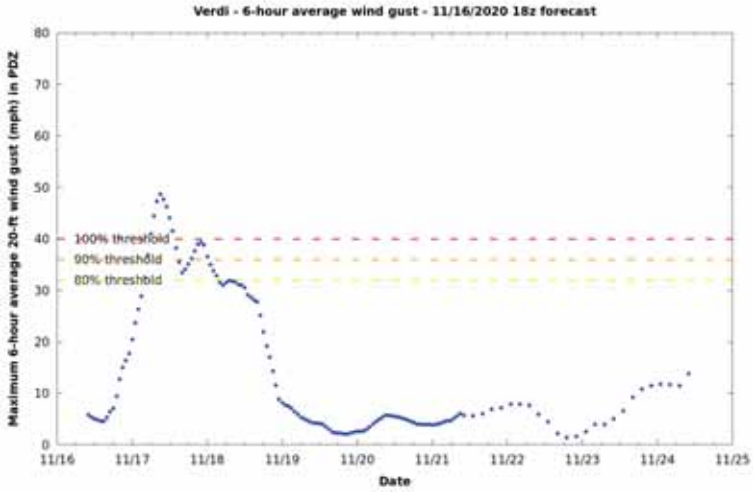
Floriston



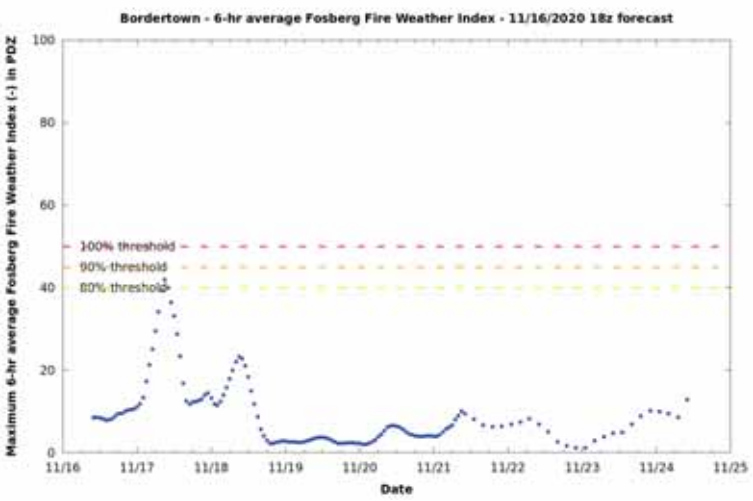


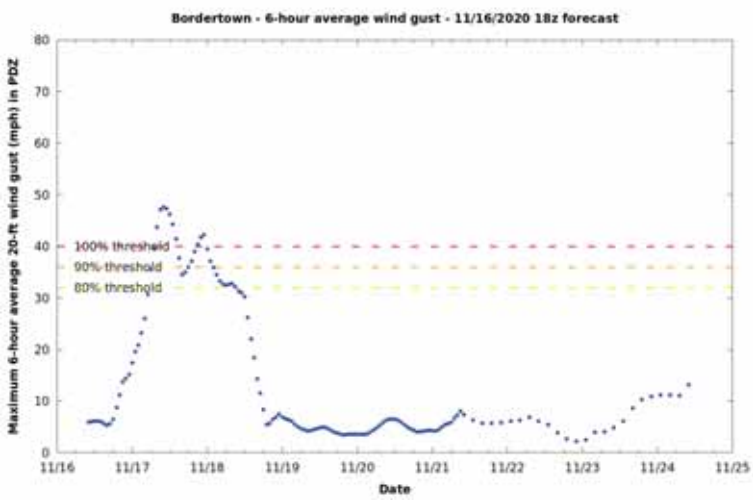
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/16/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25


Bordertown - 6-hour average wind gust - 11/16/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/16
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25

Liberty Utilities Fire Potential Index Forecast for 11/17/20 - 11/23/20

Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	moderate	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

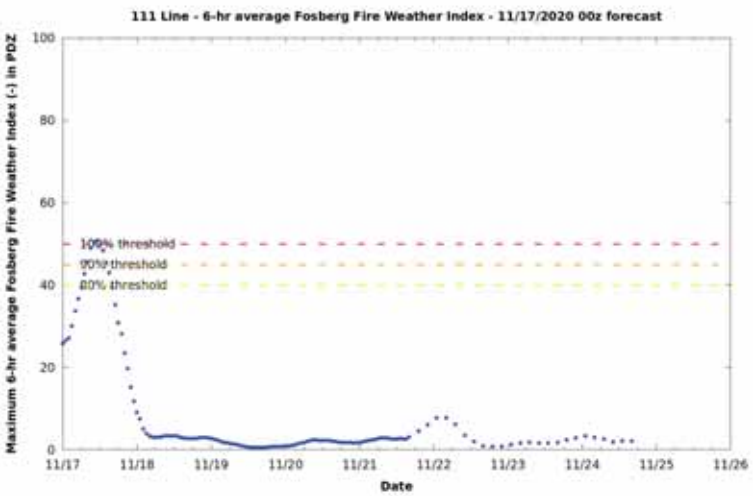
Liberty Utilities Energy Release Component Forecast for 11/17/20 - 11/23/20

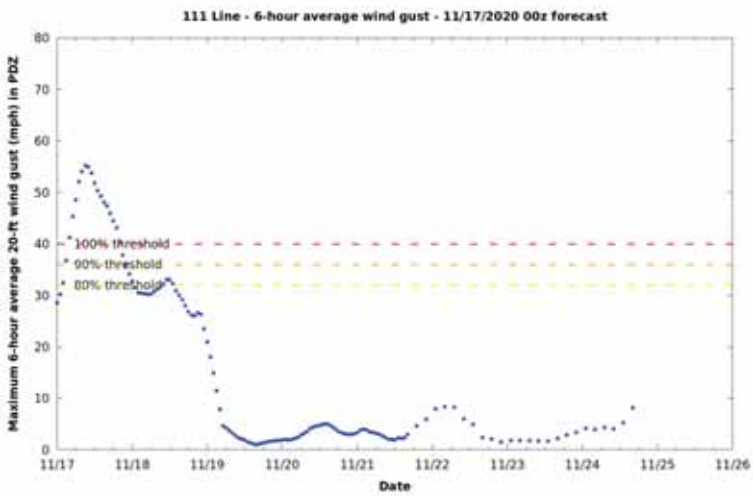
Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	56.9	55.7	44.6	39.3	41.2	42.2	45.3
Sierra Brooks	59.8	60.7	49.5	44.4	45.0	48.8	53.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	13.0	12.8	9.8	8.2	7.5	7.5	7.7
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.5	1.4	1.1	1.1	1.0	1.0	1.1
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	40.0	41.8	29.9	25.4	26.6	27.9	32.7
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	49.2	51.7	36.8	30.1	30.2	32.5	34.7
Topaz	60.5	61.3	44.8	38.0	38.4	39.2	45.1
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	34.0	33.4	24.7	23.0	23.9	24.4	25.7
Old Country Road	60.9	57.6	45.7	43.9	44.3	45.3	47.6
Tah 52-68	23.2	21.3	17.0	16.7	16.7	17.0	17.4
The Grid	57.2	55.8	39.0	36.3	38.1	38.9	39.4
Canterbury and Commonwealth	41.8	41.1	28.6	26.4	27.9	28.6	29.3
Bky 5100 to NVE	23.9	23.5	16.4	15.1	15.9	16.4	16.8
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	24.2	23.3	18.7	15.8	14.7	14.1	14.7
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	33.4	33.4	27.0	25.0	25.0	25.5	27.5
650 Line	1.9	1.9	1.3	1.2	1.3	1.3	1.4
Floriston	46.6	46.6	34.7	31.2	31.1	33.6	36.2
Verdi	55.7	55.7	44.1	36.2	39.6	44.1	46.8
Bordertown	58.8	58.8	47.7	40.0	41.6	45.7	48.9

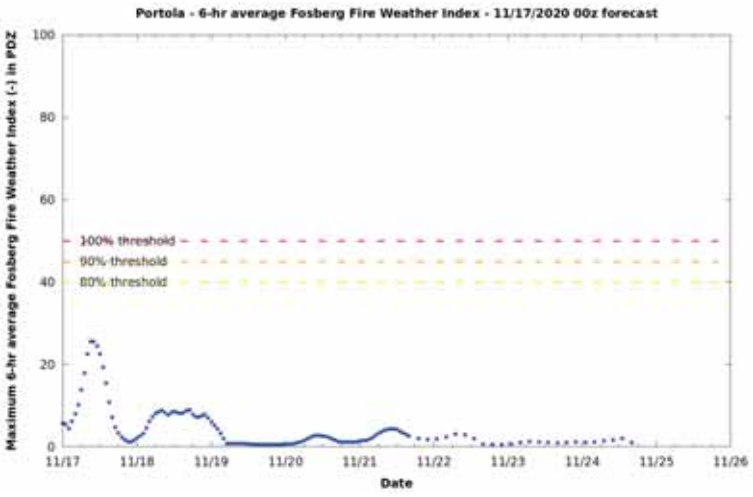
Liberty Utilities Fire Weather Summary Plots - 11/17/2020 00z forecast

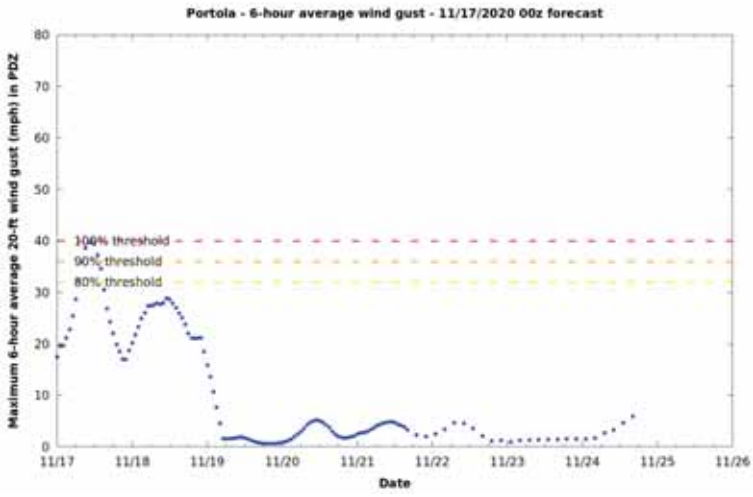
111 Line



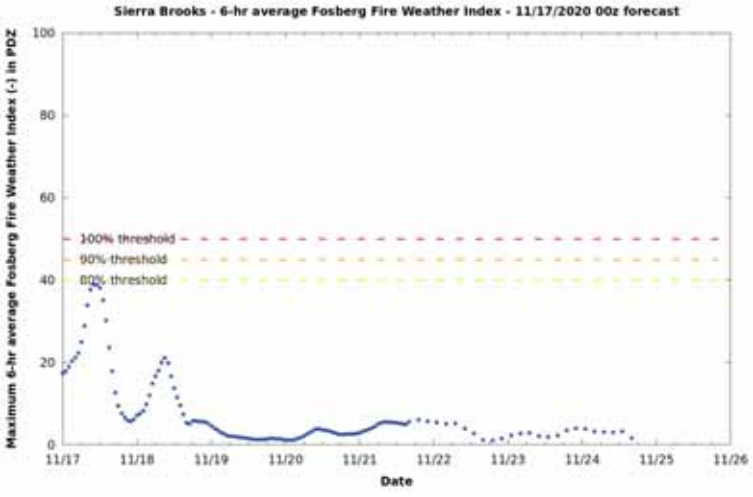


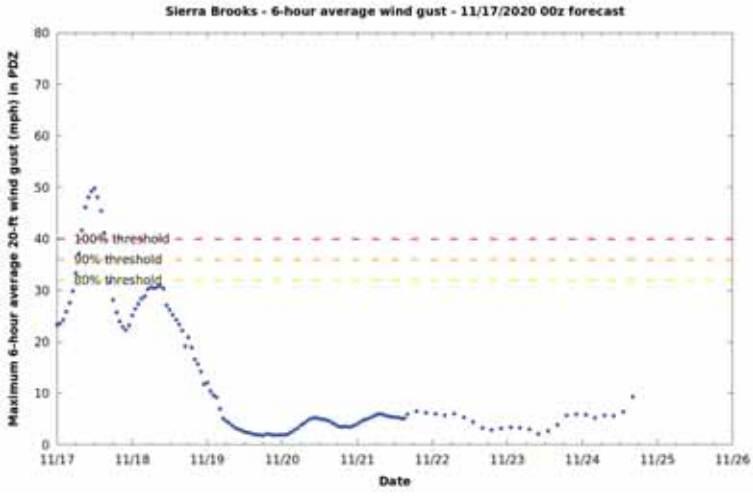
Portola



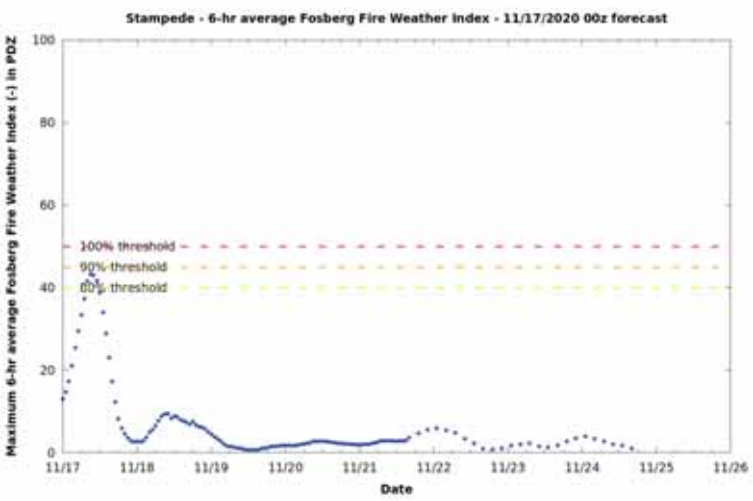


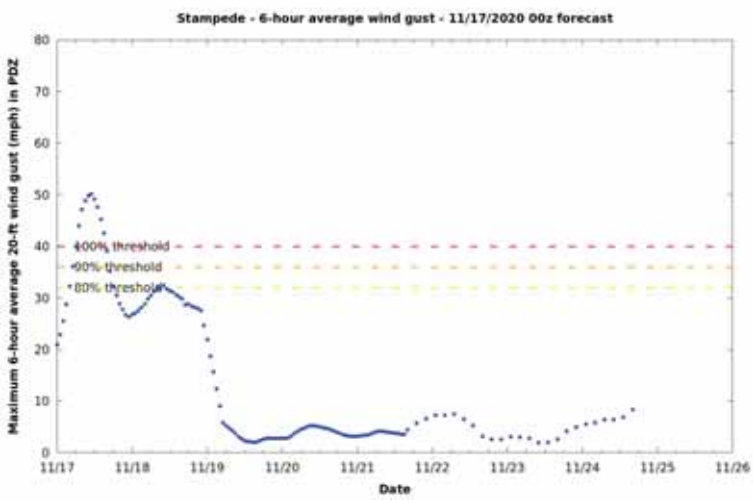
Sierra Brooks



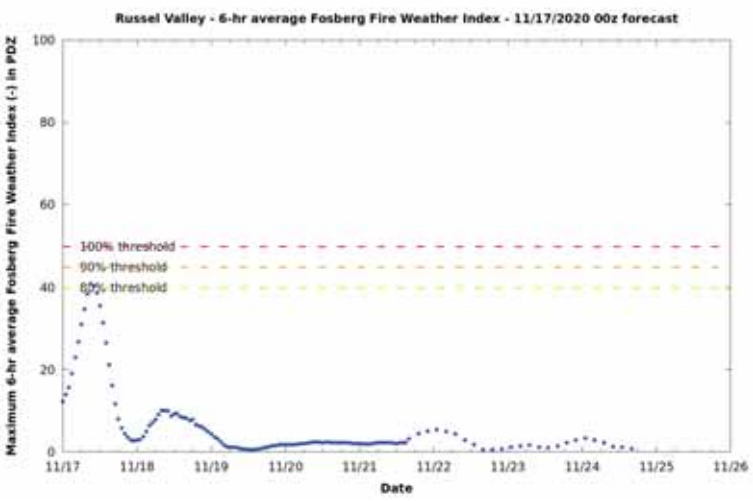


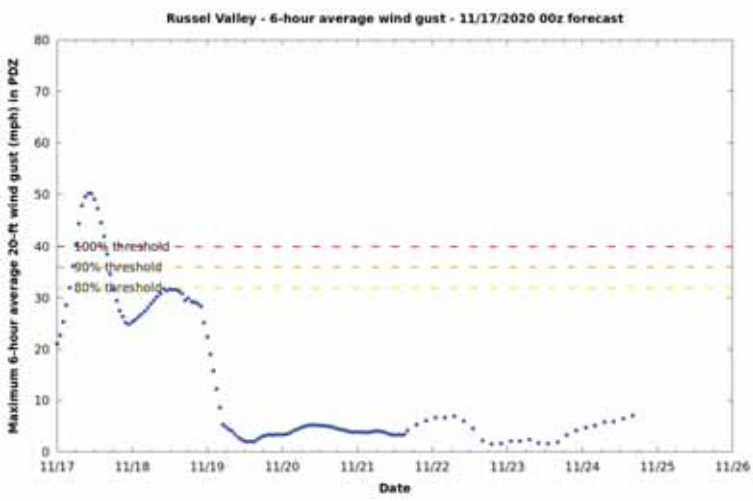
Stampede





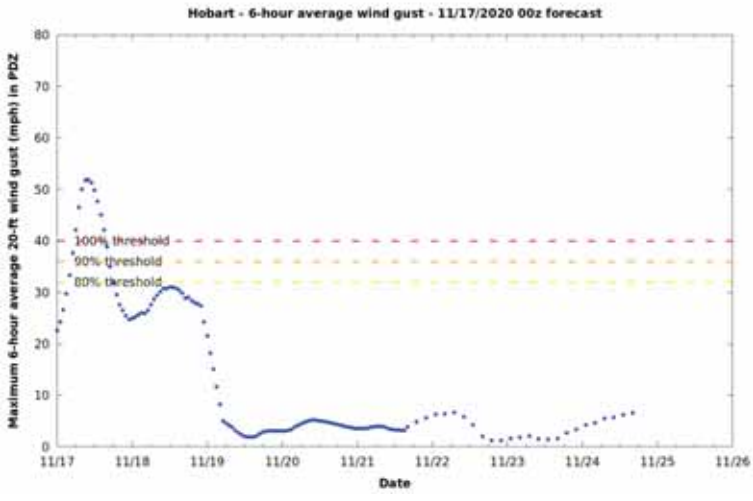
Russell Valley



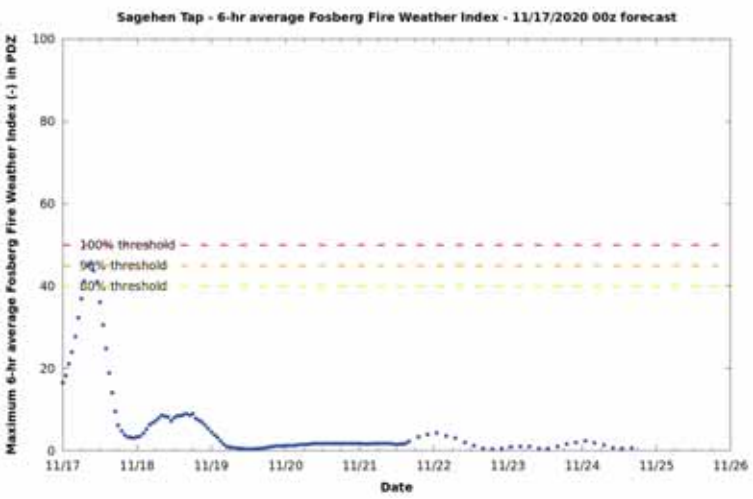


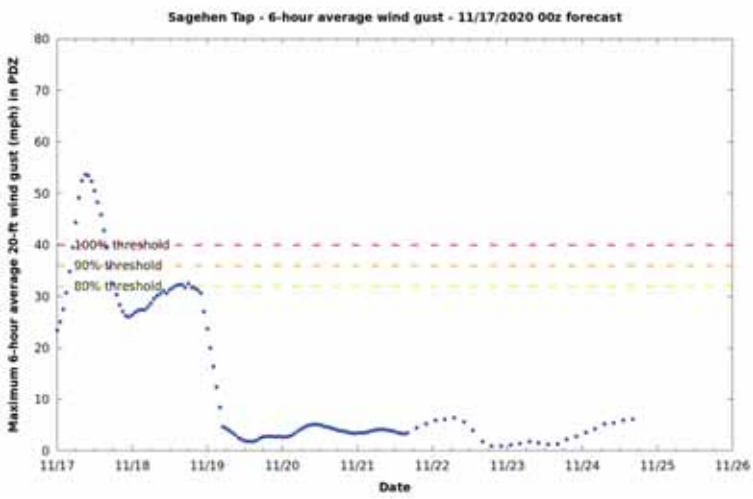
Hobart



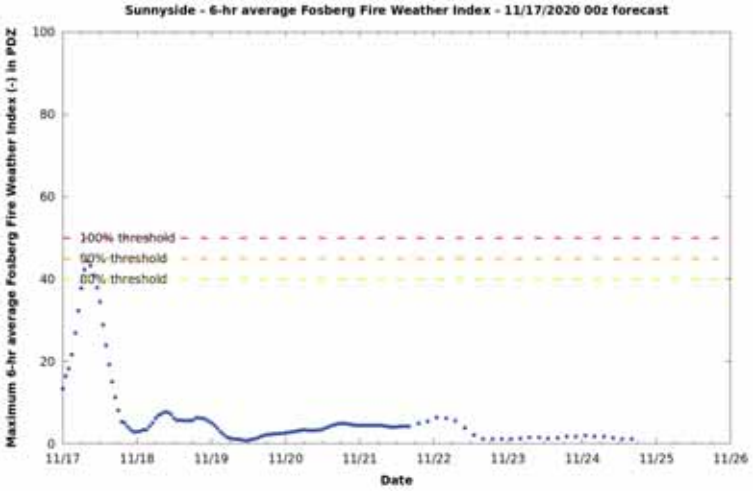


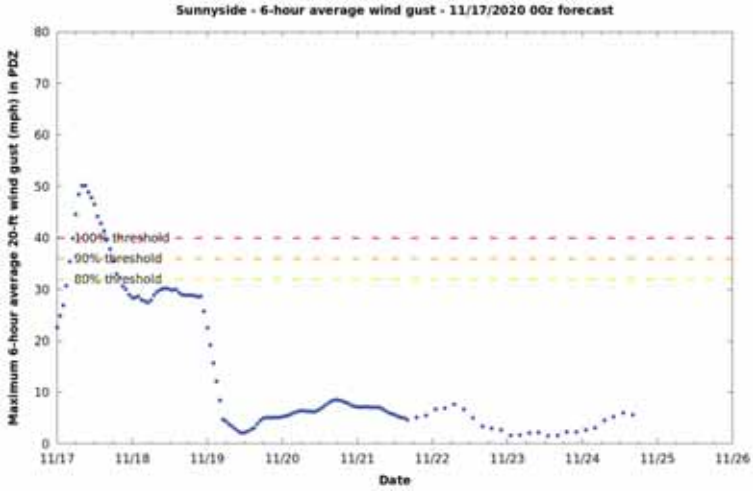
Sagehen tap



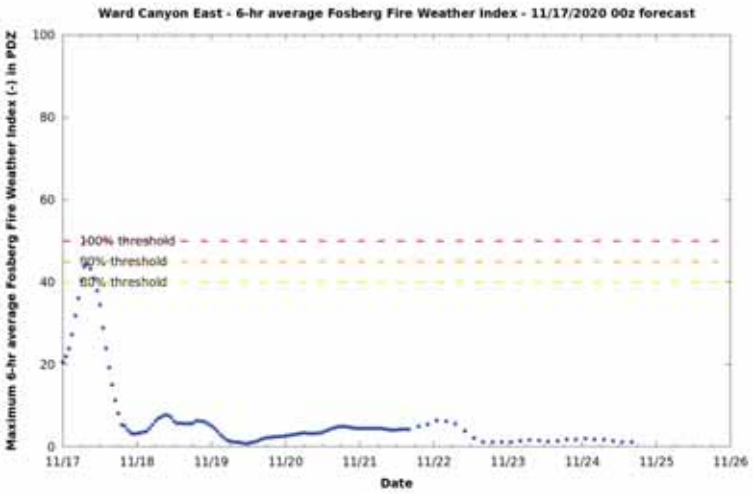


Sunnyside



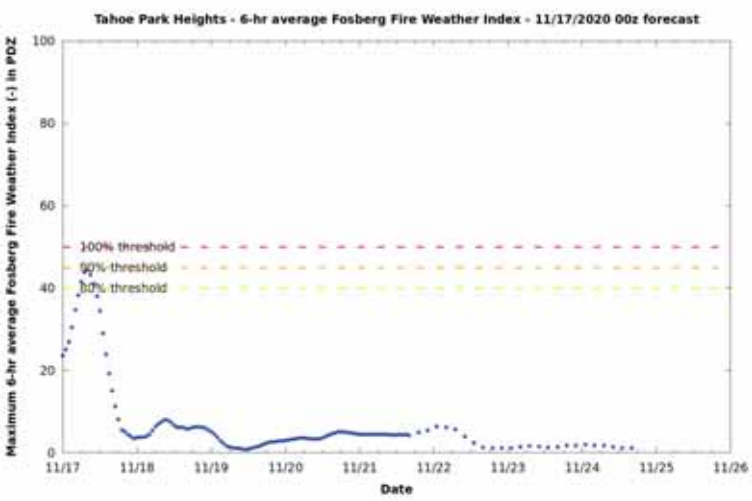


Ward Canyon East



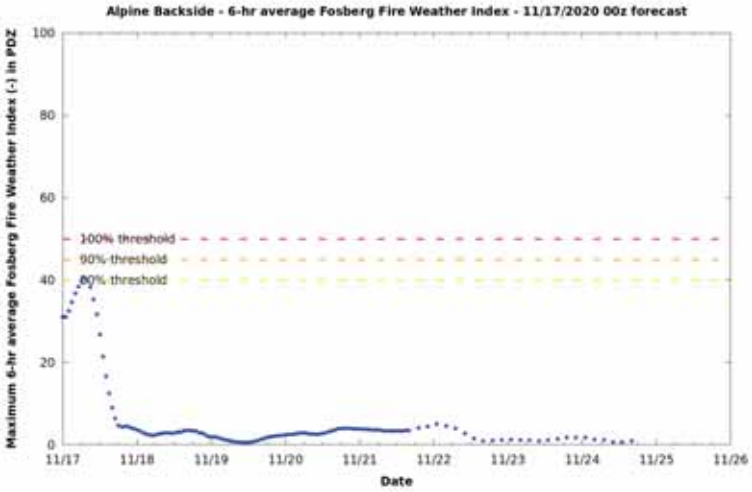


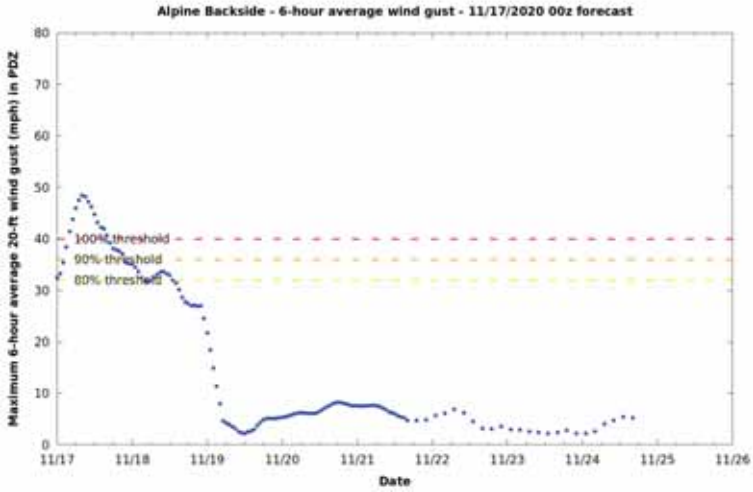
Tahoe Park Heights



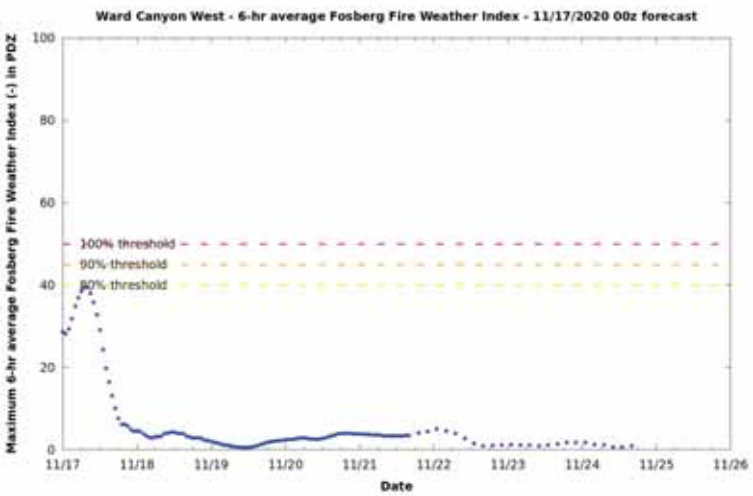


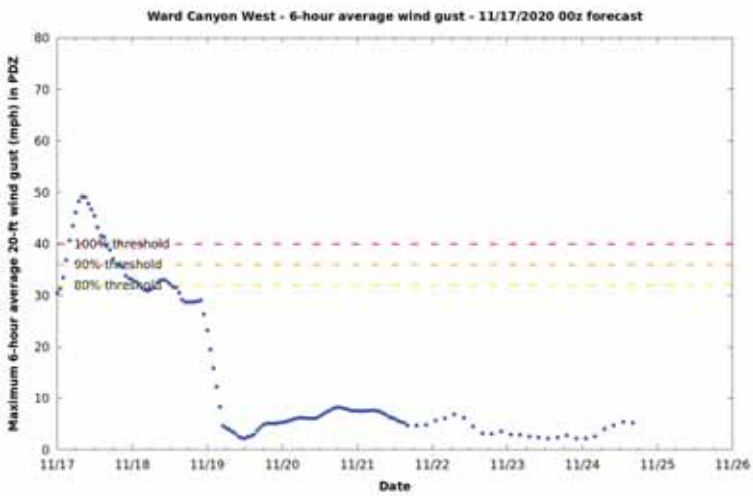
Alpine Backside



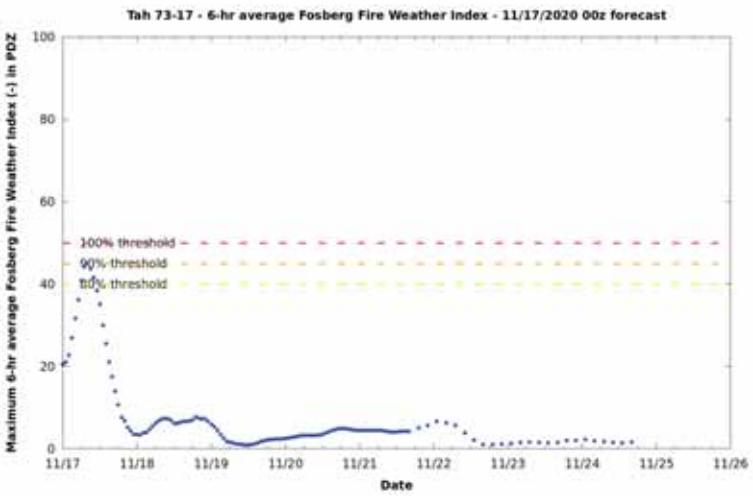


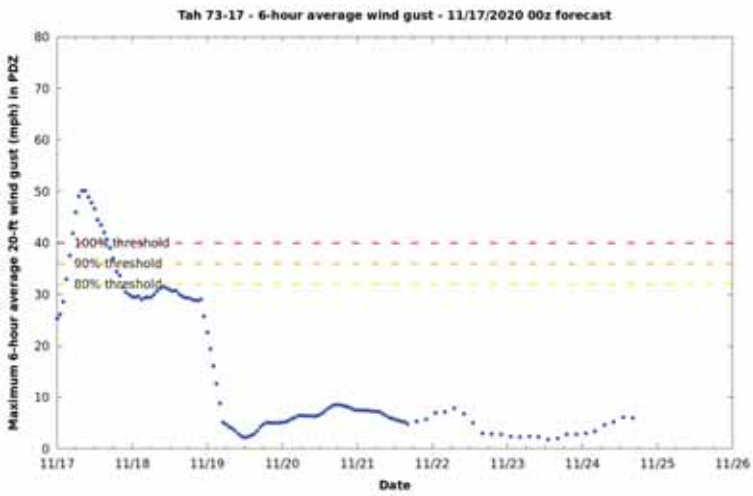
Ward Canyon West



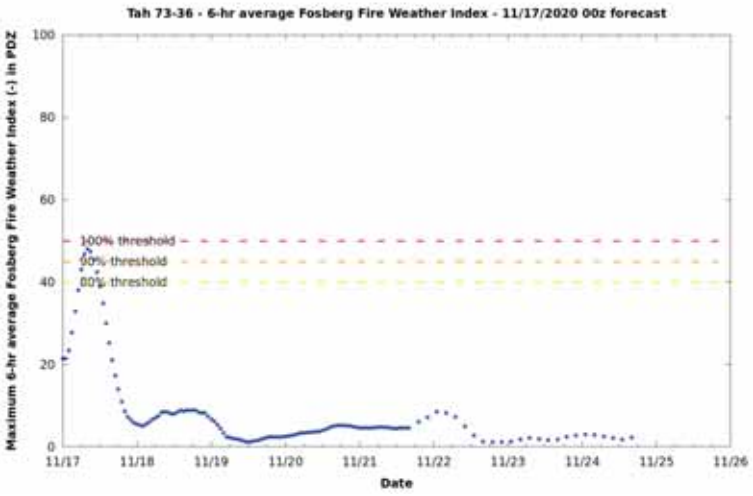


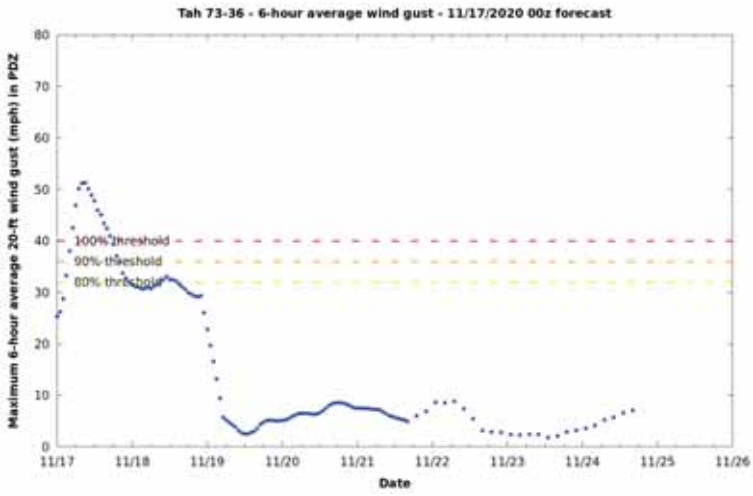
Tah 73-17



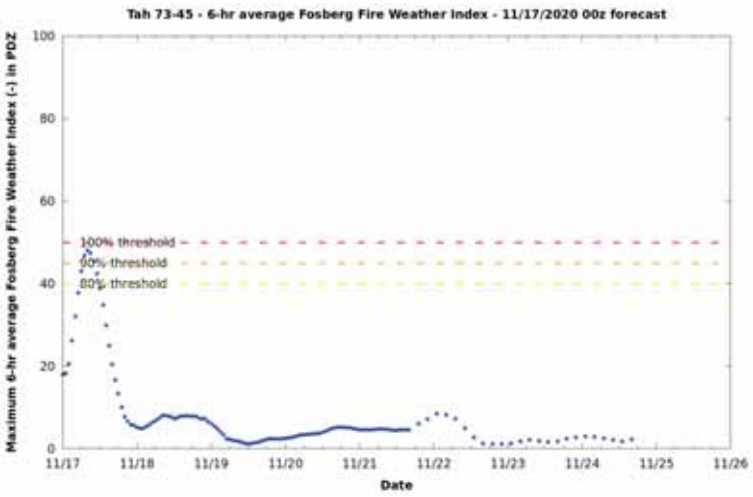


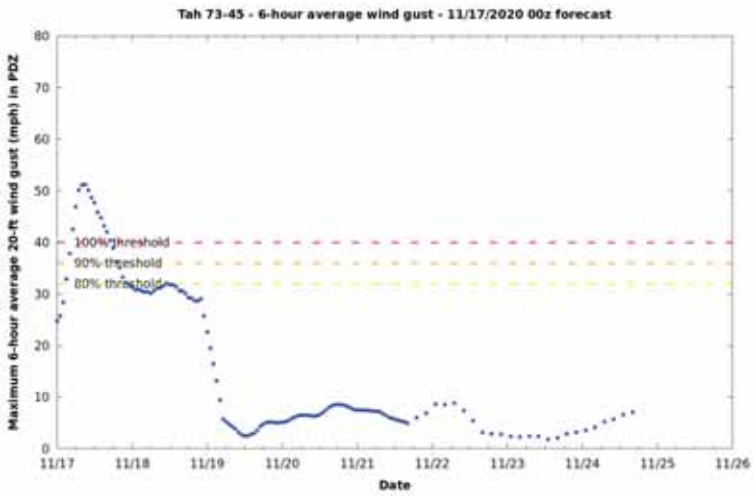
Tah 73-36



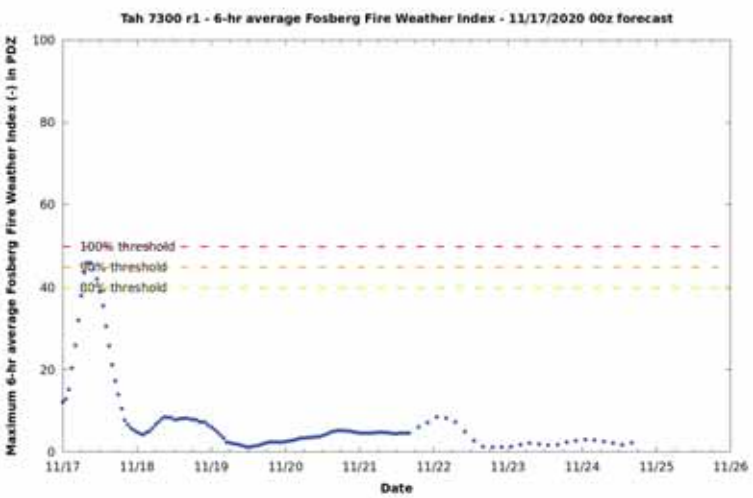


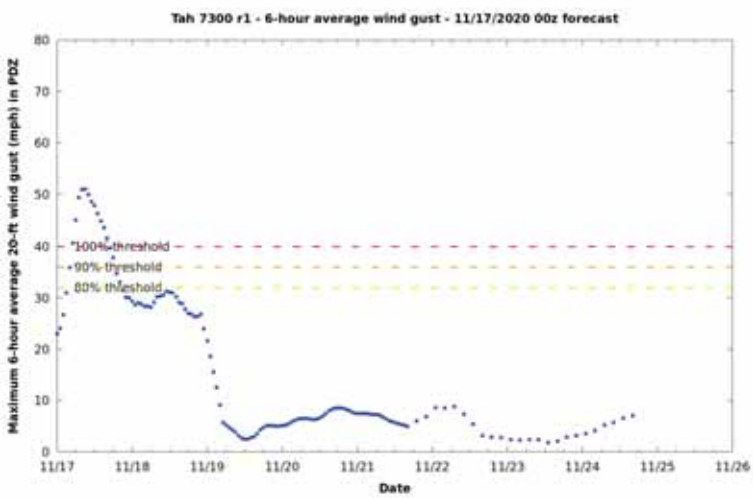
Tah 73-45



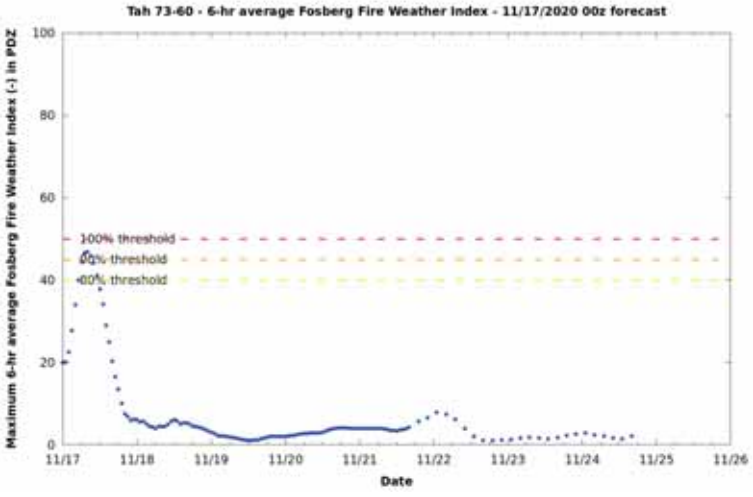


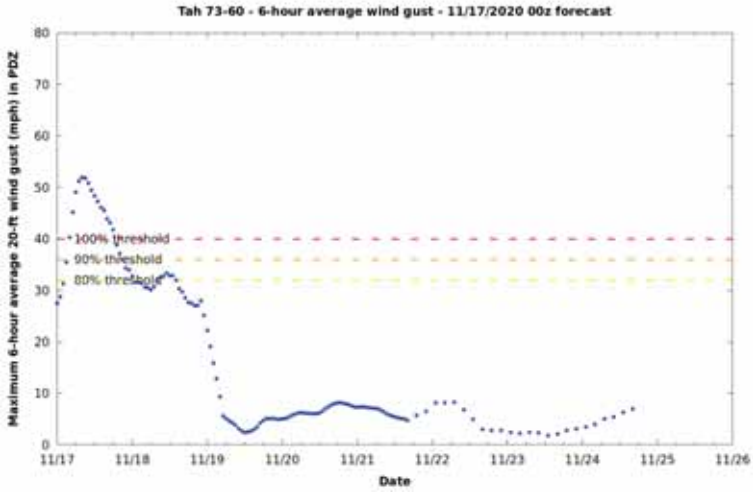
Tah 7300 r1



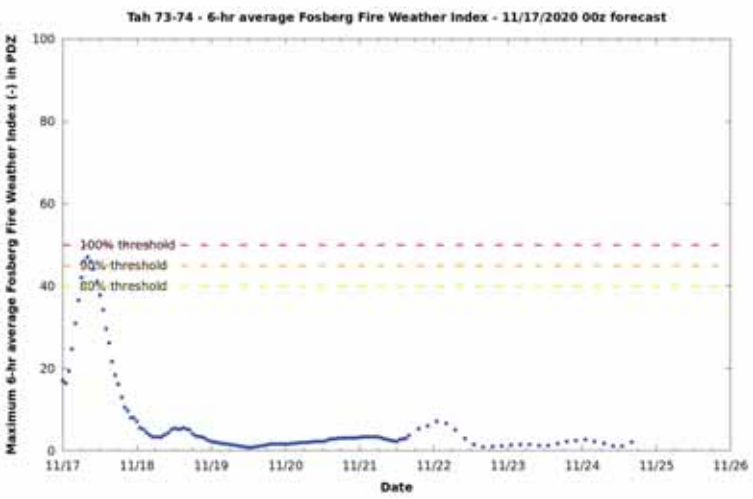


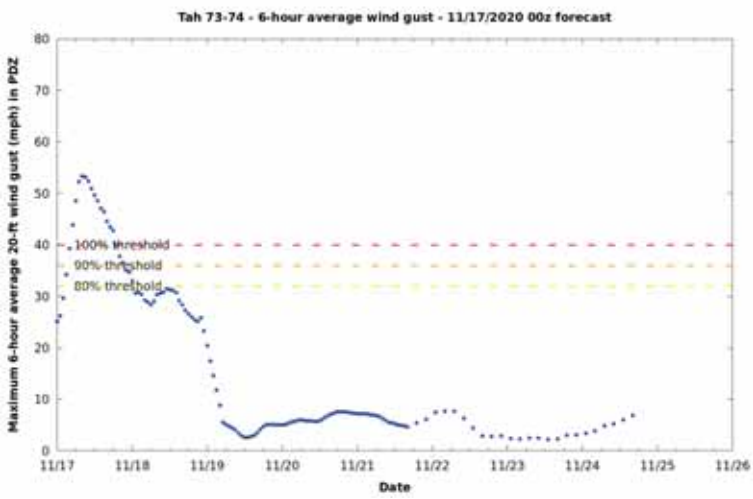
Tah 73-60



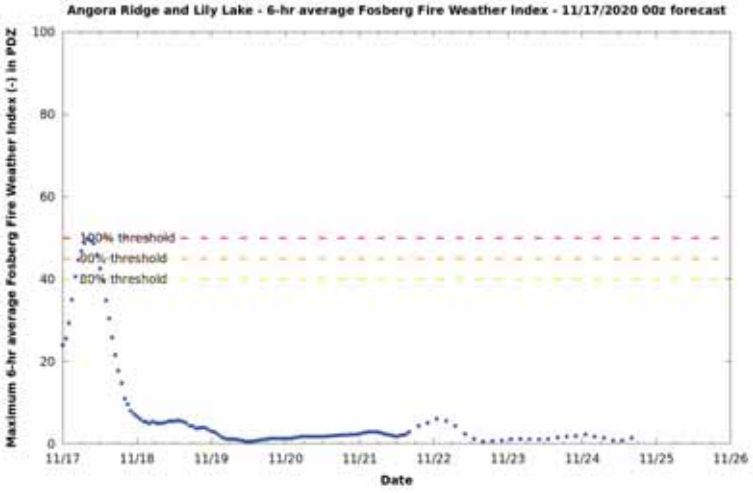


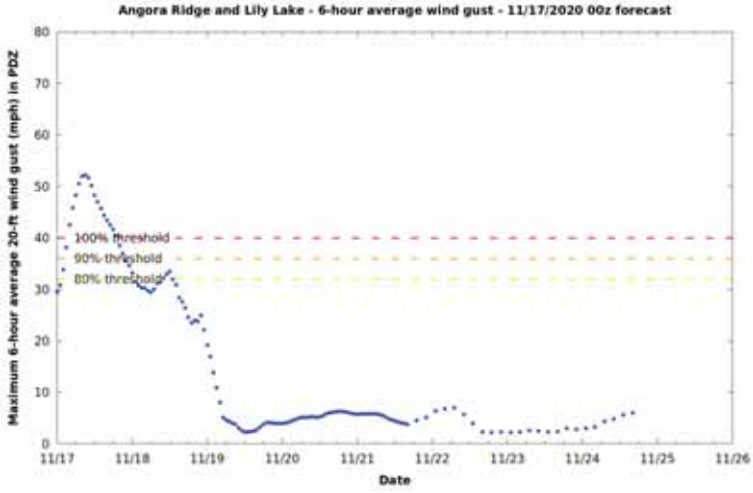
Tah 73-74



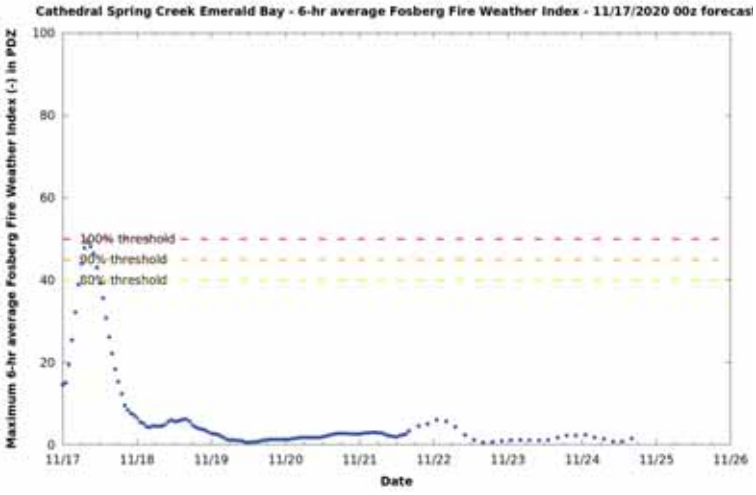


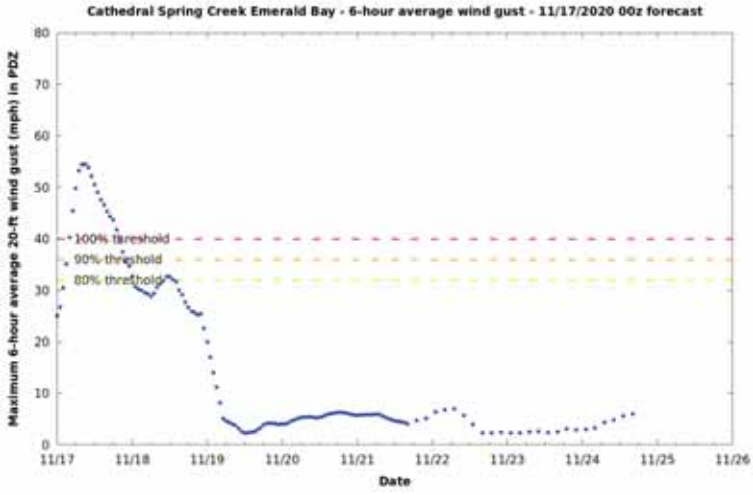
Angora Ridge and Lily Lake



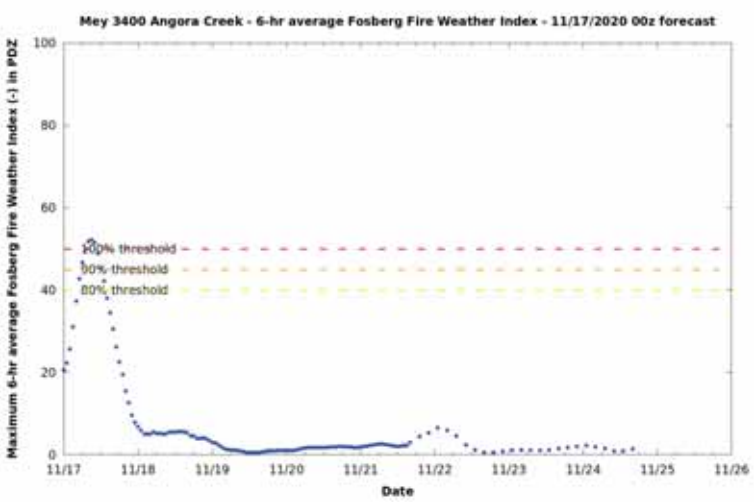


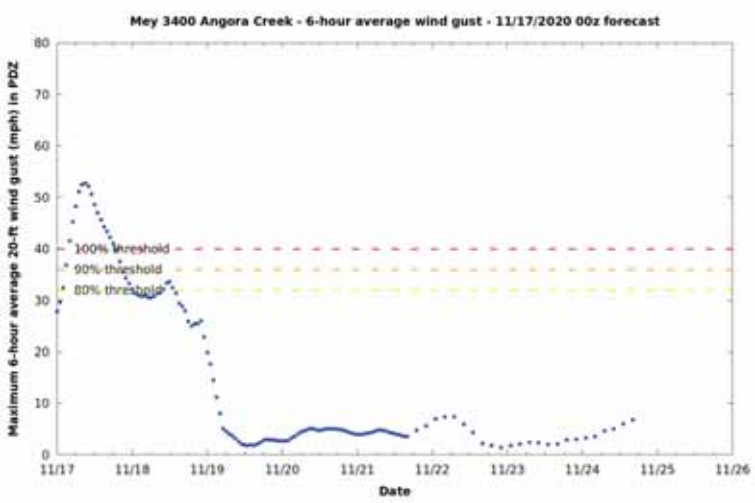
Cathedral Spring Creek Emerald Bay



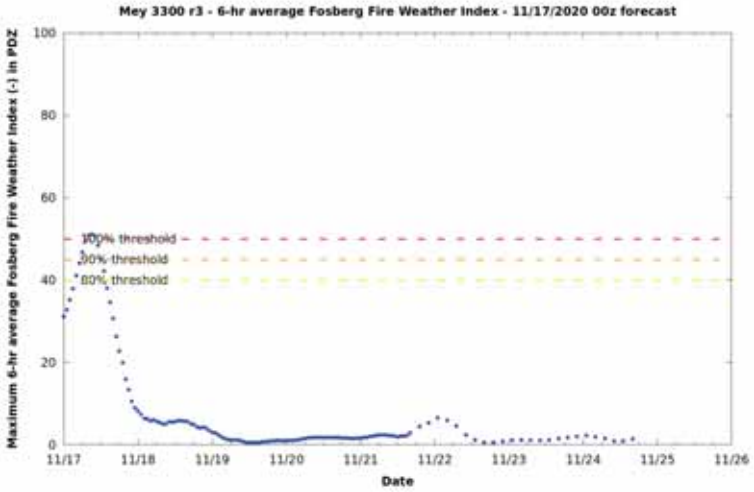


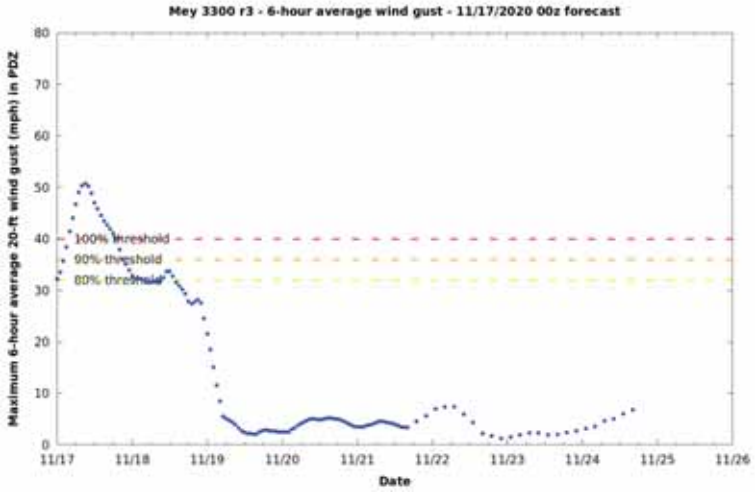
Mey 3400 Angora Creek



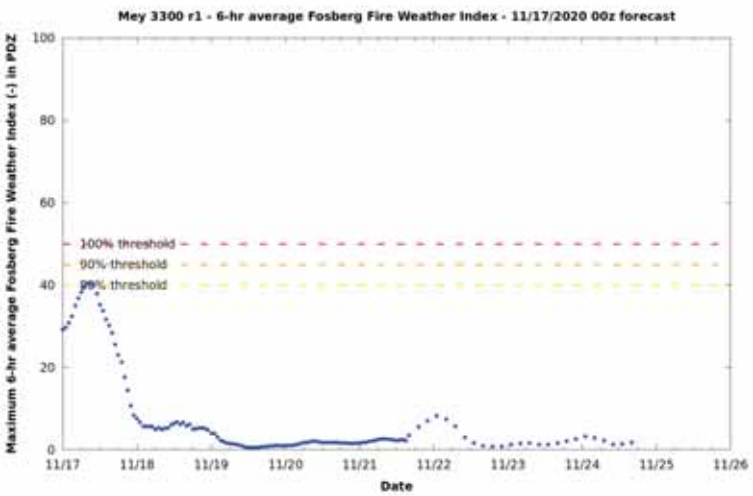


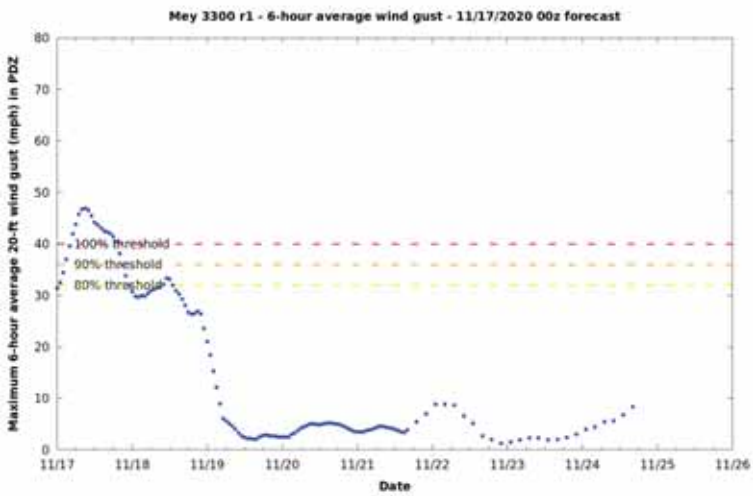
Mey 3300 r3



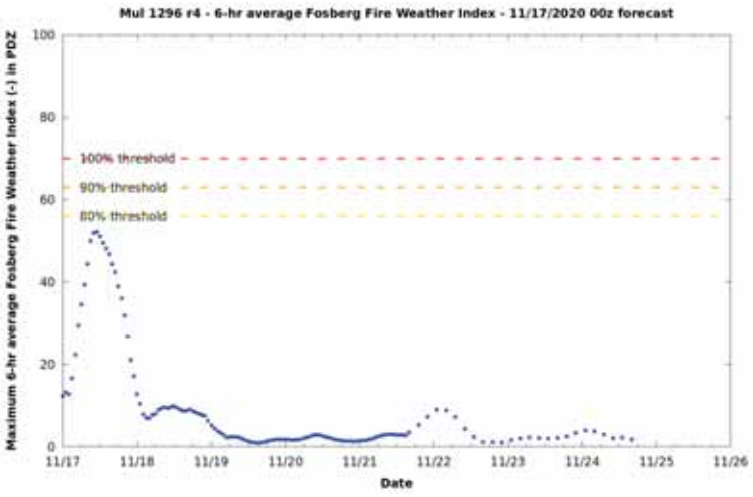


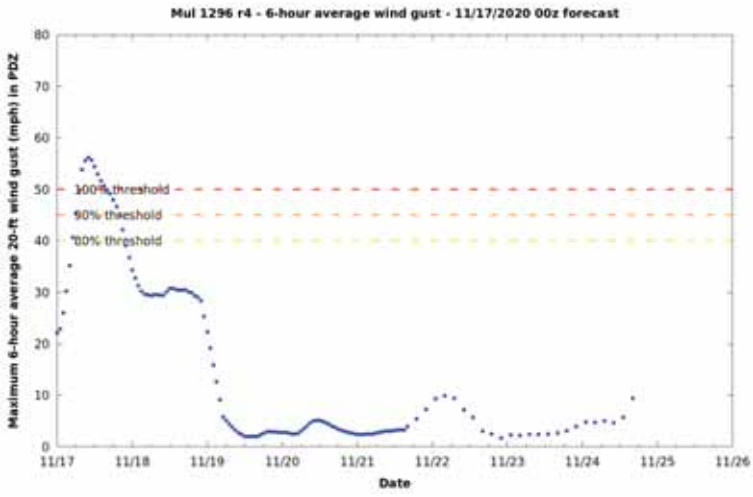
Mey 3300 r1



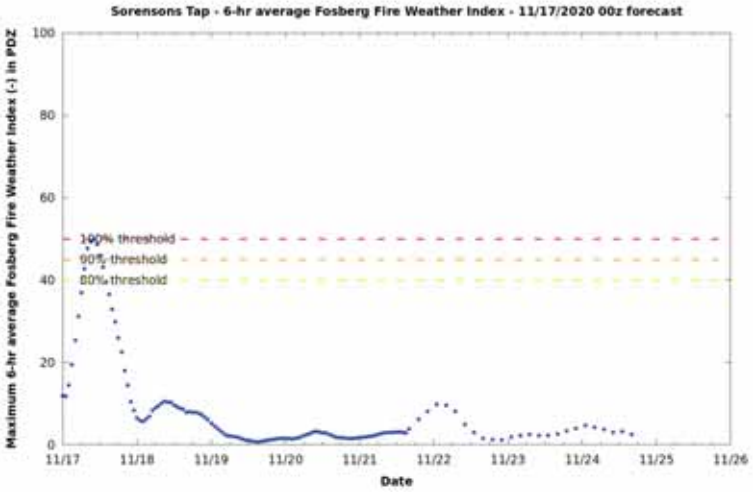


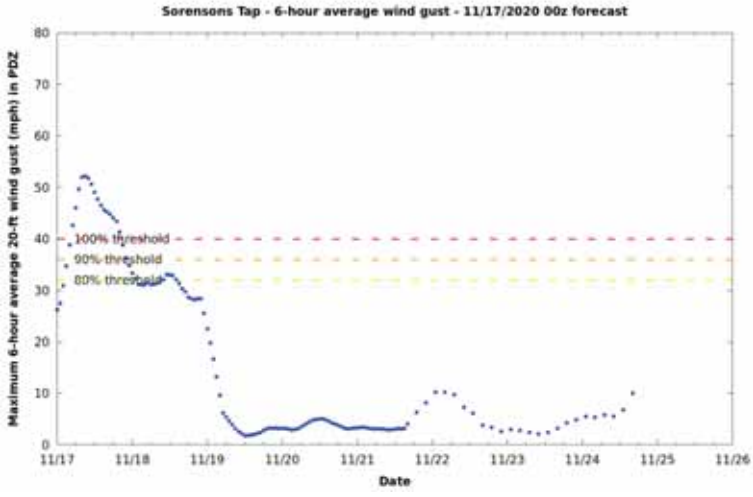
Mul 1296 r4



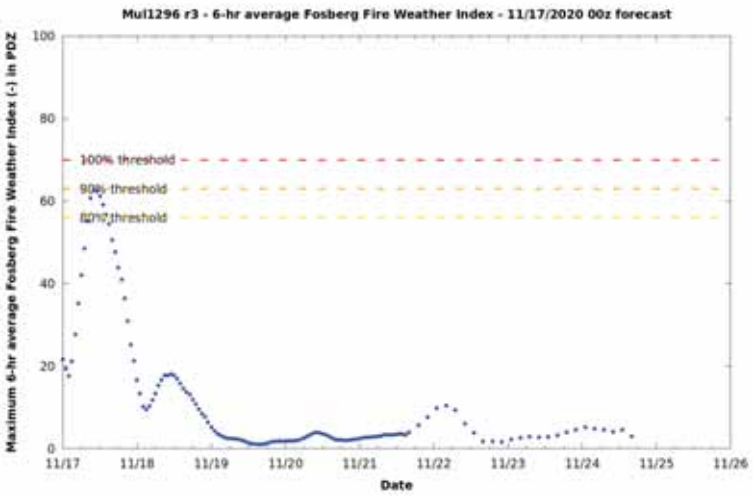


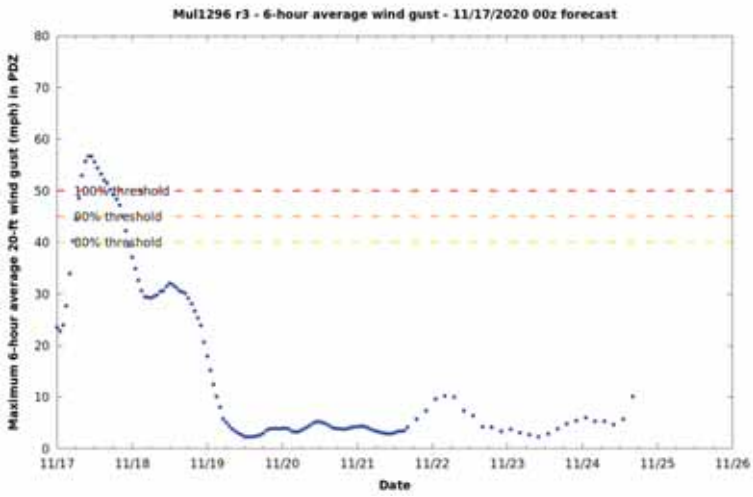
Sorensons Tap



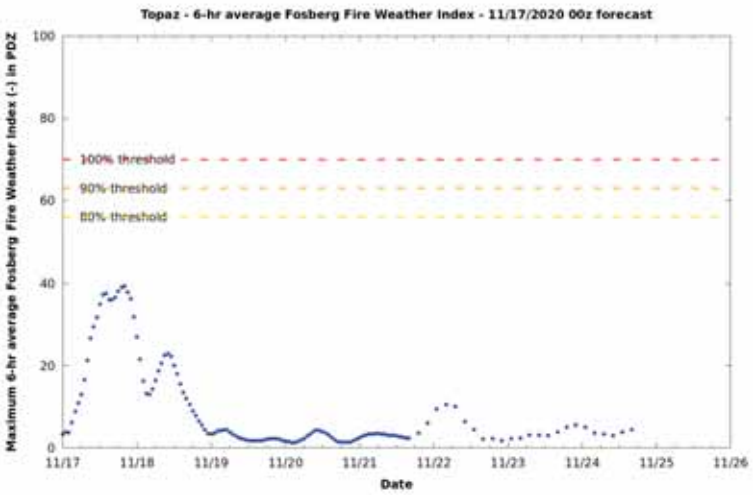


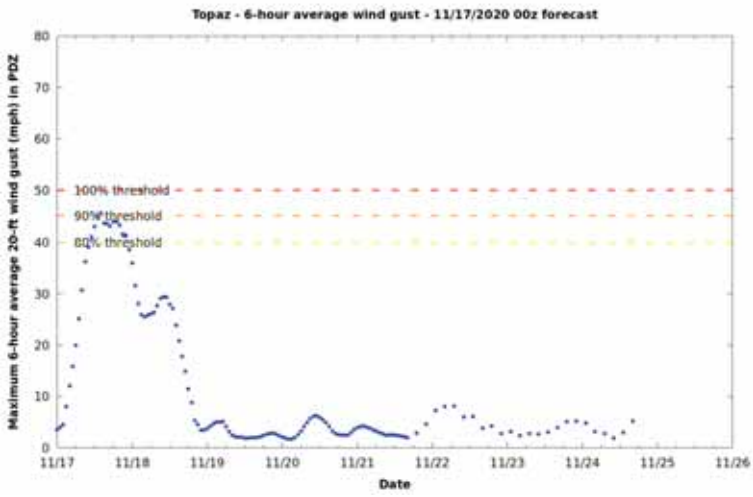
Mul 1296 r3



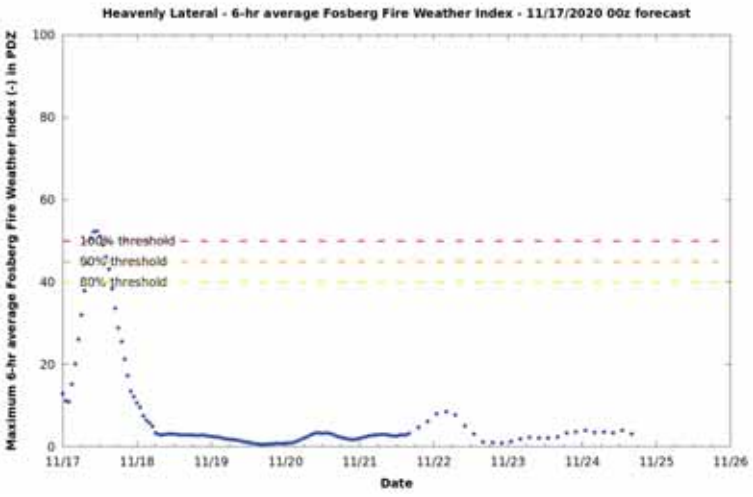


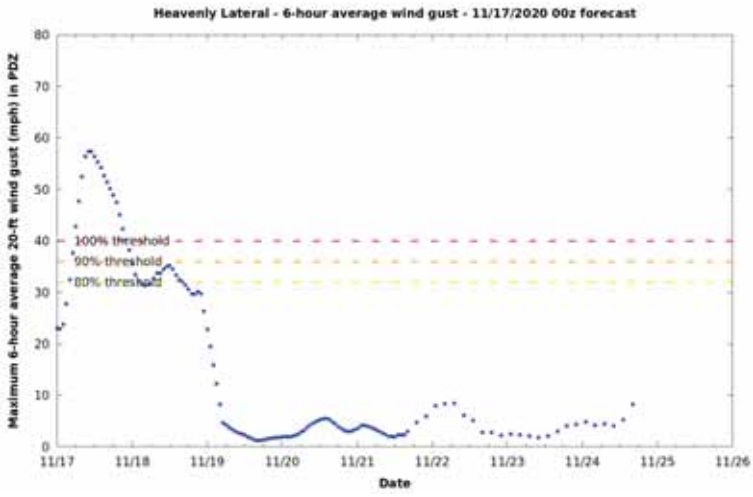
Topaz



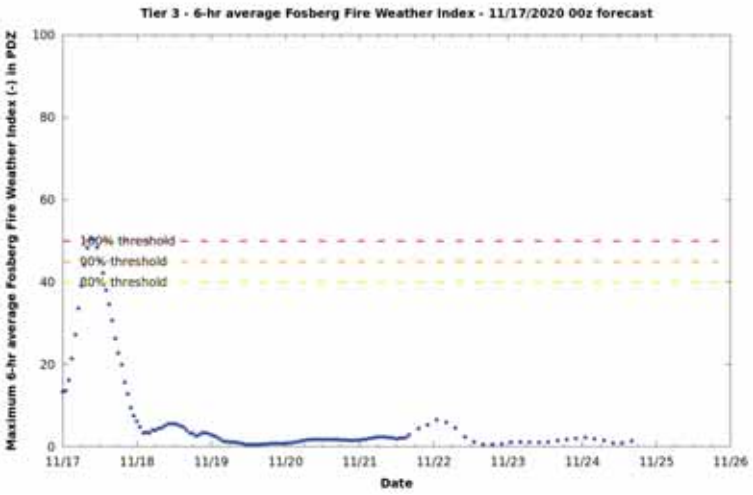


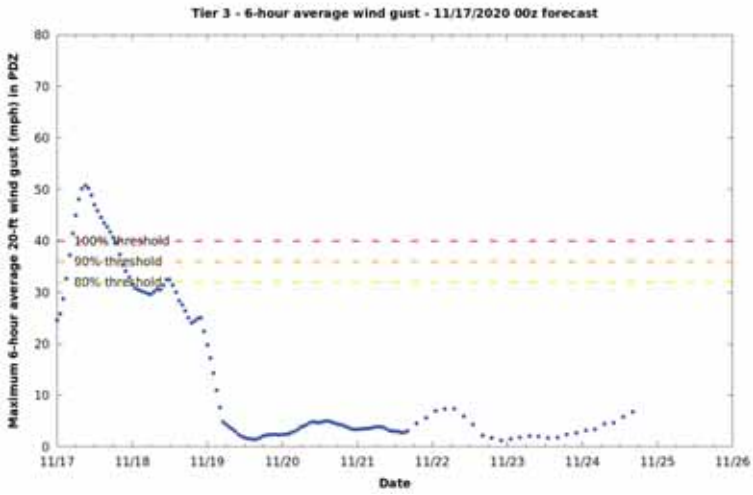
Heavenly Lateral



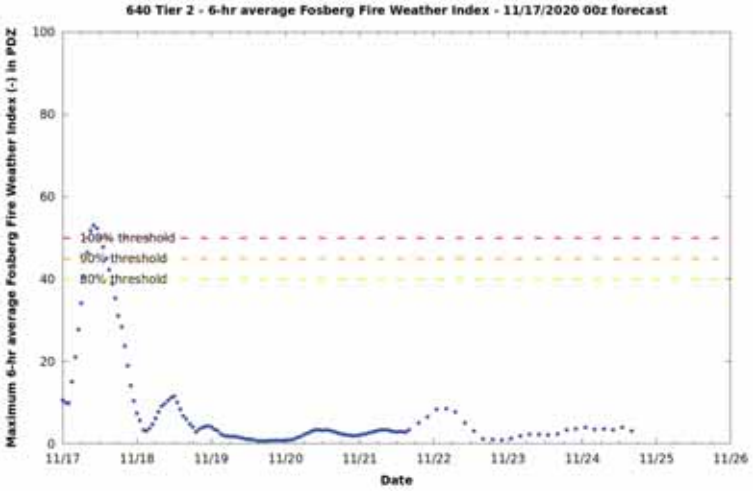


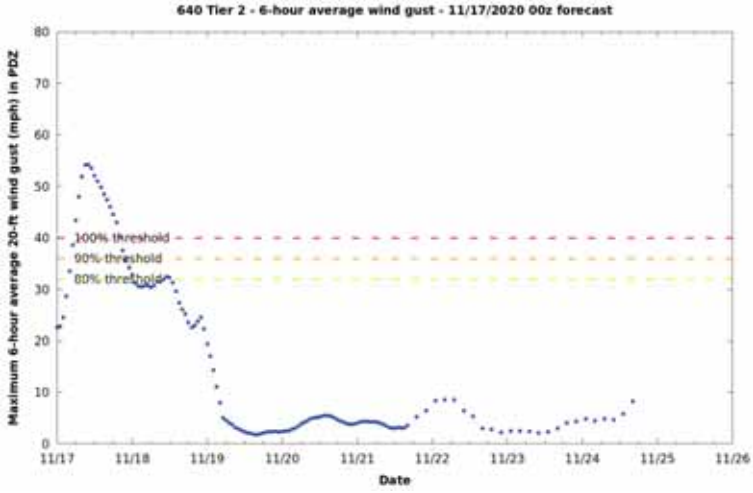
Tier 3



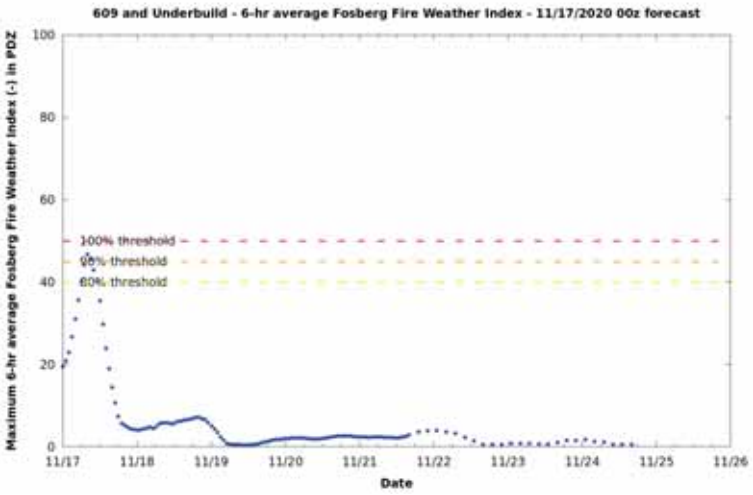


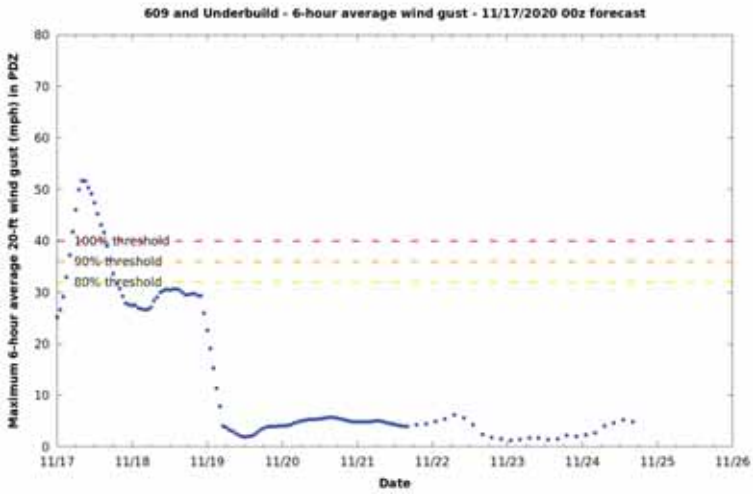
640 Tier 2



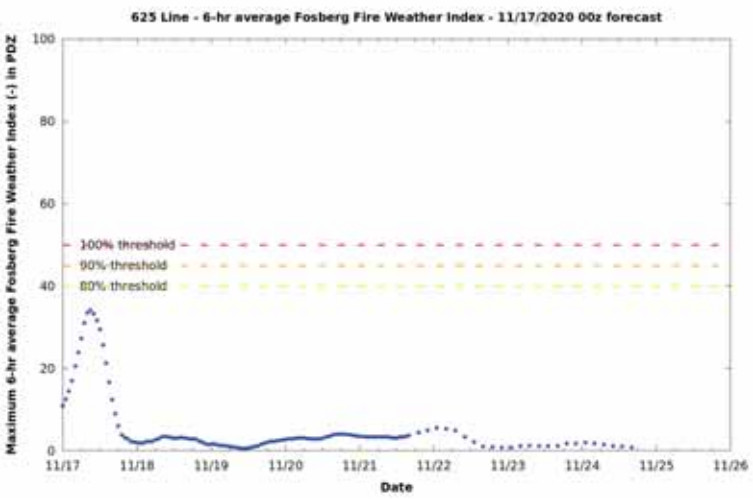


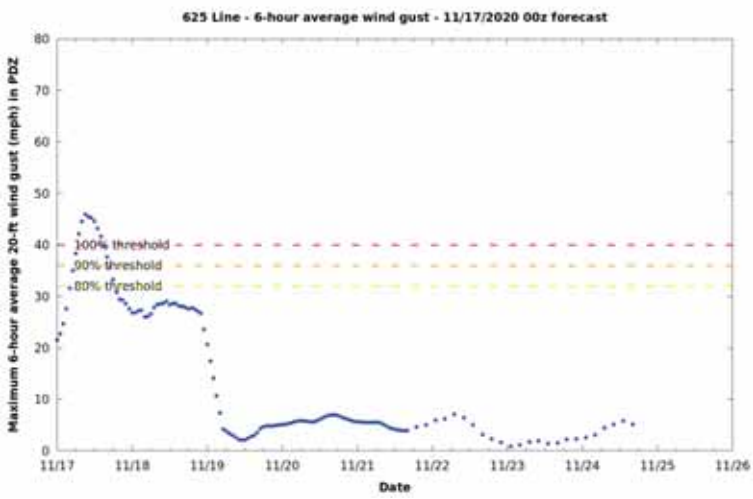
609 and Underbuild



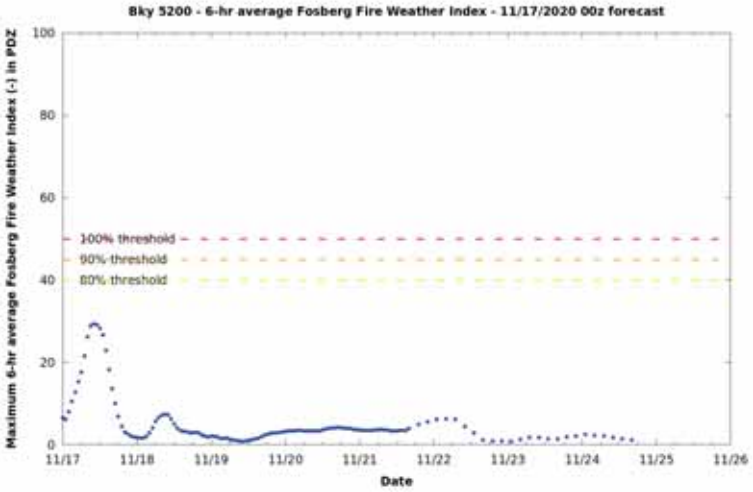


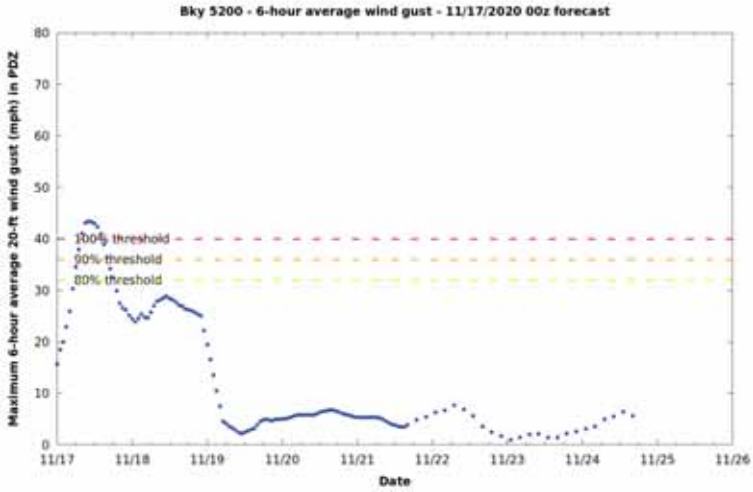
625 Line



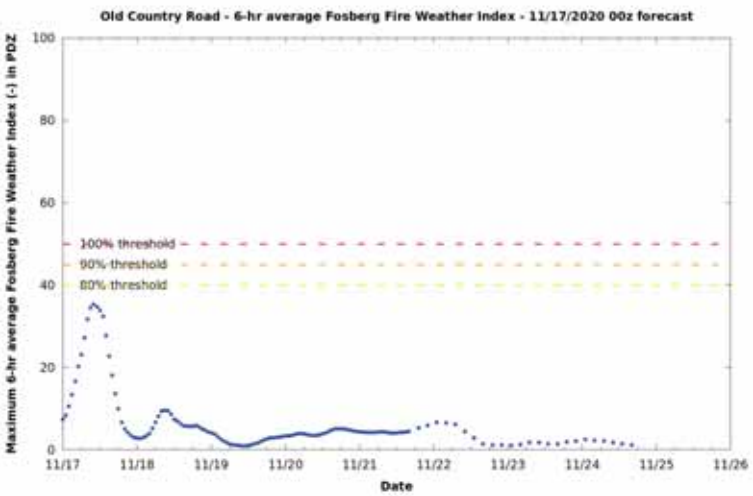


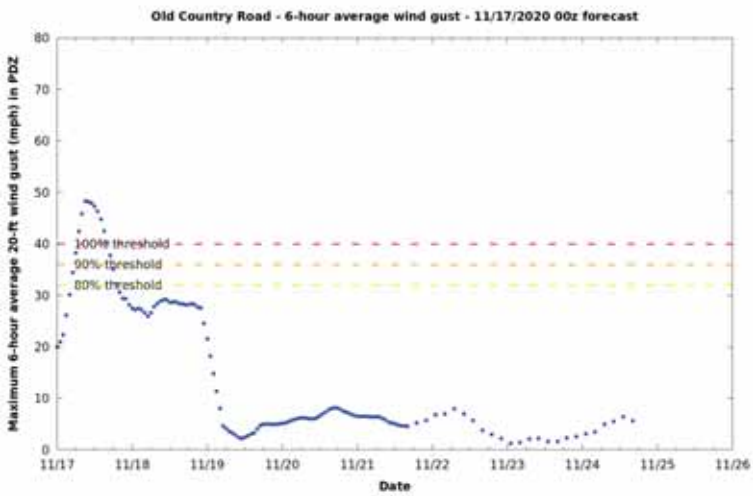
Bky 5200



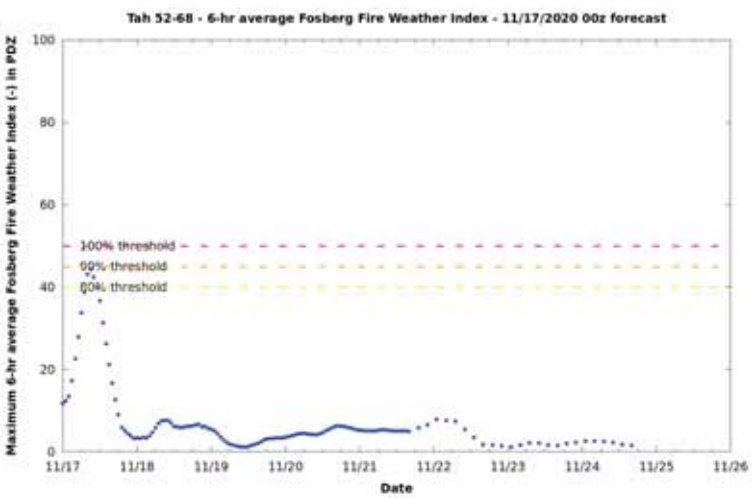


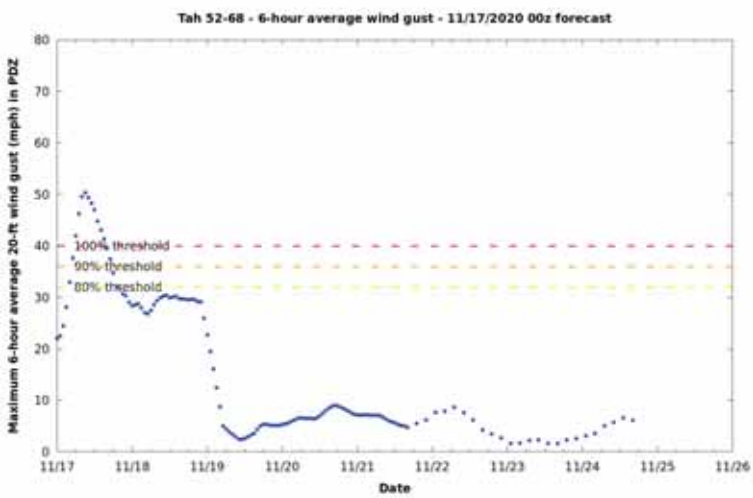
Old Country Road



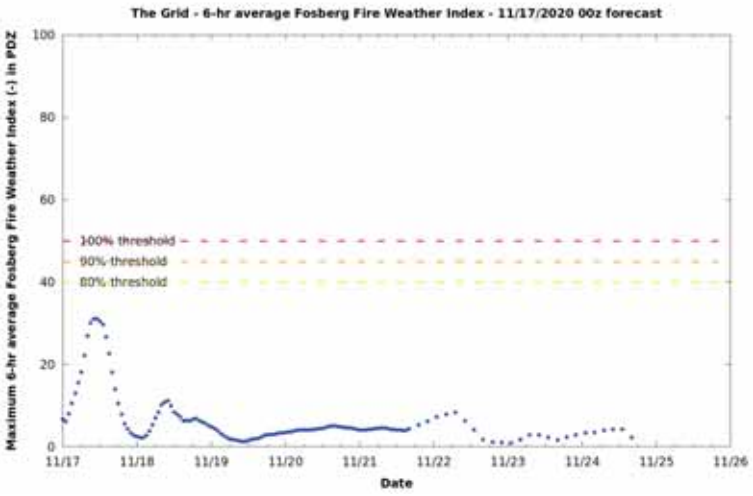


Tah 52-68



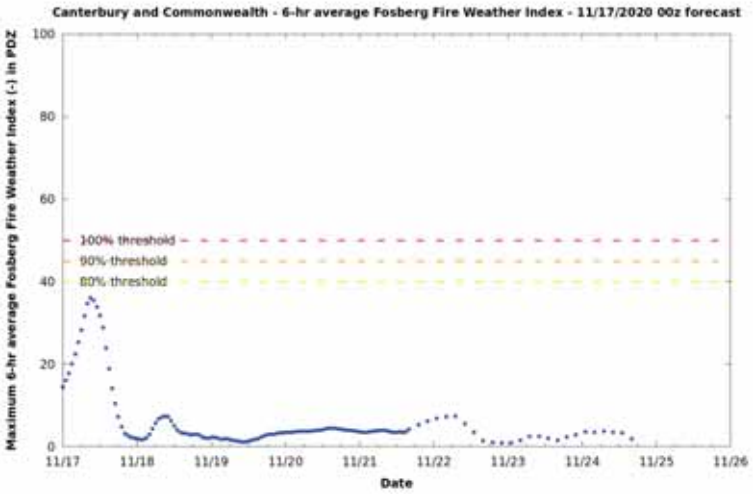


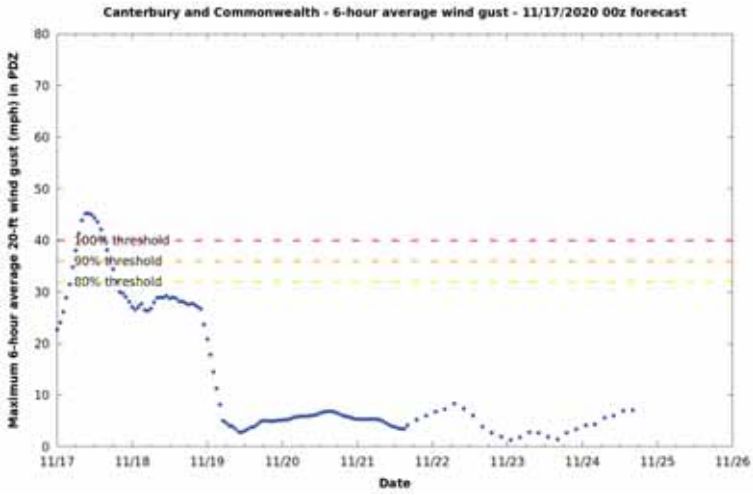
The Grid



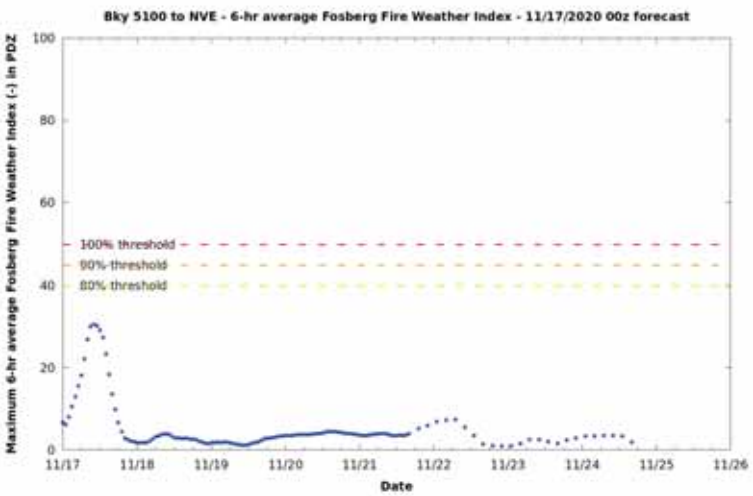


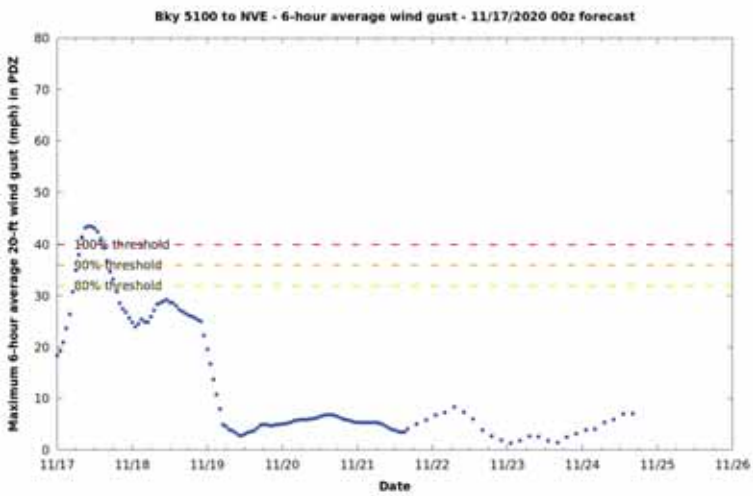
Canterbuy and Commonwealth



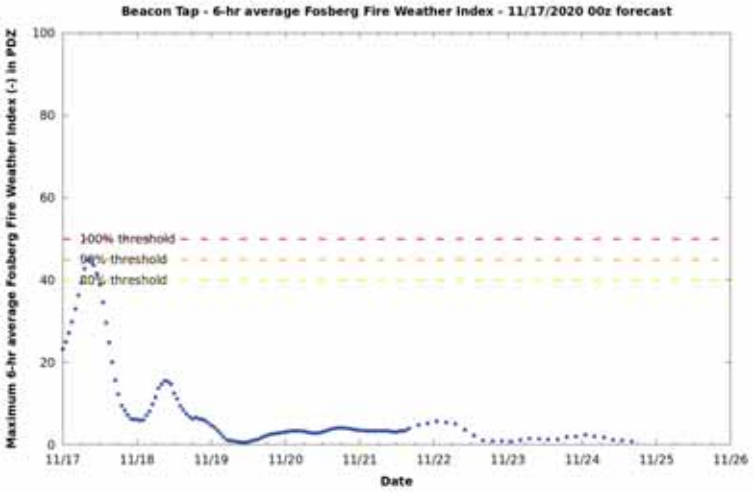


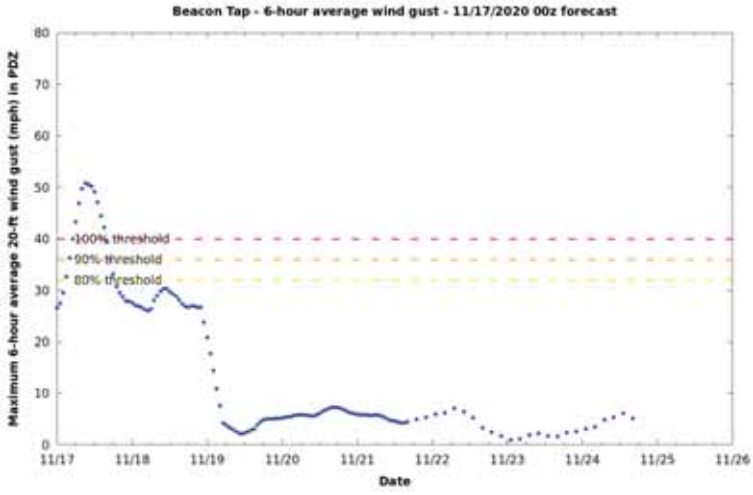
Bky 5100 to NVE



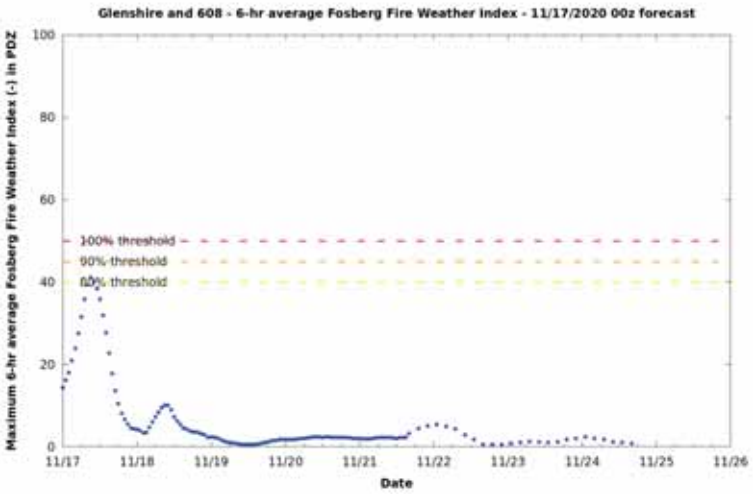


Beacon Tap



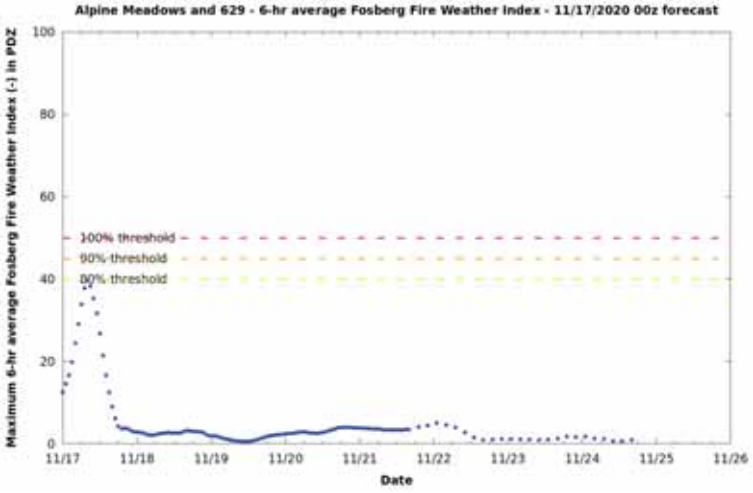


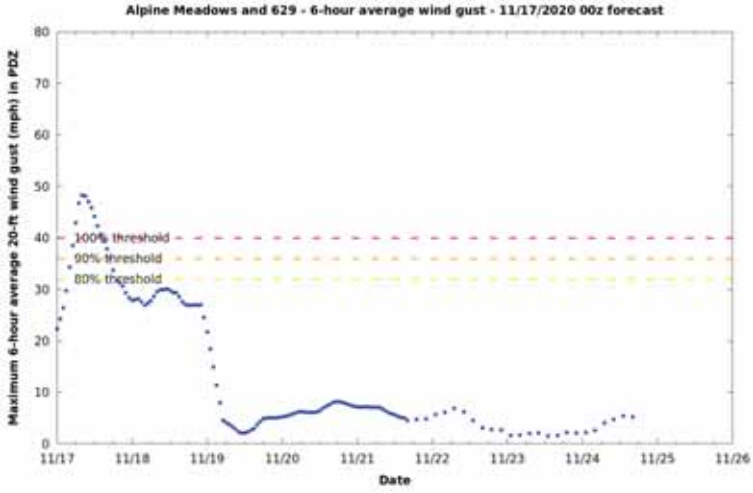
Glenshire and 608



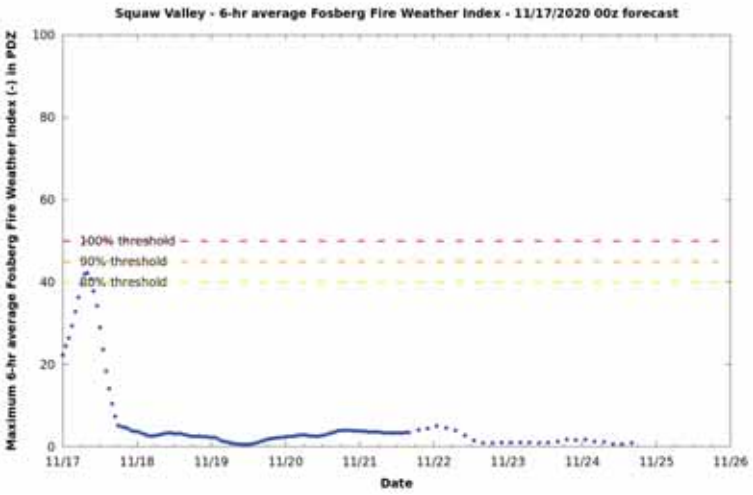


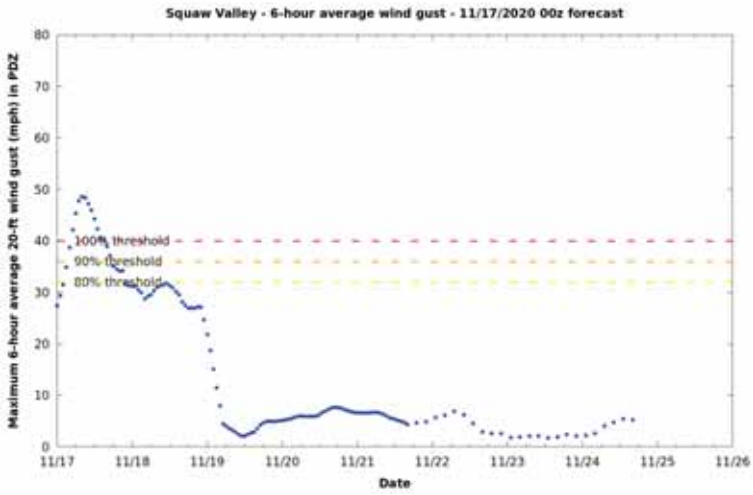
Alpine Meadows and 629



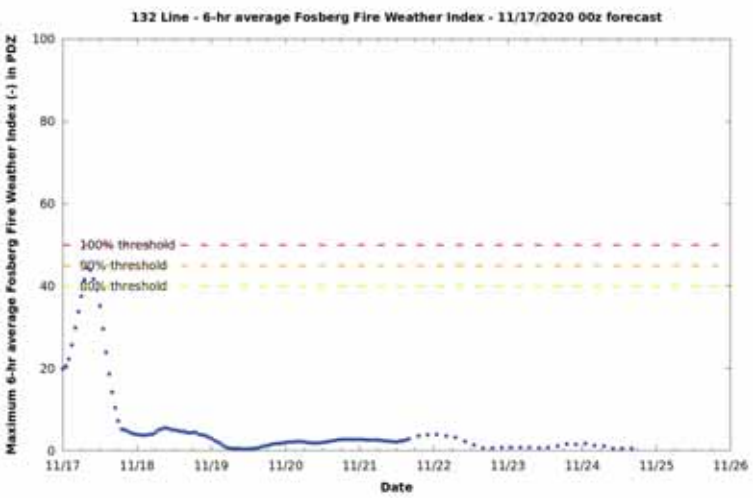


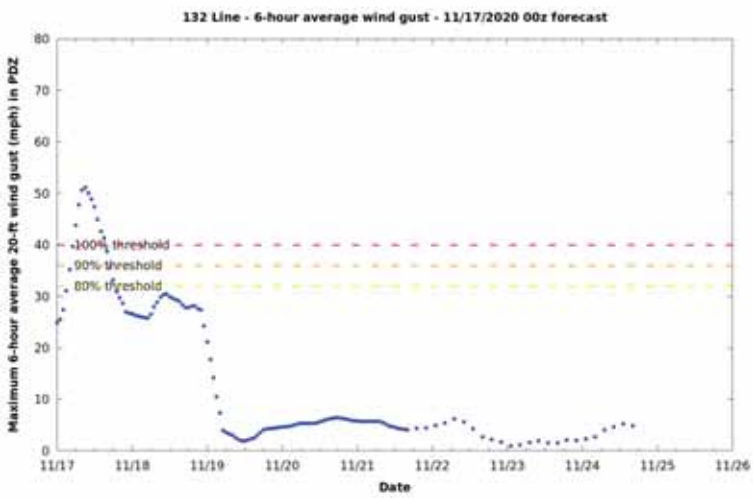
Squaw Valley



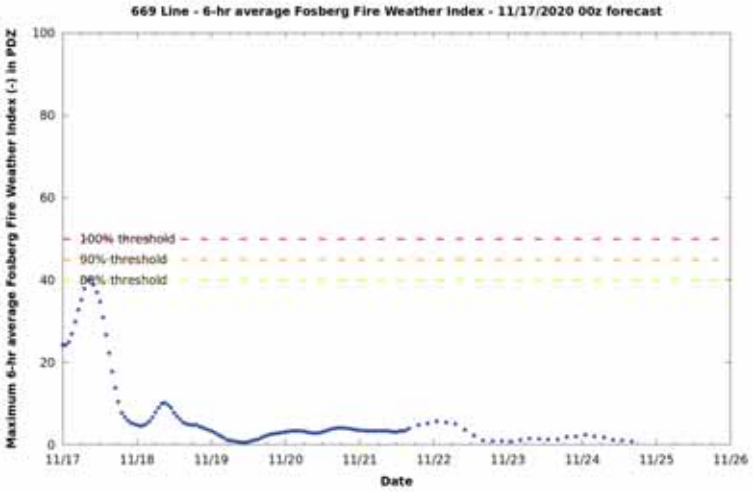


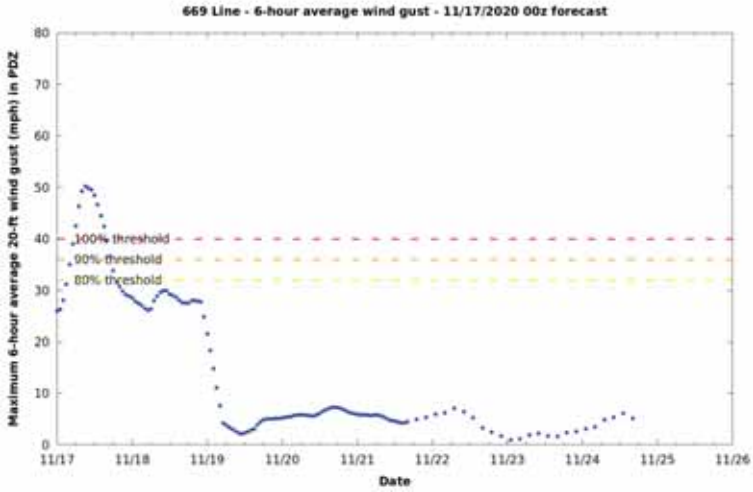
132 Line



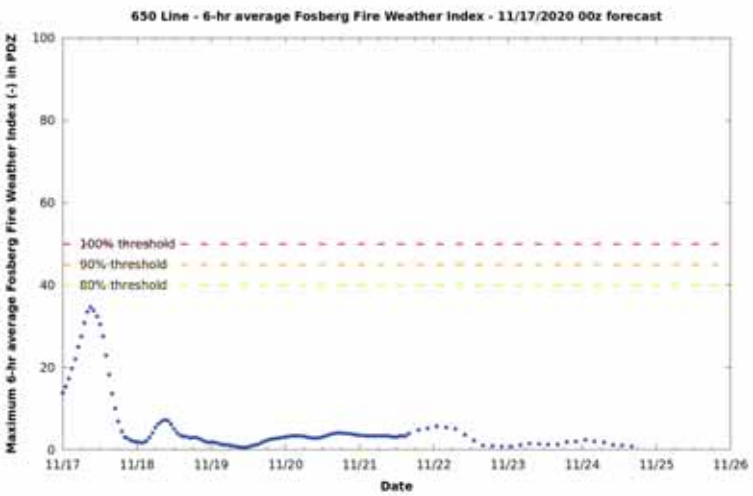


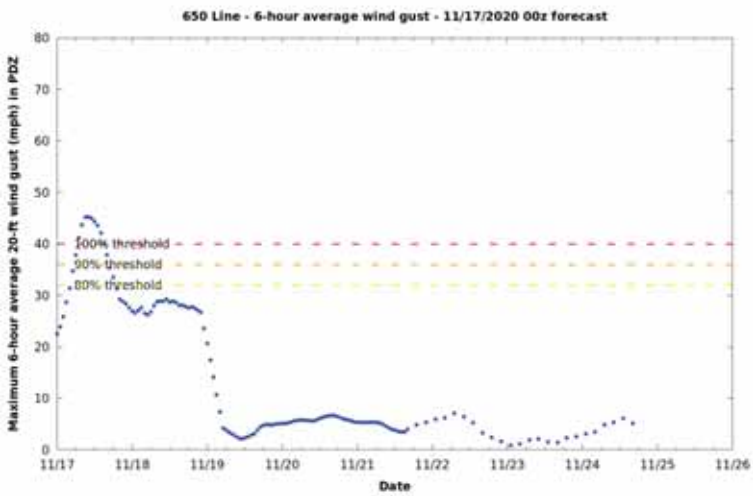
669 Line



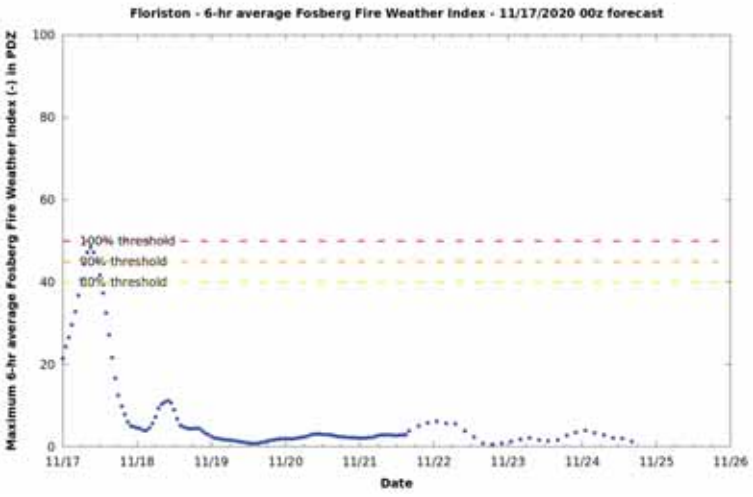


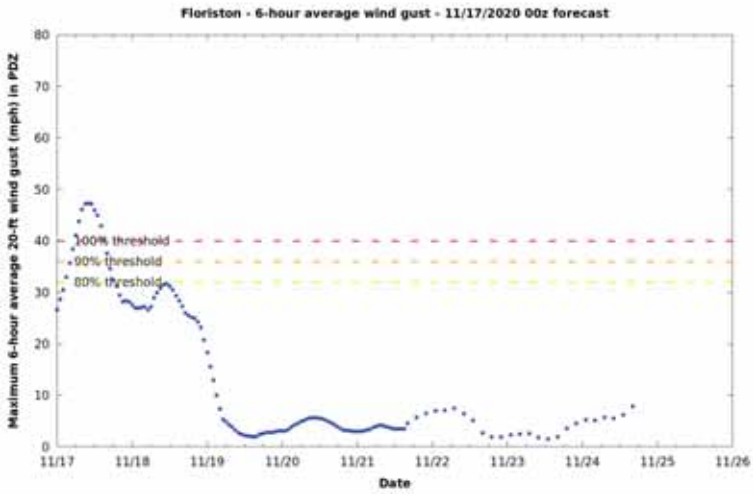
650 Line



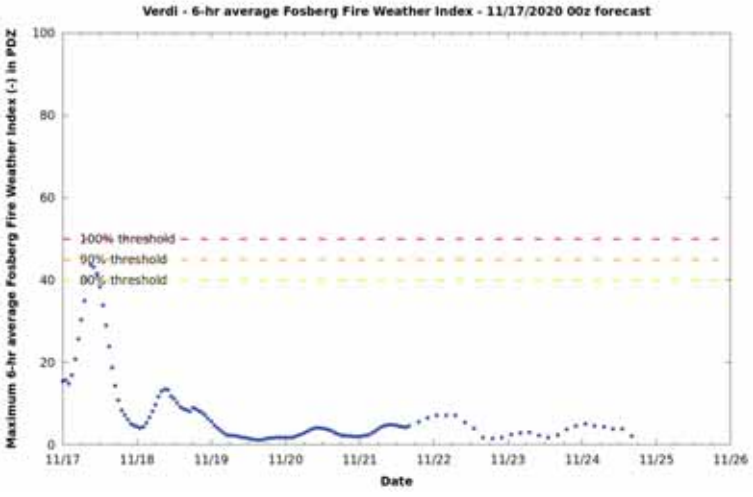


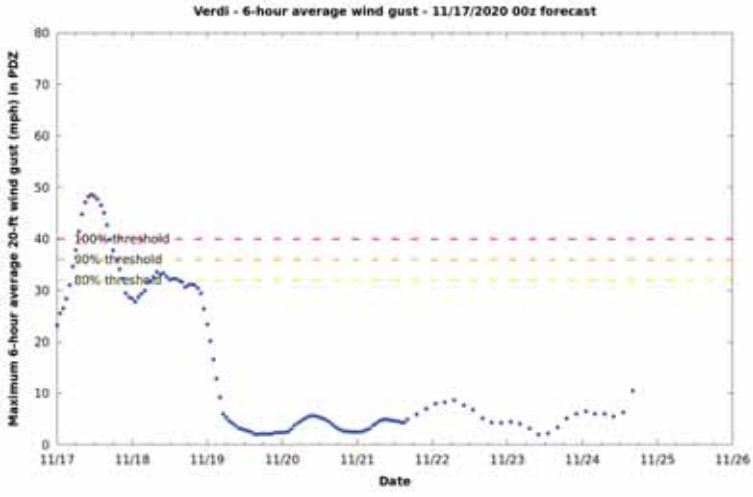
Floriston



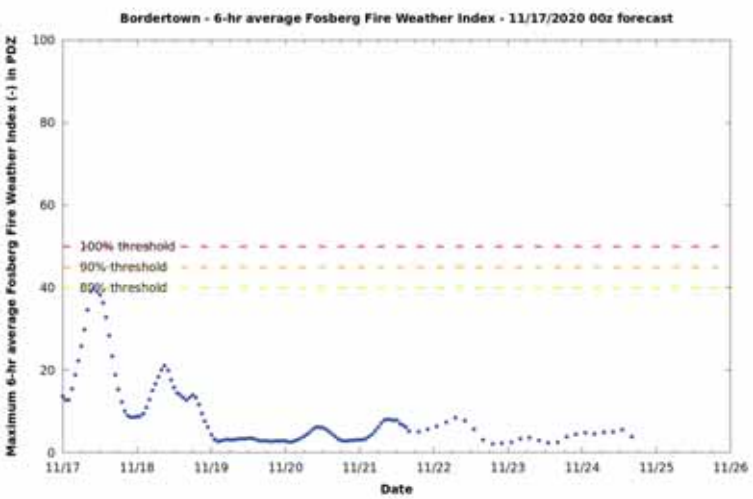


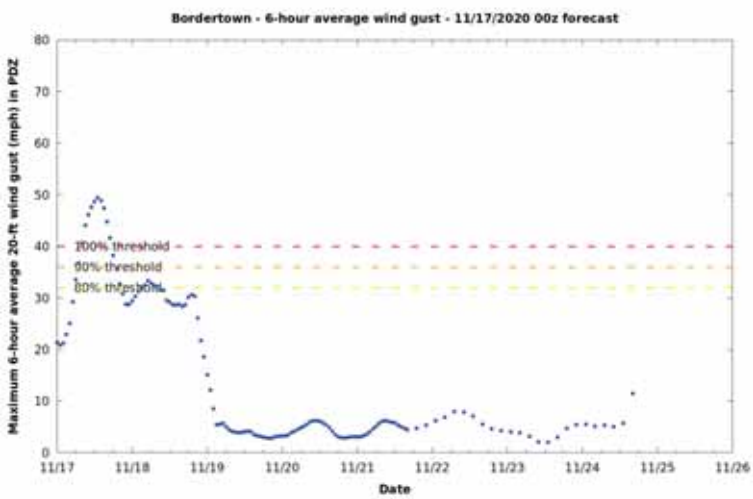
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/17/2020 00z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25
11/26


Bordertown - 6-hour average wind gust - 11/17/2020 00z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25
11/26

Liberty Utilities Fire Potential Index Forecast for 11/17/20 - 11/23/20

Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	low	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	moderate	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	low	low	low	low	low	low	low

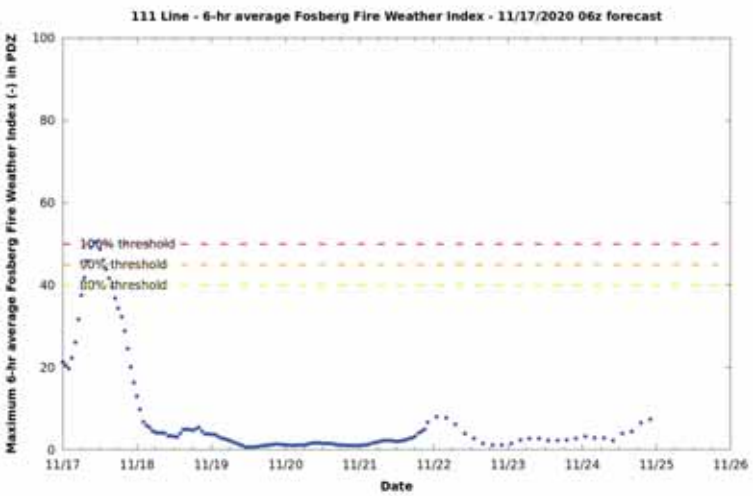
Liberty Utilities Energy Release Component Forecast for 11/17/20 - 11/23/20

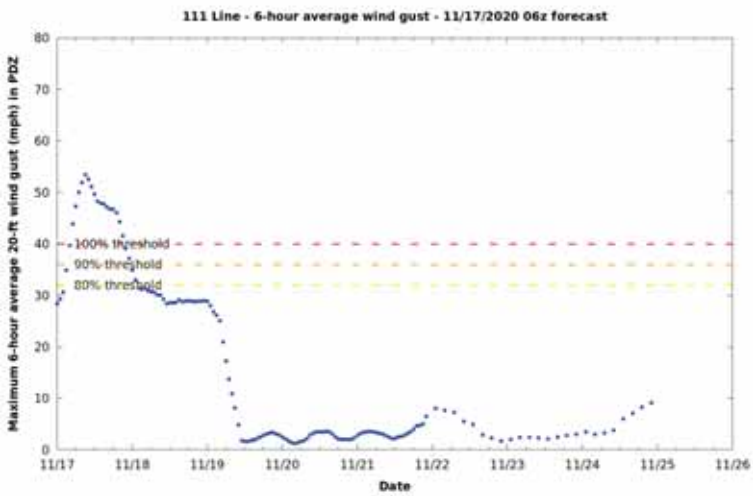
Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	56.9	55.7	44.6	39.3	41.2	42.2	45.3
Sierra Brooks	59.8	60.7	49.5	44.4	45.0	48.8	53.2
Stampede	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Russel Valley	13.0	12.8	9.8	8.2	7.5	7.5	7.7
Hobart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sagehen Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sunnyside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon East	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-36	1.5	1.4	1.1	1.1	1.0	1.0	1.1
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angora Ridge and Lily Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cathedral Spring Creek Emerald Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	40.0	41.8	29.9	25.4	26.6	27.9	32.7
Sorensons Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul1296 r3	49.2	51.7	36.8	30.1	30.2	32.5	34.7
Topaz	60.5	61.3	44.8	38.0	38.4	39.2	45.1
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
640 Tier 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
609 and Underbuild	0.0	0.0	0.0	0.0	0.0	0.0	0.0
625 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bky 5200	34.0	33.4	24.7	23.0	23.9	24.4	25.7
Old Country Road	60.9	57.6	45.7	43.9	44.3	45.3	47.6
Tah 52-68	23.2	21.3	17.0	16.7	16.7	17.0	17.4
The Grid	57.2	55.8	39.0	36.3	38.1	38.9	39.4
Canterbury and Commonwealth	41.8	41.1	28.6	26.4	27.9	28.6	29.3
Bky 5100 to NVE	23.9	23.5	16.4	15.1	15.9	16.4	16.8
Beacon Tap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glenshire and 608	24.2	23.3	18.7	15.8	14.7	14.1	14.7
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
669 Line	33.4	33.4	27.0	25.0	25.0	25.5	27.5
650 Line	1.9	1.9	1.3	1.2	1.3	1.3	1.4
Floriston	46.6	46.6	34.7	31.2	31.1	33.6	36.2
Verdi	55.7	55.7	44.1	36.2	39.6	44.1	46.8
Bordertown	58.8	58.8	47.7	40.0	41.6	45.7	48.9

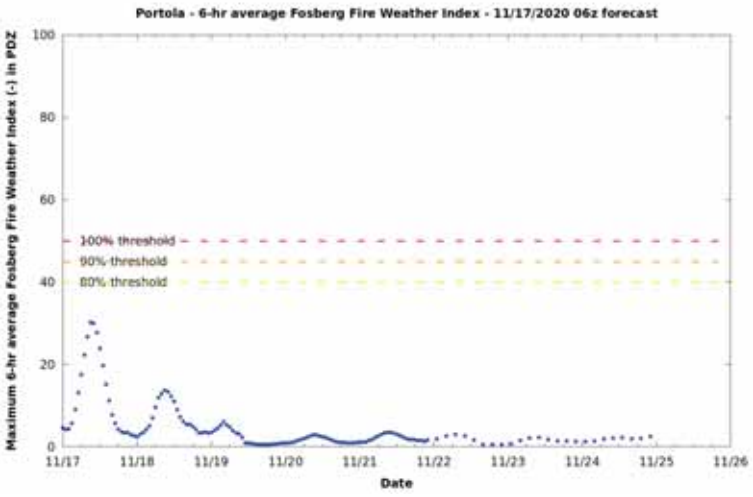
Liberty Utilities Fire Weather Summary Plots - 11/17/2020 06z forecast

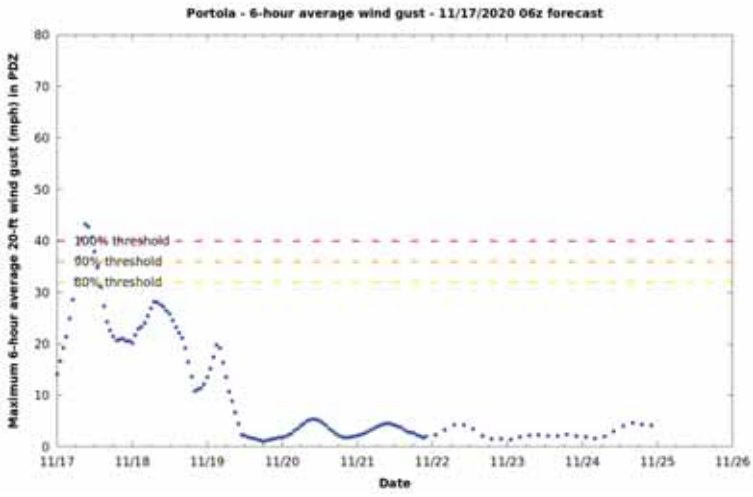
111 Line



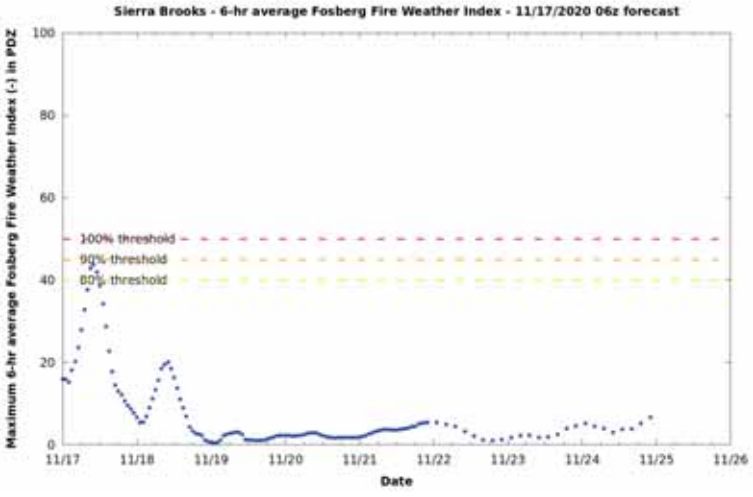


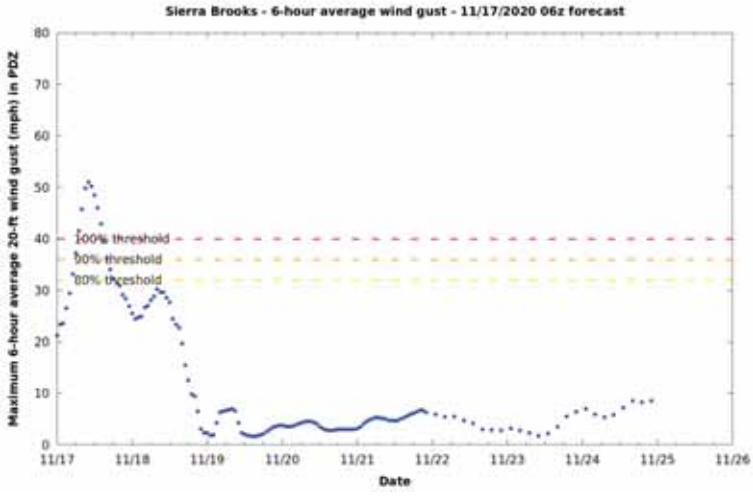
Portola



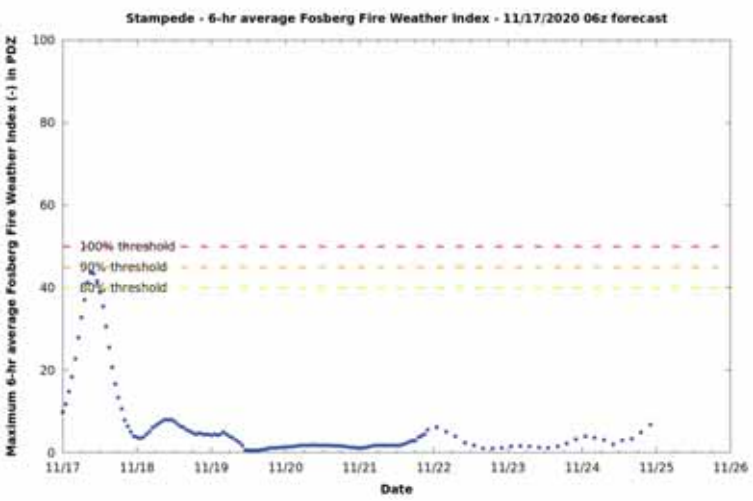


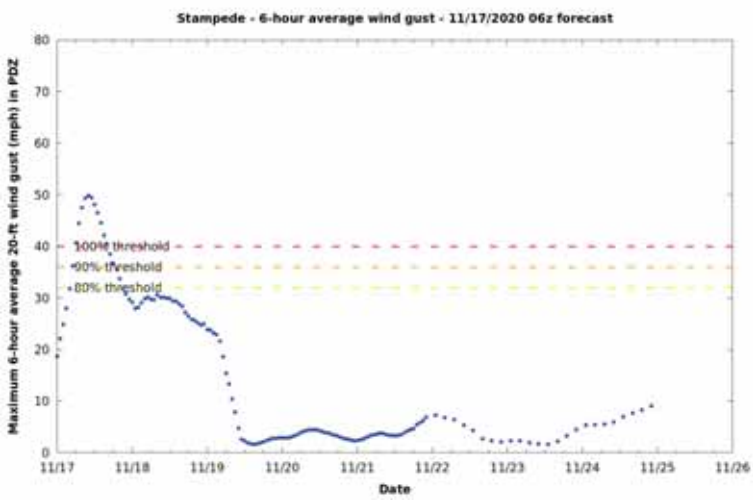
Sierra Brooks



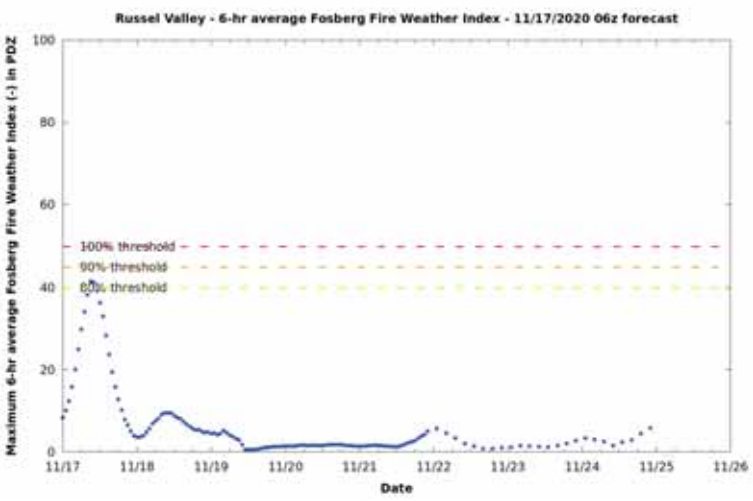


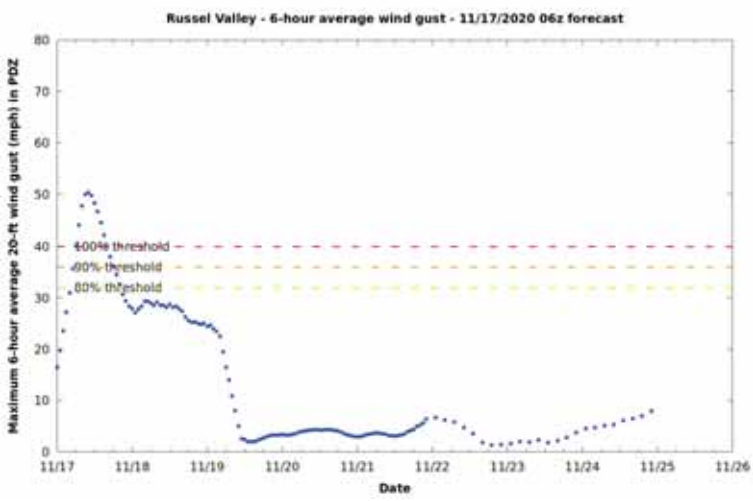
Stampede





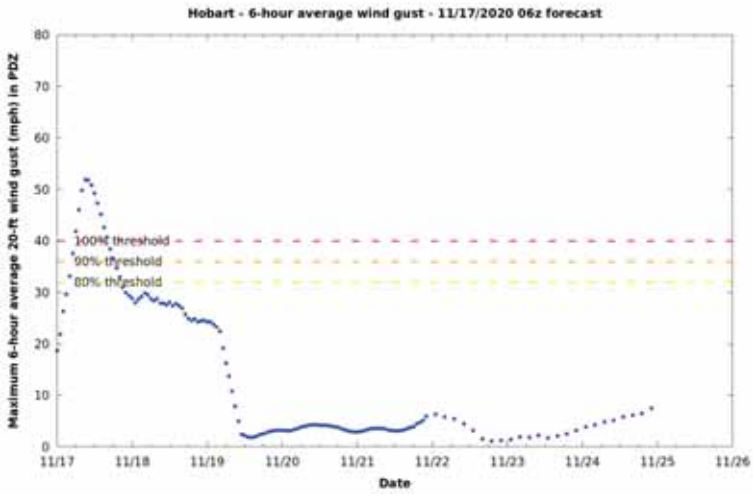
Russell Valley



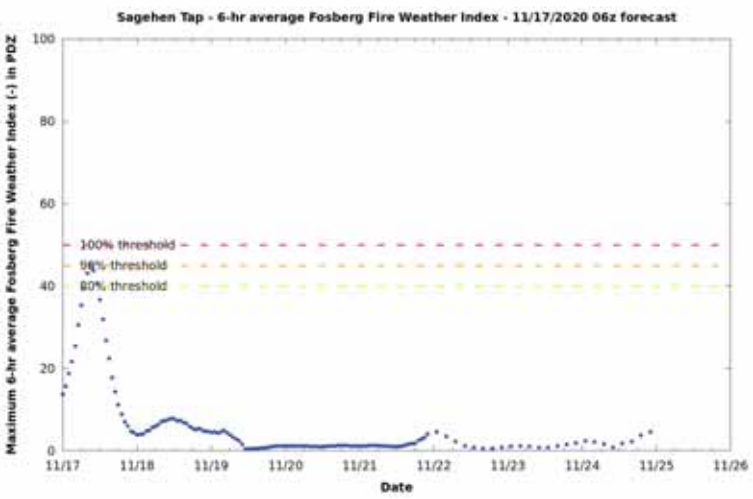


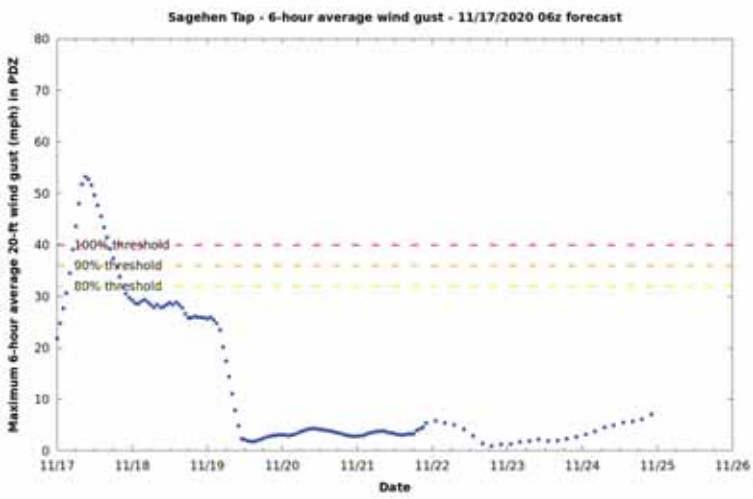
Hobart



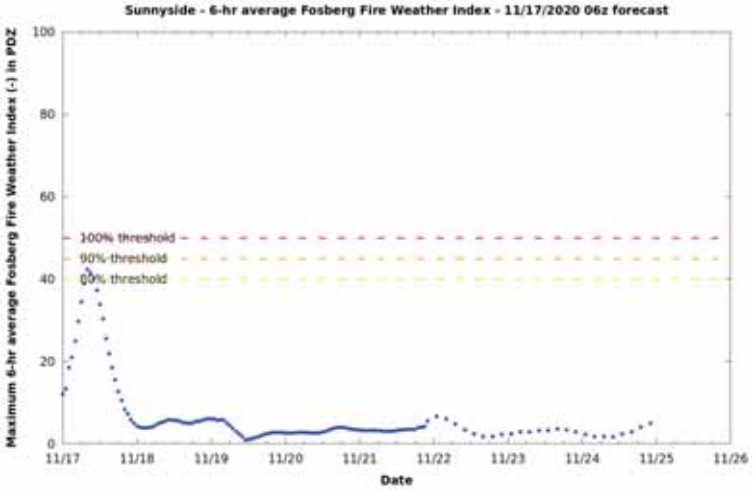


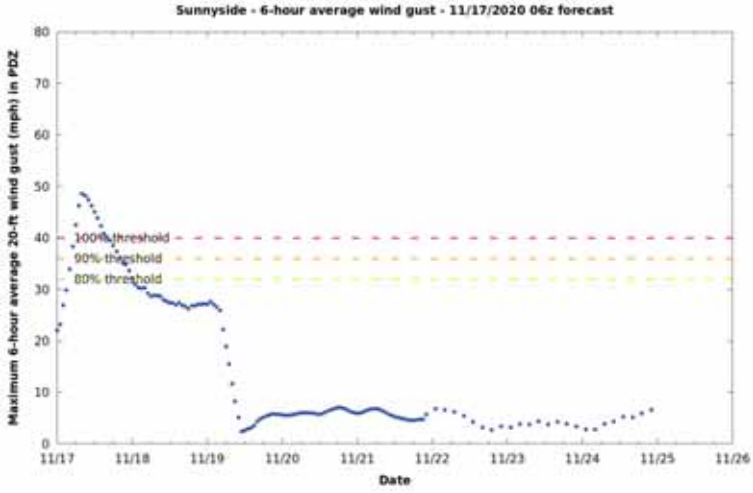
Sagehen tap



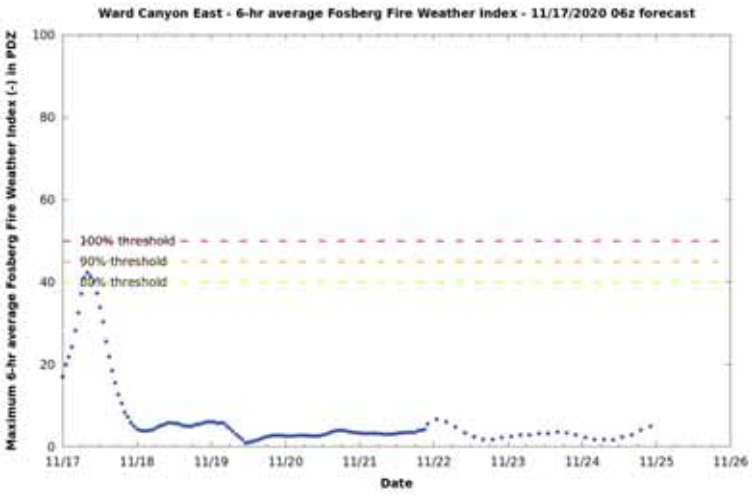


Sunnyside



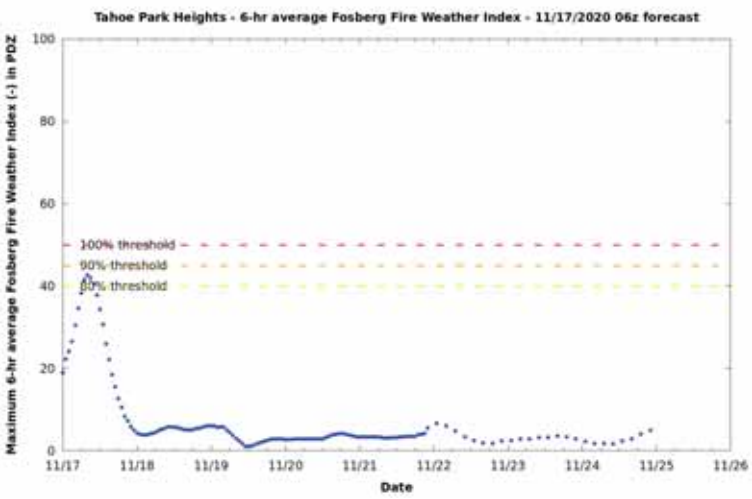


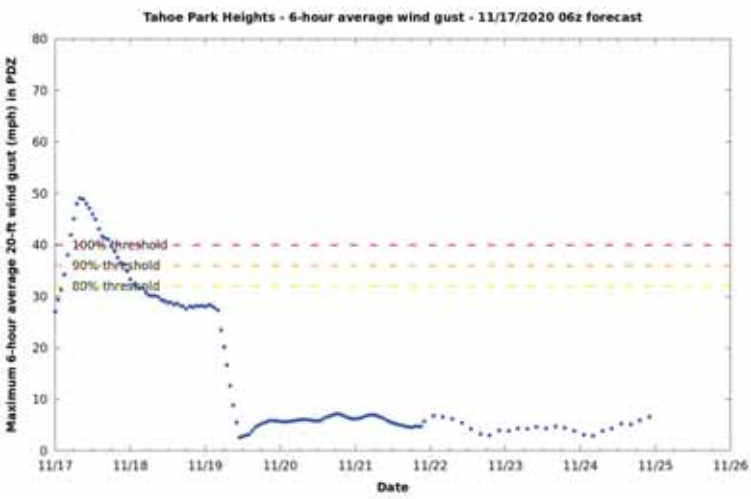
Ward Canyon East



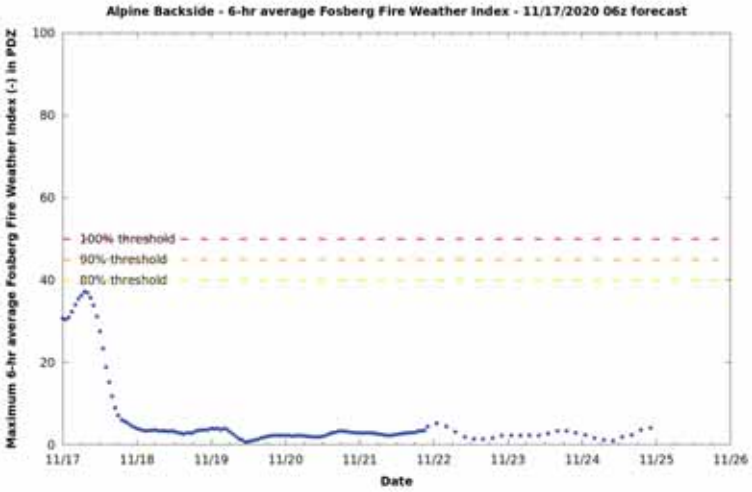


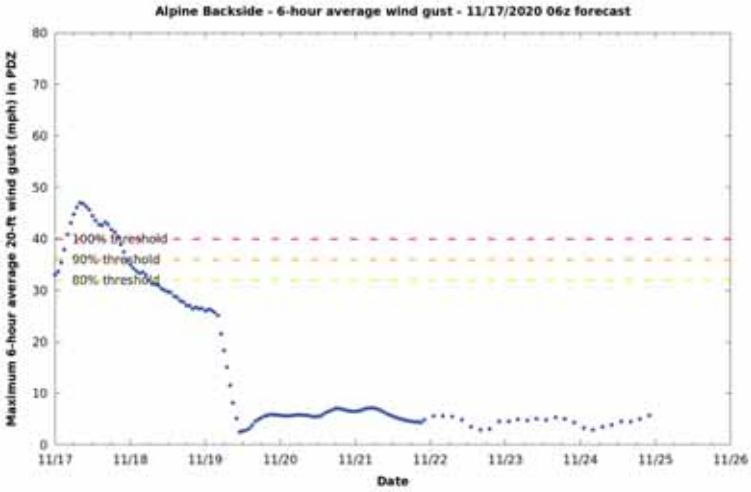
Tahoe Park Heights



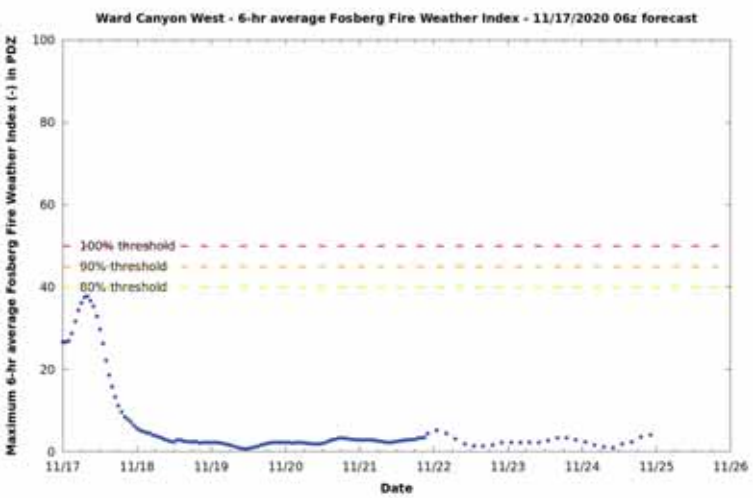


Alpine Backside



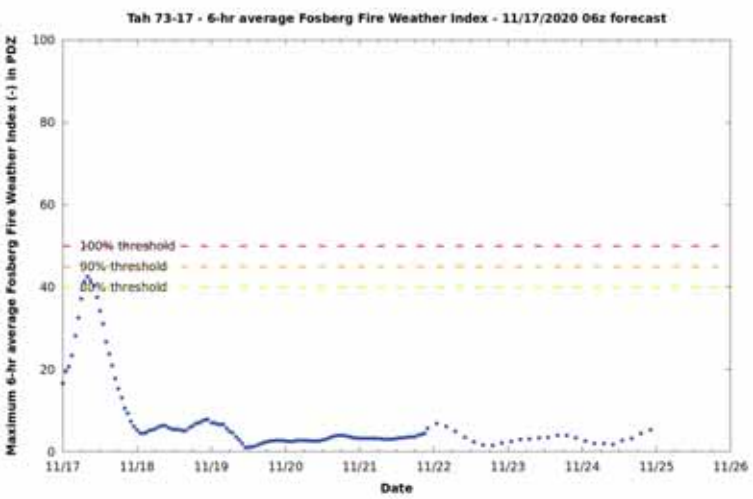


Ward Canyon West



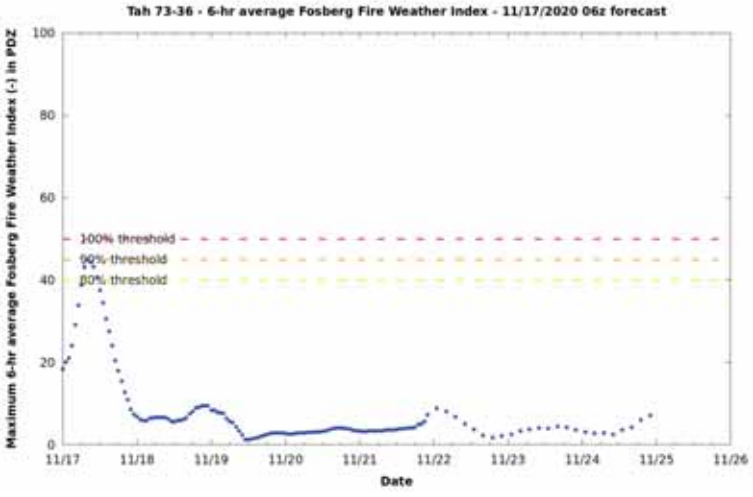


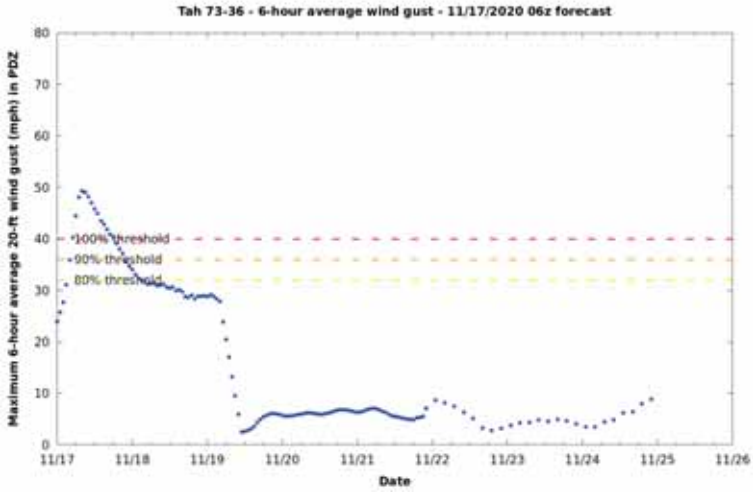
Tah 73-17



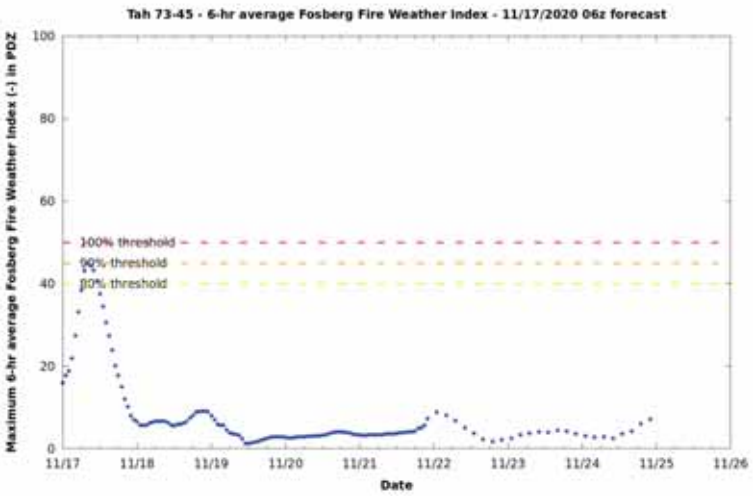


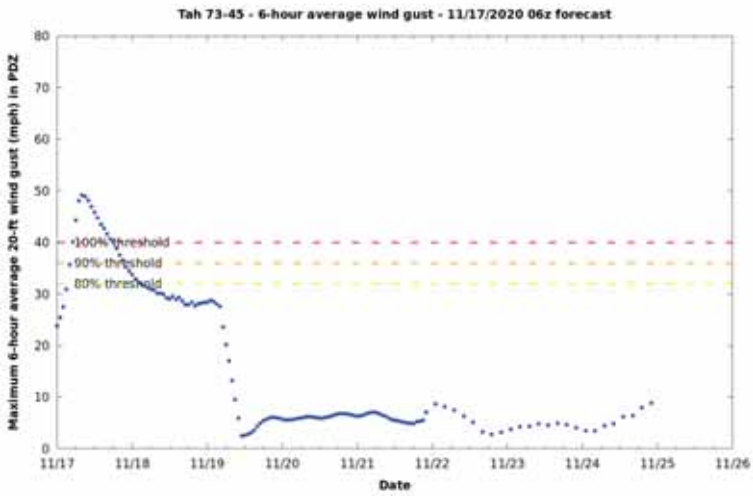
Tah 73-36



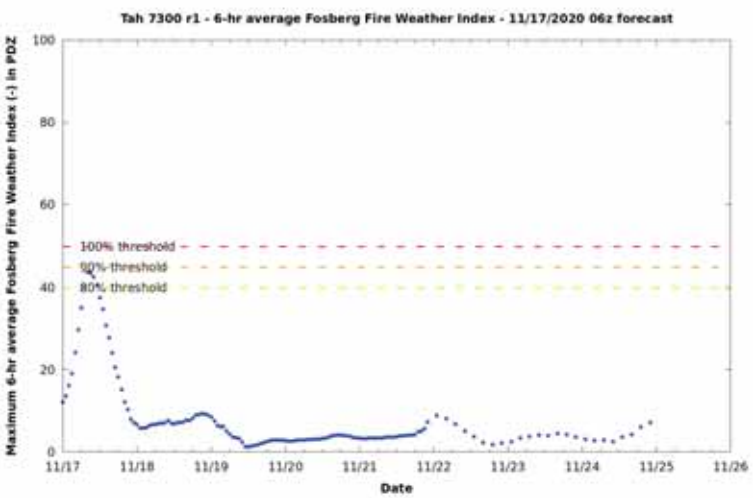


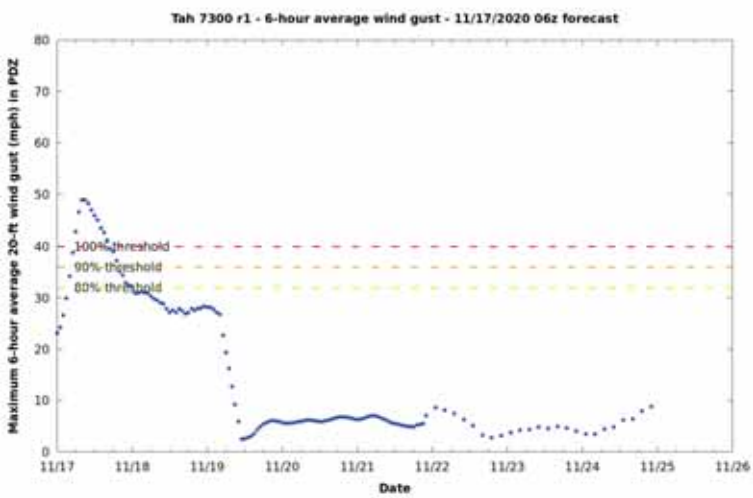
Tah 73-45



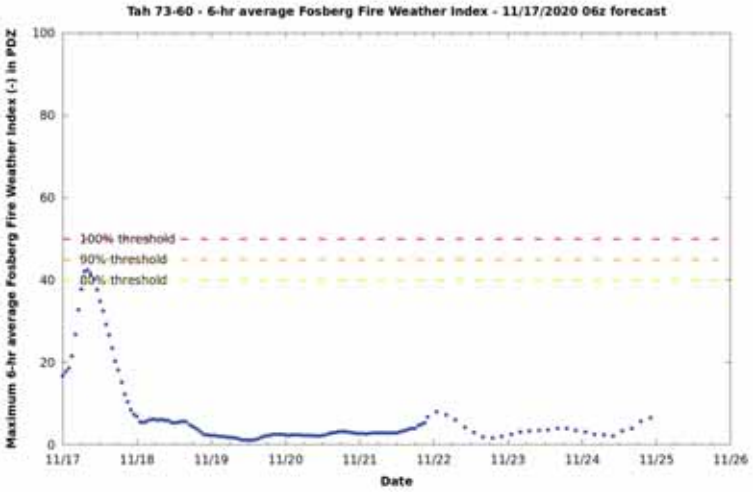


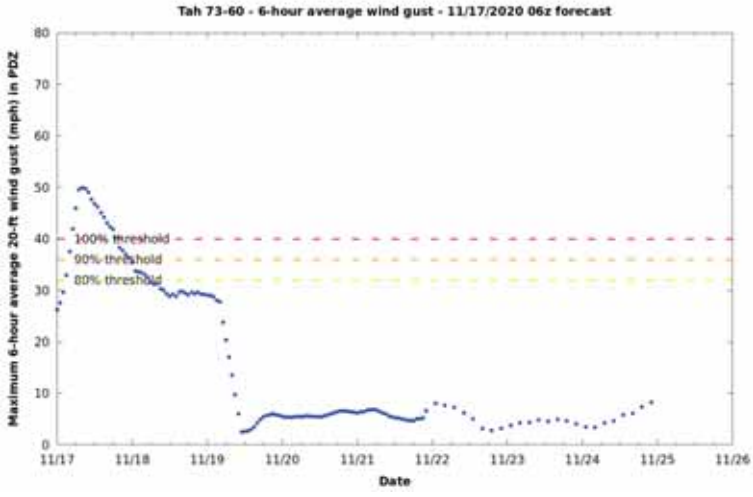
Tah 7300 r1



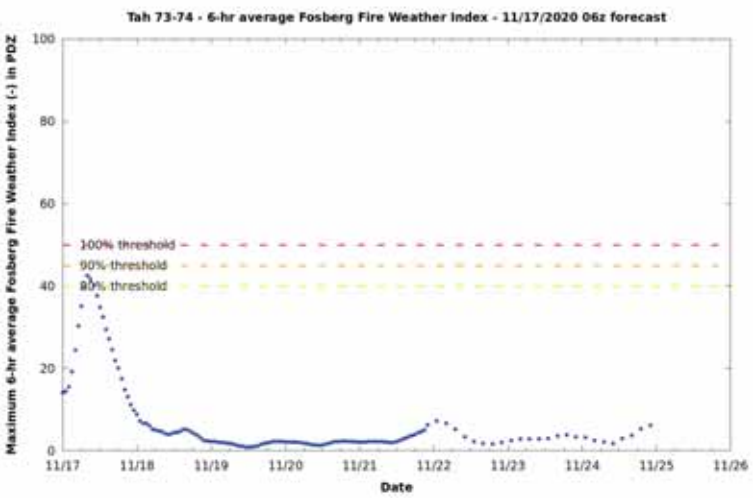


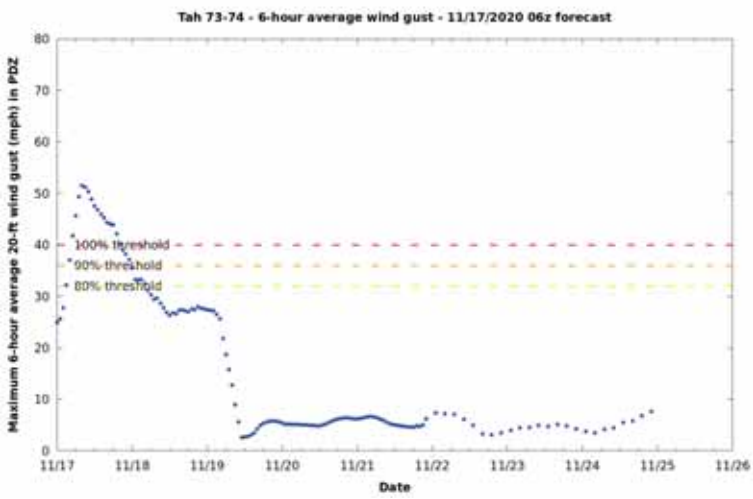
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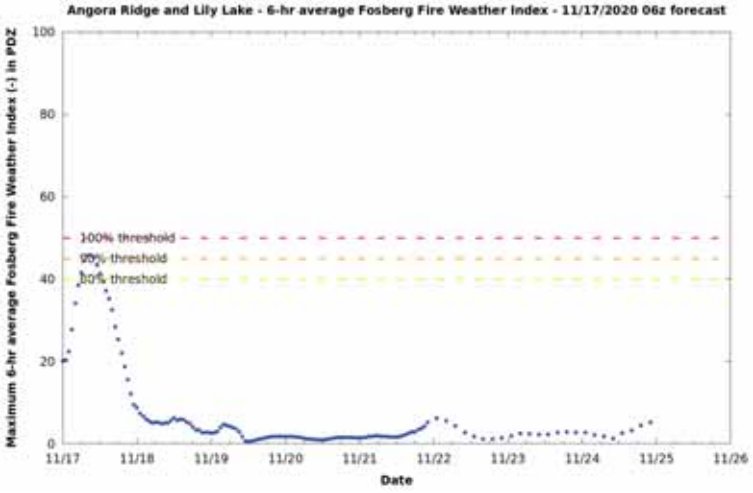


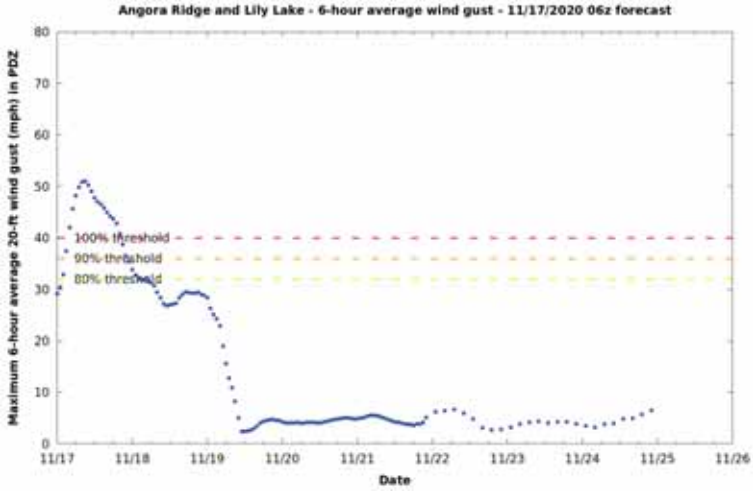
Tah 73-74



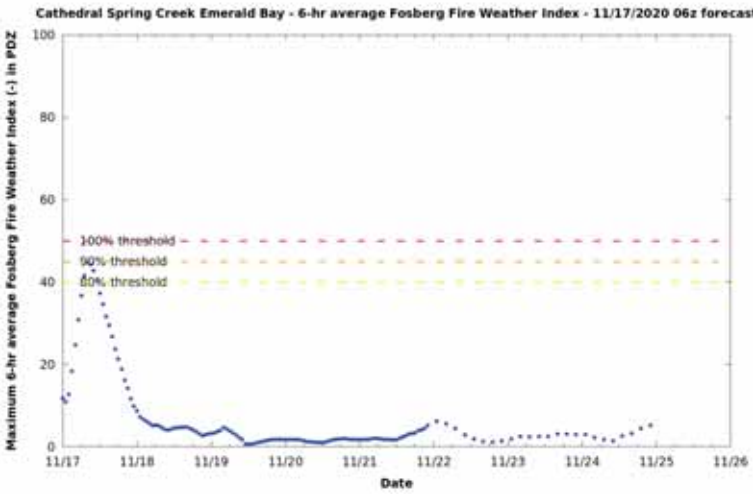


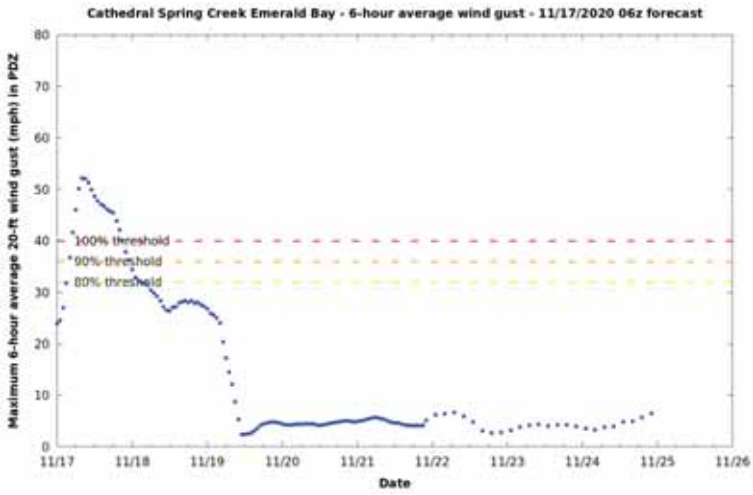
Angora Ridge and Lily Lake



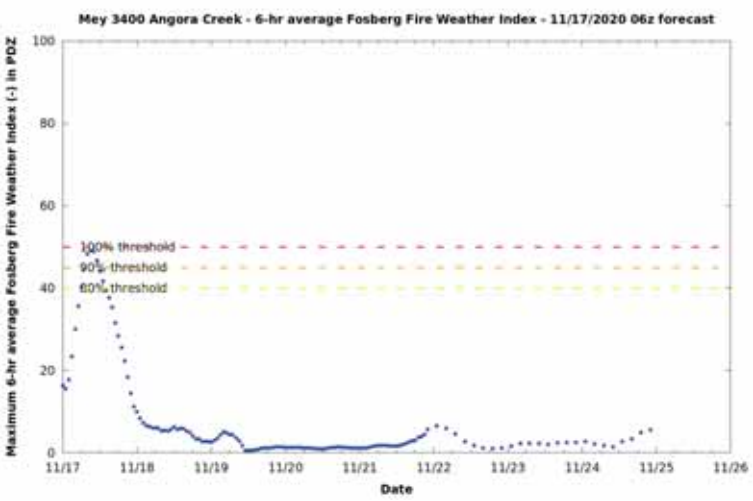


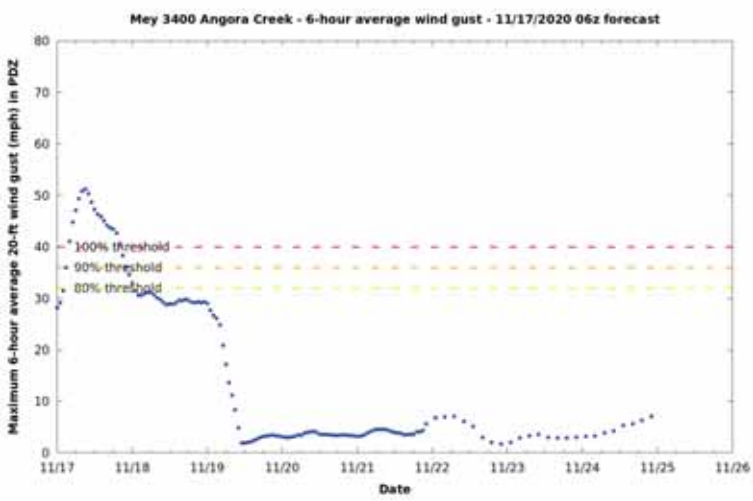
Cathedral Spring Creek Emerald Bay



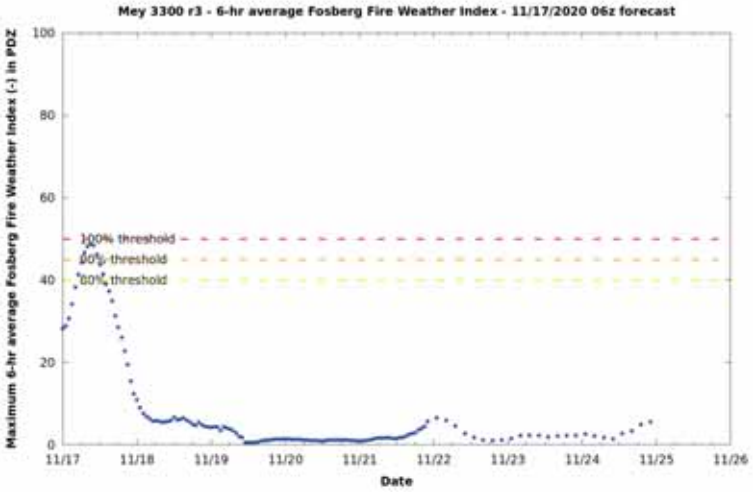


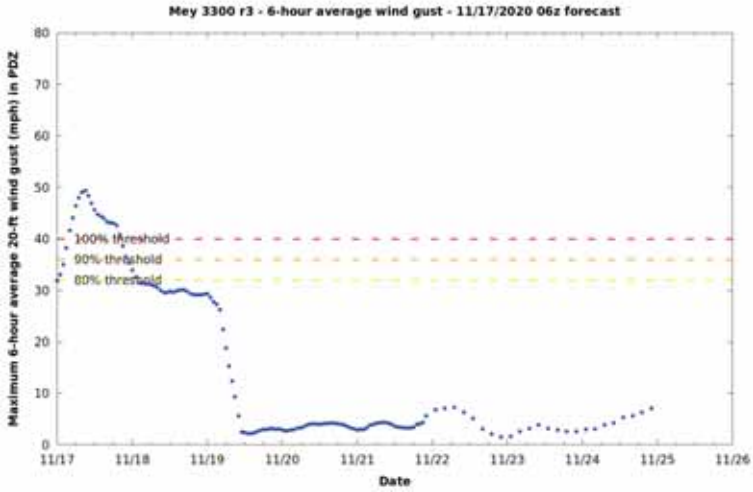
Mey 3400 Angora Creek



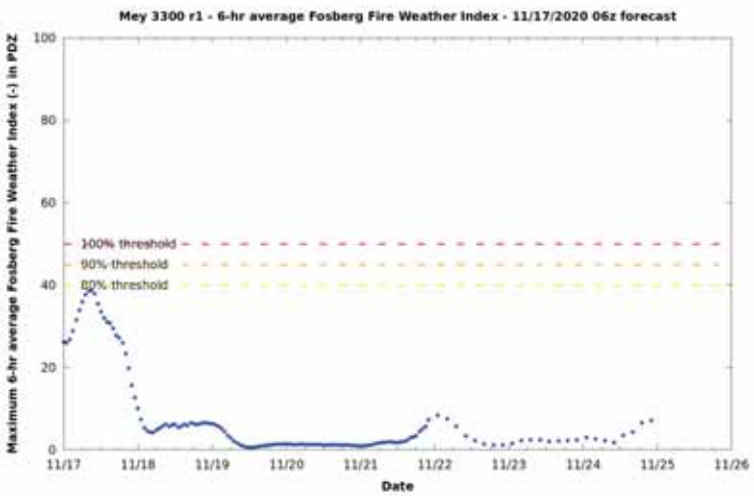


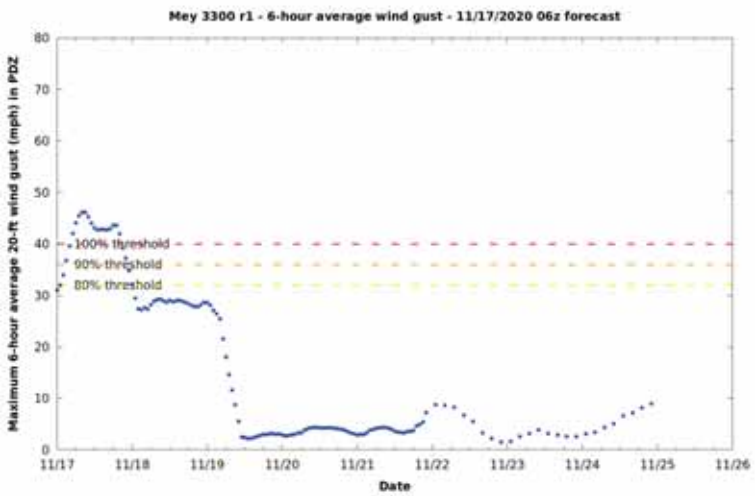
Mey 3300 r3



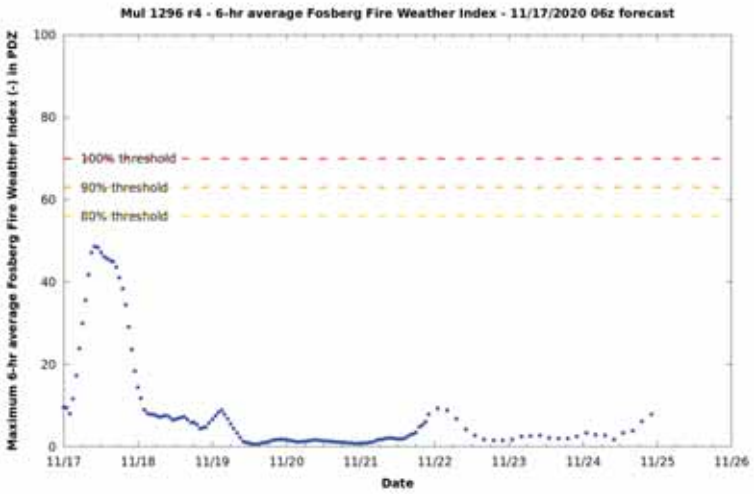


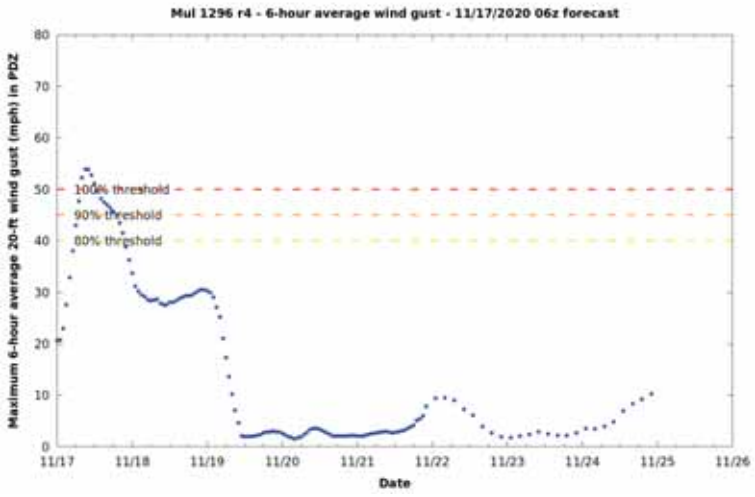
Mey 3300 r1



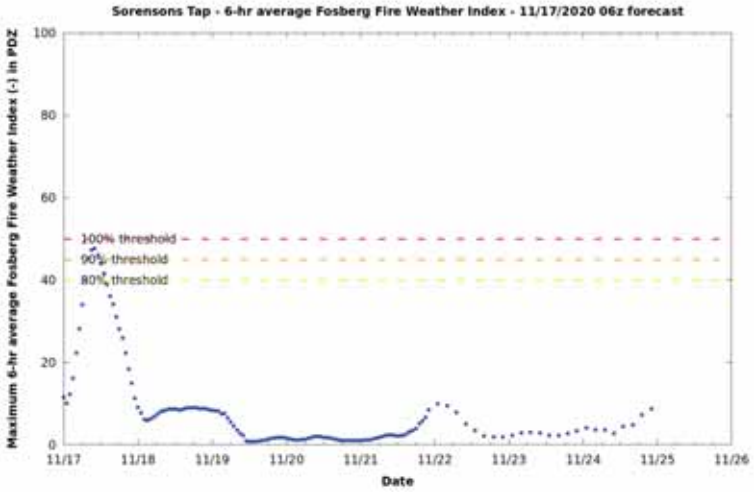


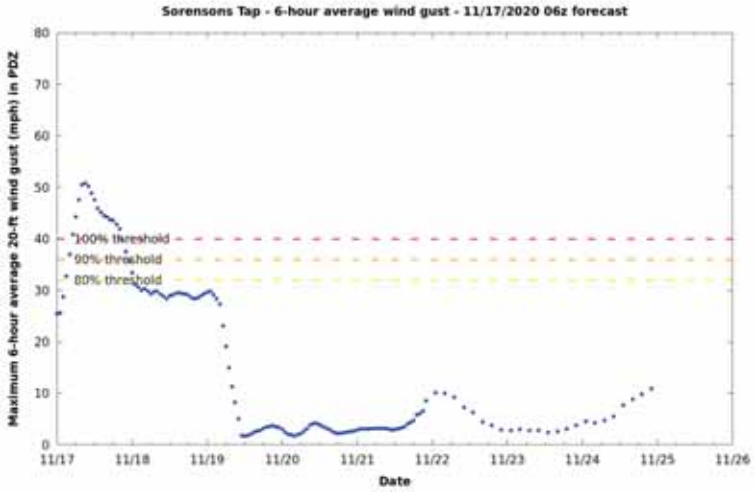
Mul 1296 r4



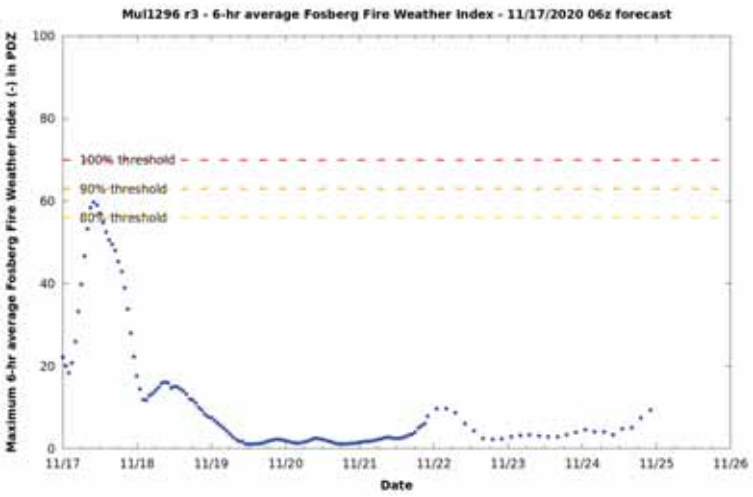


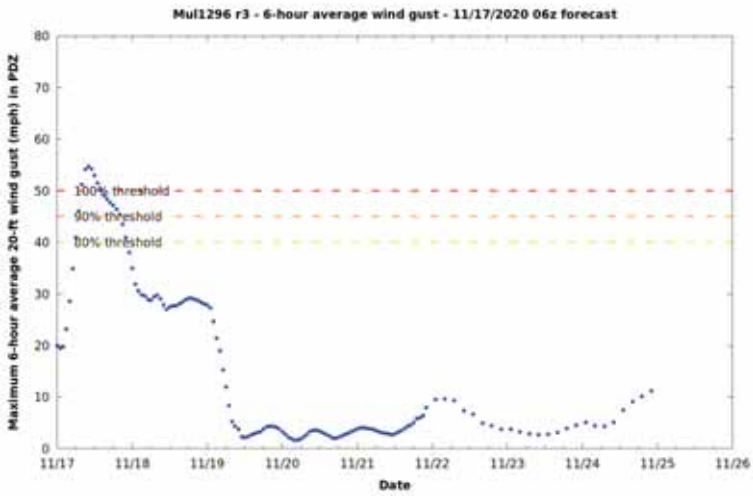
Sorensons Tap



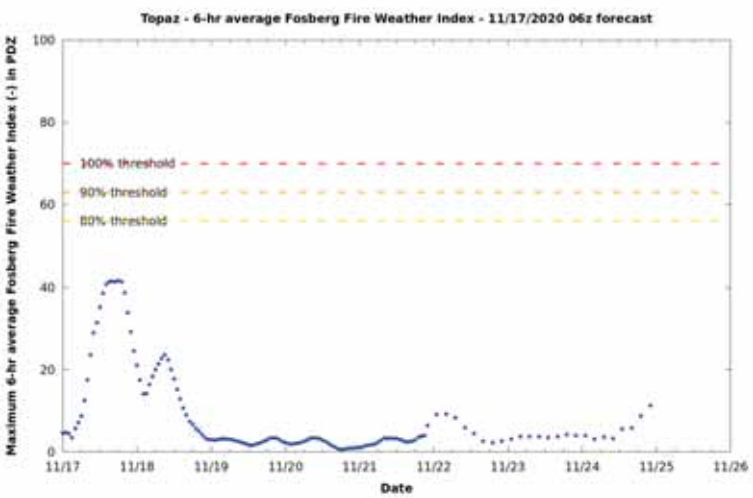


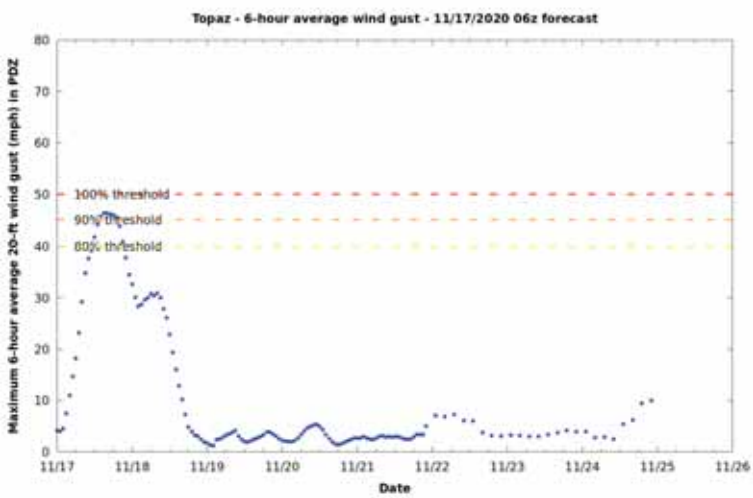
Mul 1296 r3



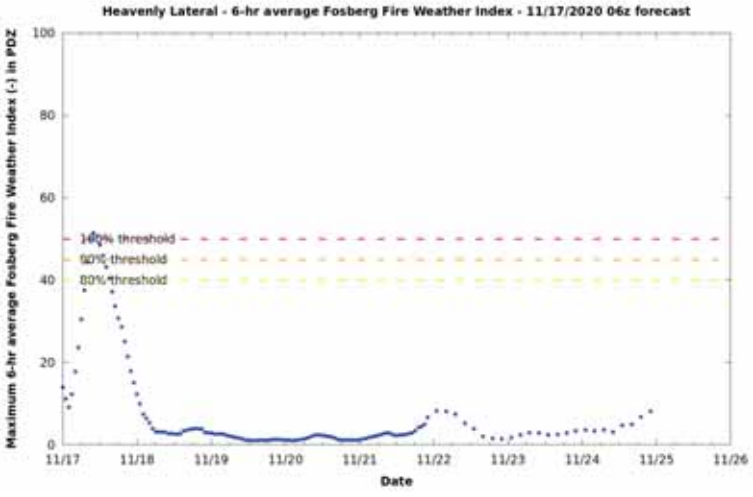


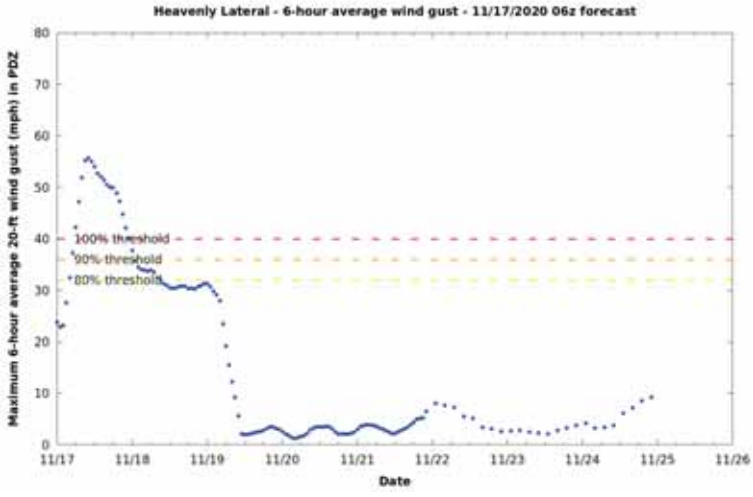
Topaz



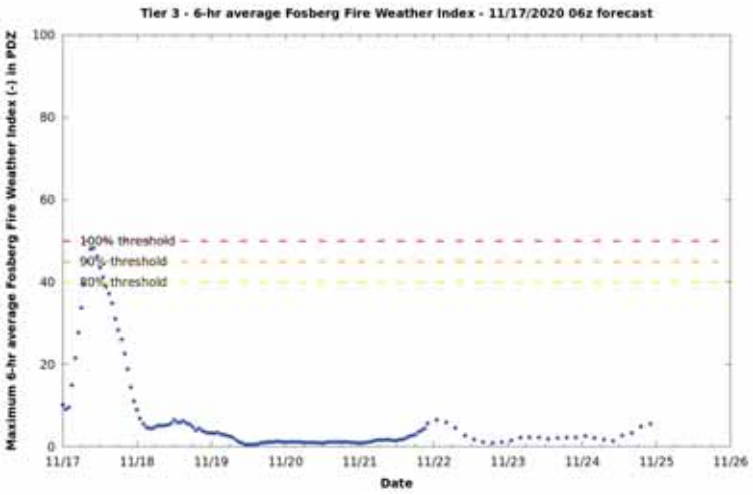


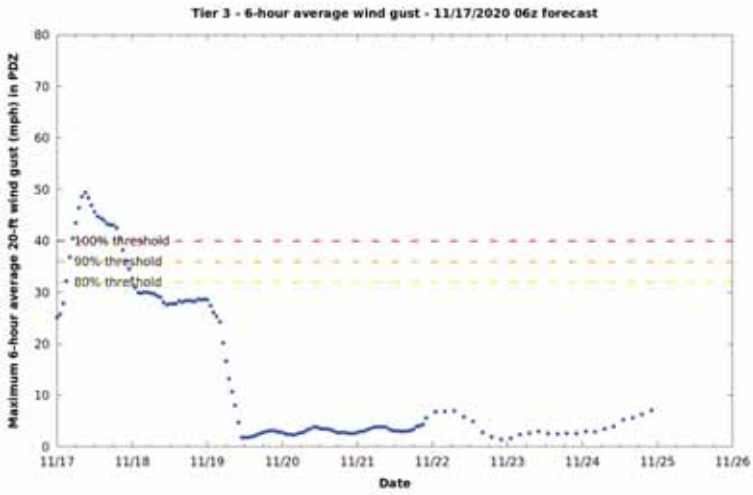
Heavenly Lateral



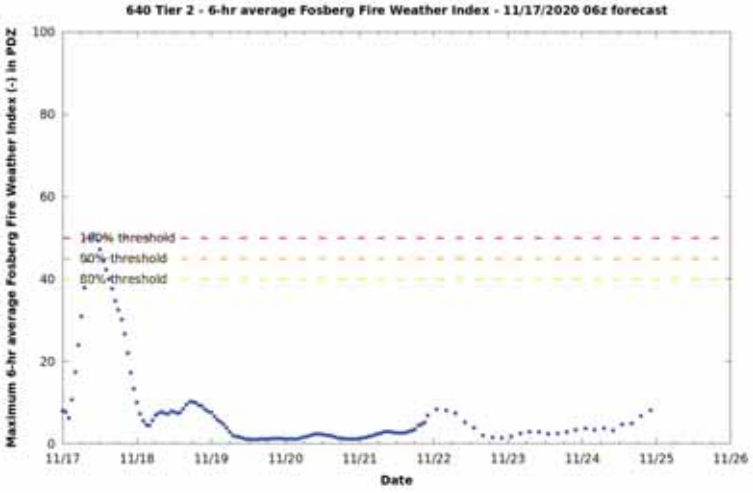


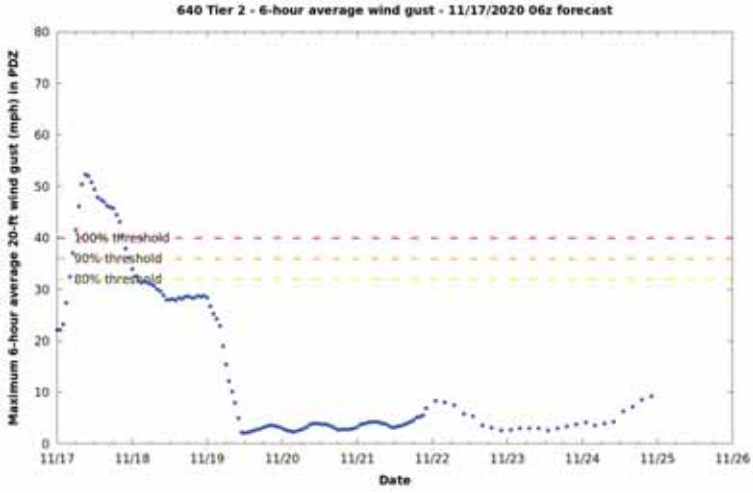
Tier 3



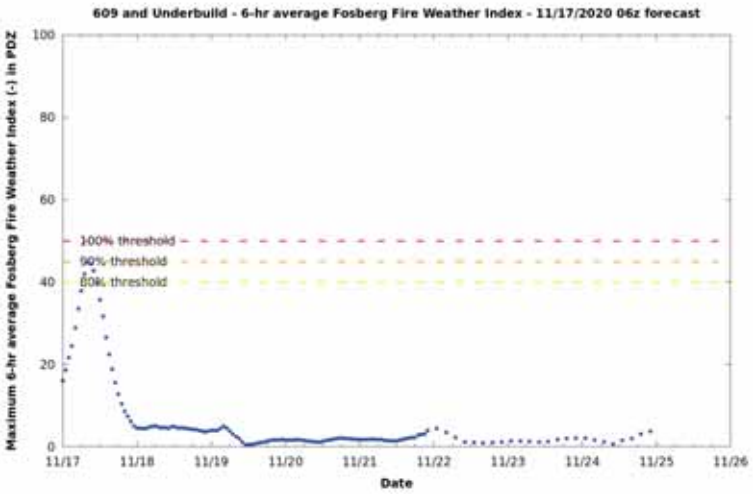


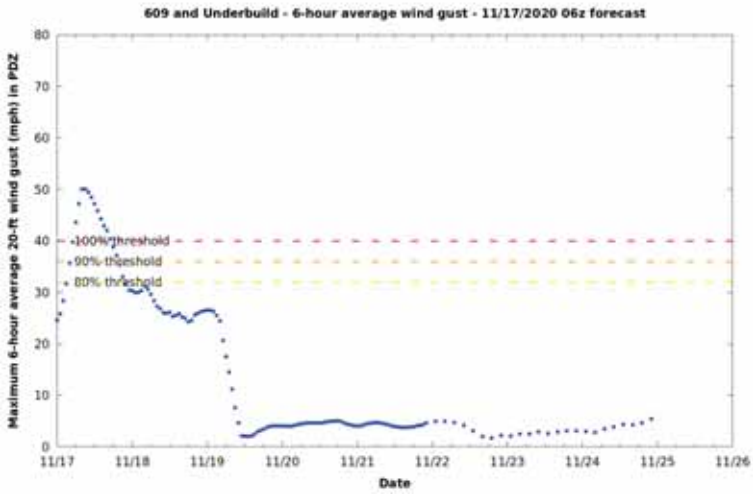
640 Tier 2



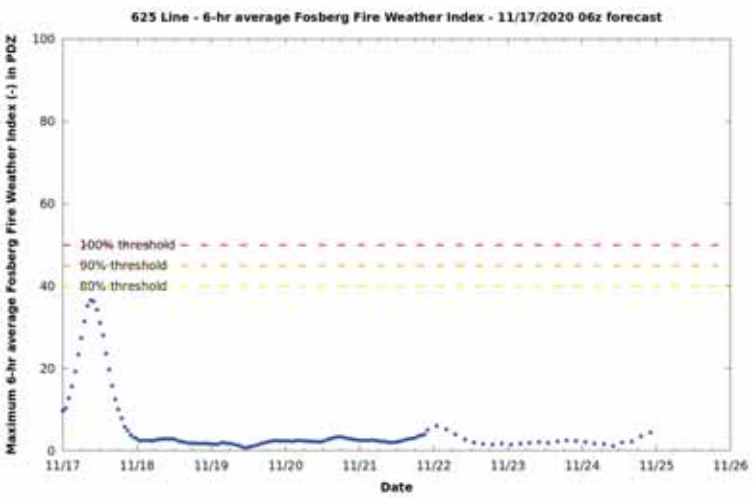


609 and Underbuild



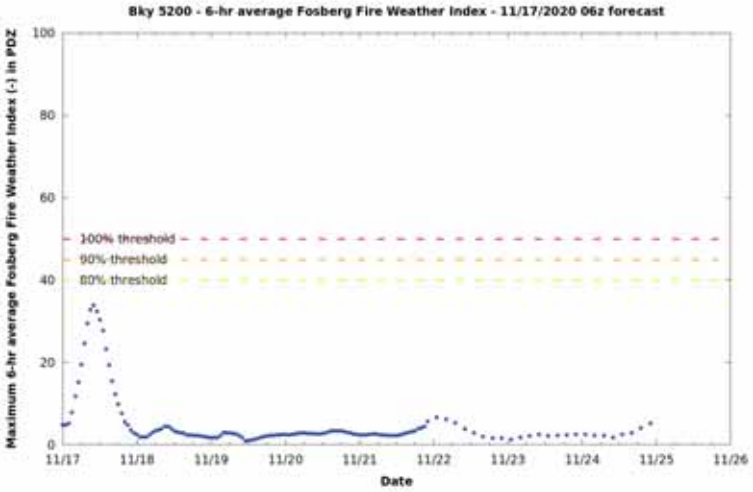


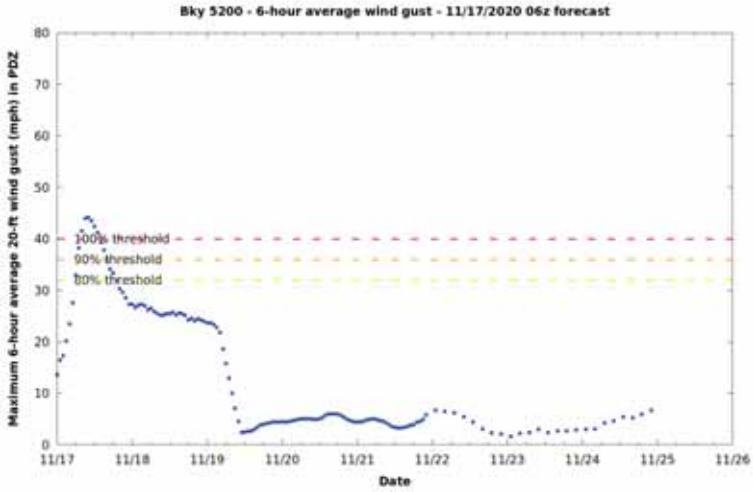
625 Line



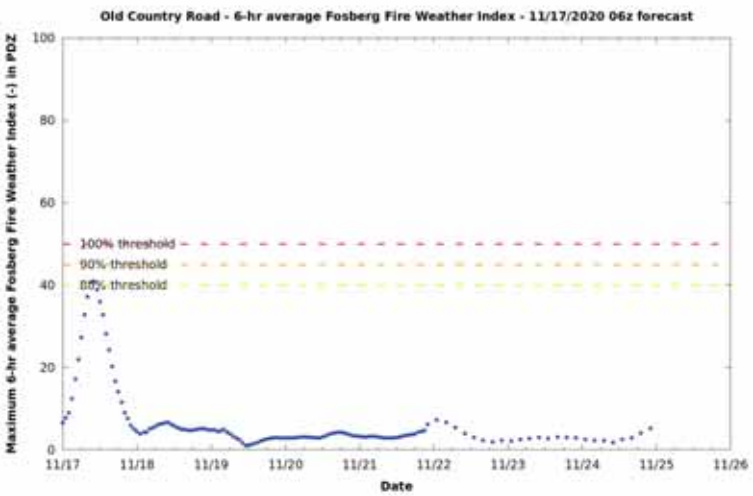


Bky 5200



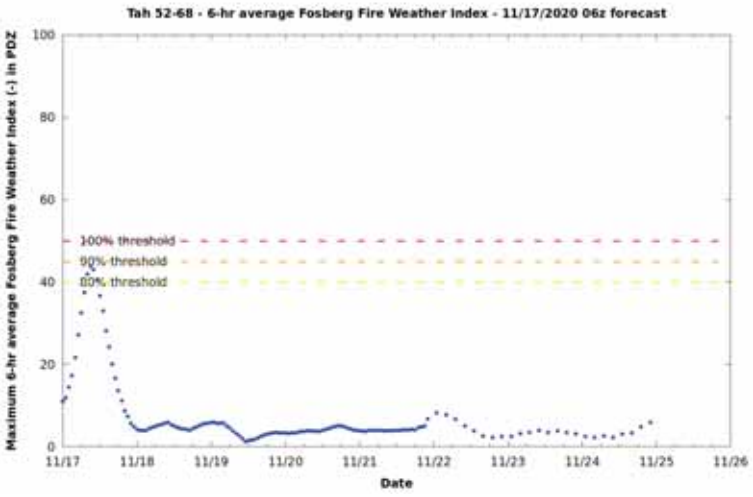


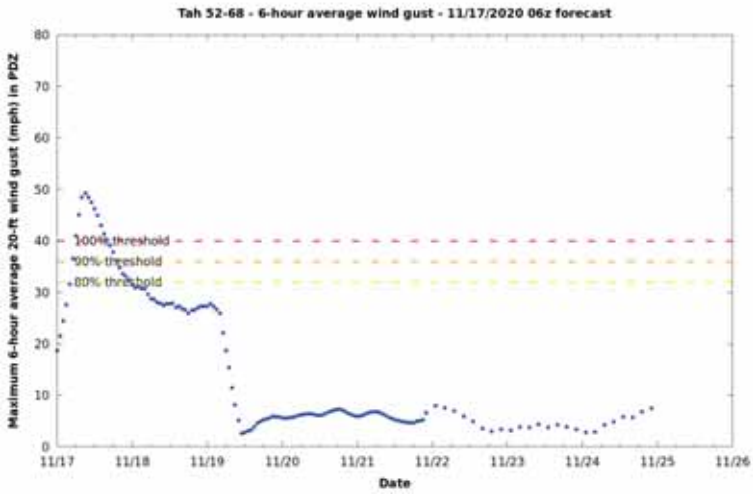
Old Country Road



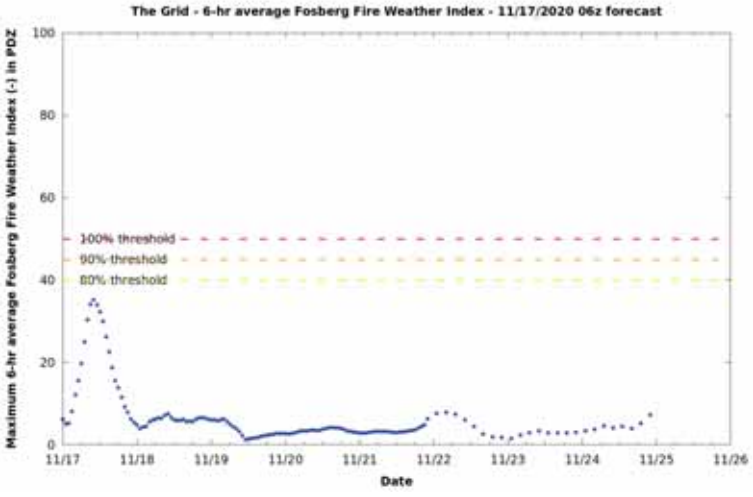


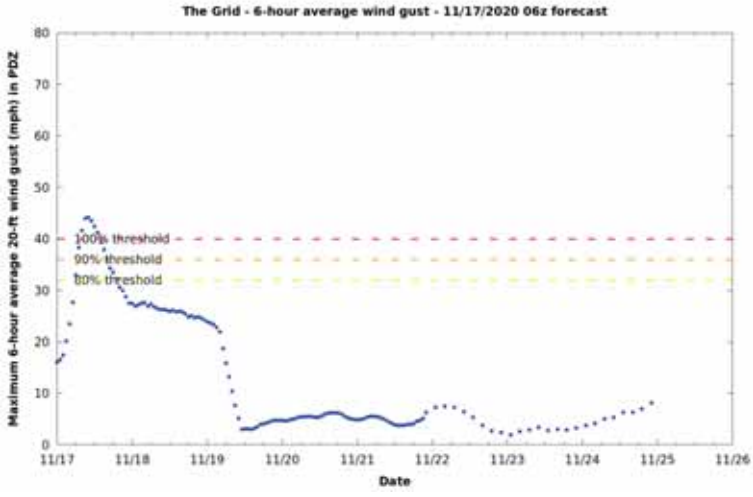
Tah 52-68



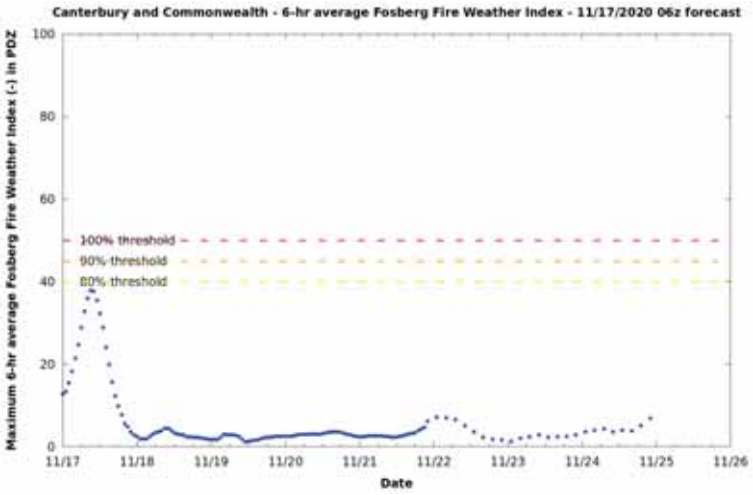


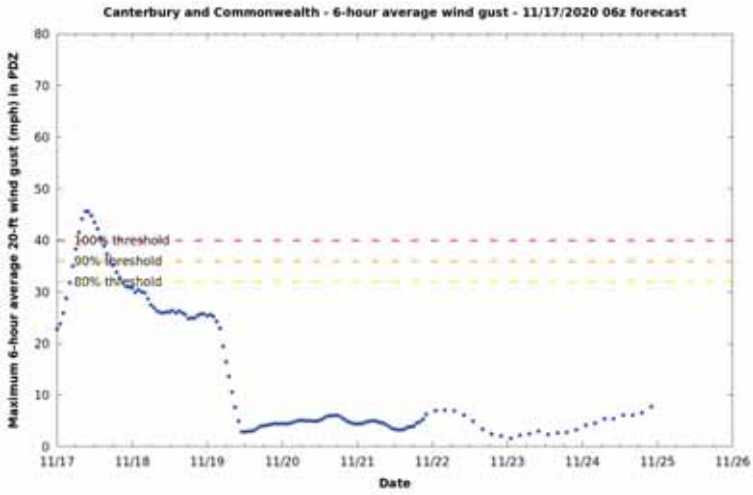
The Grid



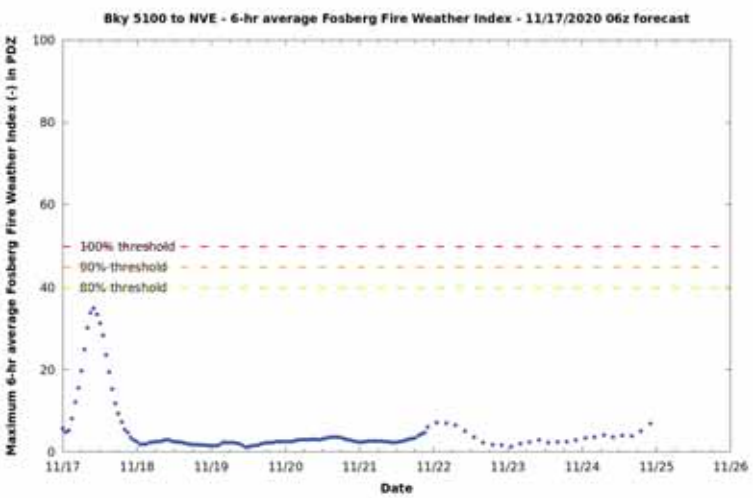


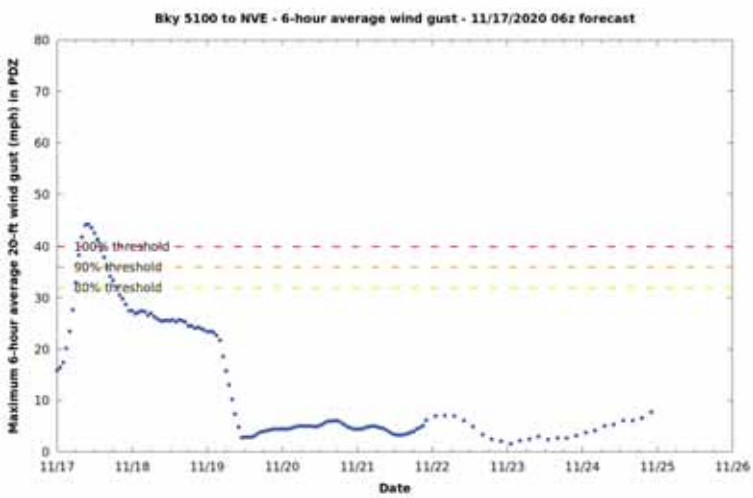
Canterbuy and Commonwealth



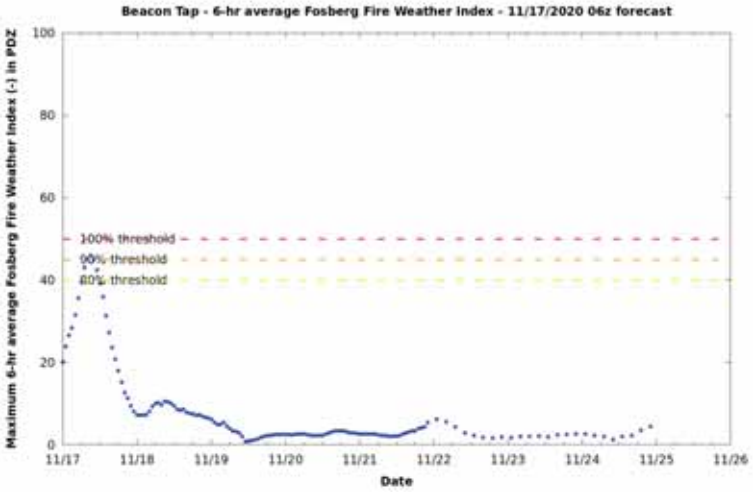


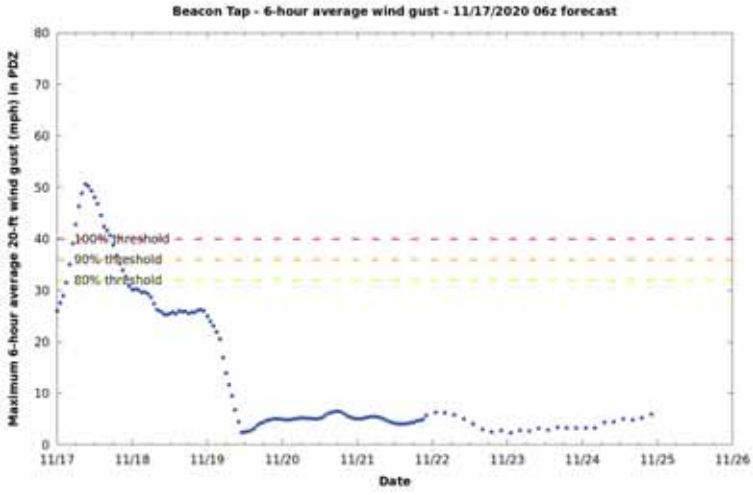
Bky 5100 to NVE



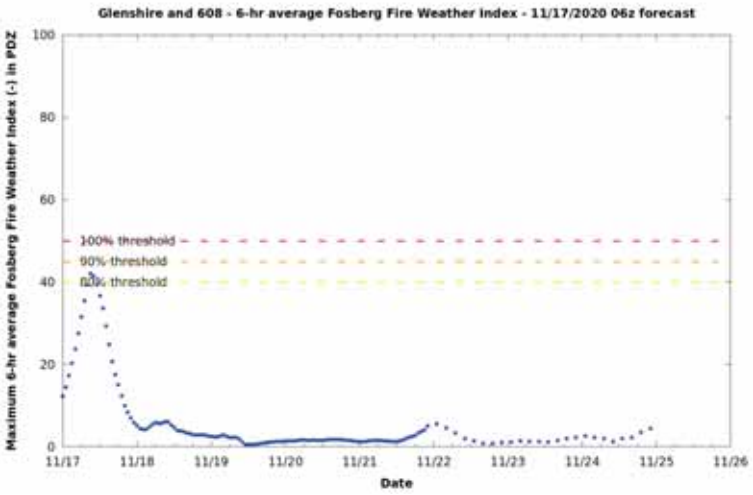


Beacon Tap



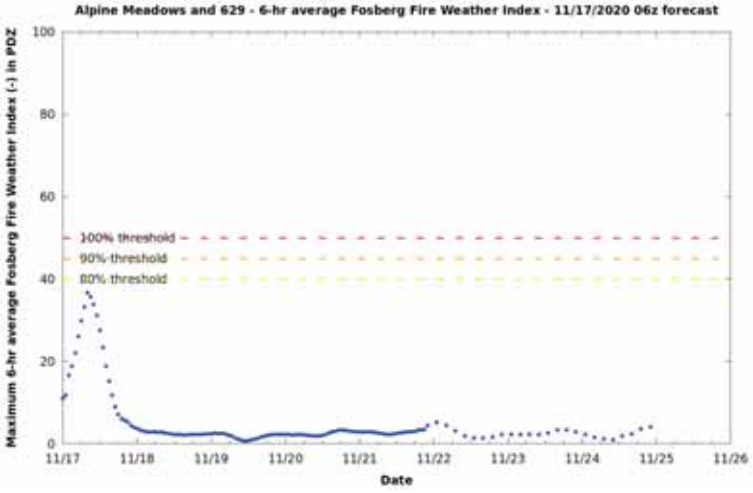


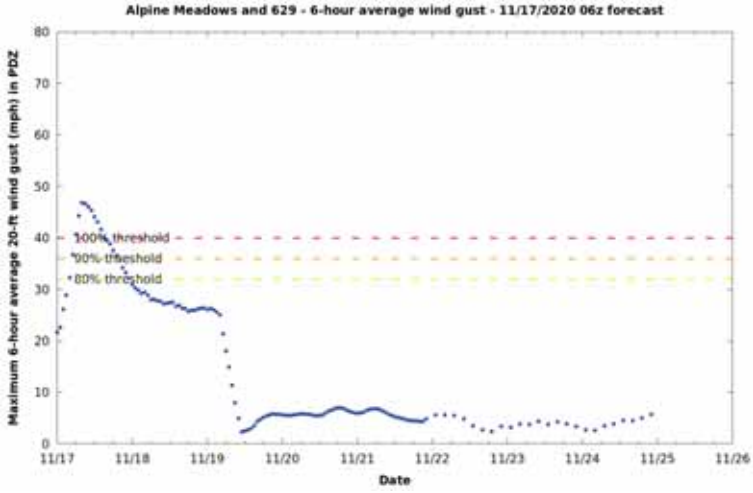
Glenshire and 608



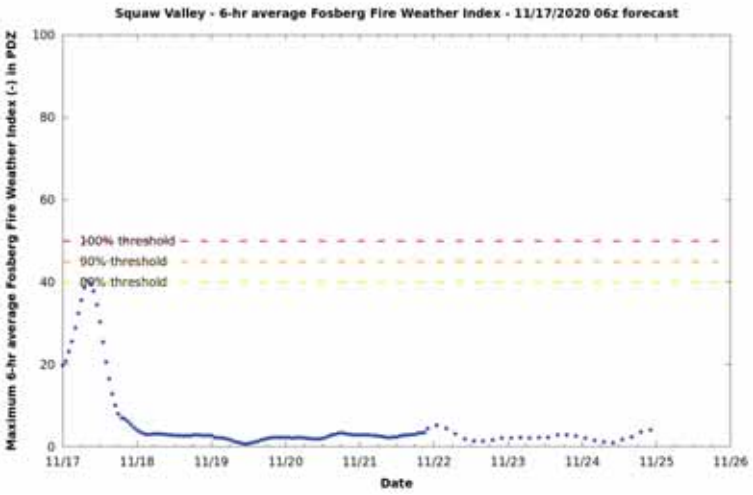


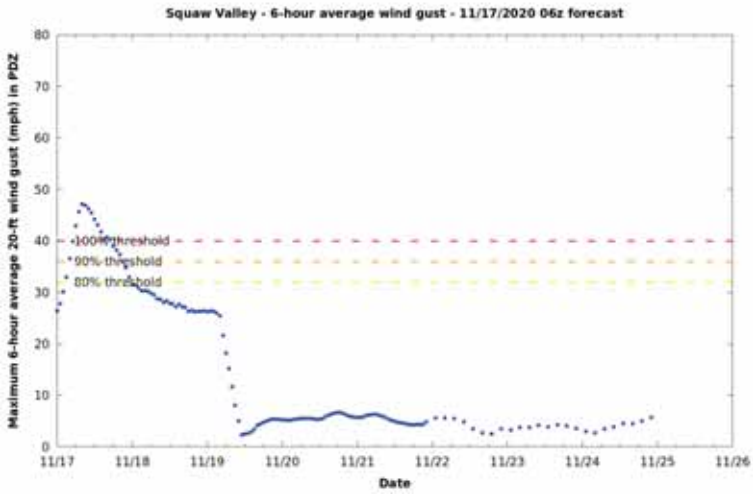
Alpine Meadows and 629



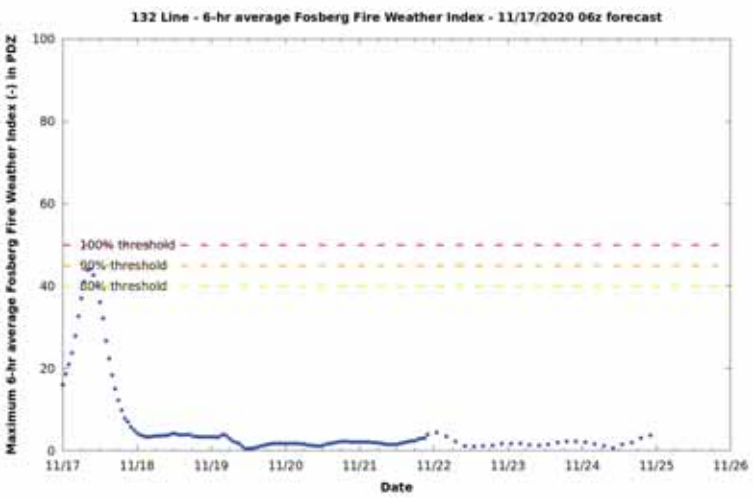


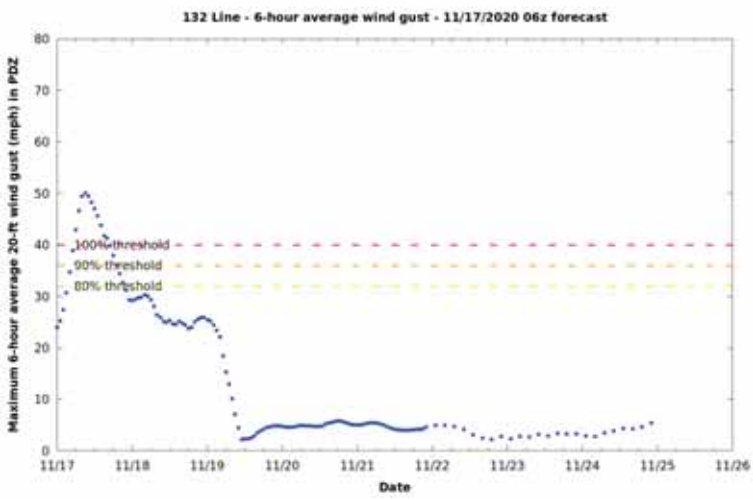
Squaw Valley



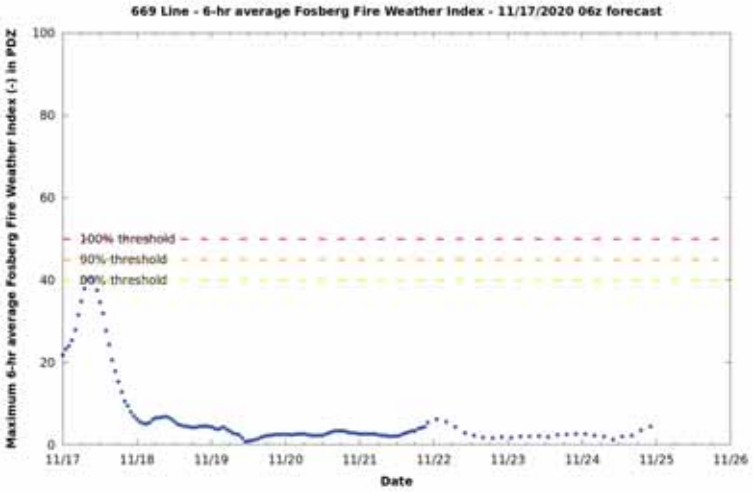


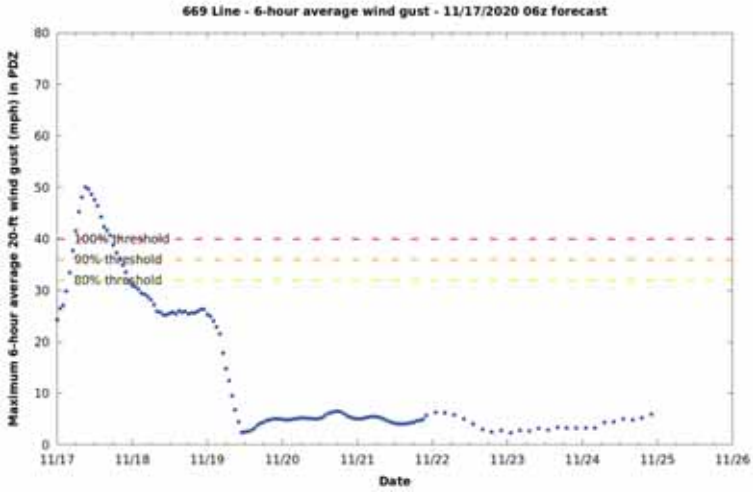
132 Line



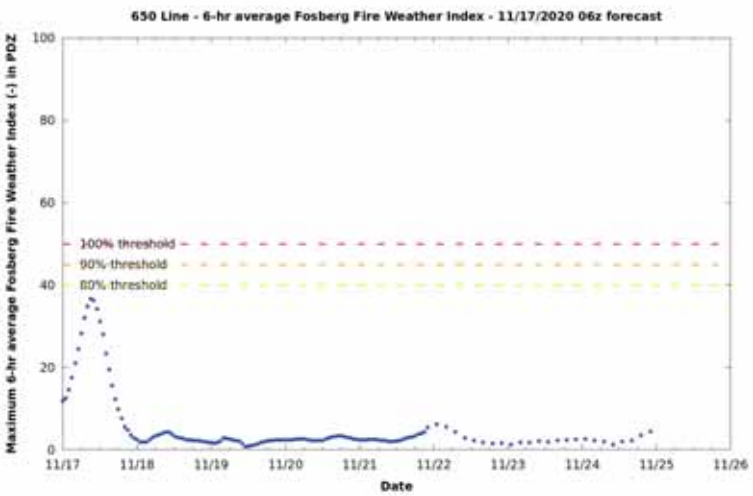


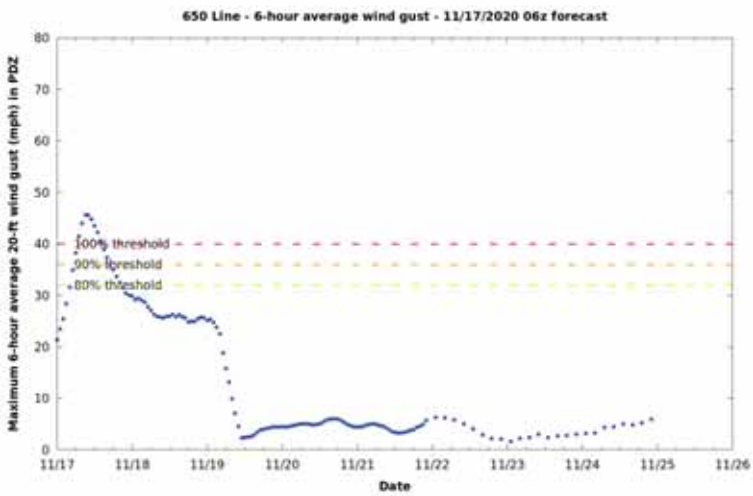
669 Line



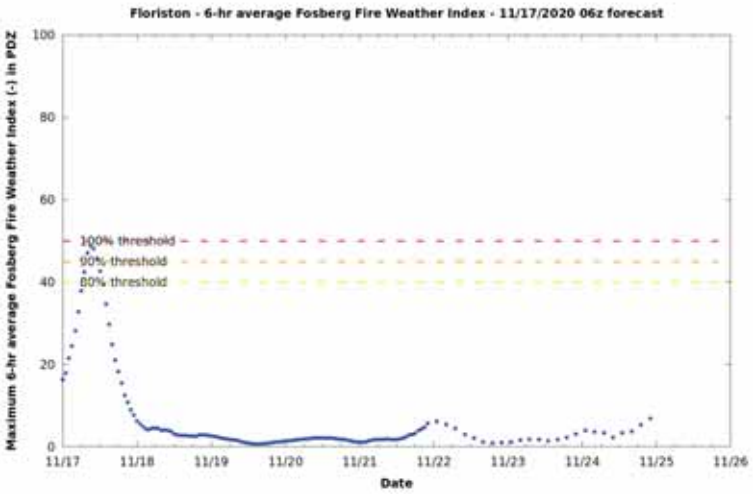


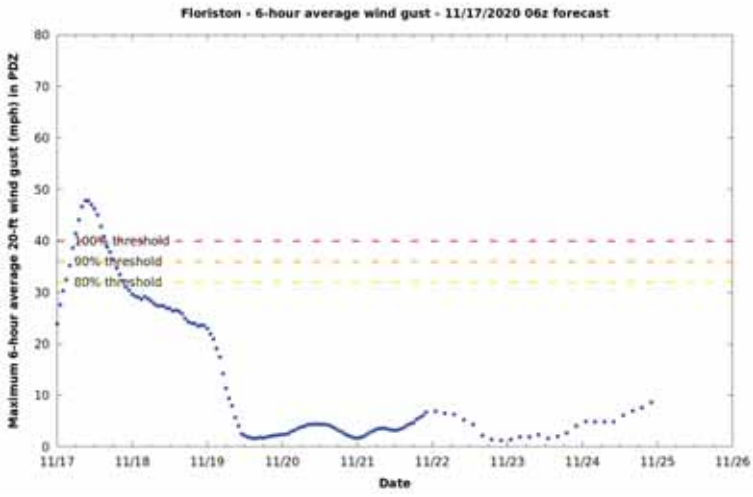
650 Line



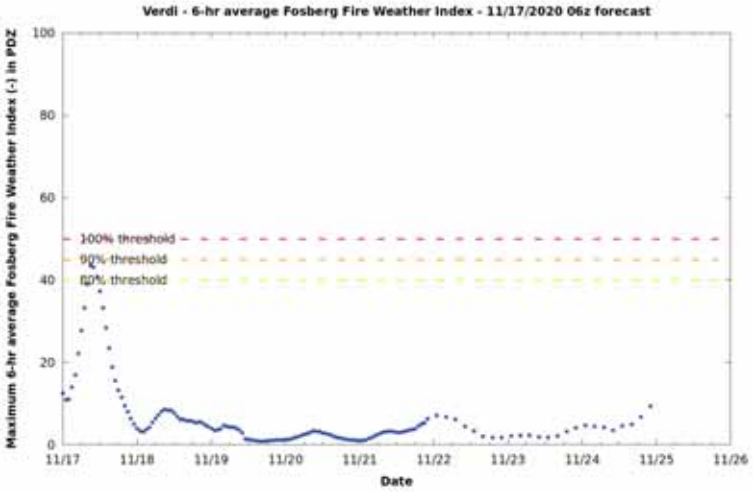


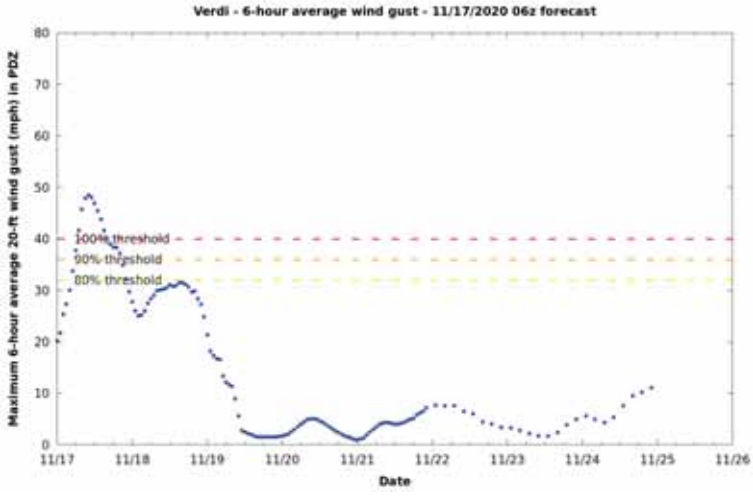
Floriston



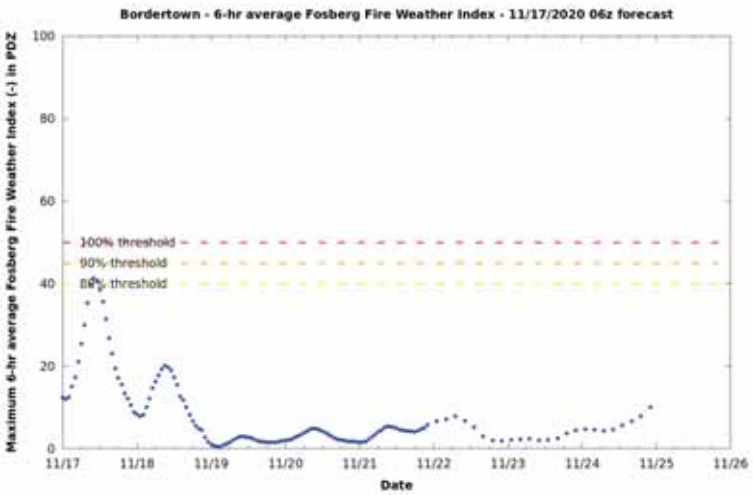


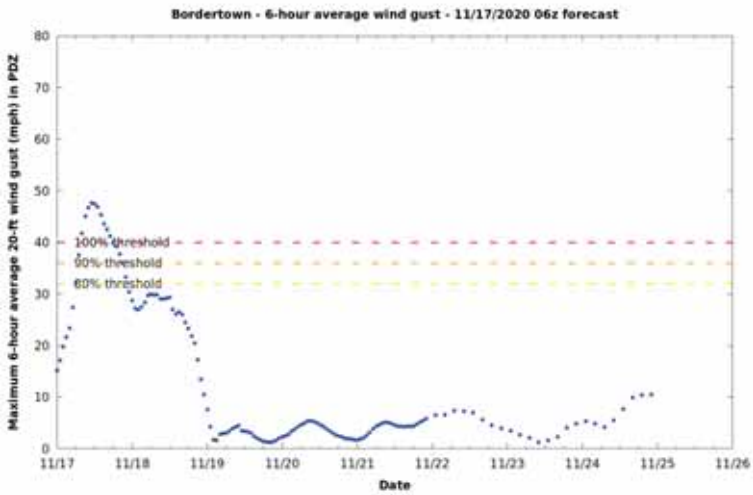
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/17/2020 06z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/17/2020 06z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/17/20 - 11/23/20

Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	moderate	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	low	low	low	low	low	low

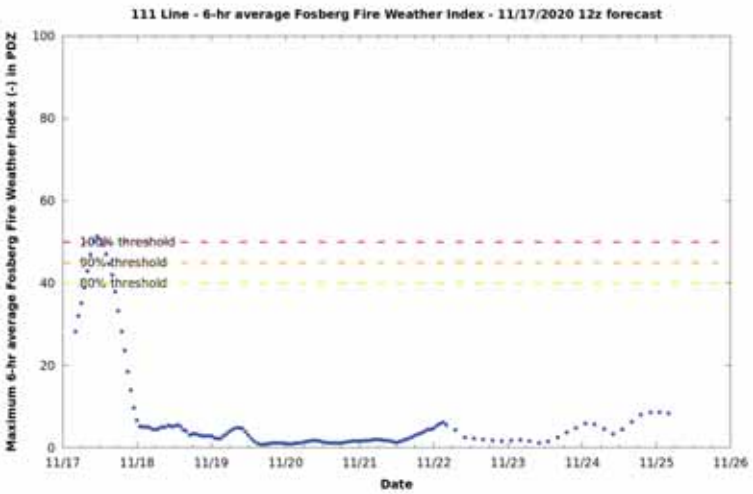
Liberty Utilities Energy Release Component Forecast for 11/17/20 - 11/23/20

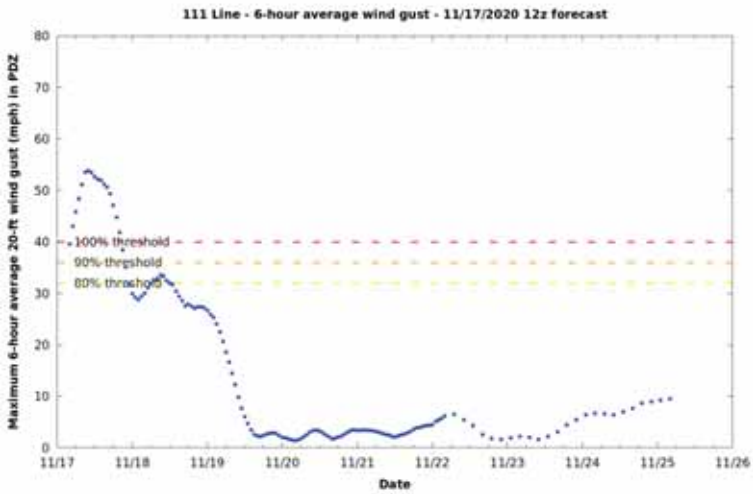
Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
111 Line	7.2	5.1	5.7	5.0	5.6	6.3	6.4
Portola	52.8	36.9	41.6	36.9	39.6	43.0	43.0
Sierra Brooks	61.8	49.5	52.5	46.4	50.4	54.4	55.2
Stampede	57.0	41.0	43.0	36.0	37.0	39.0	40.0
Russel Valley	63.0	48.1	50.6	40.5	40.4	40.1	39.1
Hobart	53.9	41.6	42.4	35.2	35.2	34.7	34.3
Sagehen Tap	17.9	13.7	14.2	12.0	12.0	12.0	12.0
Sunnyside	21.1	14.8	15.8	11.6	12.0	12.7	11.3
Ward Canyon East	54.5	38.2	40.9	30.0	30.9	32.7	29.1
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	42.4	31.4	33.0	26.8	29.7	32.3	32.3
Tah 73-36	1.5	1.1	1.0	0.8	0.7	0.7	0.7
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	44.1	32.9	37.0	31.0	35.7	38.1	39.1
Angora Ridge and Lily Lake	1.0	0.6	0.8	0.6	0.6	0.6	0.6

Cathedral Spring Creek Emerald Bay	19.0	12.9	15.6	12.0	13.1	14.1	14.1
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	49.3	33.3	35.9	28.2	32.9	37.1	38.6
Sorensons Tap	25.2	16.5	19.2	15.7	18.4	20.3	21.0
Mul1296 r3	55.2	37.7	40.2	30.5	34.3	38.0	39.7
Topaz	48.9	34.1	38.4	29.5	34.1	39.1	39.9
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	27.2	19.3	22.1	18.7	21.2	23.6	23.9
640 Tier 2	58.7	40.4	44.9	36.1	40.0	43.7	44.5
609 and Underbuild	2.6	1.8	1.9	1.6	1.8	2.0	2.0
625 Line	4.9	3.8	3.9	3.5	3.8	4.1	4.2
Bky 5200	57.3	38.1	45.2	35.2	32.6	33.8	30.6
Old Country Road	57.7	42.4	45.4	37.6	33.4	33.1	30.3
Tah 52-68	21.9	16.4	16.4	13.6	11.7	10.9	10.2
The Grid	60.9	39.5	46.7	33.7	33.0	33.5	31.5
Canterbury and Commonwealth	44.7	29.3	34.5	24.9	24.9	25.7	24.2
Bky 5100 to NVE	25.6	16.8	19.7	14.3	14.3	14.7	13.8
Beacon Tap	69.0	53.0	55.0	46.0	45.0	46.0	46.0
Glenshire and 608	66.9	51.8	54.4	44.6	46.2	46.7	46.2
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	9.7	9.7	10.4	8.8	10.0	10.9	10.9
132 Line	13.9	13.9	14.7	12.1	12.9	13.6	13.9
669 Line	49.4	49.4	51.9	43.6	45.0	48.7	49.4
650 Line	27.7	27.7	29.2	25.4	27.2	29.3	30.1
Floriston	38.1	38.1	41.8	33.3	36.0	38.1	39.0
Verdi	43.6	43.6	46.7	38.2	43.1	46.7	48.7
Bordertown	49.2	49.2	51.0	42.6	47.0	51.4	52.4

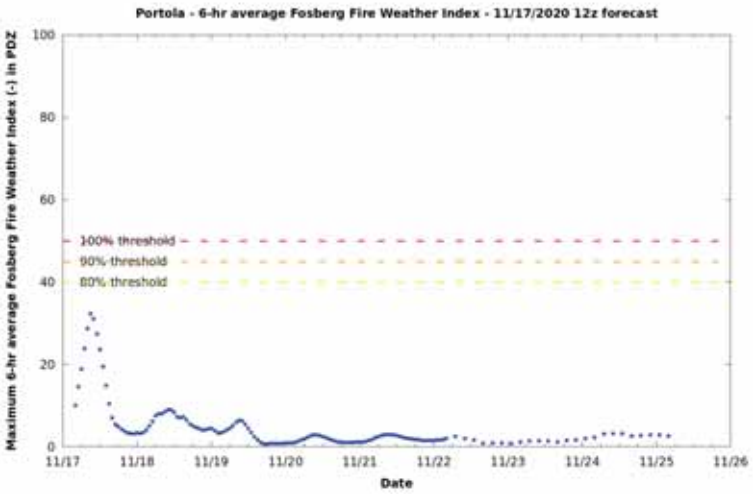
Liberty Utilities Fire Weather Summary Plots - 11/17/2020 12z forecast

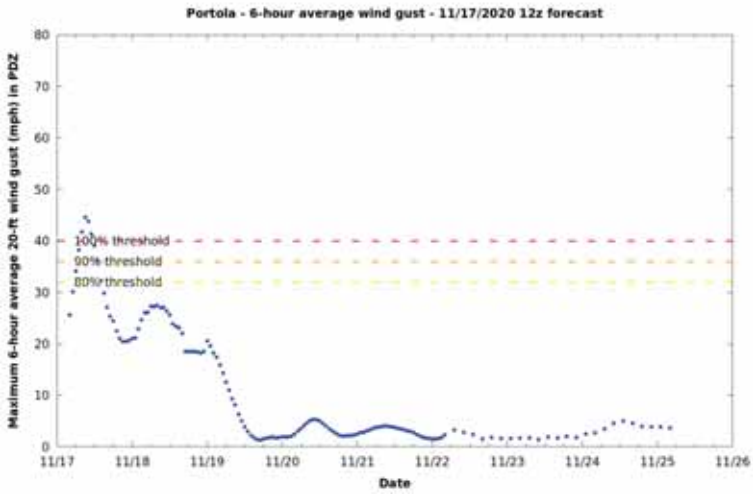
111 Line



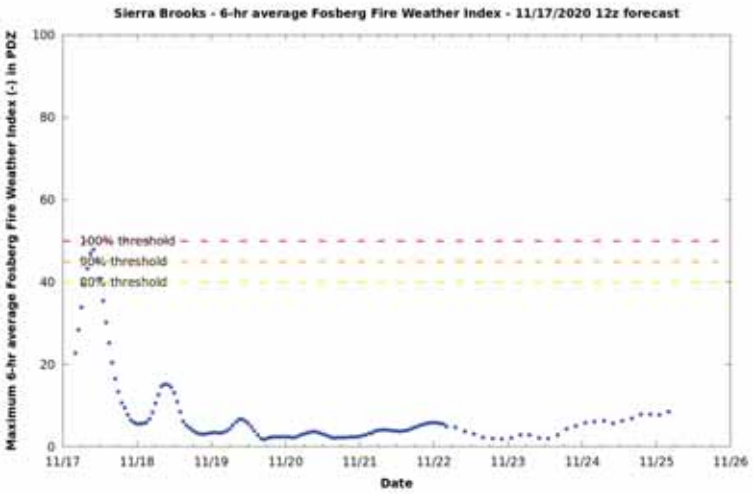


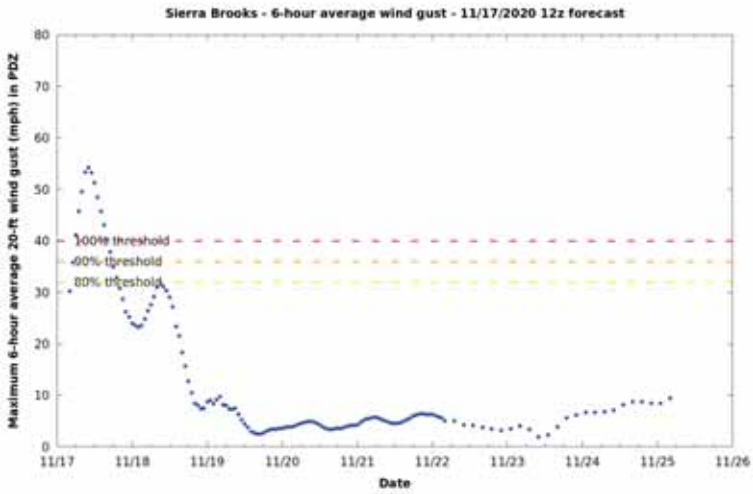
Portola



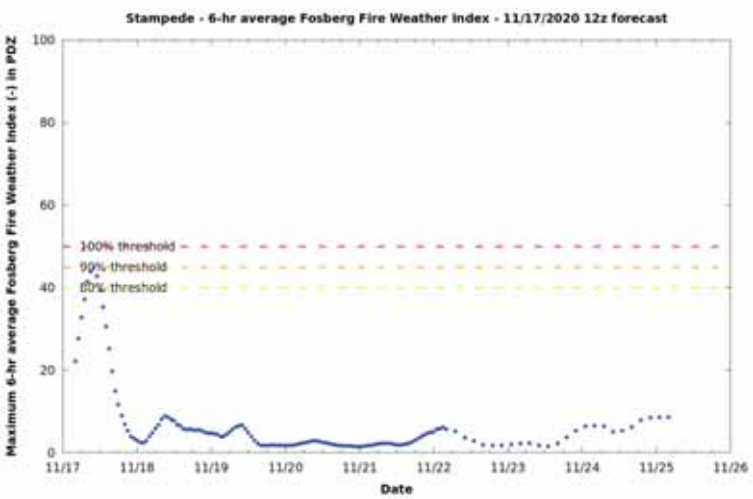


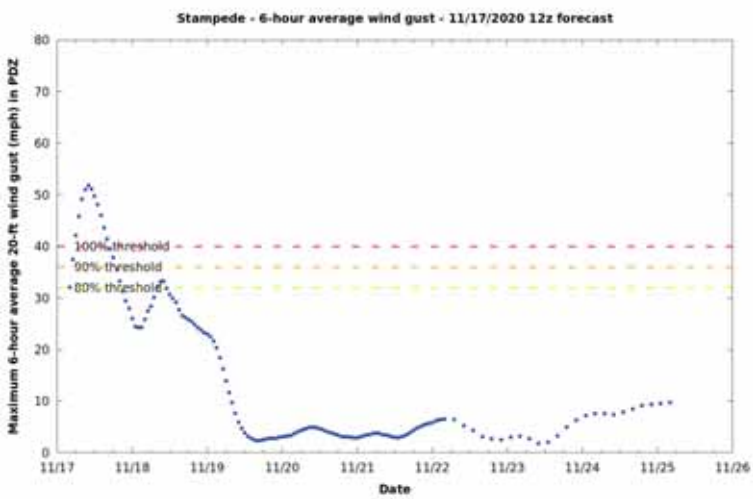
Sierra Brooks



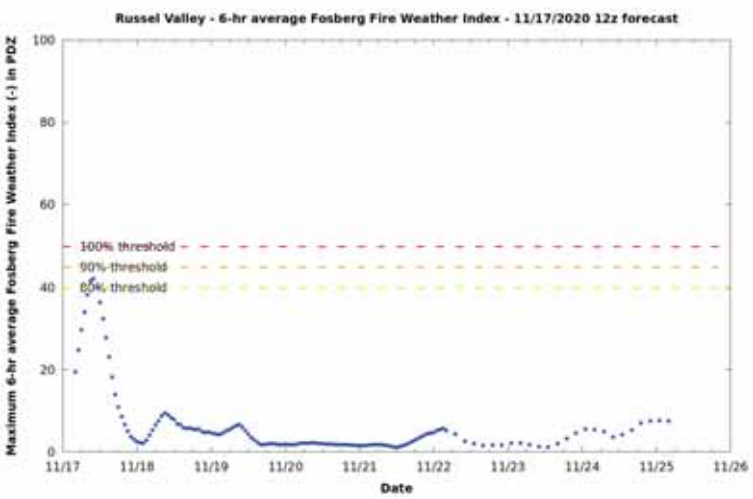


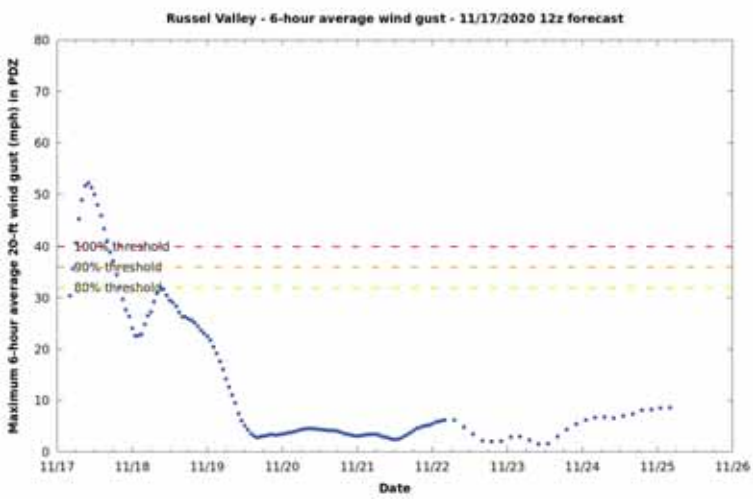
Stampede



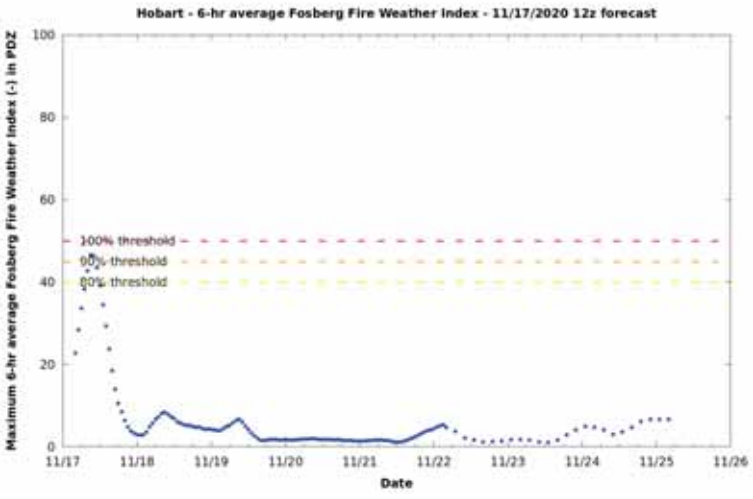


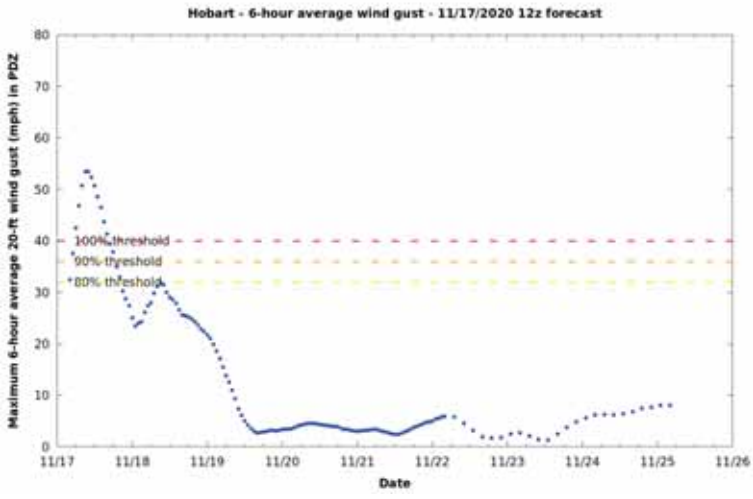
Russell Valley



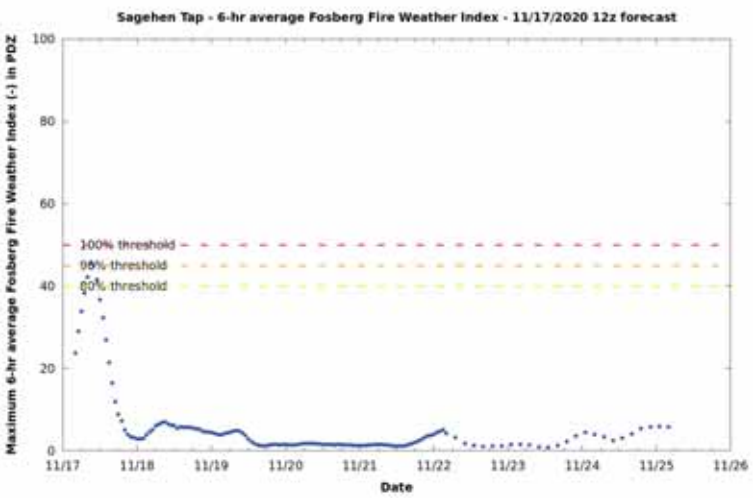


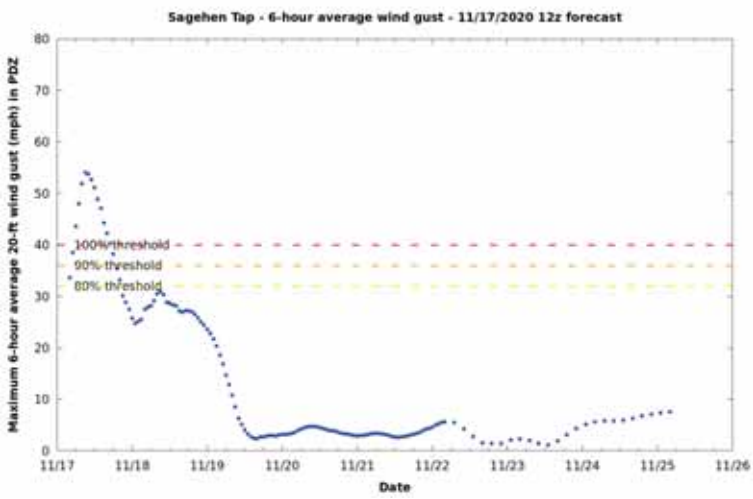
Hobart



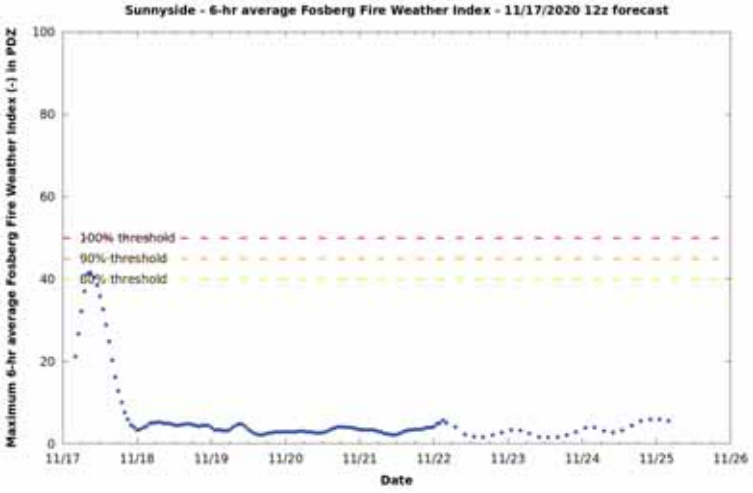


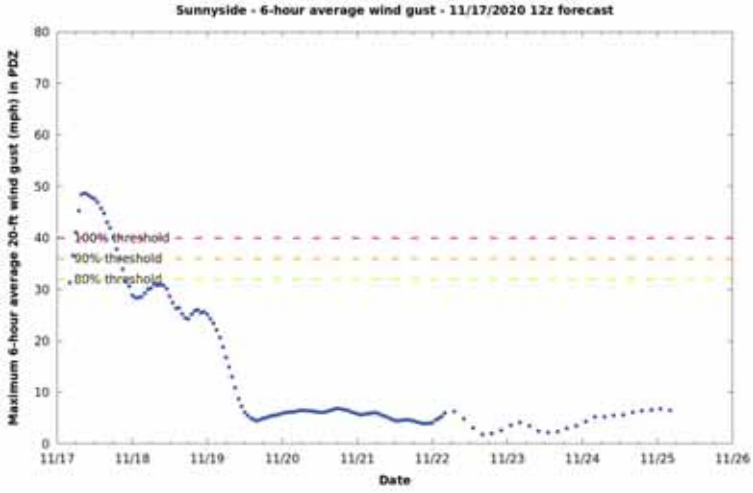
Sagehen tap



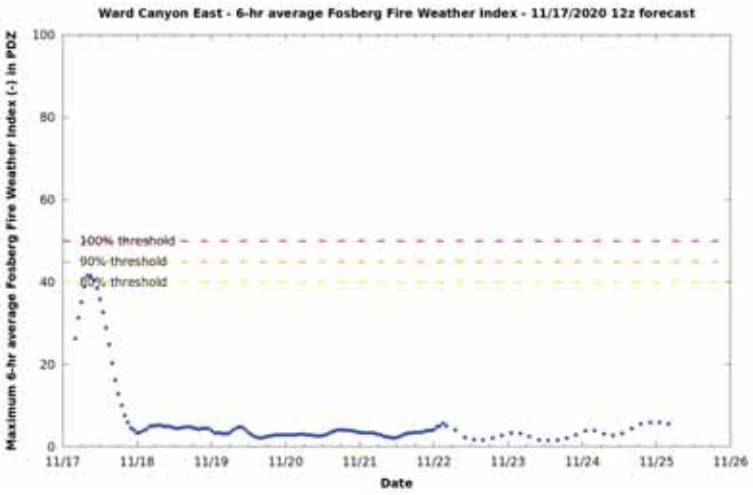


Sunnyside



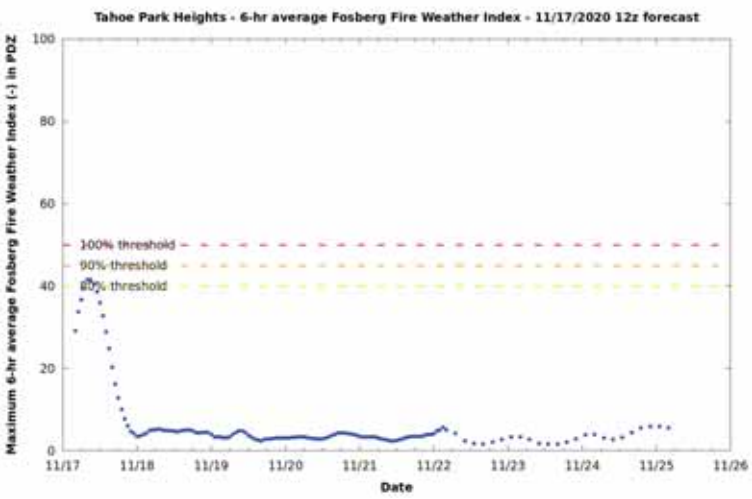


Ward Canyon East



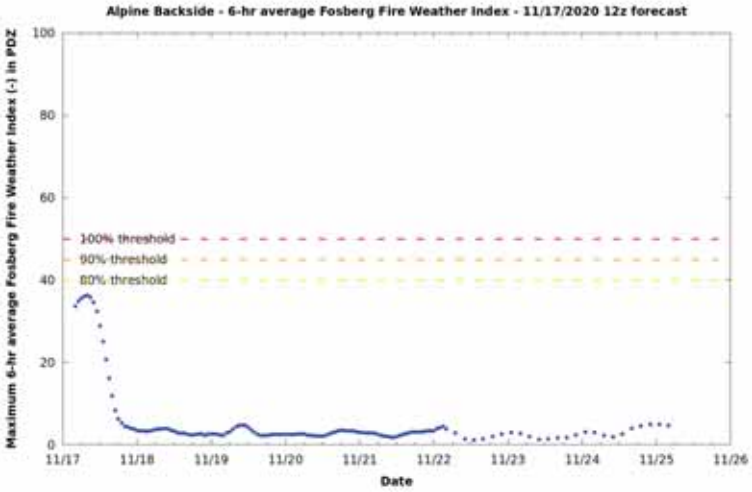


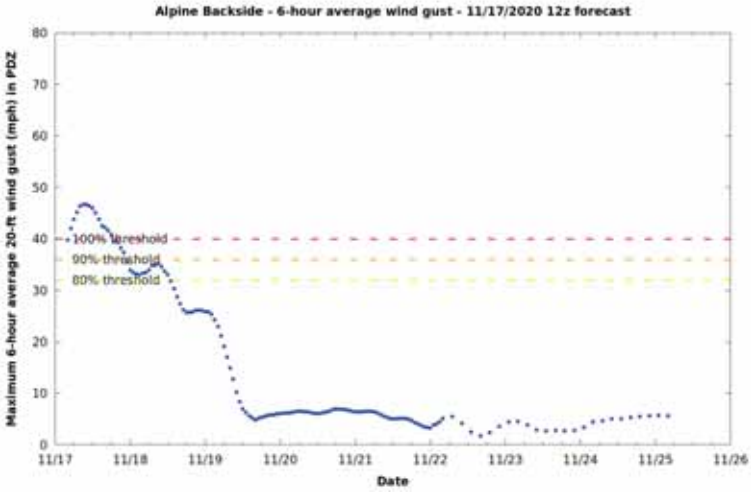
Tahoe Park Heights



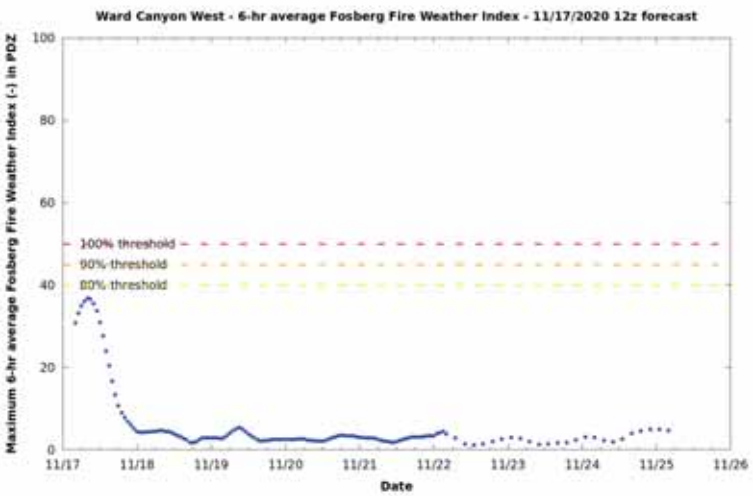


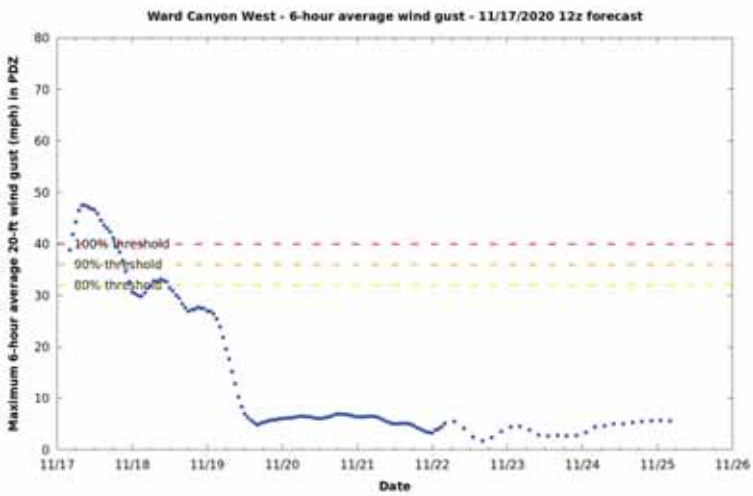
Alpine Backside



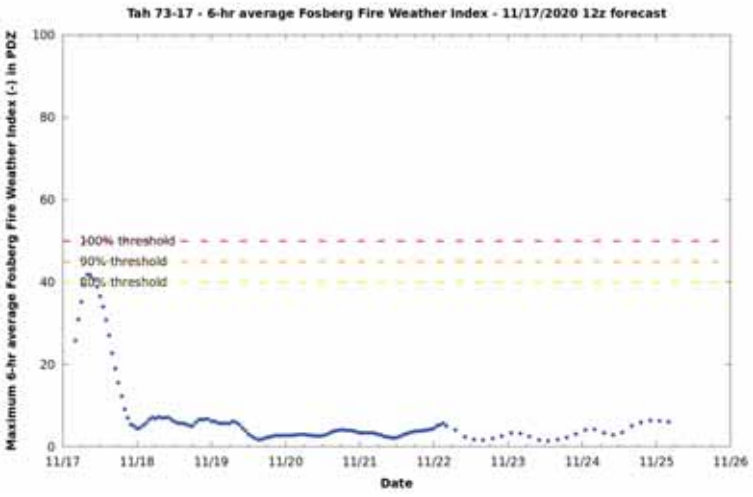


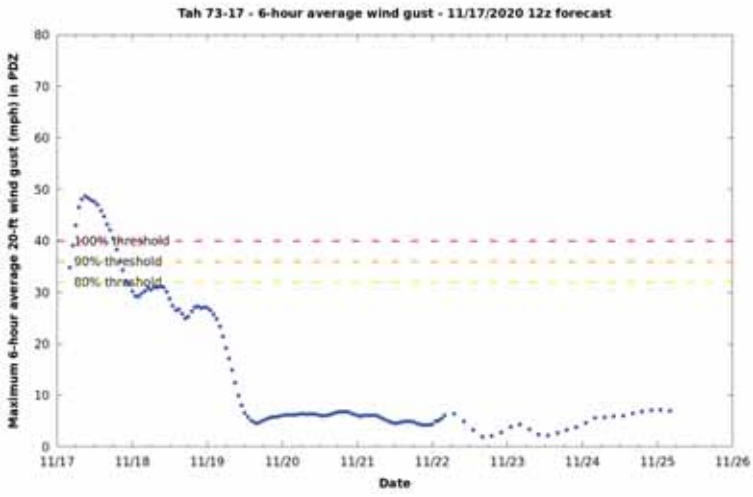
Ward Canyon West



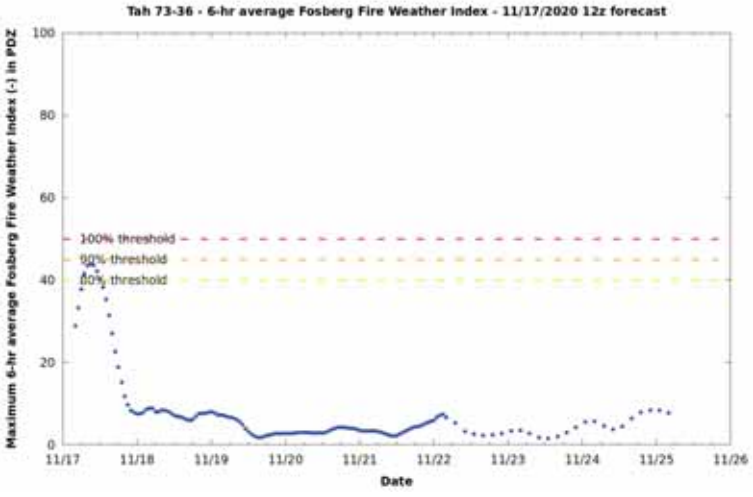


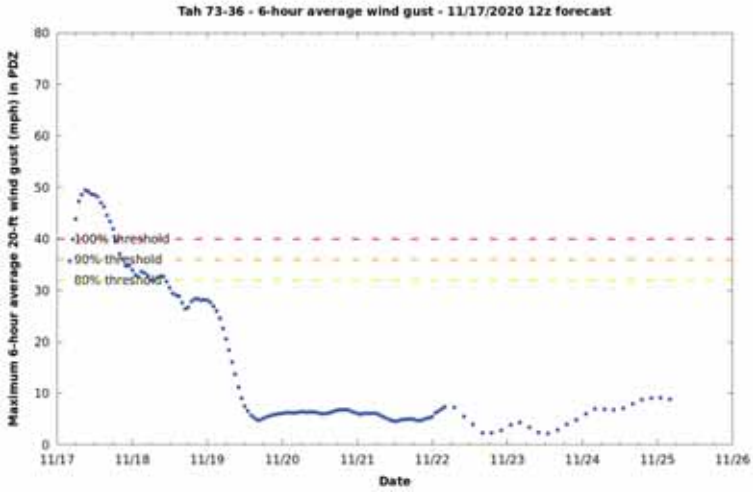
Tah 73-17



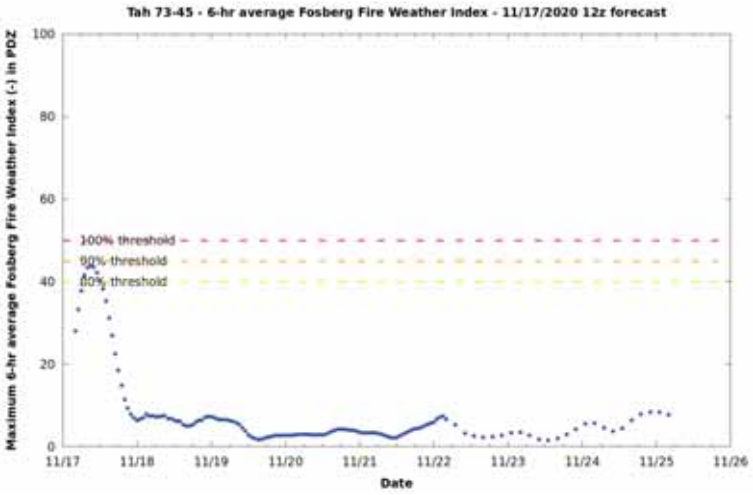


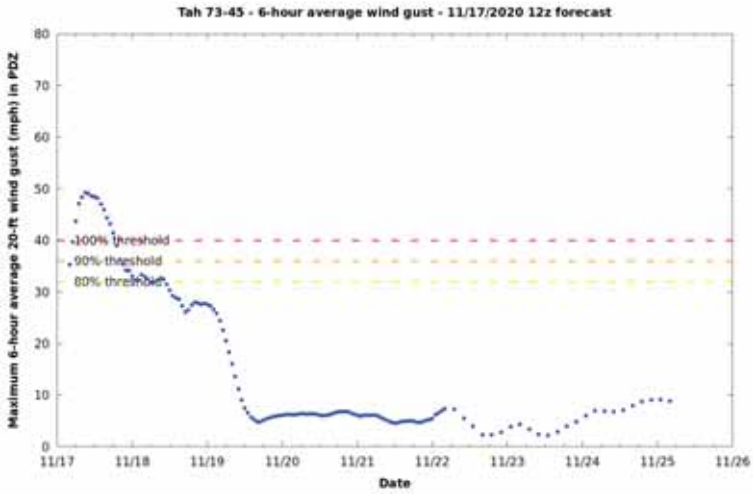
Tah 73-36



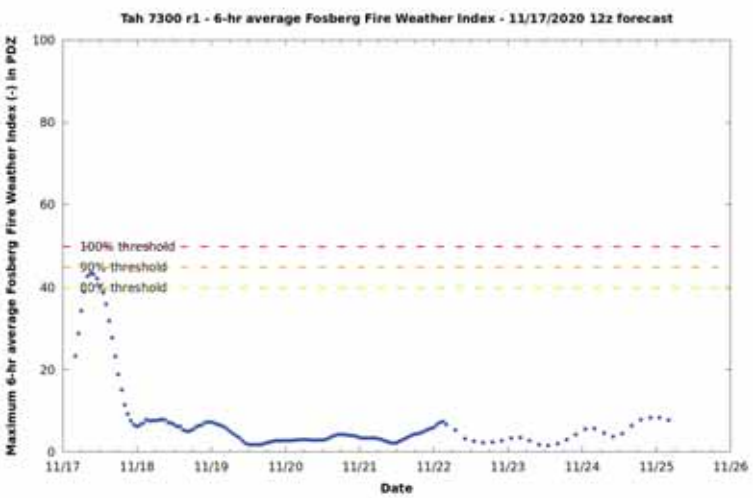


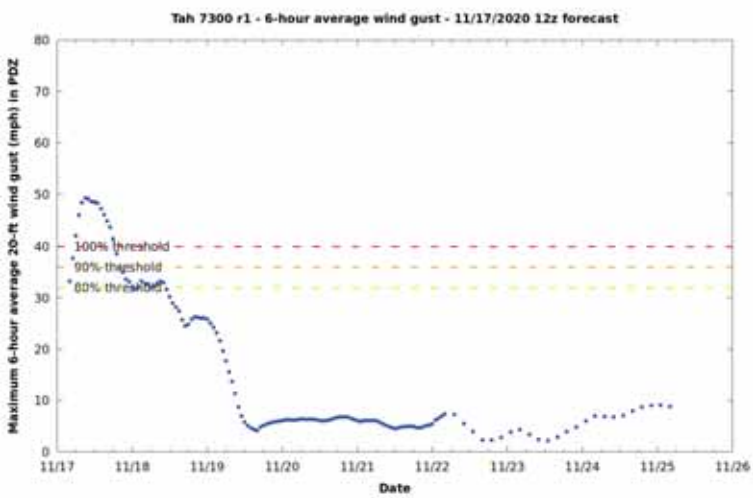
Tah 73-45



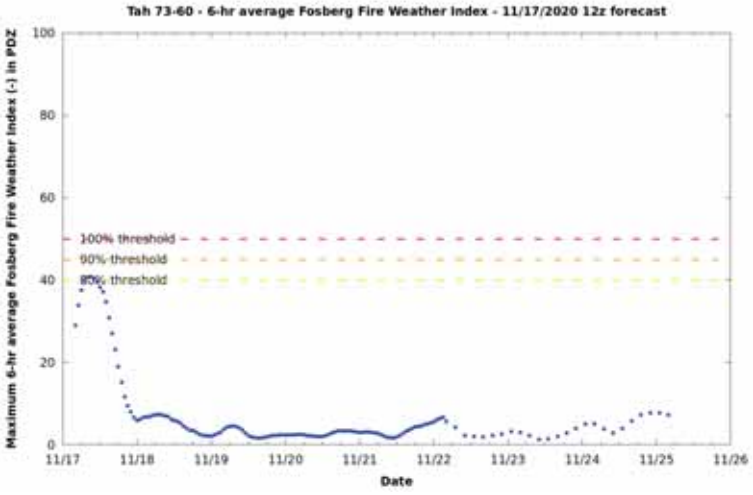


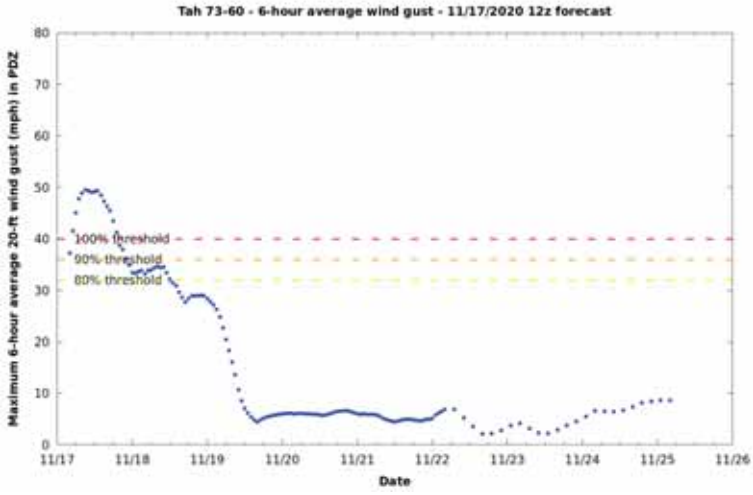
Tah 7300 r1



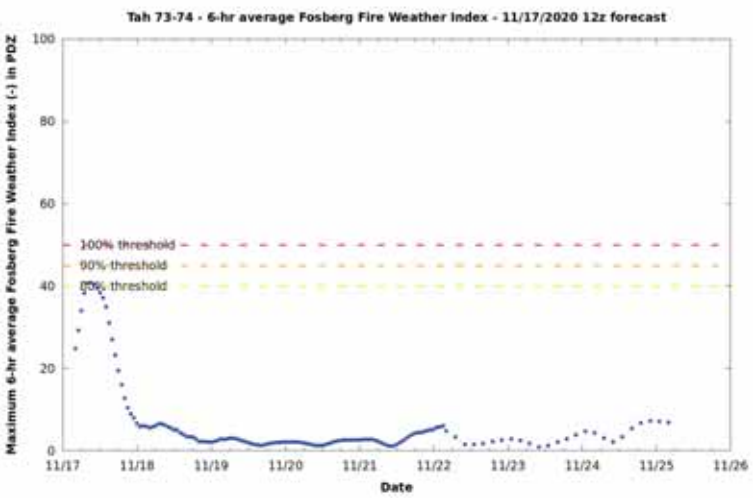


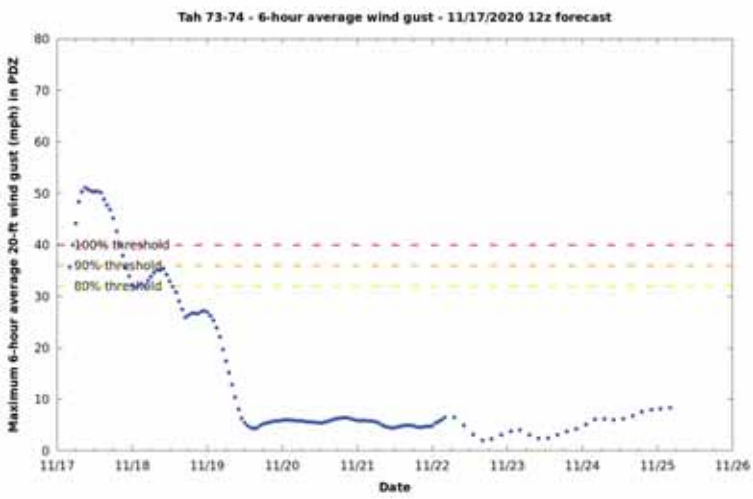
Tah 73-60



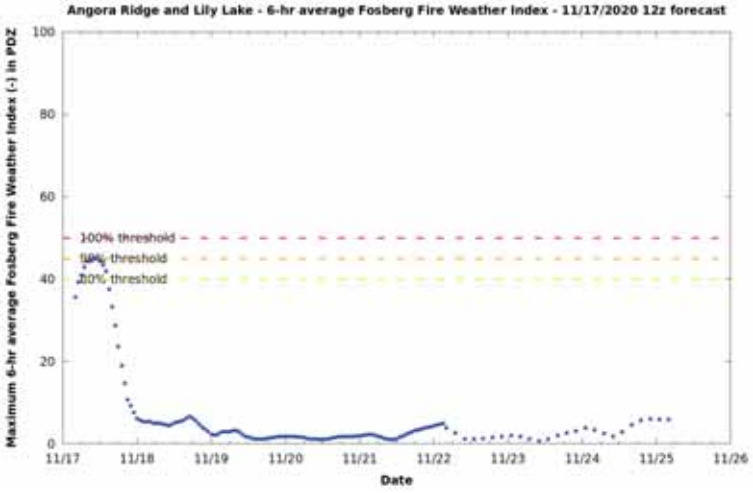


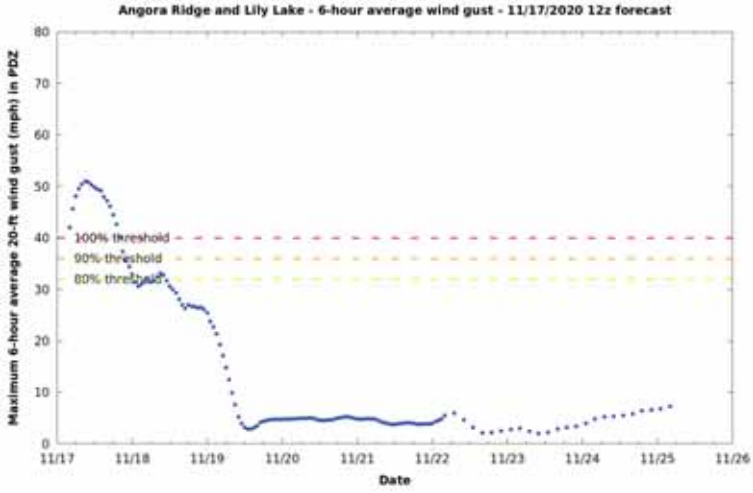
Tah 73-74



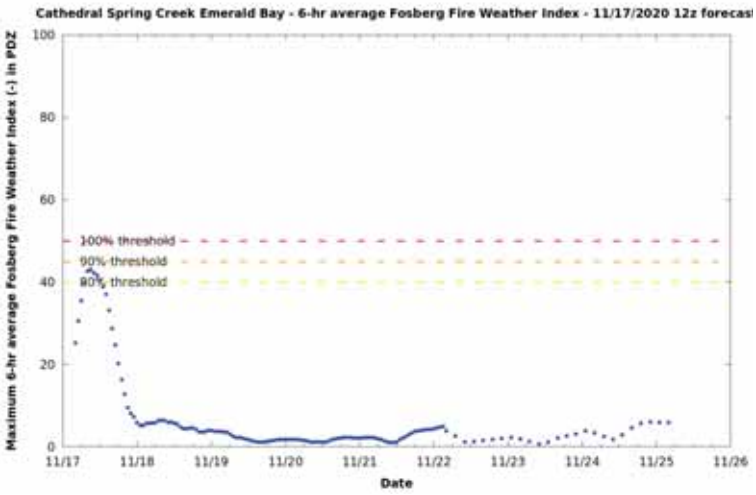


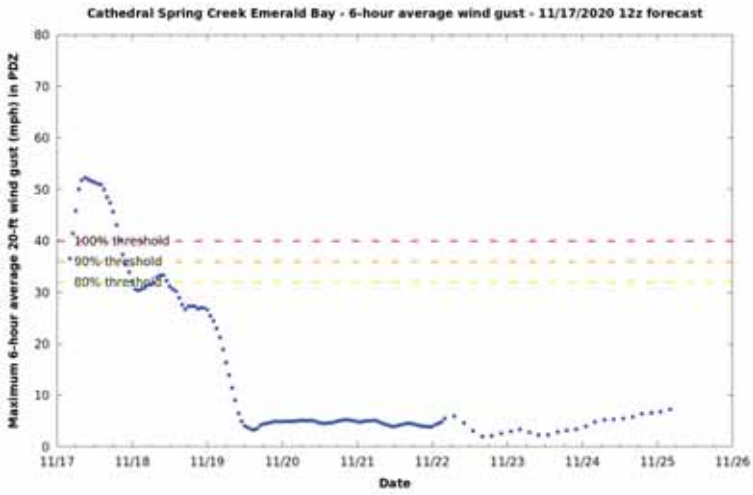
Angora Ridge and Lily Lake



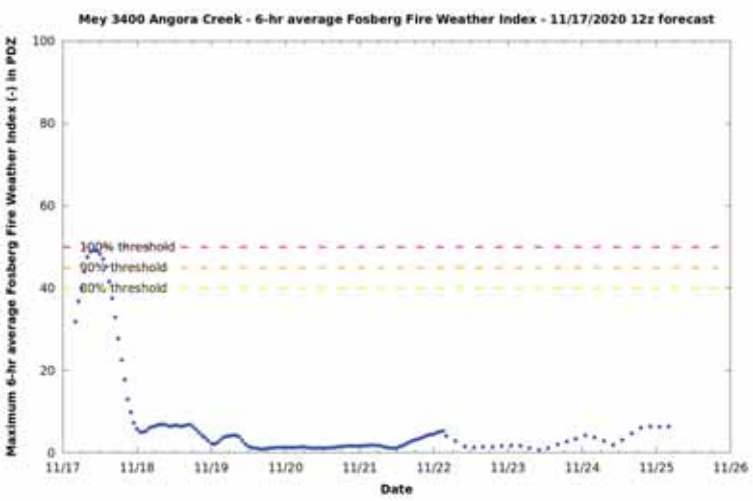


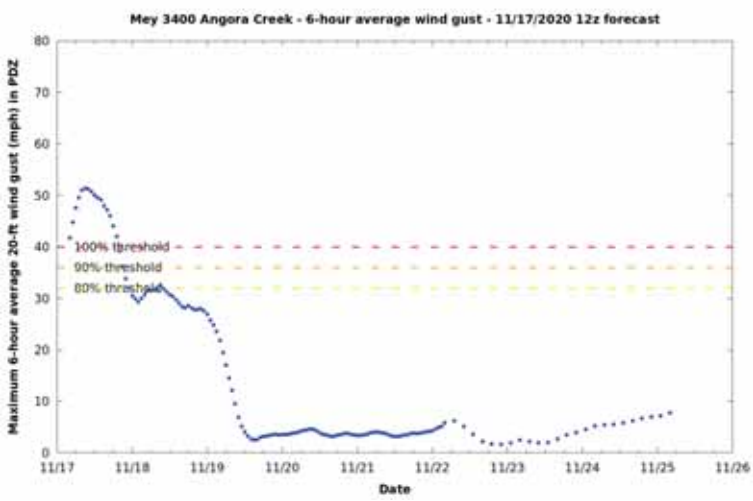
Cathedral Spring Creek Emerald Bay



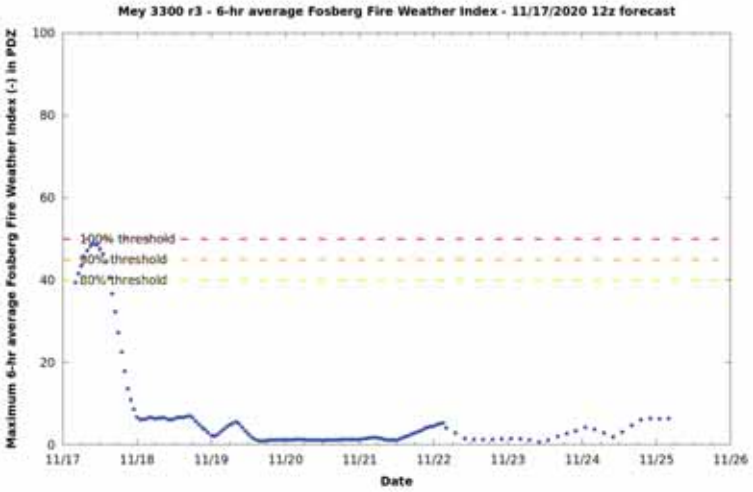


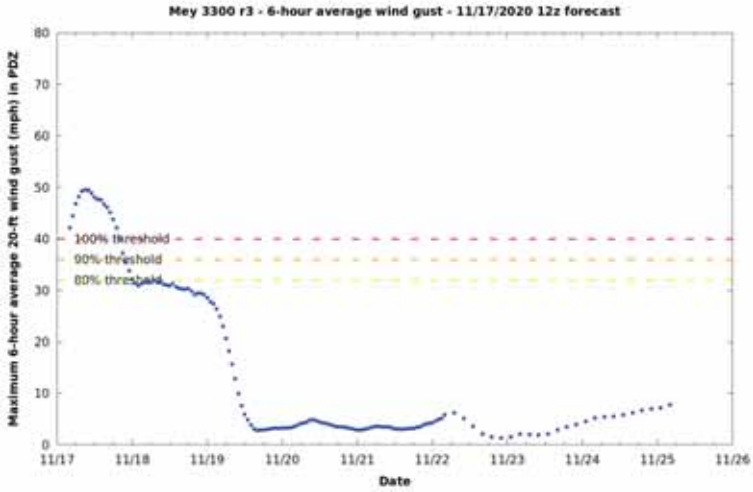
Mey 3400 Angora Creek



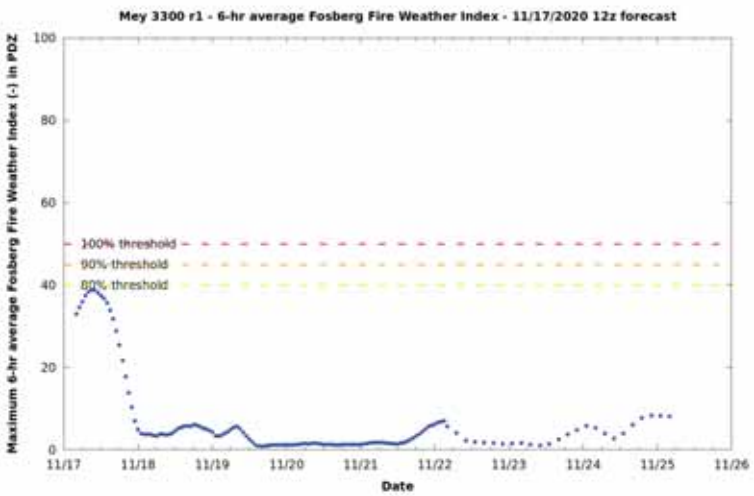


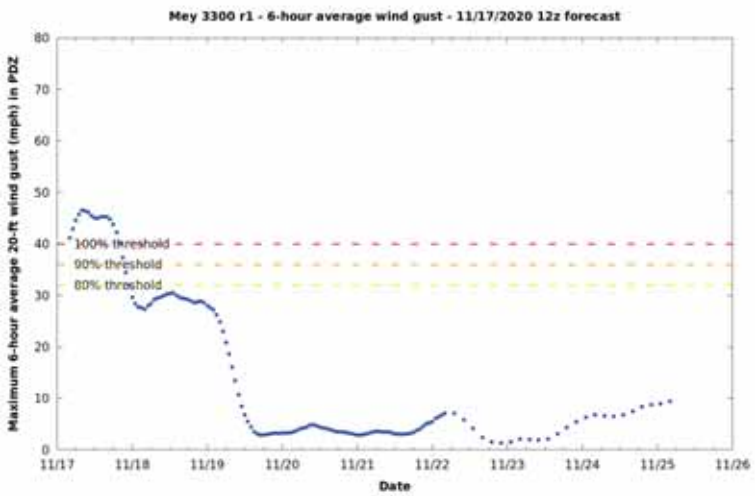
Mey 3300 r3



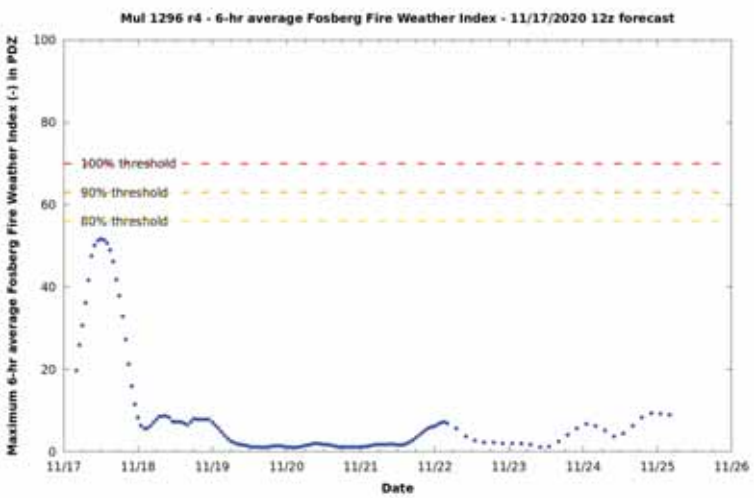


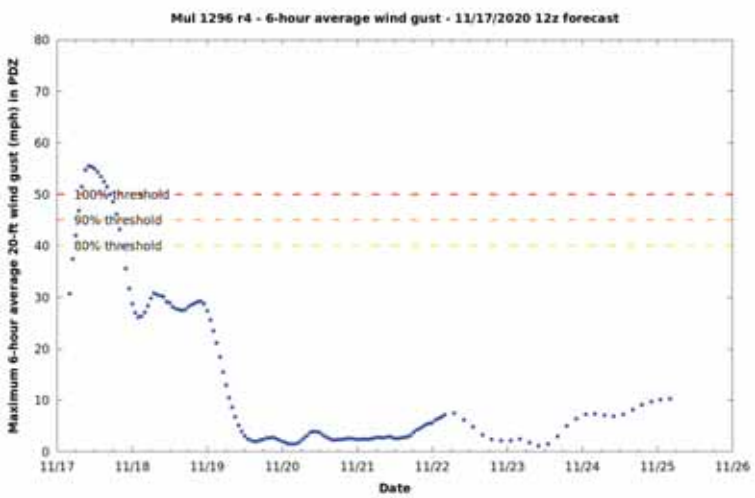
Mey 3300 r1



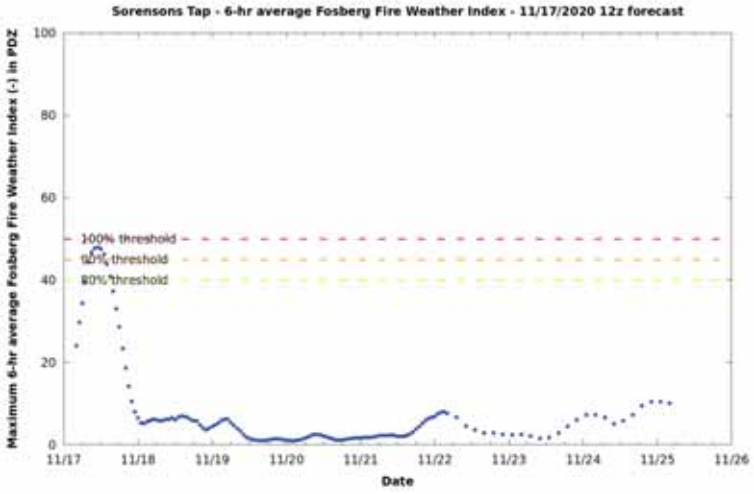


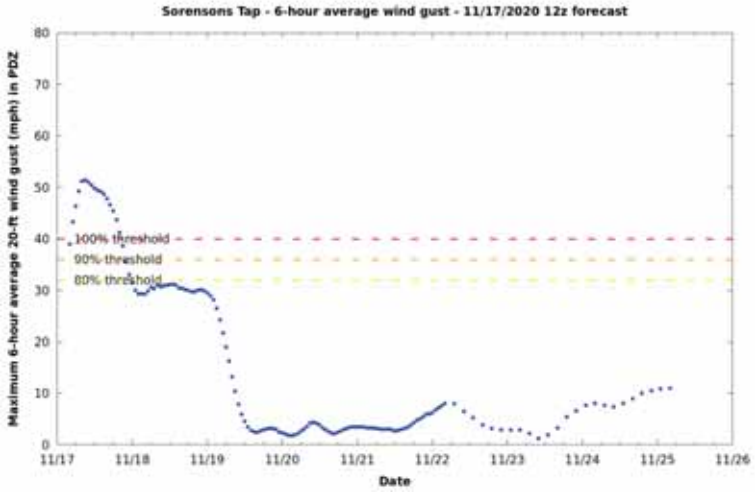
Mul 1296 r4



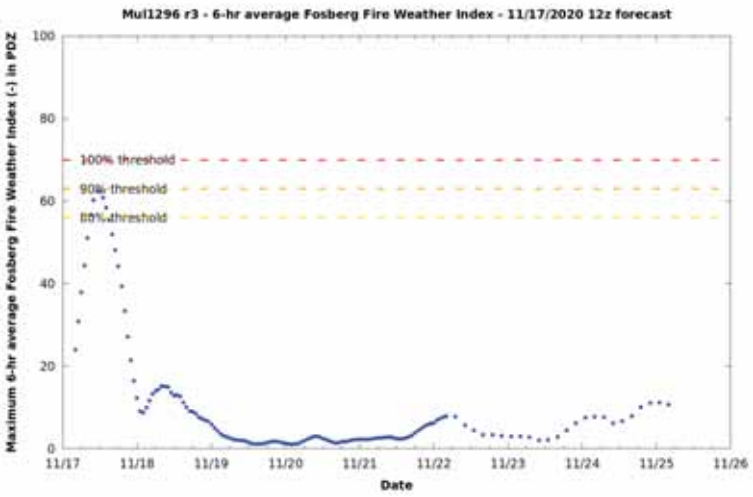


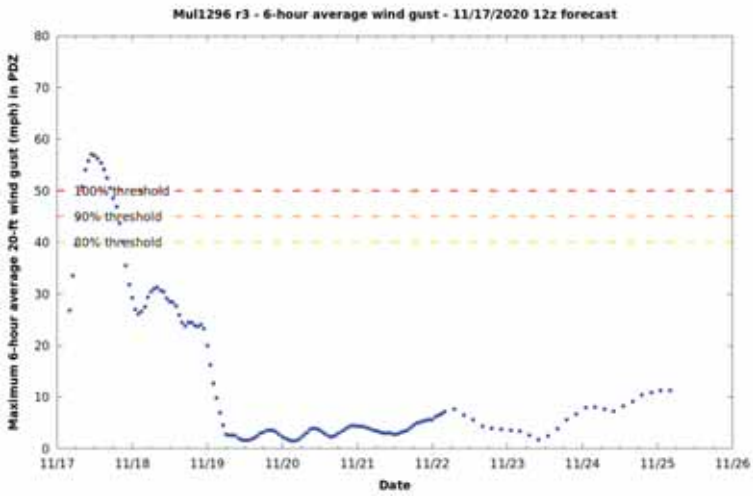
Sorensons Tap



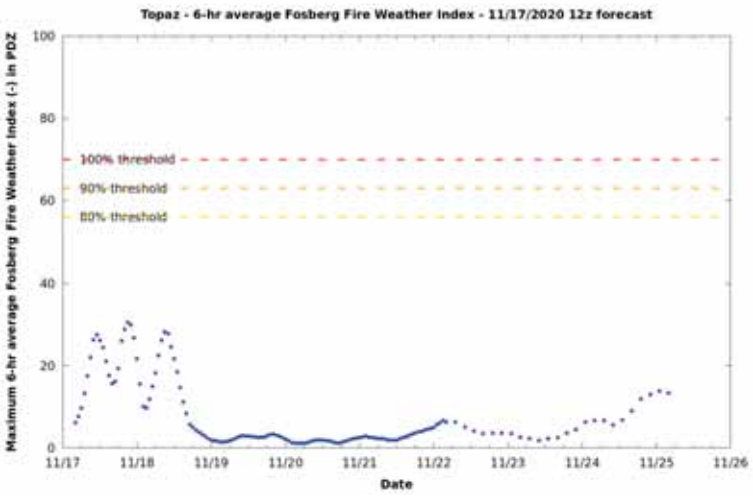


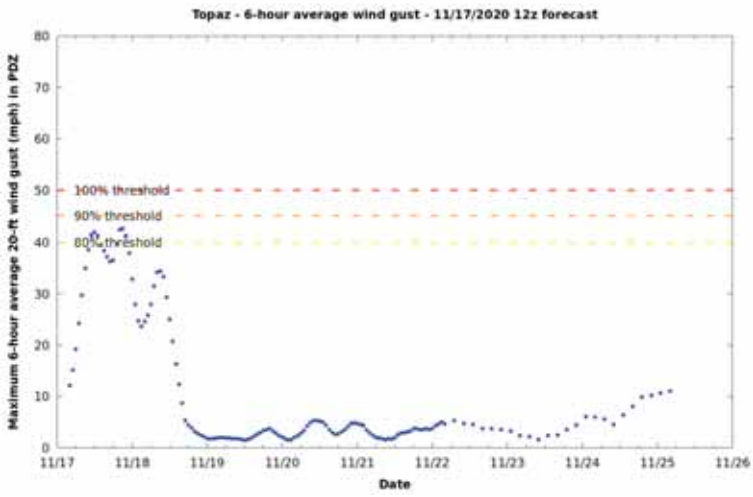
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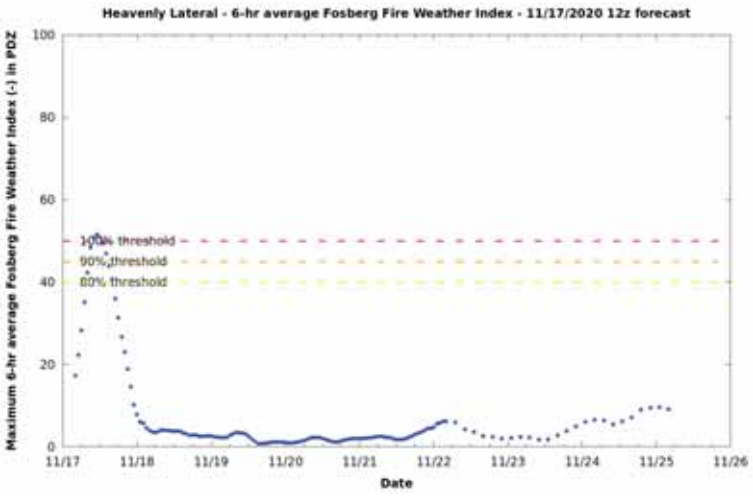


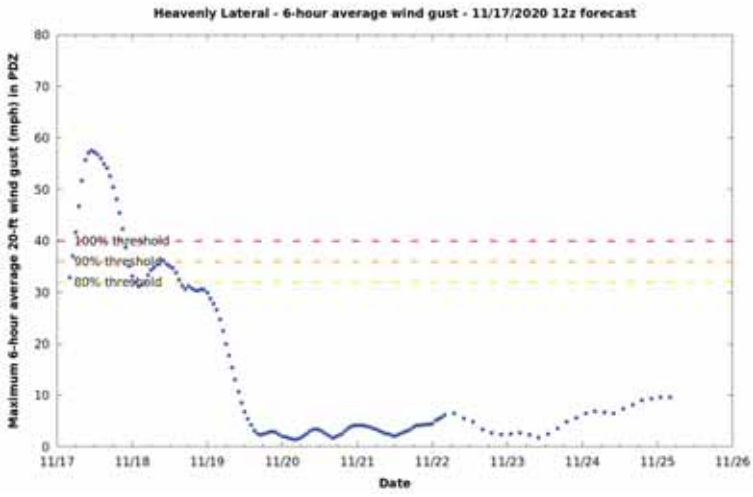
Topaz



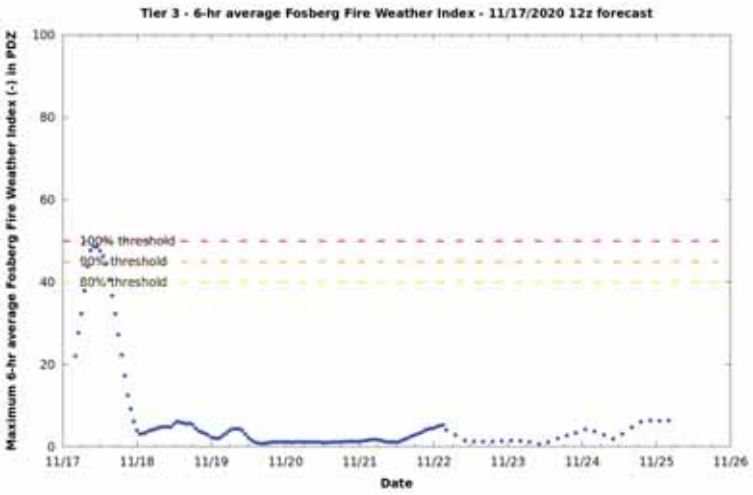


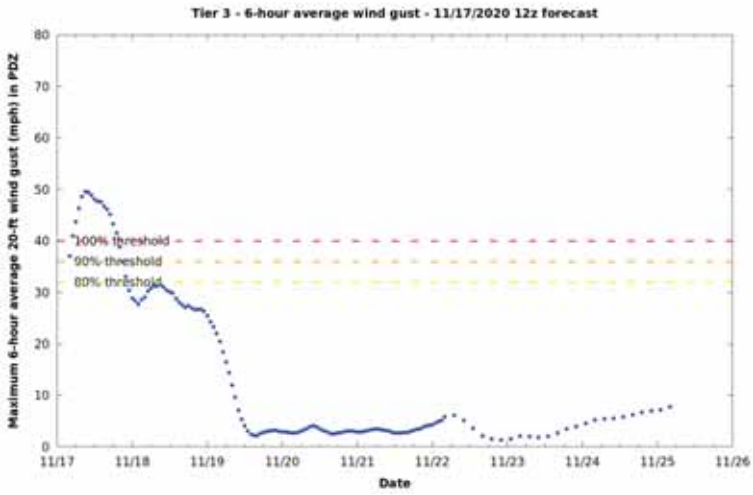
Heavenly Lateral



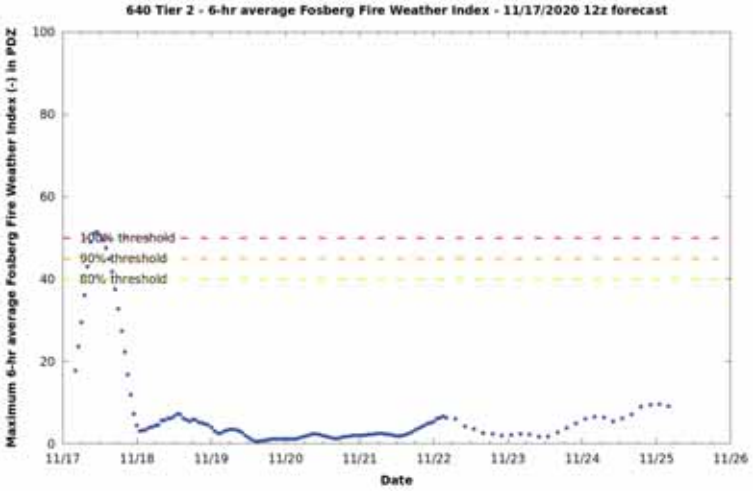


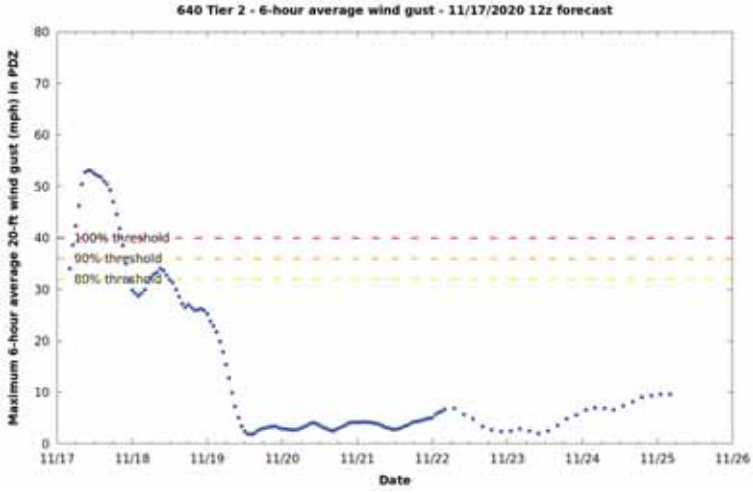
Tier 3



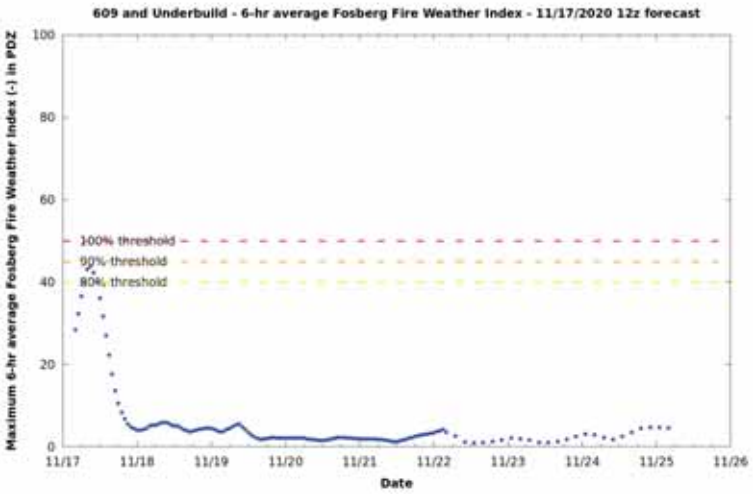


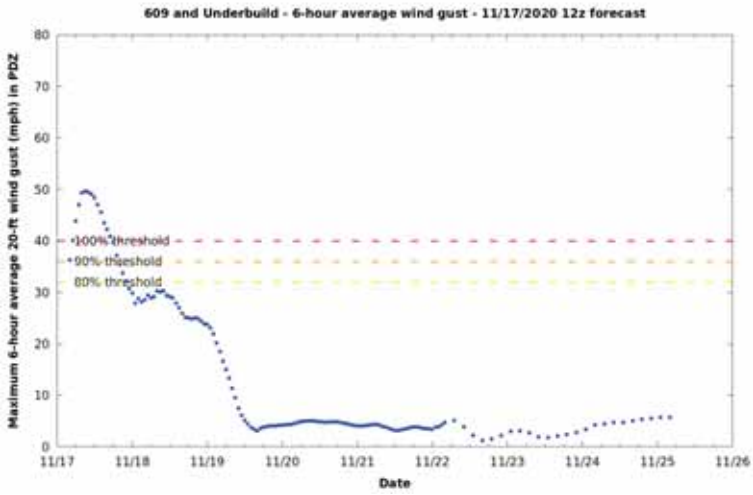
640 Tier 2



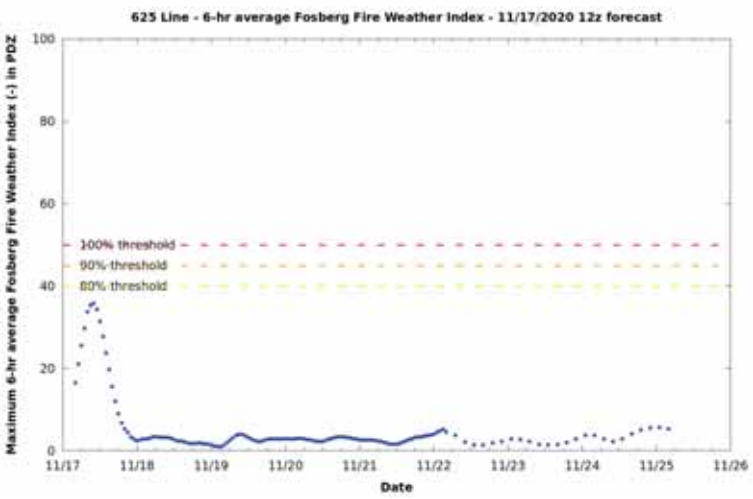


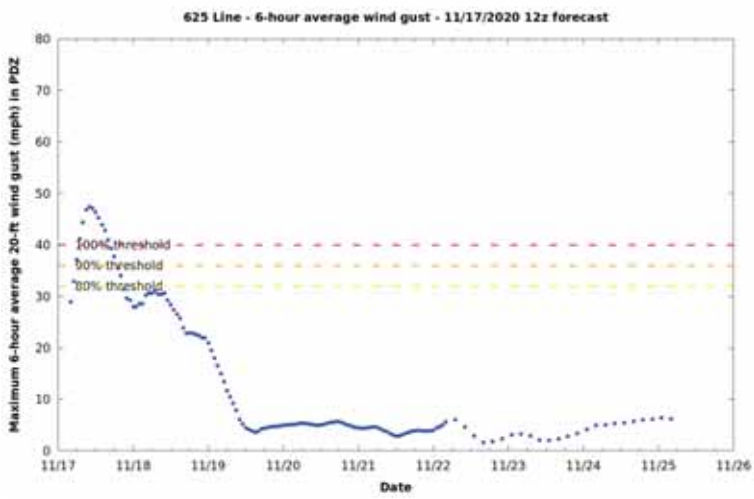
609 and Underbuild



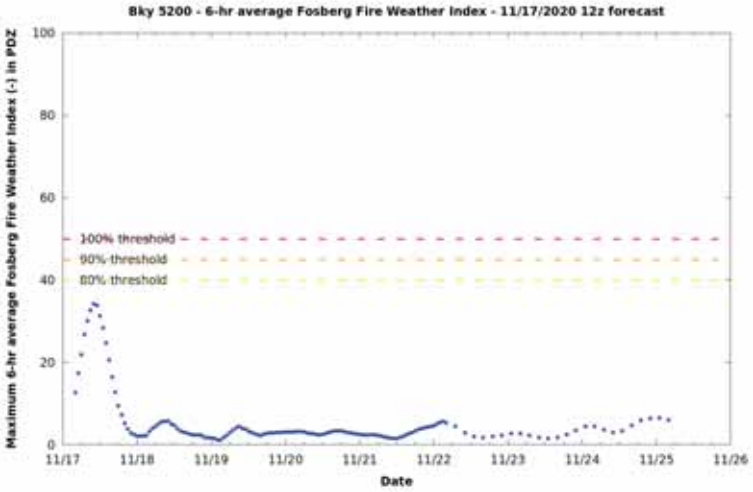


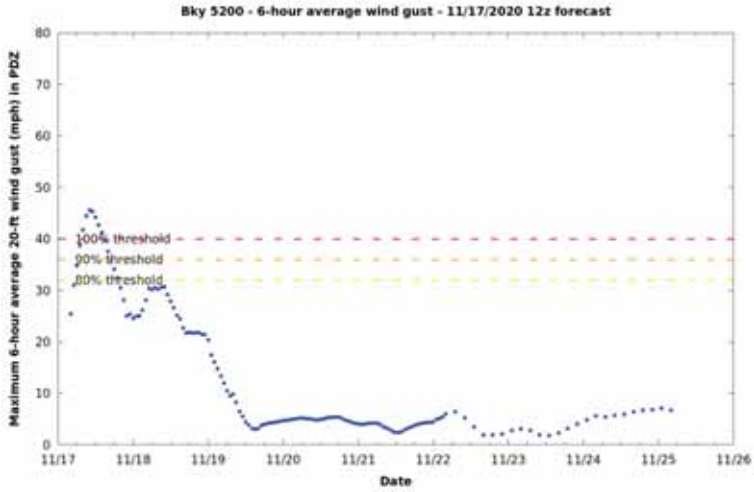
625 Line



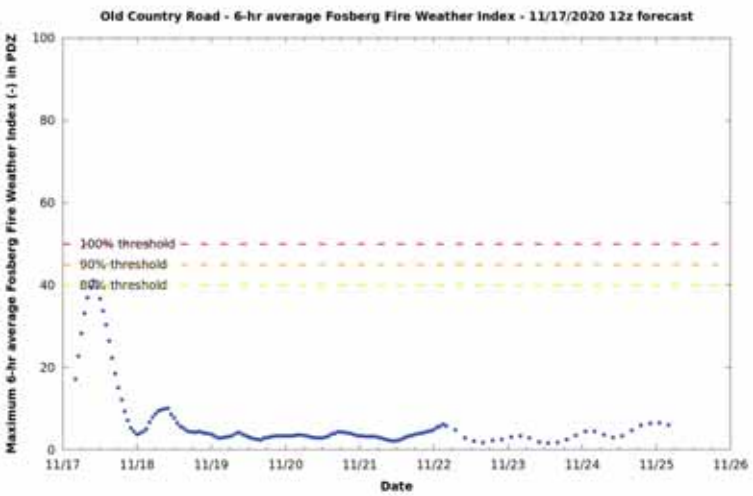


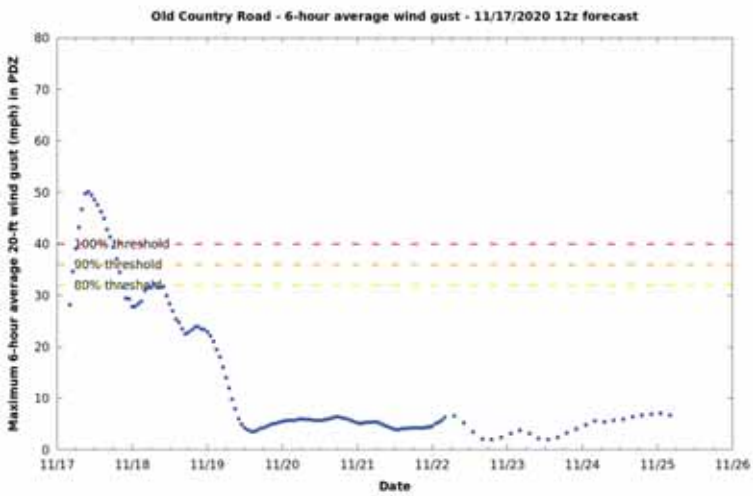
Bky 5200



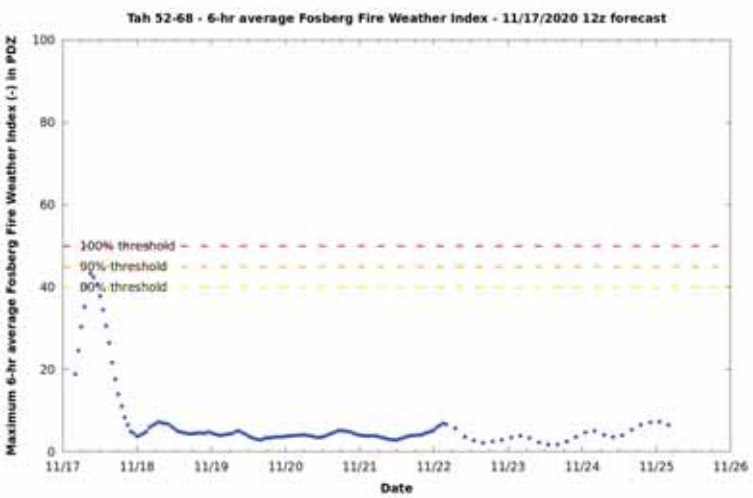


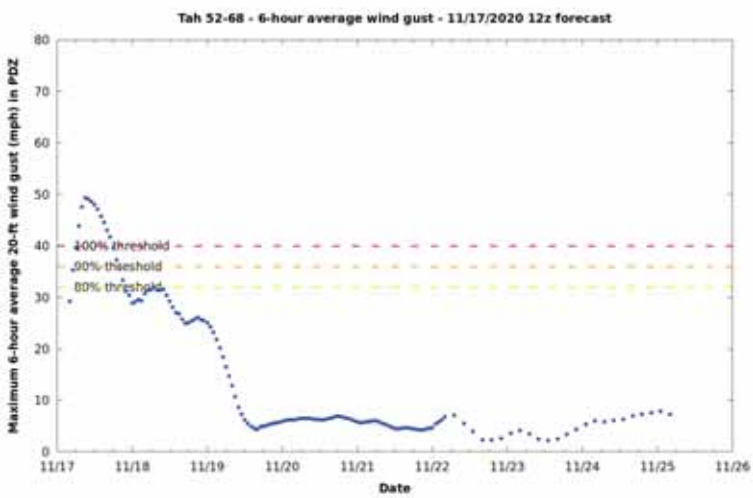
Old Country Road



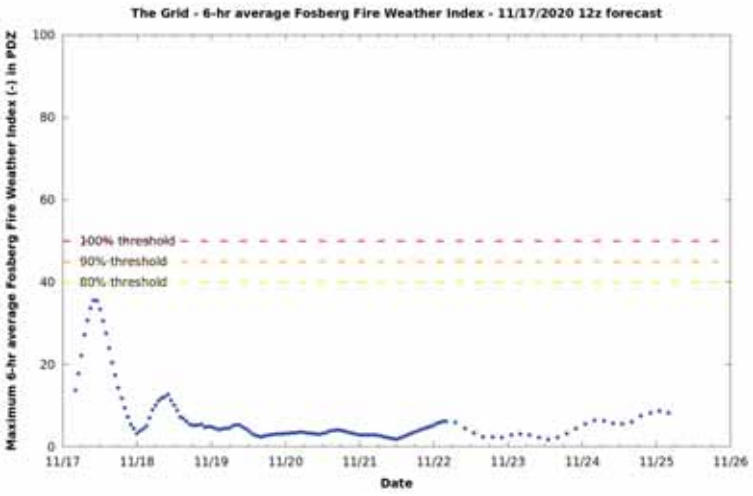


Tah 52-68



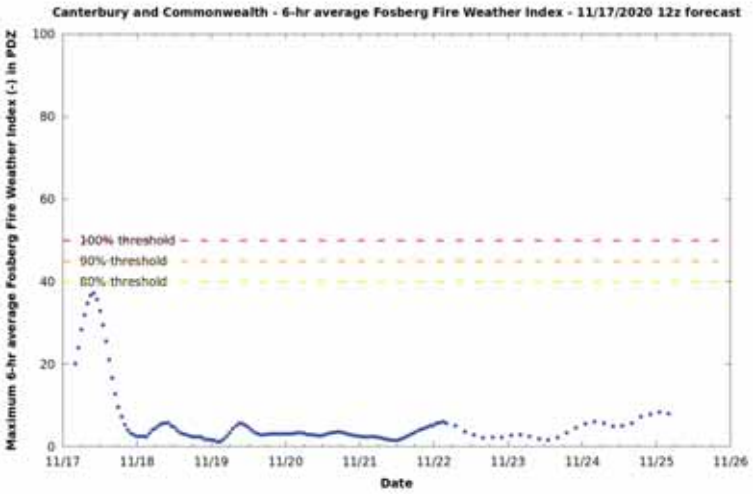


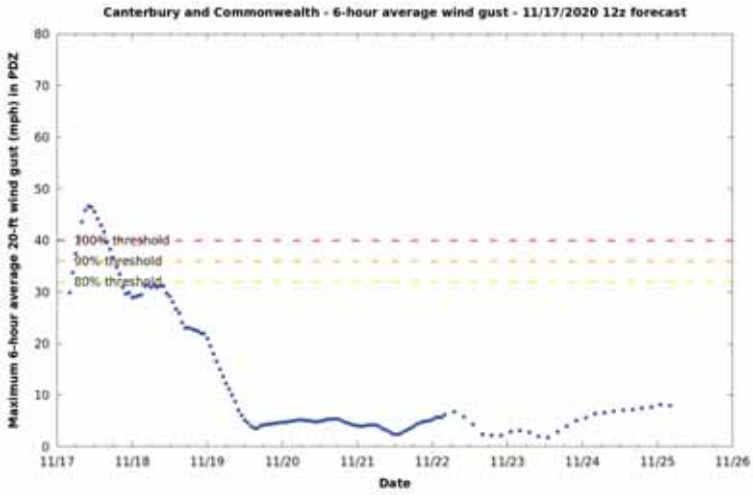
The Grid



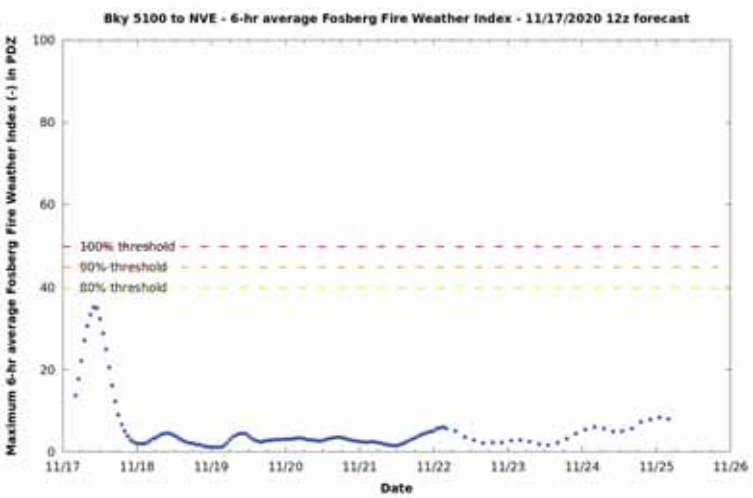


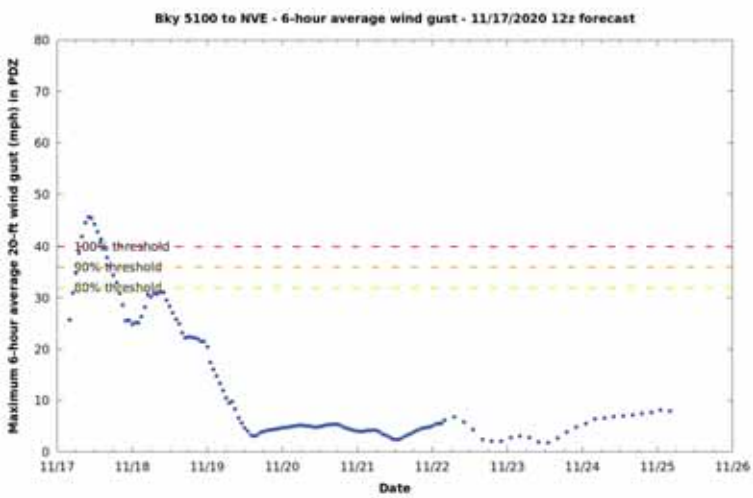
Canterbuy and Commonwealth



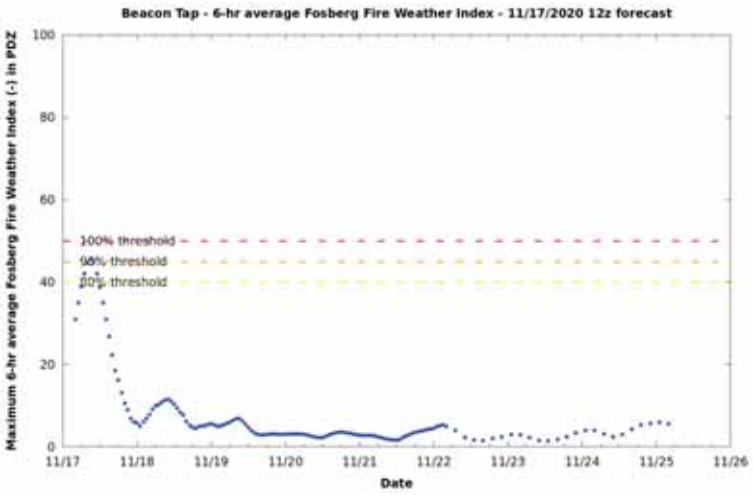


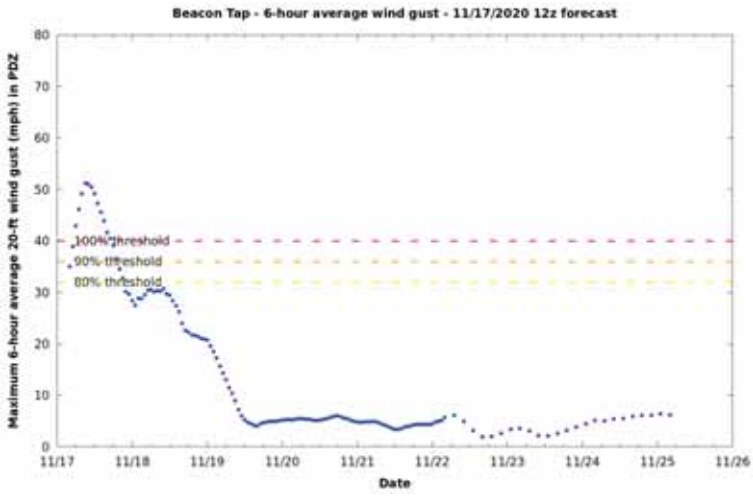
Bky 5100 to NVE



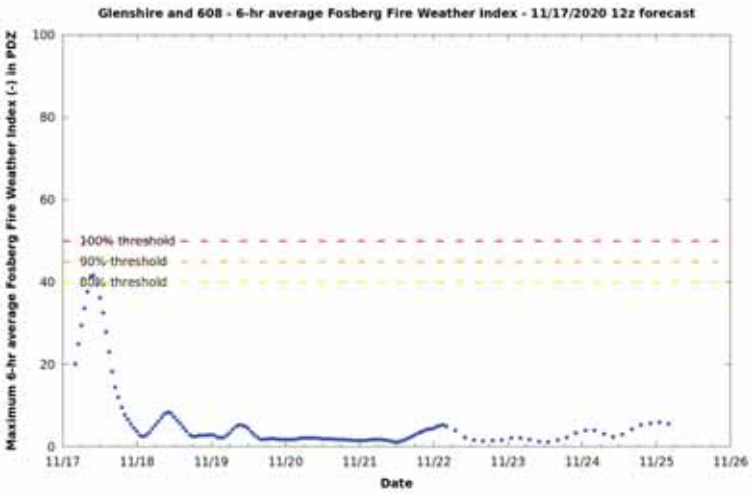


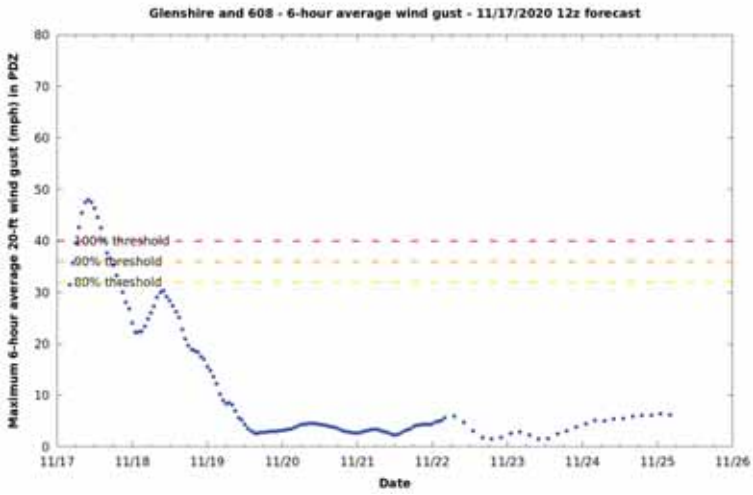
Beacon Tap



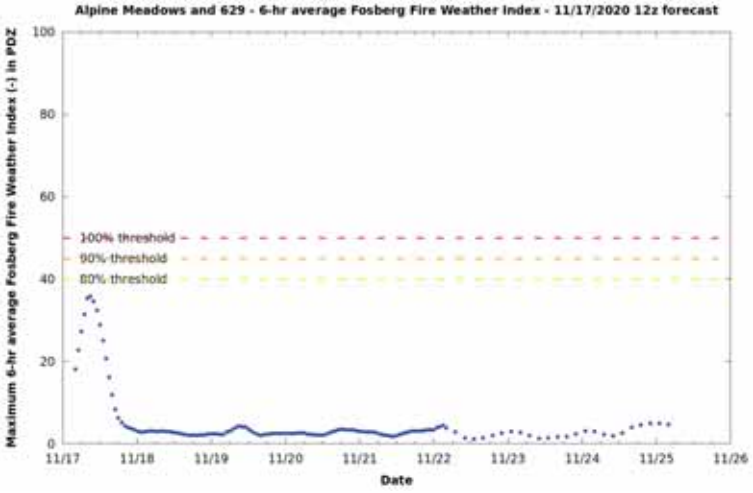


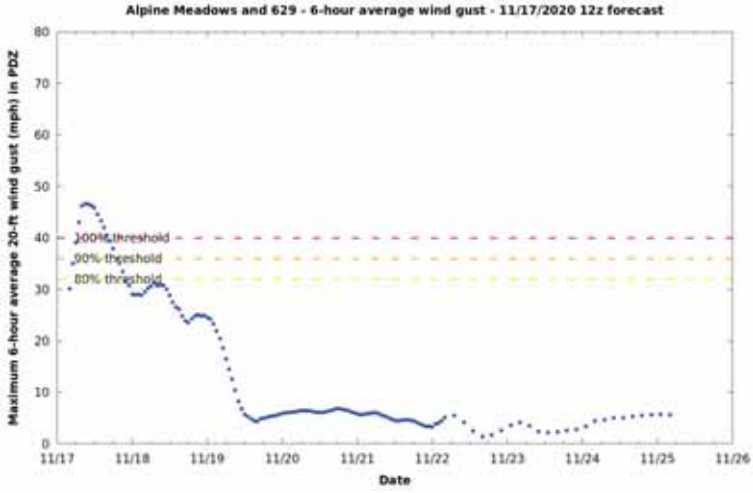
Glenshire and 608



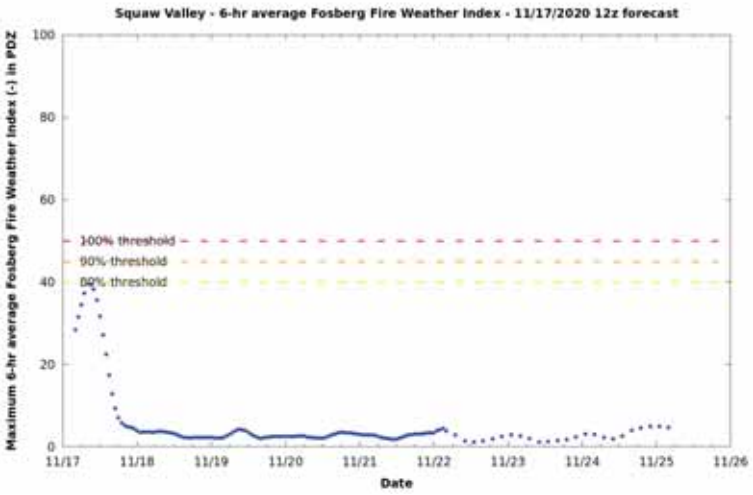


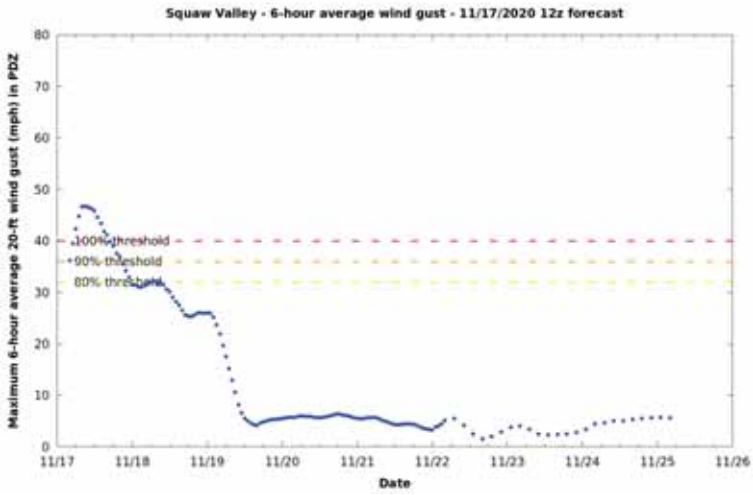
Alpine Meadows and 629



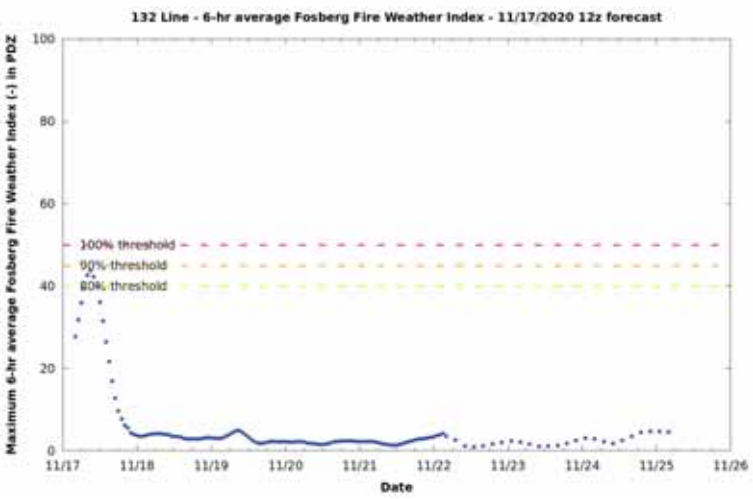


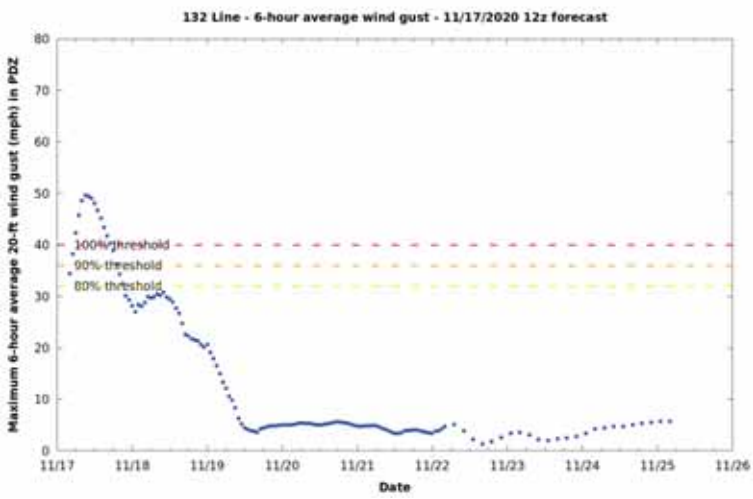
Squaw Valley



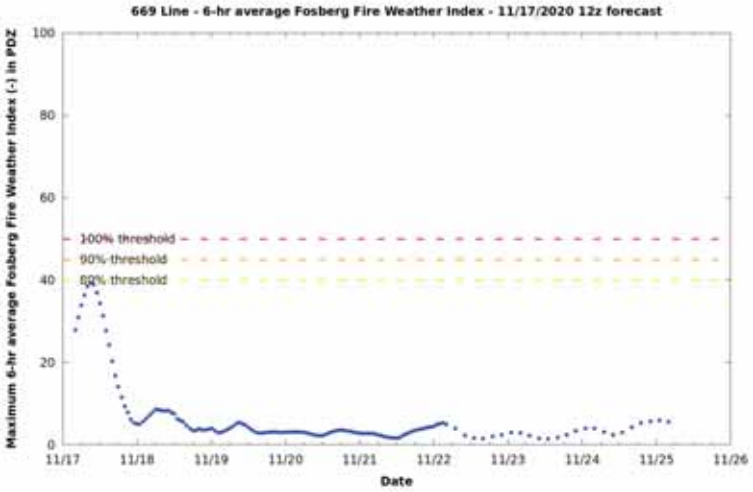


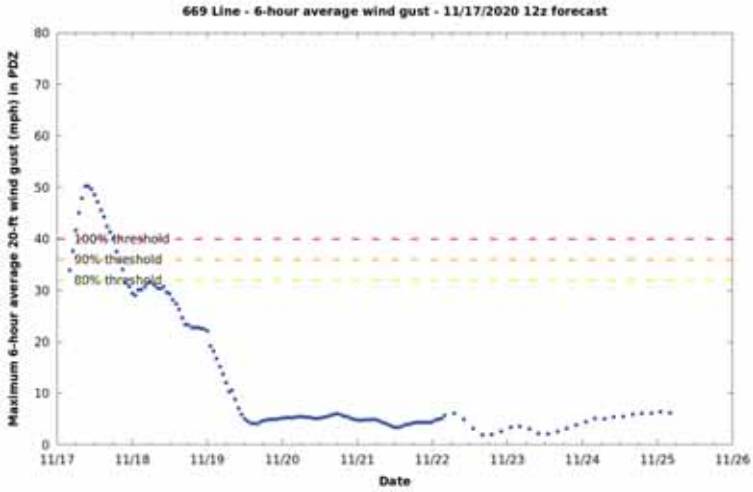
132 Line



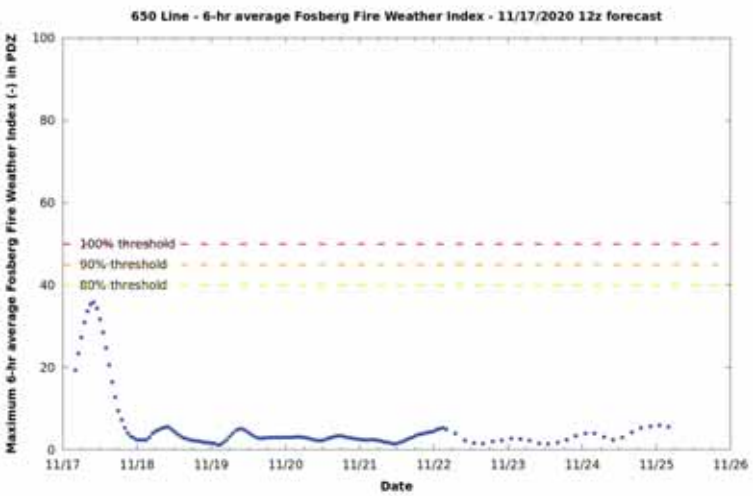


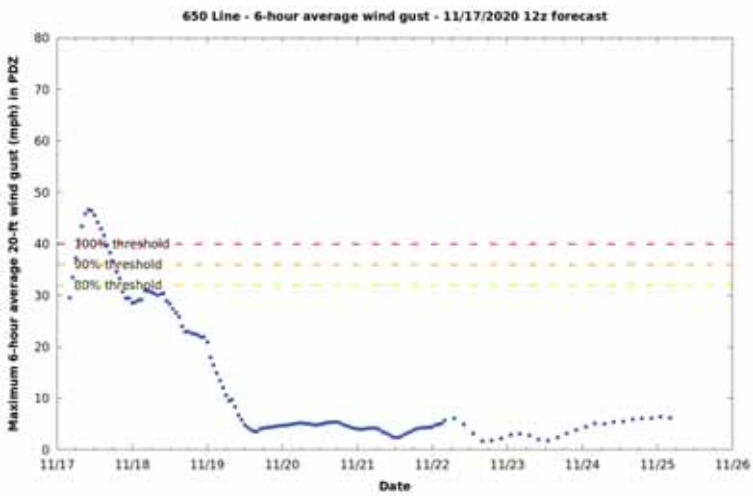
669 Line



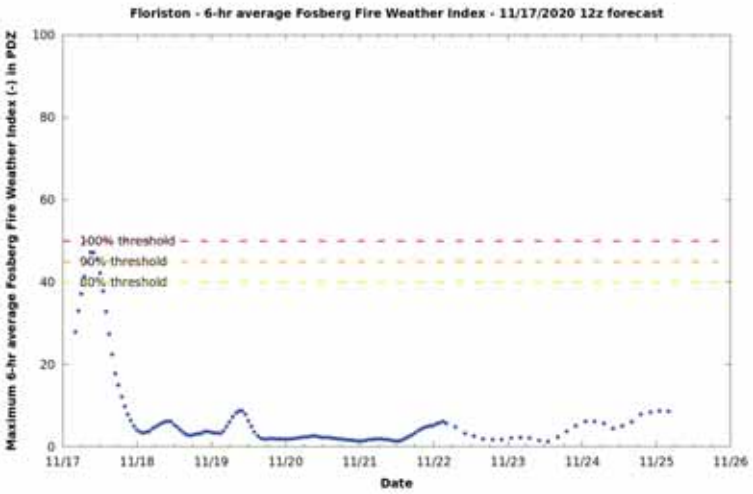


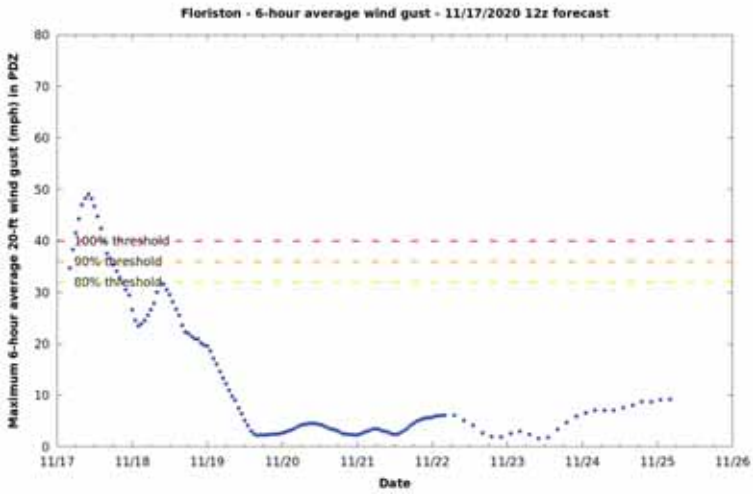
650 Line



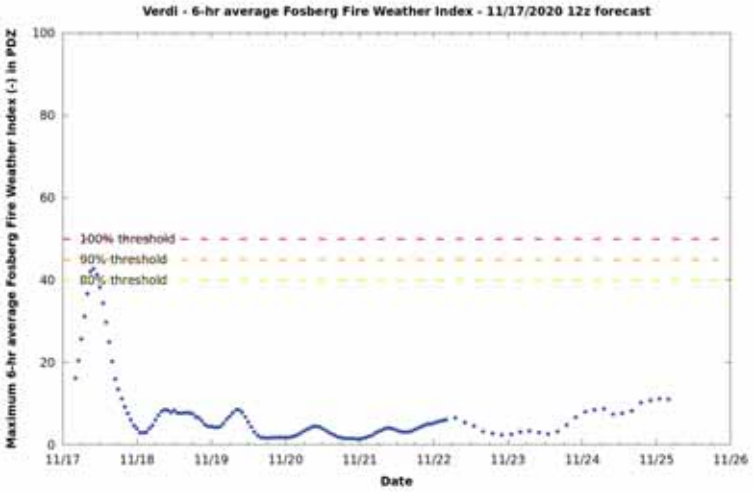


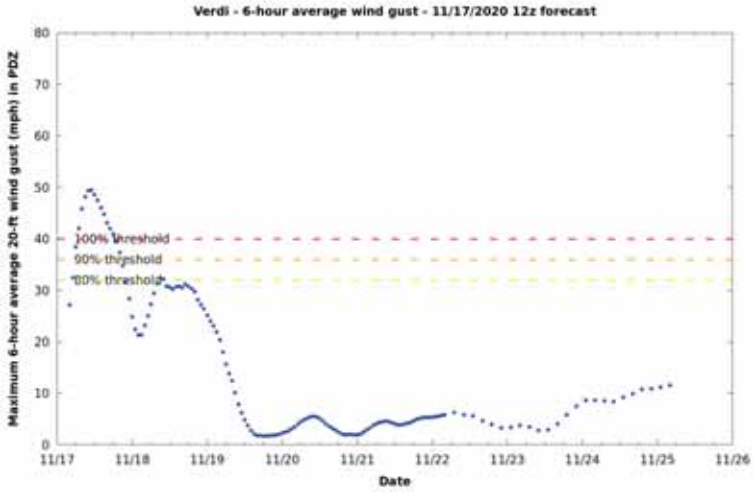
Floriston



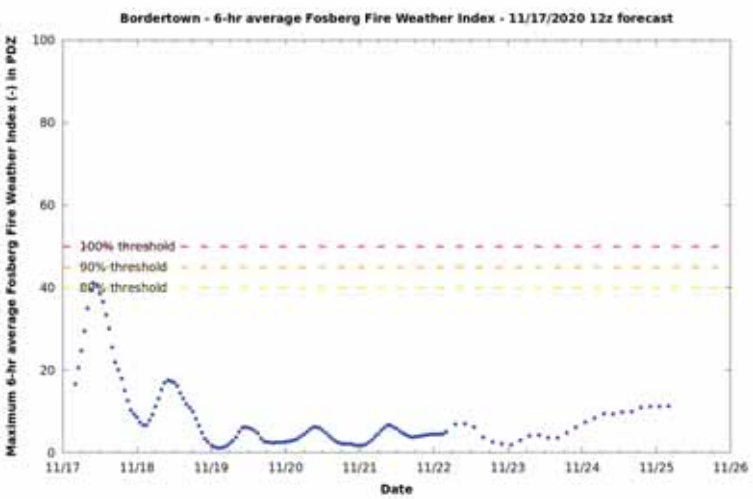


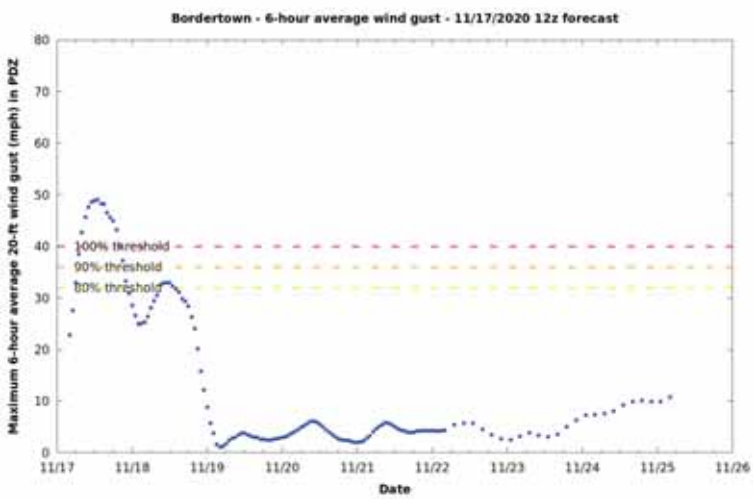
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/17/2020 12z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date


Bordertown - 6-hour average wind gust - 11/17/2020 12z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date

Liberty Utilities Fire Potential Index Forecast for 11/18/20 - 11/24/20

Zone	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23	Nov 24
North Shore	low	low	low	low	low	low	low
West Shore	low	low	low	low	low	low	low
Sierra Brooks	moderate	low	low	low	low	low	low
Glenshire	low	low	low	low	low	low	low
Portola	low	low	low	low	low	low	low
South Shore	low	low	low	low	low	low	low
Russell Valley	low	low	low	low	low	low	low
Topaz	low	low	low	low	low	low	low
Markleeville	low	low	low	low	low	low	low
Floriston Verdi	low	low	low	low	low	low	low
Bordertown	moderate	low	low	low	low	low	low

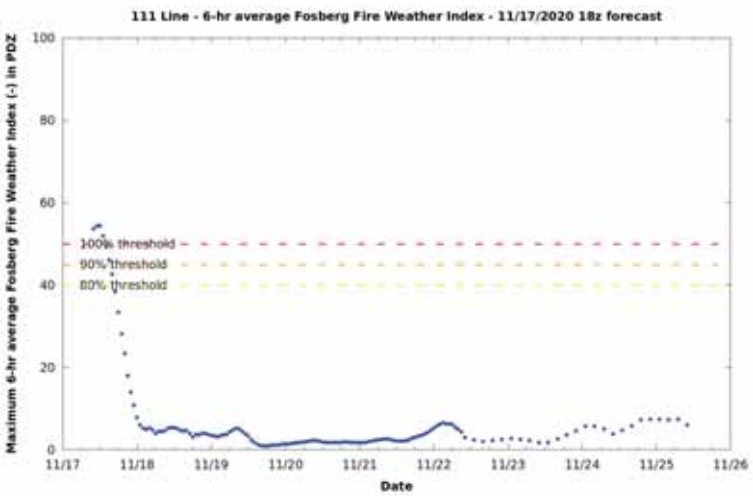
Liberty Utilities Energy Release Component Forecast for 11/18/20 - 11/24/20

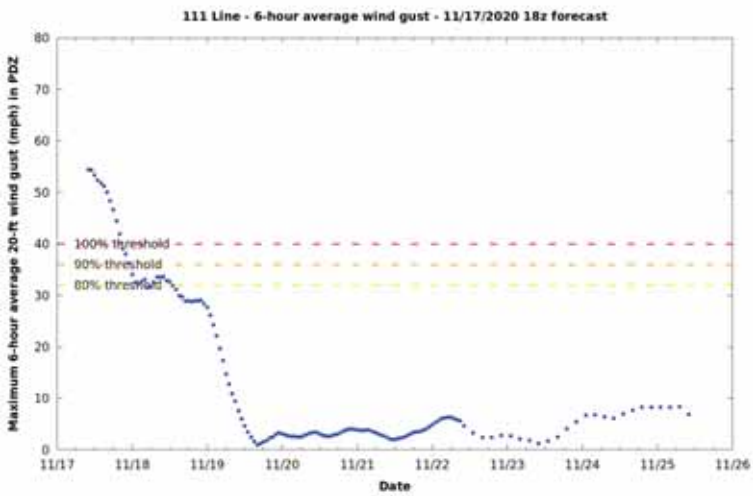
Zone	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23	Nov 24
111 Line	7.2	5.1	5.7	5.0	5.6	6.3	6.4
Portola	52.8	36.9	41.6	36.9	39.6	43.0	43.0
Sierra Brooks	61.8	49.5	52.5	46.4	50.4	54.4	55.2
Stampede	57.0	41.0	43.0	36.0	37.0	39.0	40.0
Russel Valley	63.0	48.1	50.6	40.5	40.4	40.1	39.1
Hobart	53.9	41.6	42.4	35.2	35.2	34.7	34.3
Sagehen Tap	17.9	13.7	14.2	12.0	12.0	12.0	12.0
Sunnyside	21.1	14.8	15.8	11.6	12.0	12.7	11.3
Ward Canyon East	54.5	38.2	40.9	30.0	30.9	32.7	29.1
Tahoe Park Heights	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alpine Backside	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ward Canyon West	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-17	42.4	31.4	33.0	26.8	29.7	32.3	32.3
Tah 73-36	1.5	1.1	1.0	0.8	0.7	0.7	0.7
Tah 73-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 7300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tah 73-74	44.1	32.9	37.0	31.0	35.7	38.1	39.1
Angora Ridge and Lily Lake	1.0	0.6	0.8	0.6	0.6	0.6	0.6

Cathedral Spring Creek Emerald Bay	19.0	12.9	15.6	12.0	13.1	14.1	14.1
Mey 3400 Angora Creek	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mey 3300 r1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mul 1296 r4	49.3	33.3	35.9	28.2	32.9	37.1	38.6
Sorensons Tap	25.2	16.5	19.2	15.7	18.4	20.3	21.0
Mul1296 r3	55.2	37.7	40.2	30.5	34.3	38.0	39.7
Topaz	48.9	34.1	38.4	29.5	34.1	39.1	39.9
Heavenly Lateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 3	27.2	19.3	22.1	18.7	21.2	23.6	23.9
640 Tier 2	58.7	40.4	44.9	36.1	40.0	43.7	44.5
609 and Underbuild	2.6	1.8	1.9	1.6	1.8	2.0	2.0
625 Line	4.9	3.8	3.9	3.5	3.8	4.1	4.2
Bky 5200	57.3	38.1	45.2	35.2	32.6	33.8	30.6
Old Country Road	57.7	42.4	45.4	37.6	33.4	33.1	30.3
Tah 52-68	21.9	16.4	16.4	13.6	11.7	10.9	10.2
The Grid	60.9	39.5	46.7	33.7	33.0	33.5	31.5
Canterbury and Commonwealth	44.7	29.3	34.5	24.9	24.9	25.7	24.2
Bky 5100 to NVE	25.6	16.8	19.7	14.3	14.3	14.7	13.8
Beacon Tap	69.0	53.0	55.0	46.0	45.0	46.0	46.0
Glenshire and 608	66.9	51.8	54.4	44.6	46.2	46.7	46.2
Alpine Meadows and 629	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squaw Valley	9.7	9.7	10.4	8.8	10.0	10.9	10.9
132 Line	13.9	13.9	14.7	12.1	12.9	13.6	13.9
669 Line	49.4	49.4	51.9	43.6	45.0	48.7	49.4
650 Line	27.7	27.7	29.2	25.4	27.2	29.3	30.1
Floriston	38.1	38.1	41.8	33.3	36.0	38.1	39.0
Verdi	43.6	43.6	46.7	38.2	43.1	46.7	48.7
Bordertown	49.2	49.2	51.0	42.6	47.0	51.4	52.4

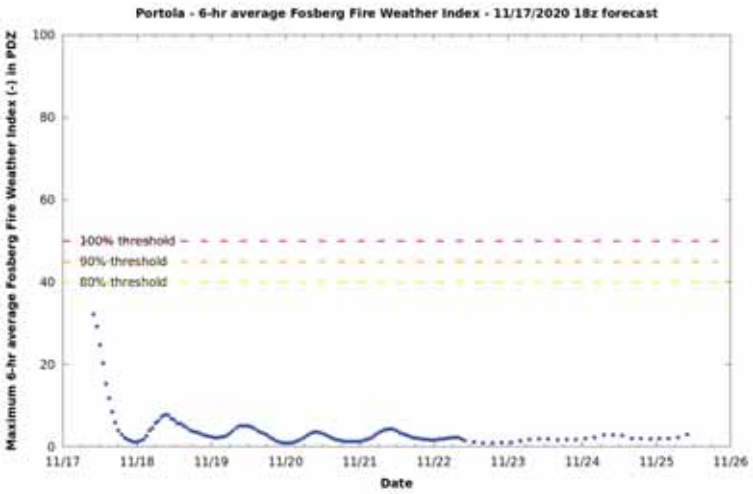
Liberty Utilities Fire Weather Summary Plots - 11/17/2020 18z forecast

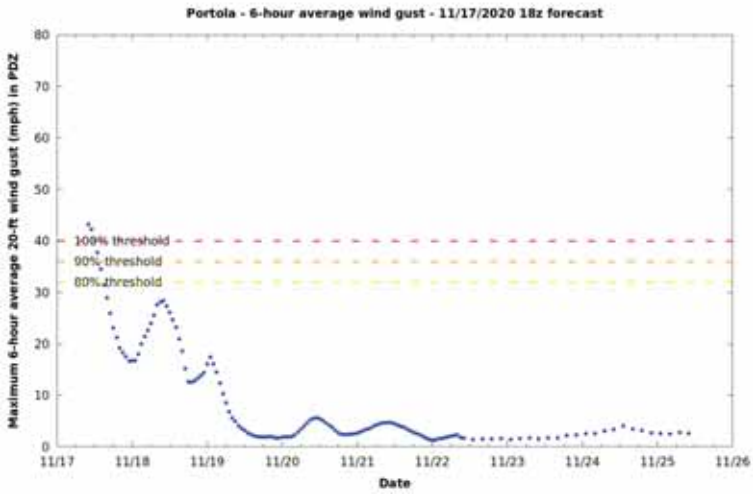
111 Line



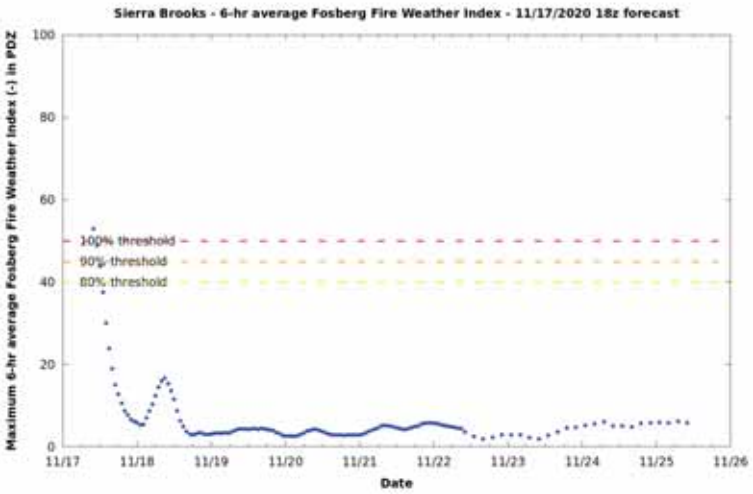


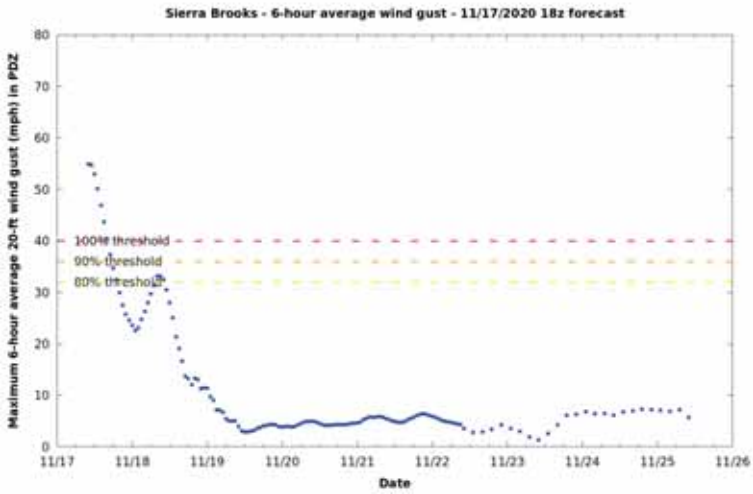
Portola



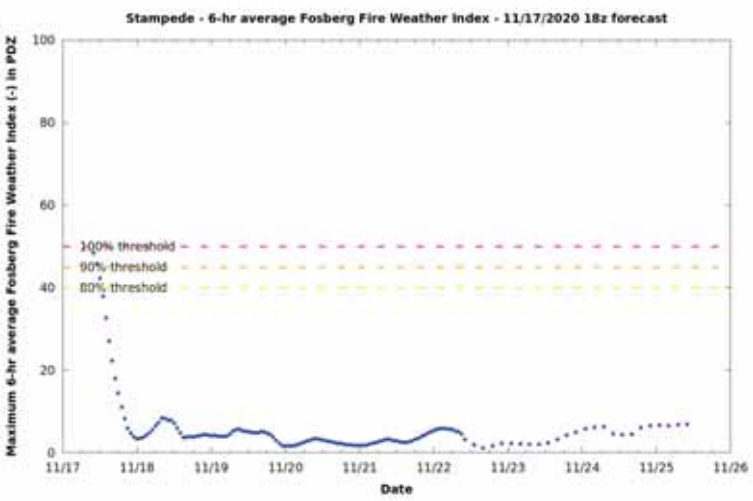


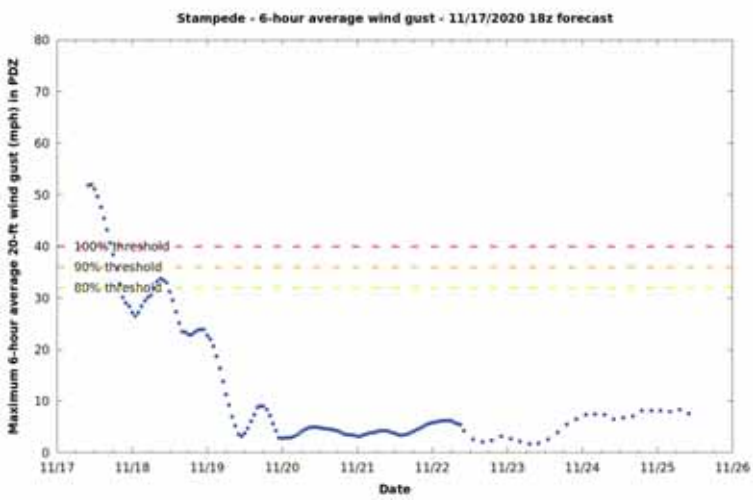
Sierra Brooks



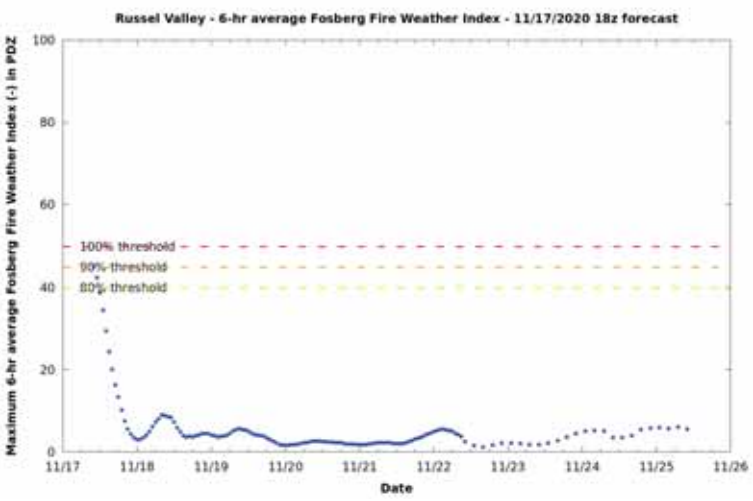


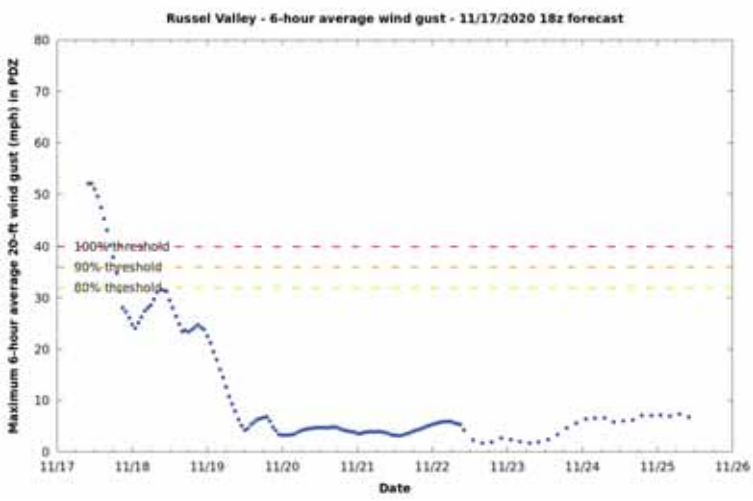
Stampede





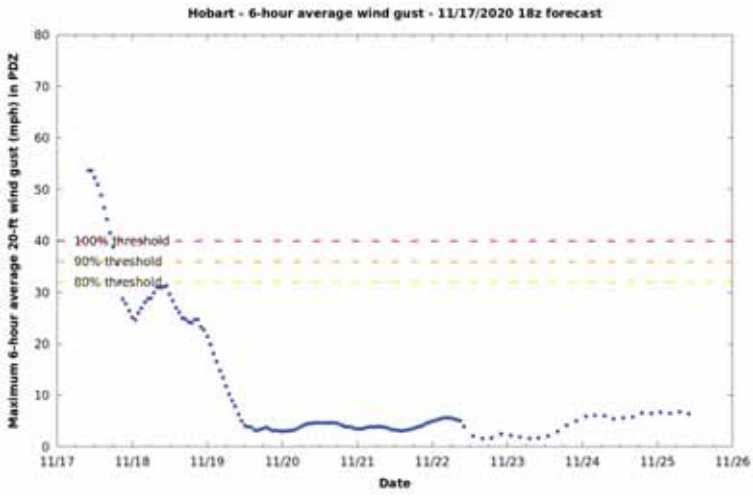
Russell Valley



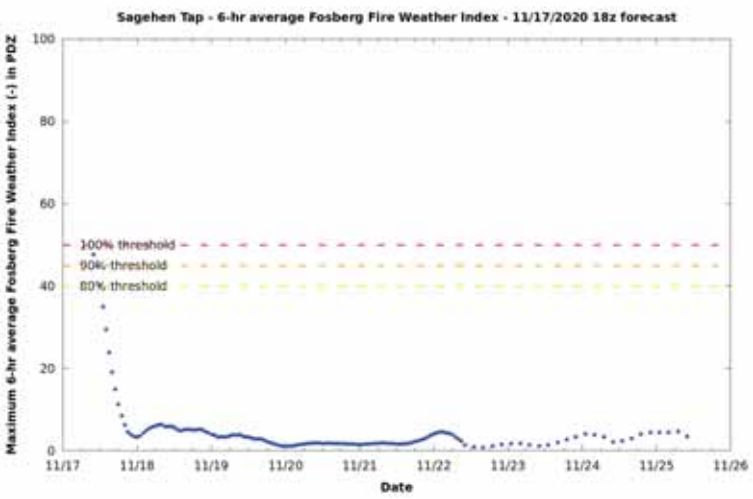


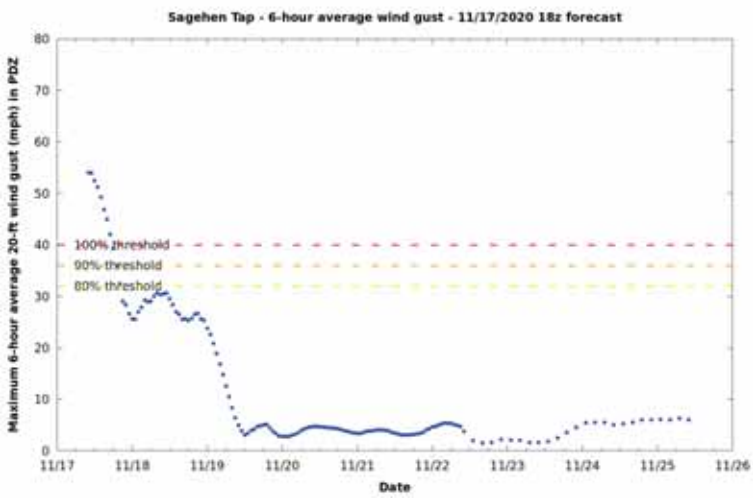
Hobart



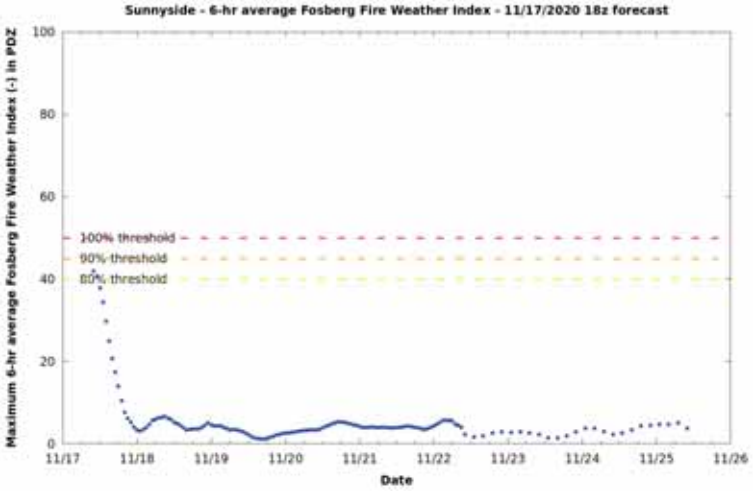


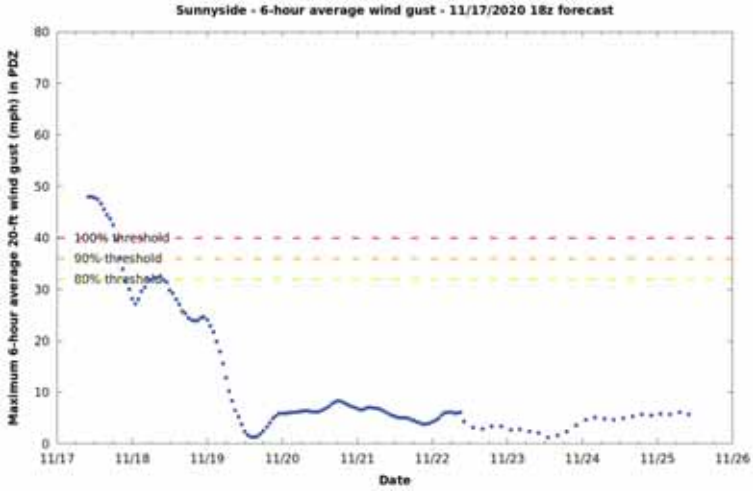
Sagehen tap



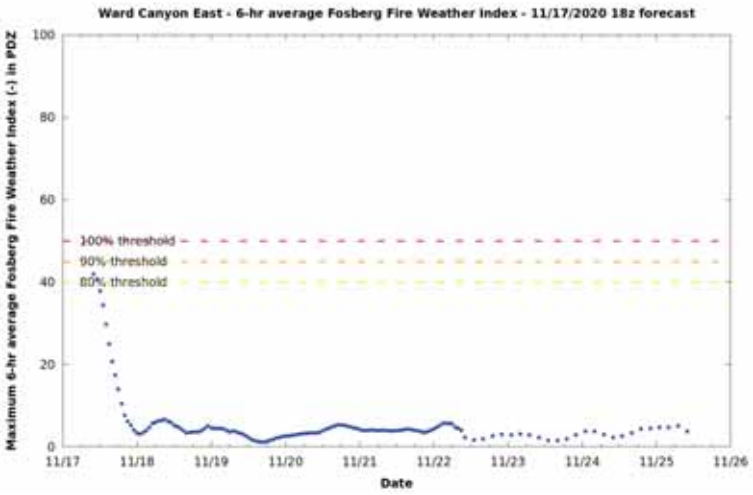


Sunnyside



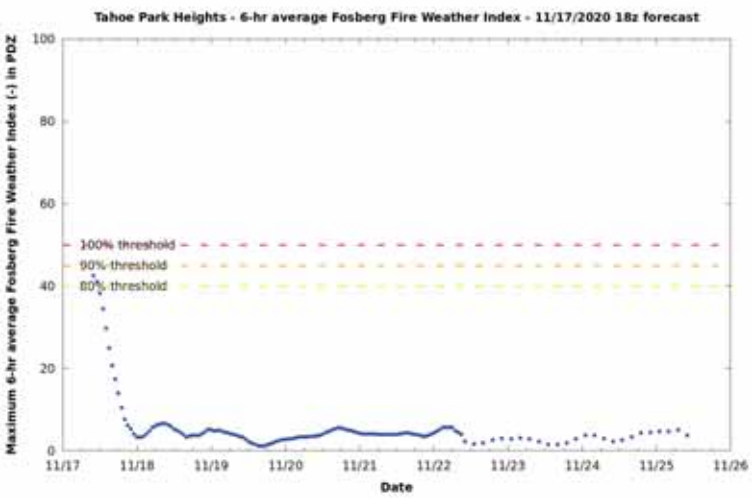


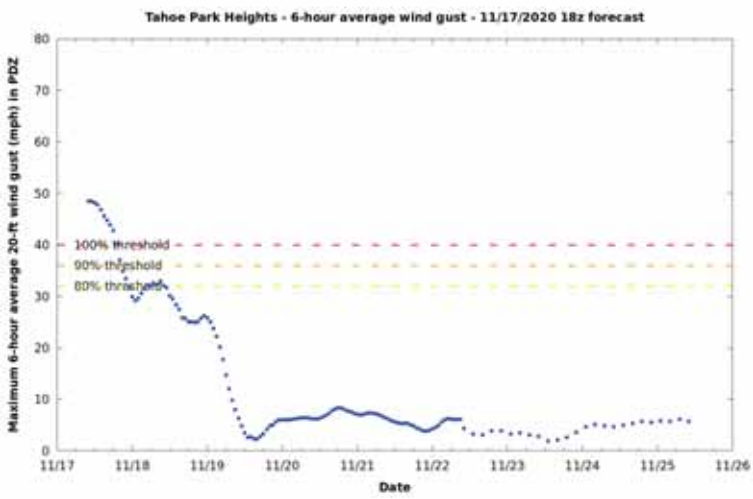
Ward Canyon East



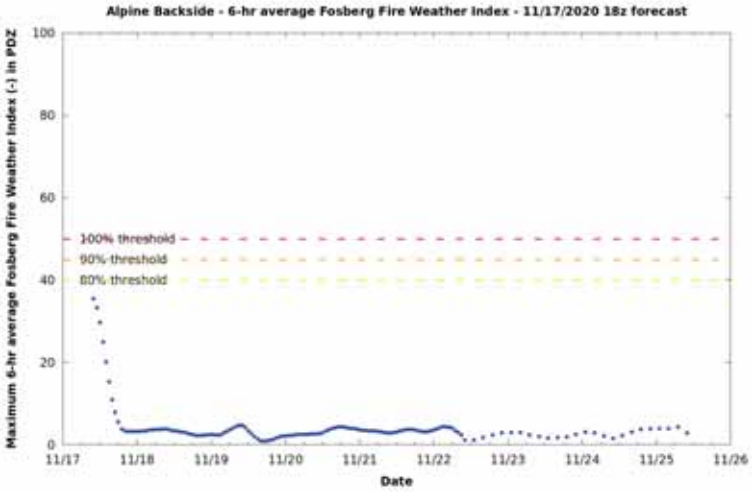


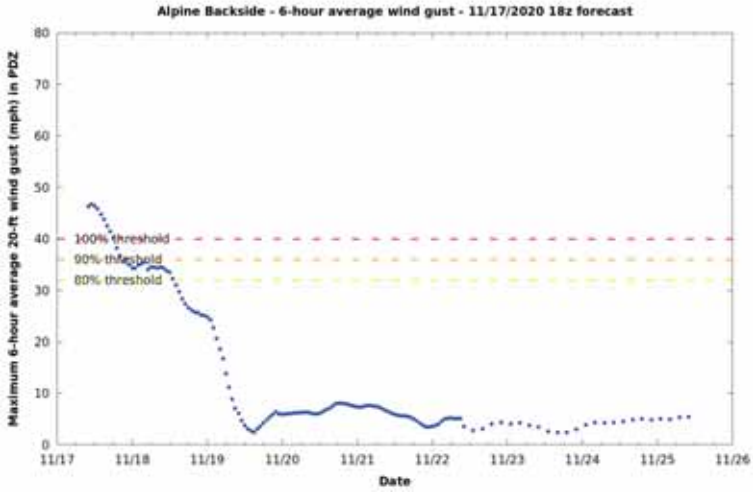
Tahoe Park Heights



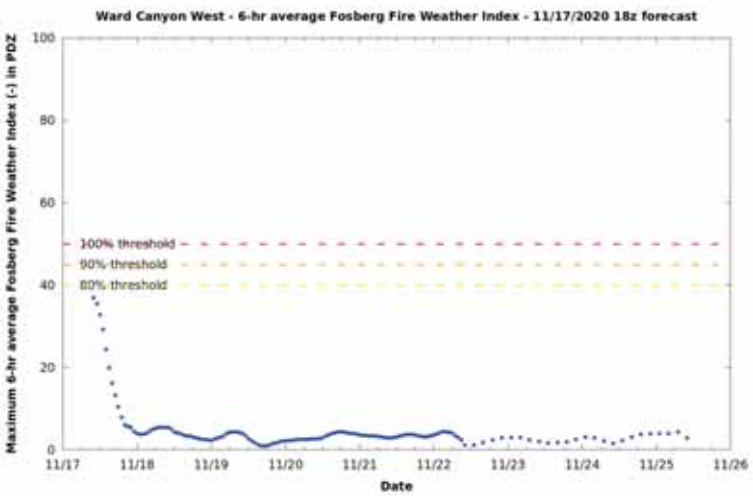


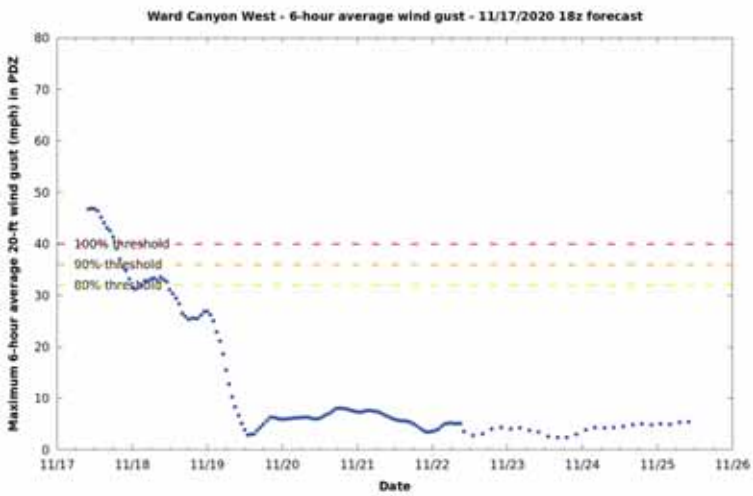
Alpine Backside



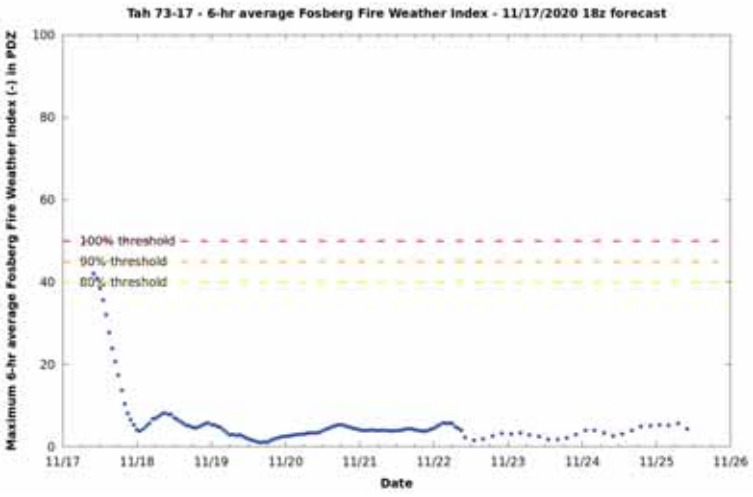


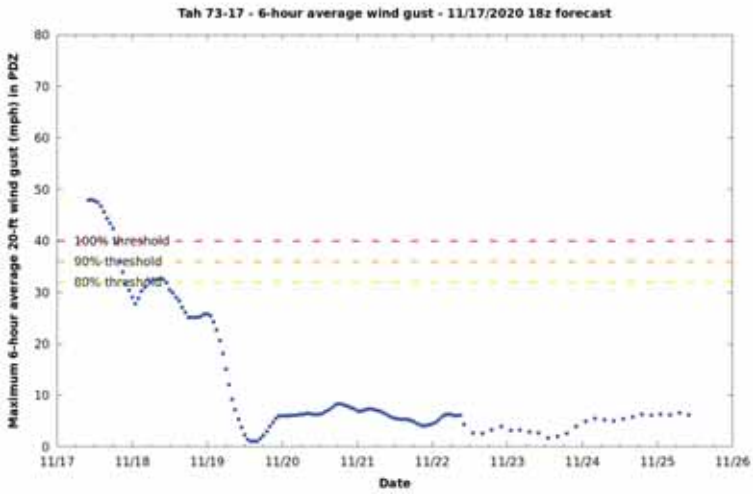
Ward Canyon West



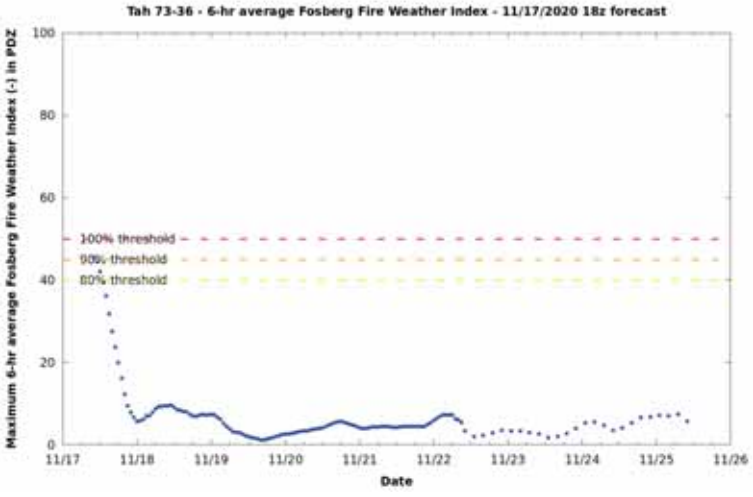


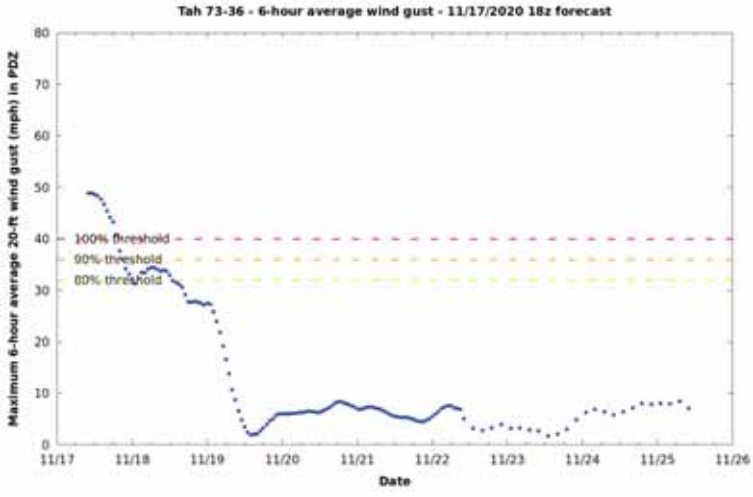
Tah 73-17



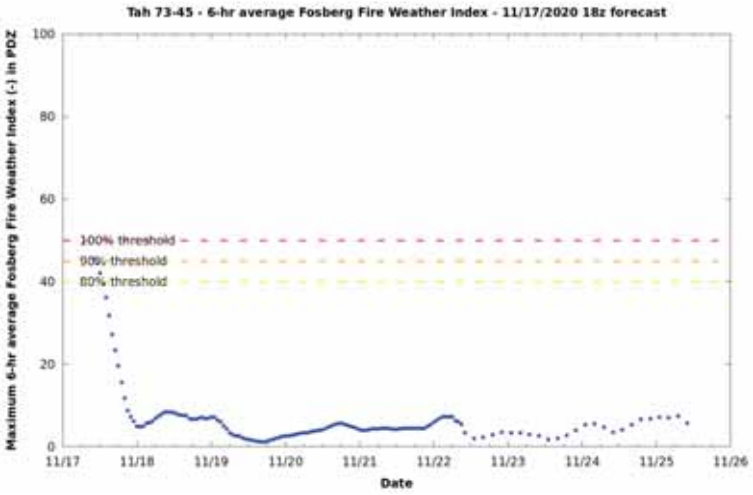


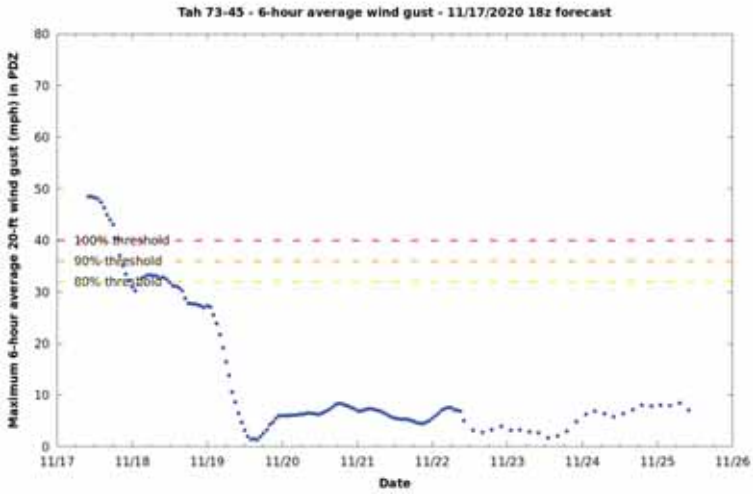
Tah 73-36



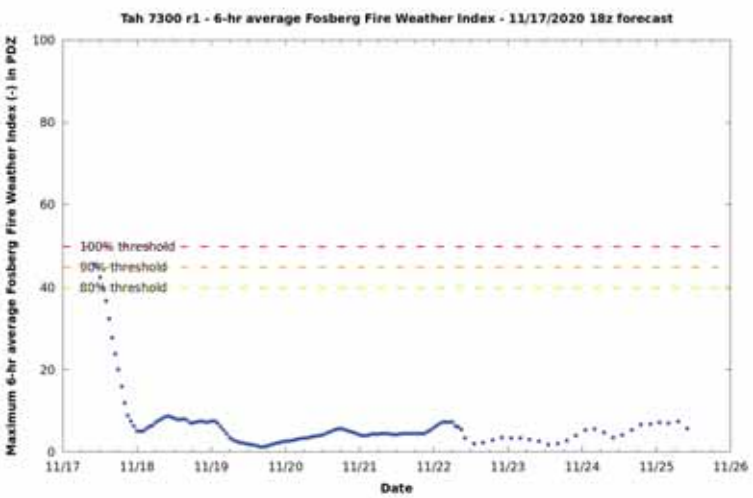


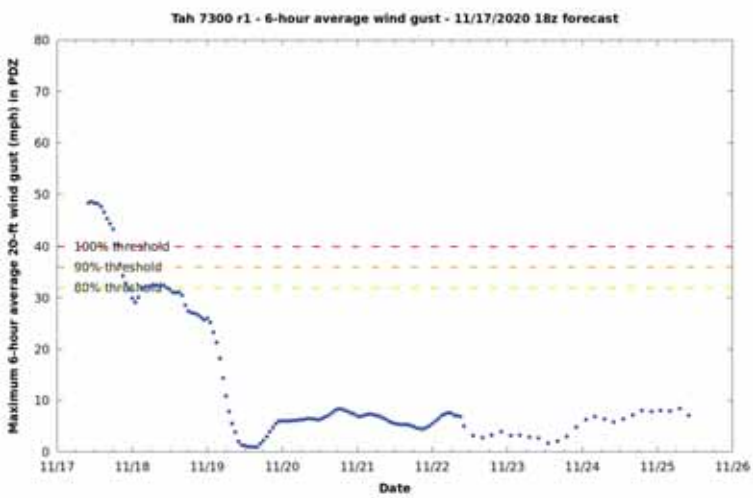
Tah 73-45



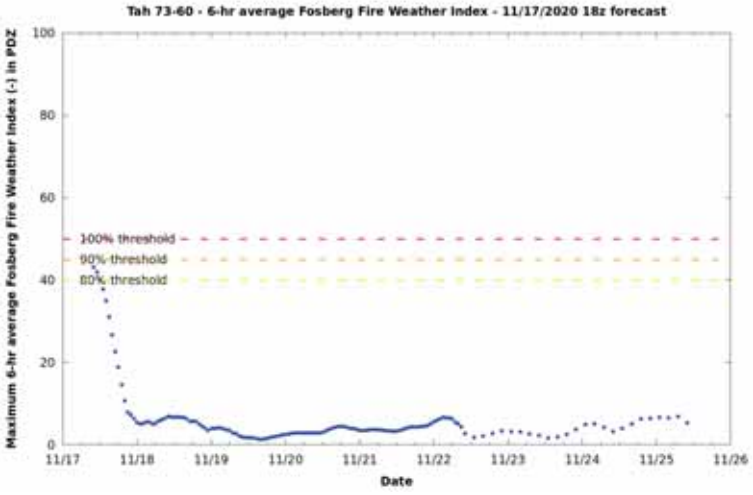


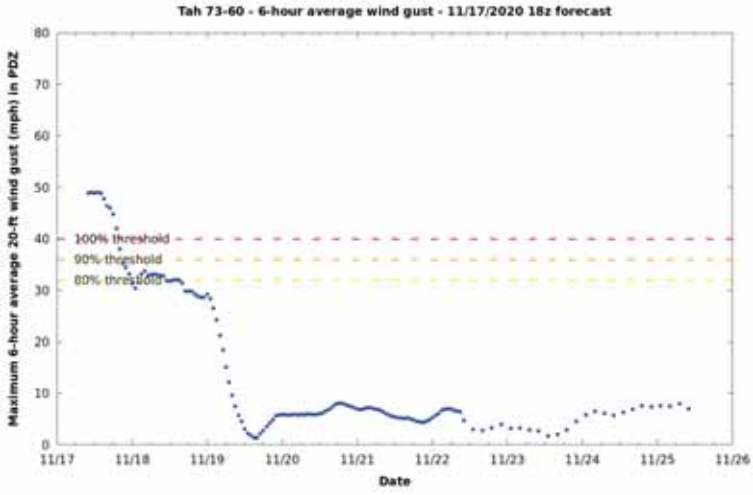
Tah 7300 r1



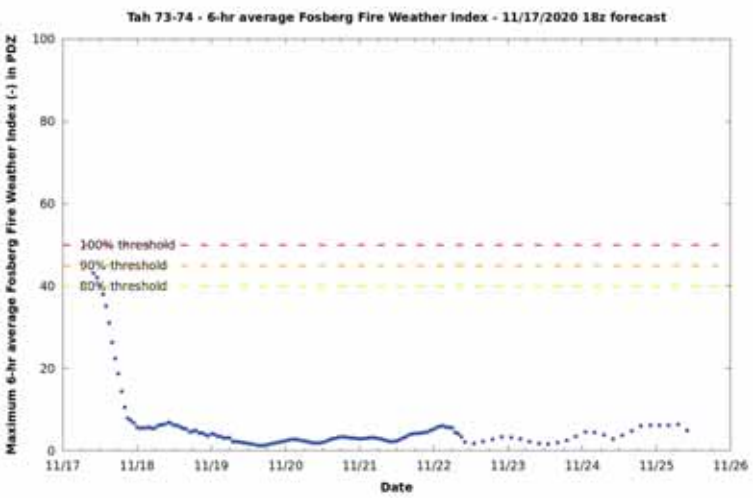


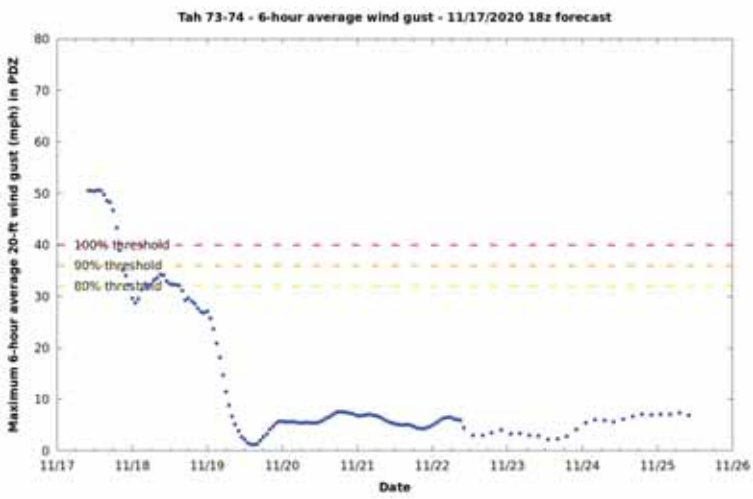
Tah 73-60



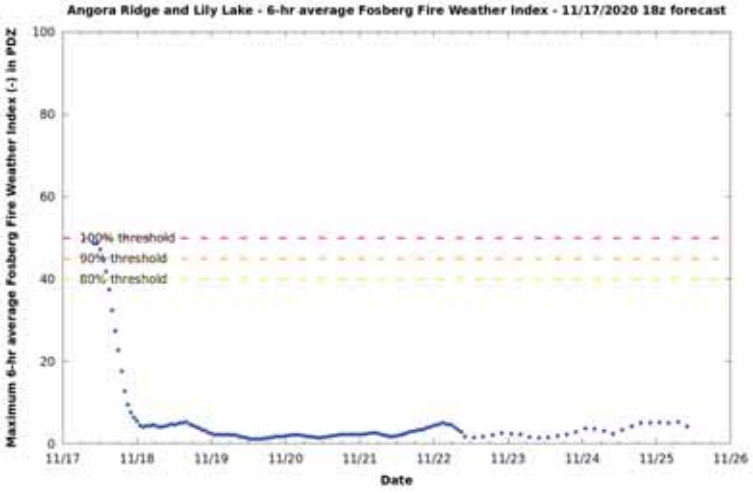


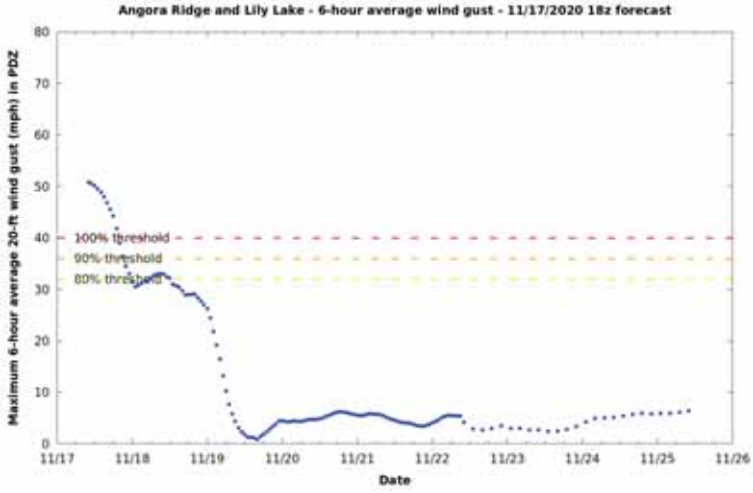
Tah 73-74



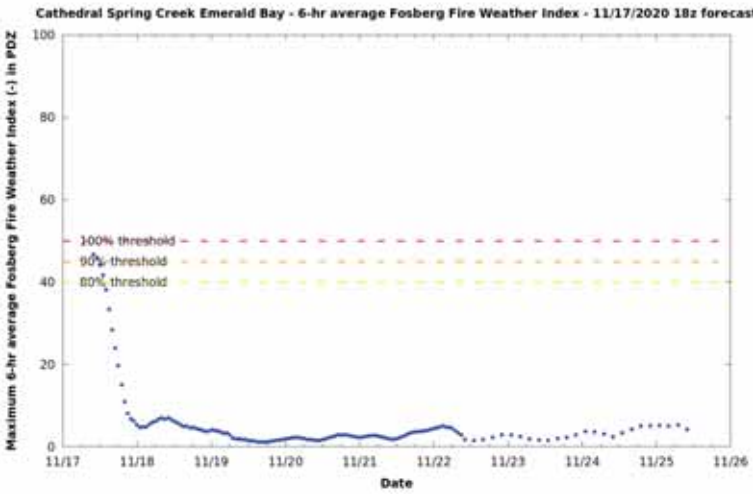


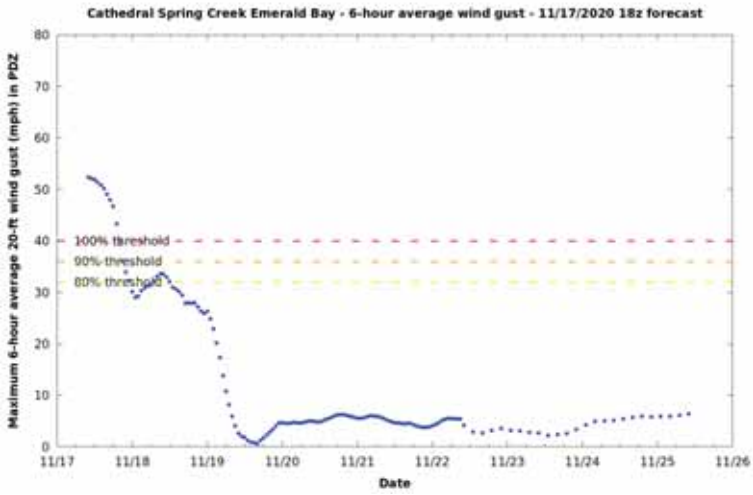
Angora Ridge and Lily Lake



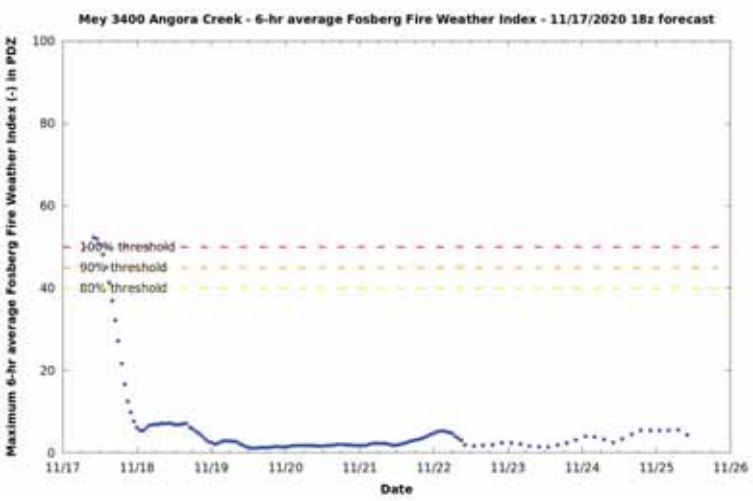


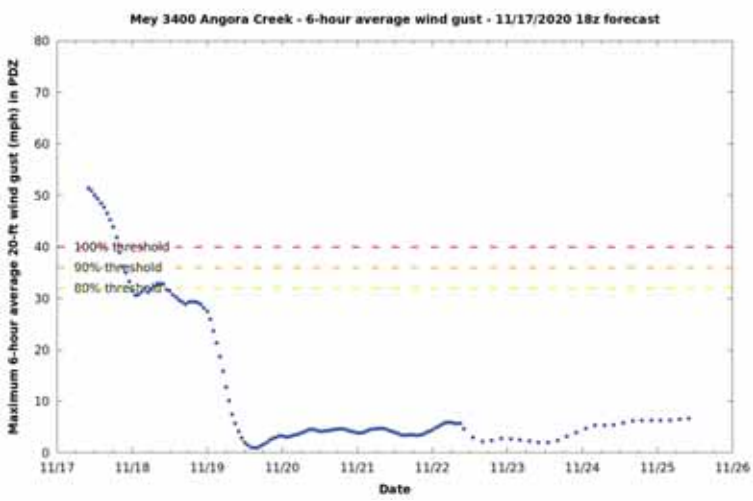
Cathedral Spring Creek Emerald Bay



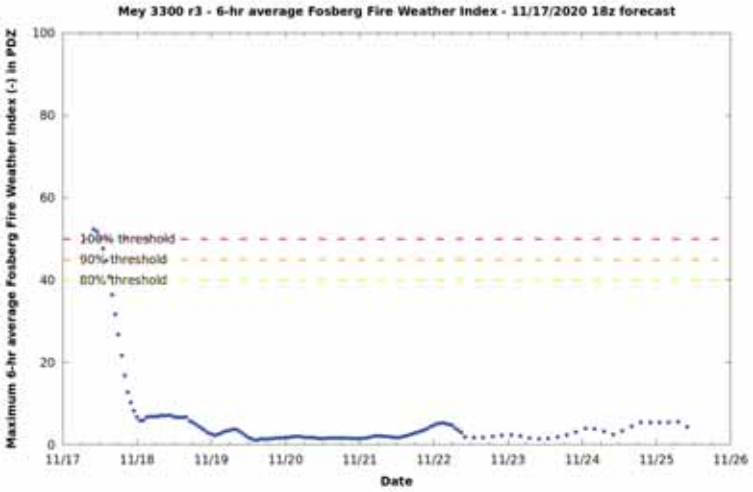


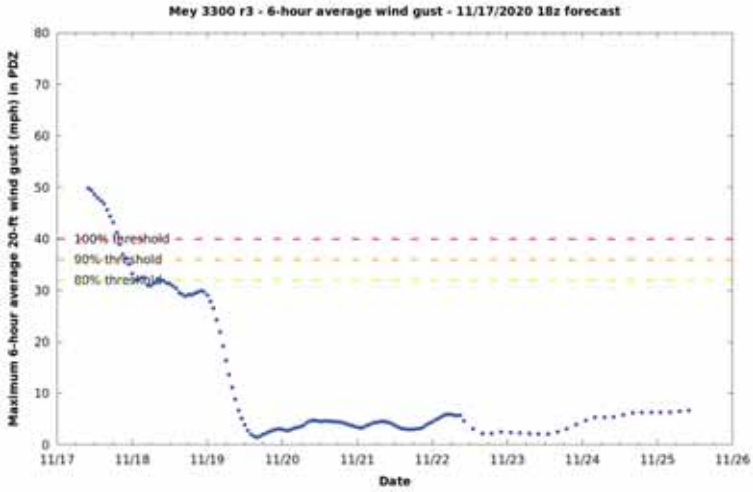
Mey 3400 Angora Creek



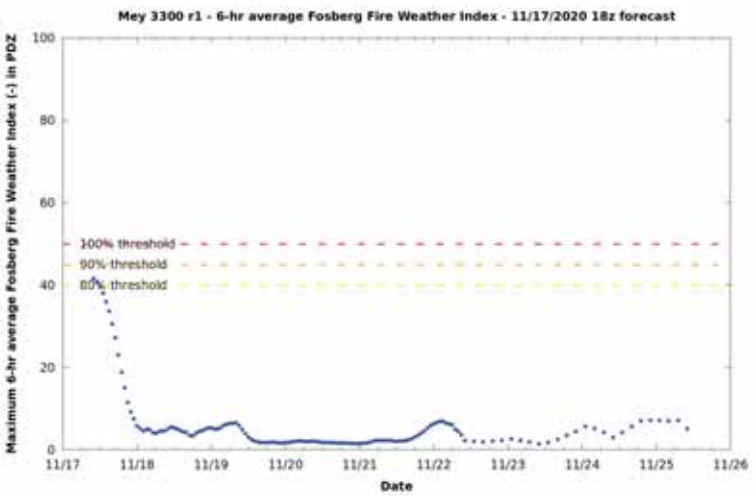


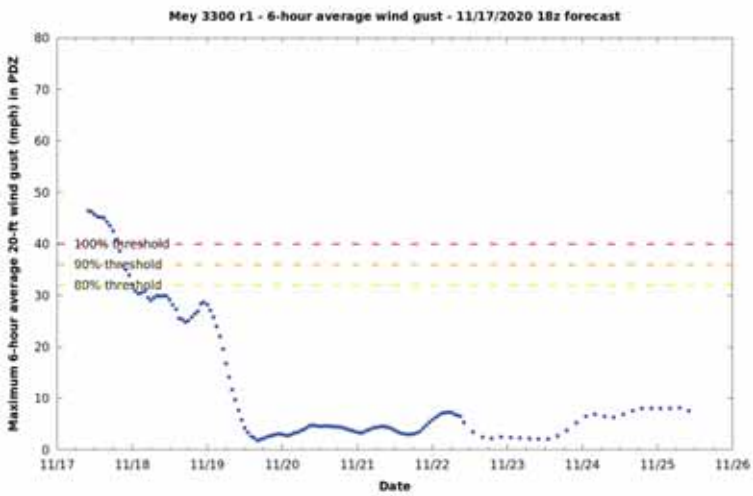
Mey 3300 r3



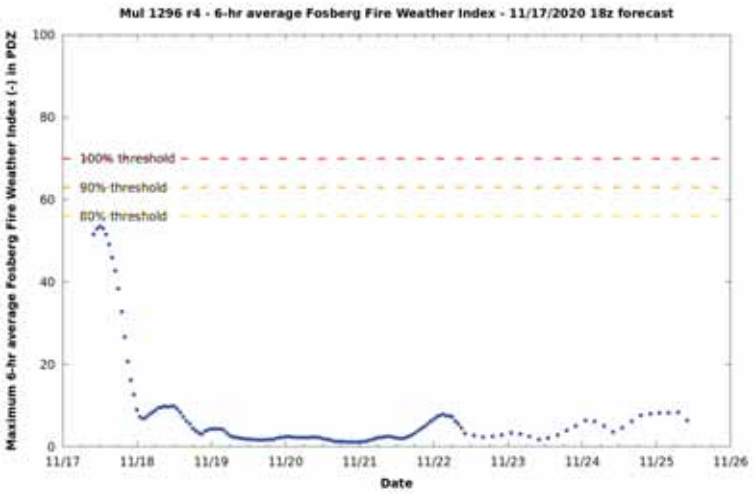


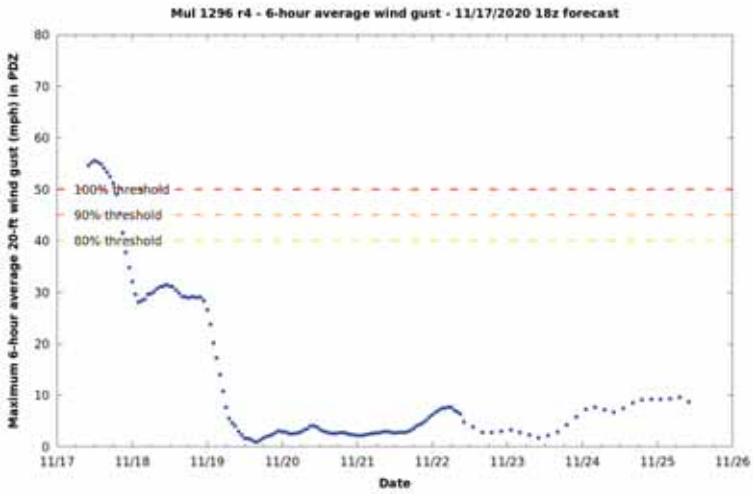
Mey 3300 r1



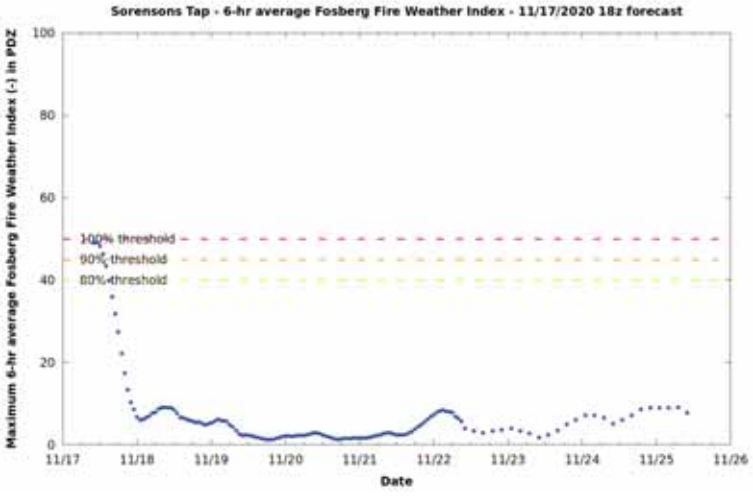


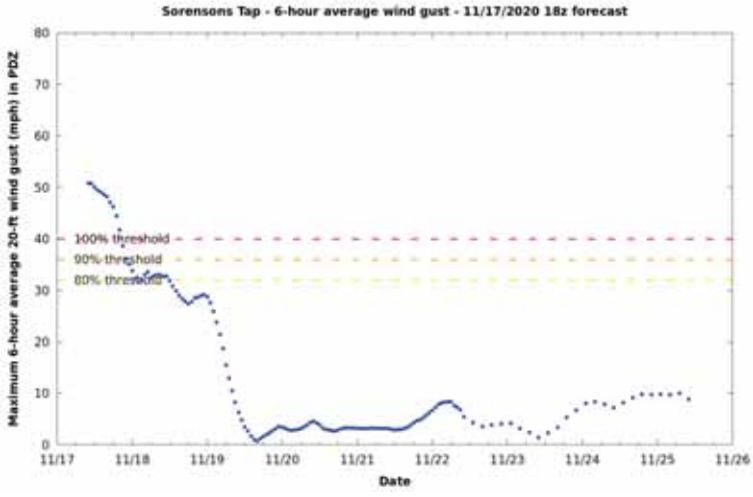
Mul 1296 r4



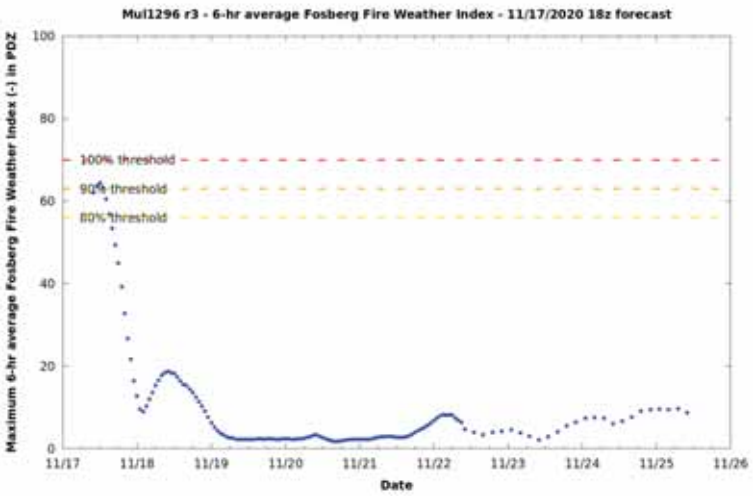


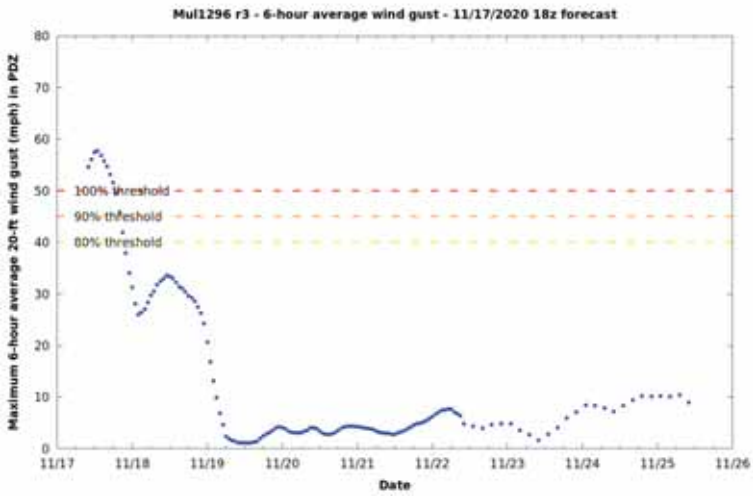
Sorensons Tap



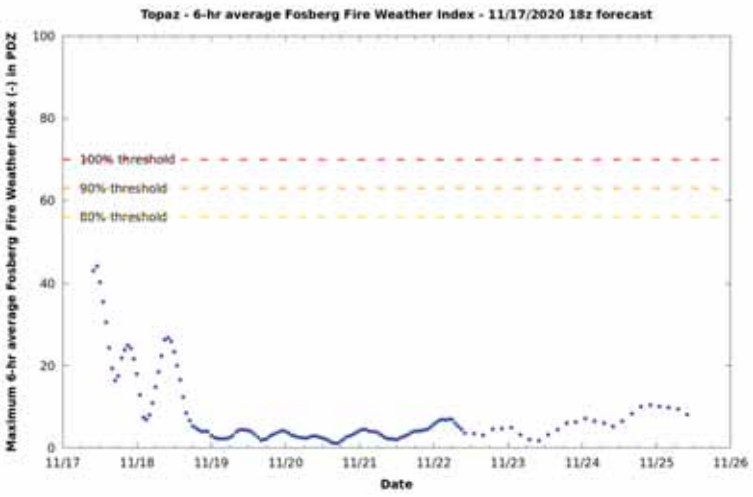


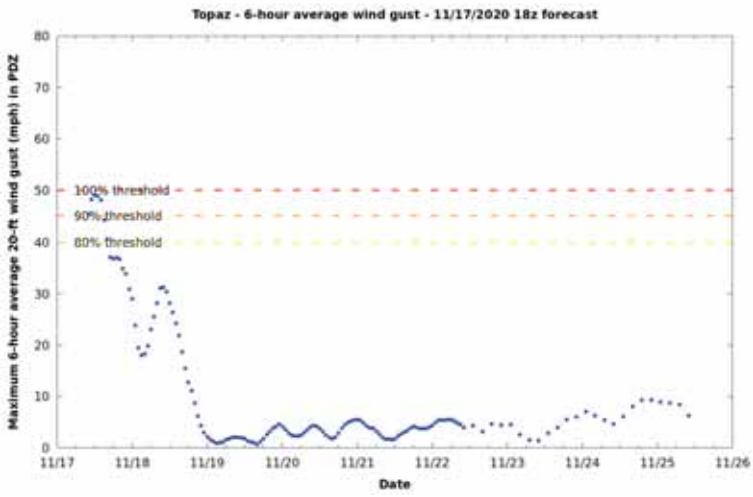
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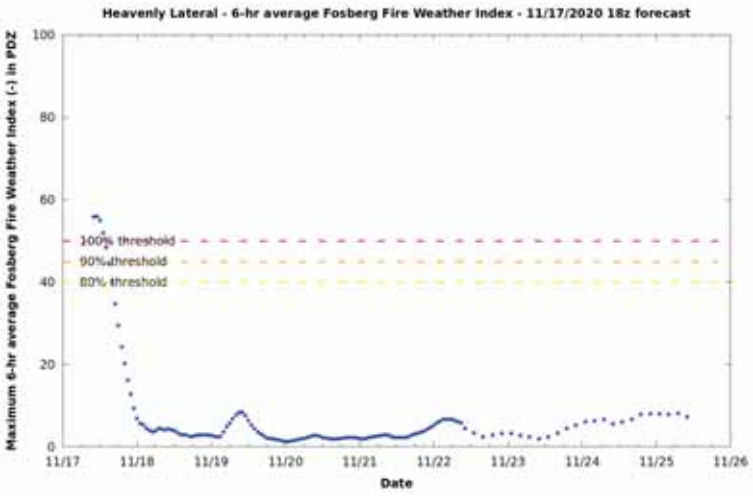


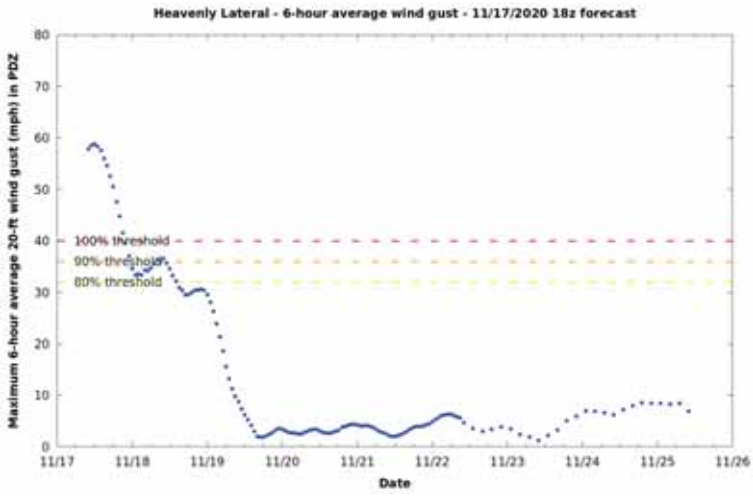
Topaz



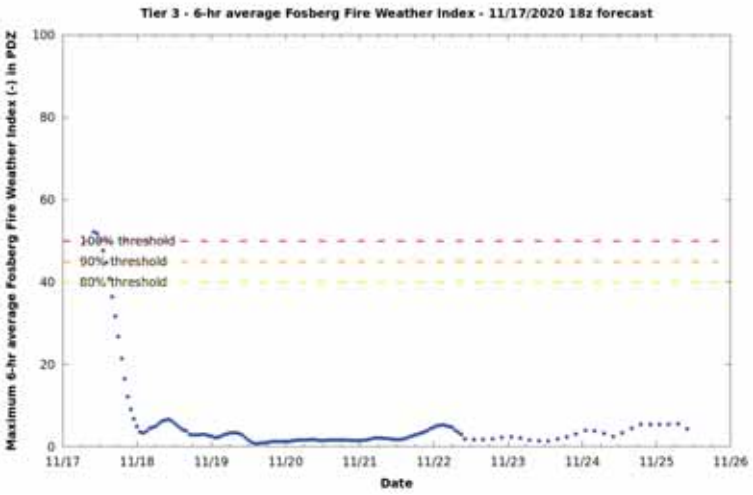


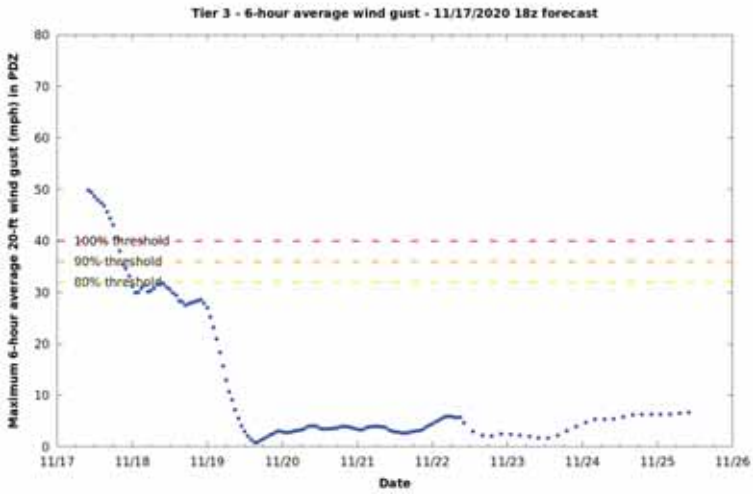
Heavenly Lateral



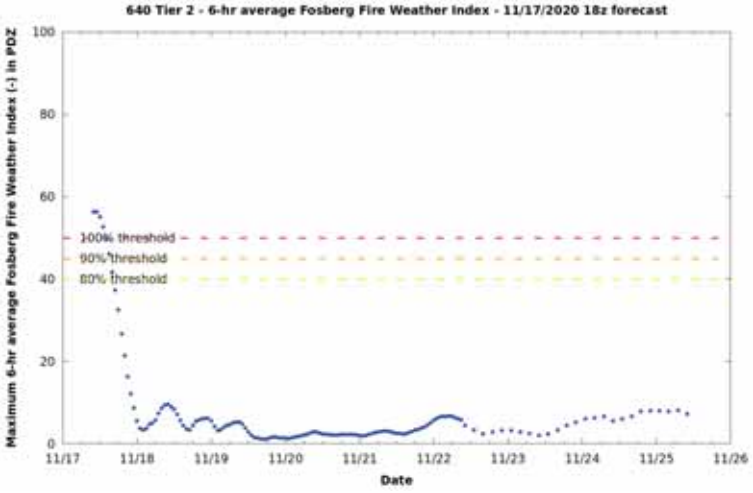


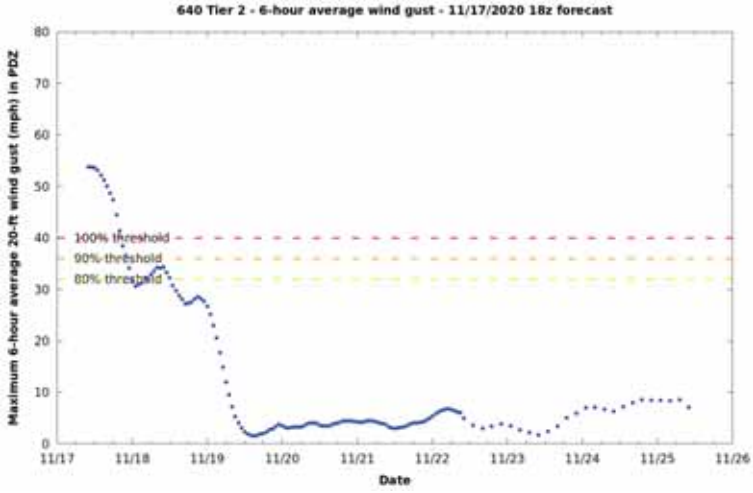
Tier 3



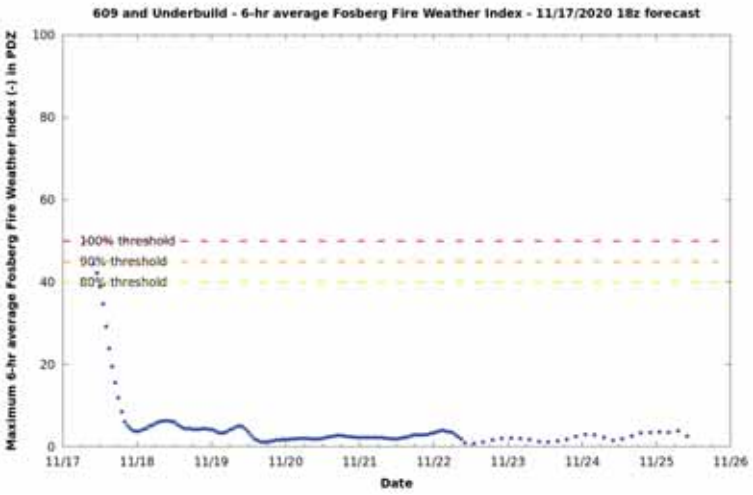


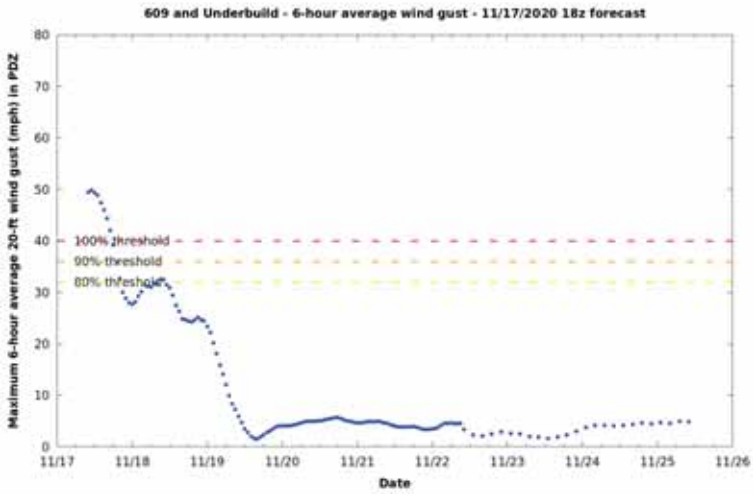
640 Tier 2



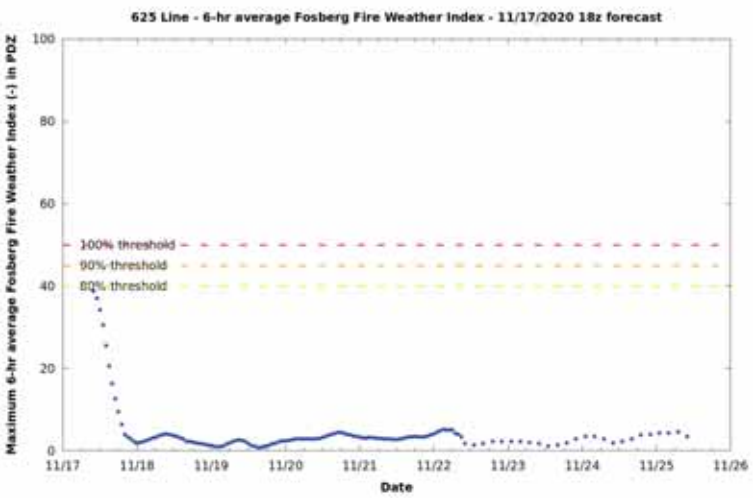


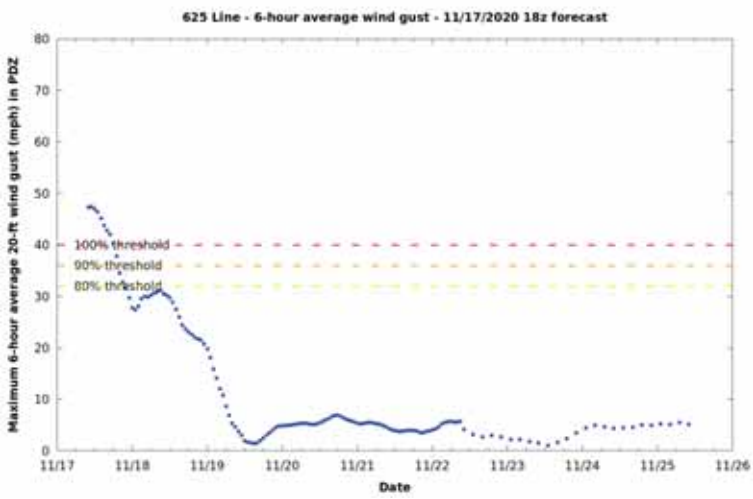
609 and Underbuild



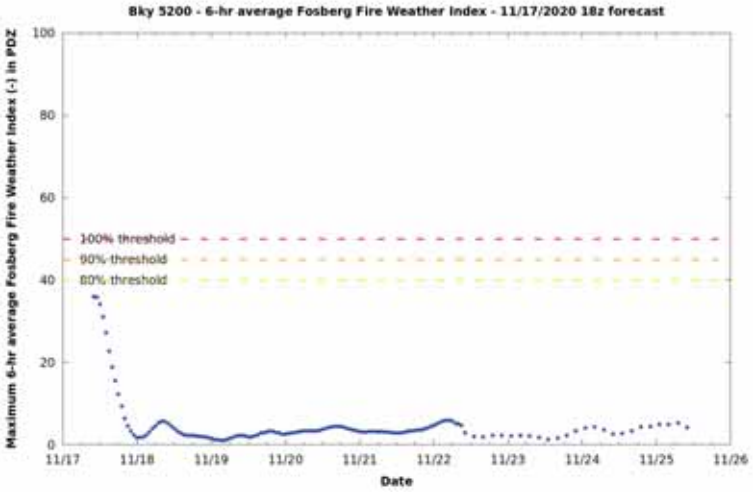


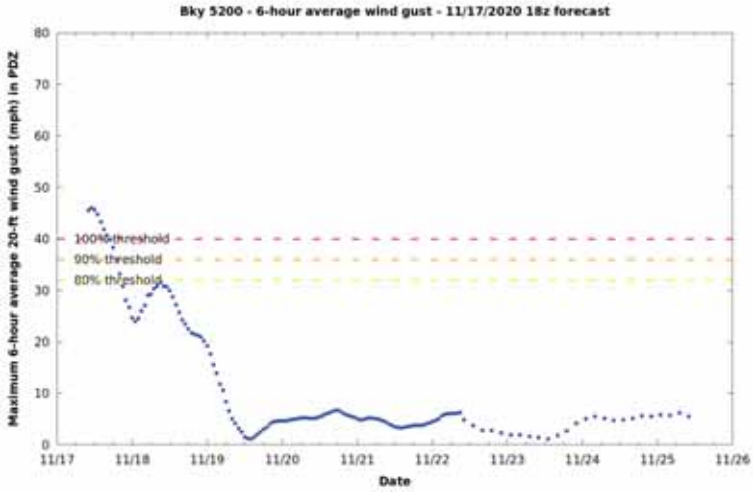
625 Line



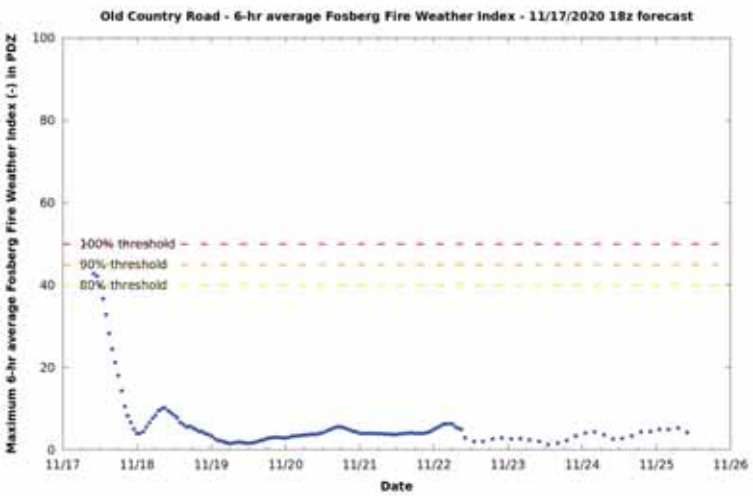


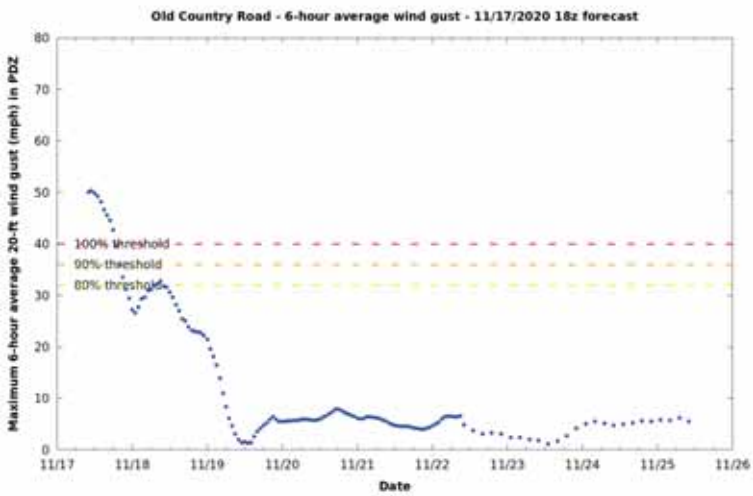
Bky 5200



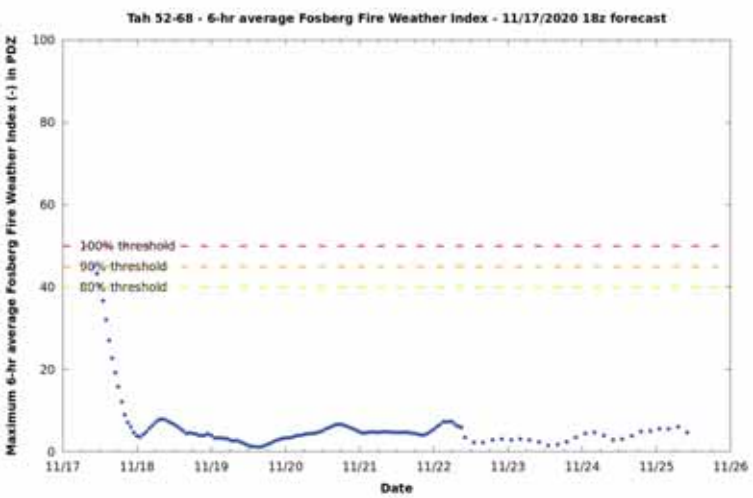


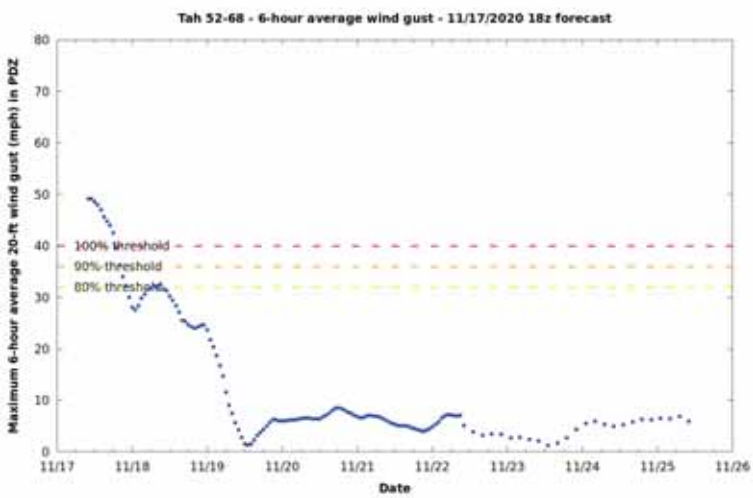
Old Country Road



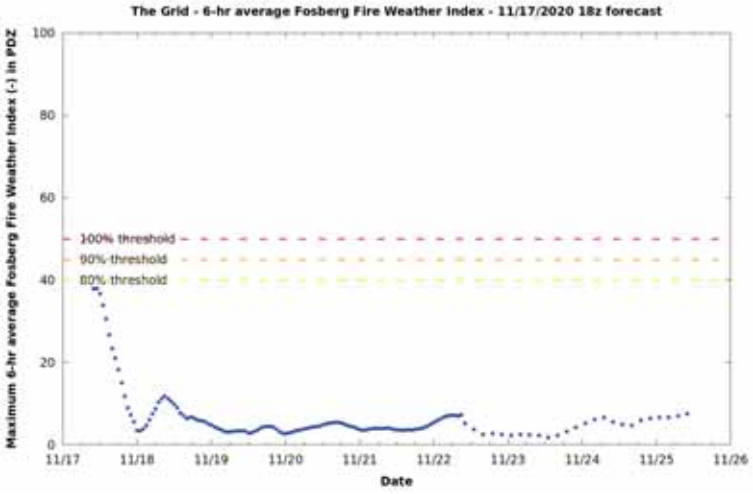


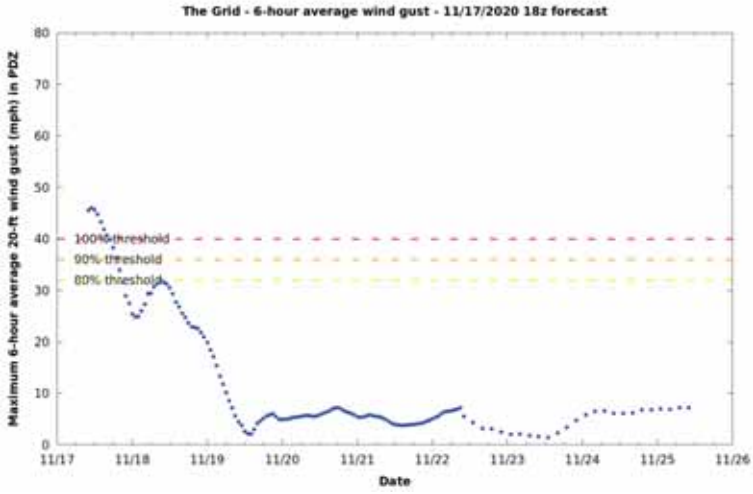
Tah 52-68



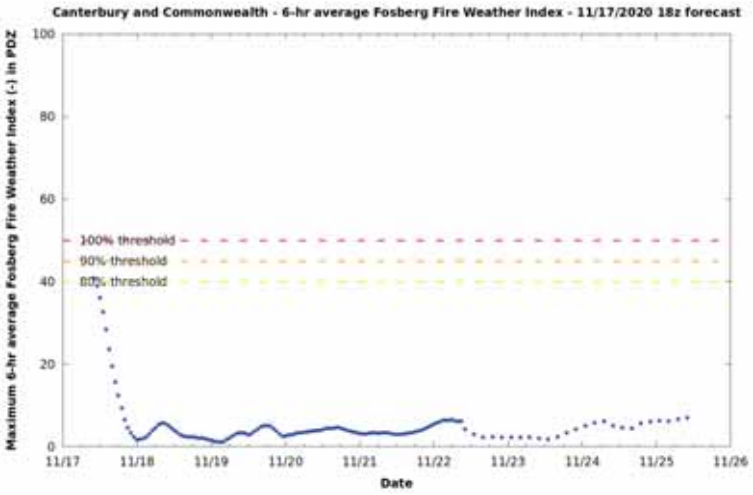


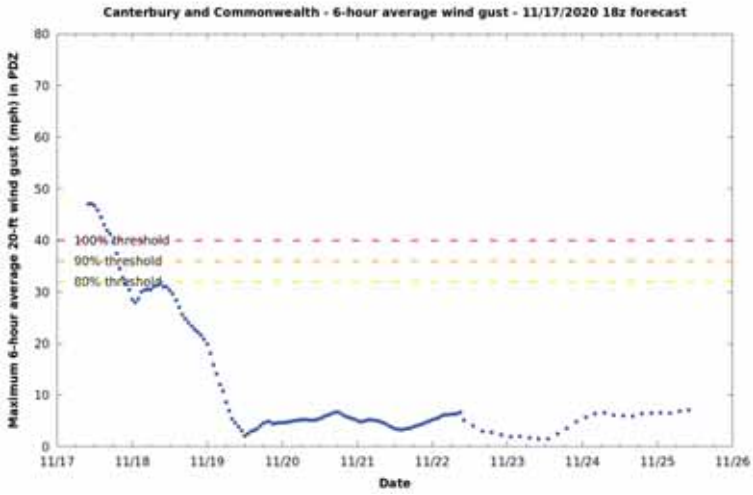
The Grid



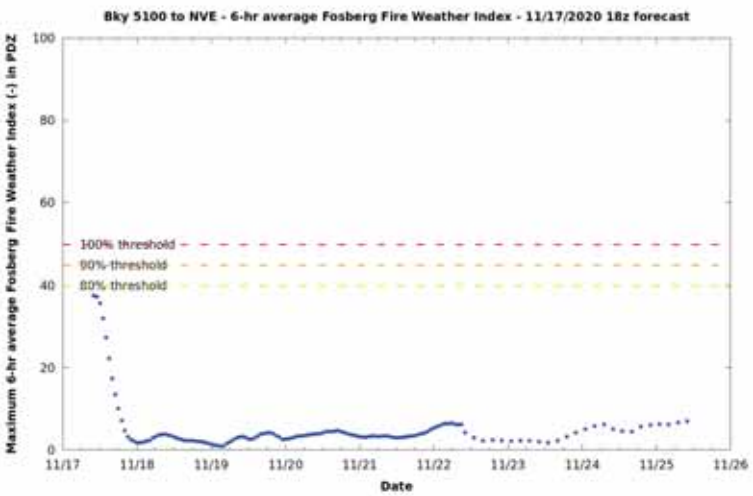


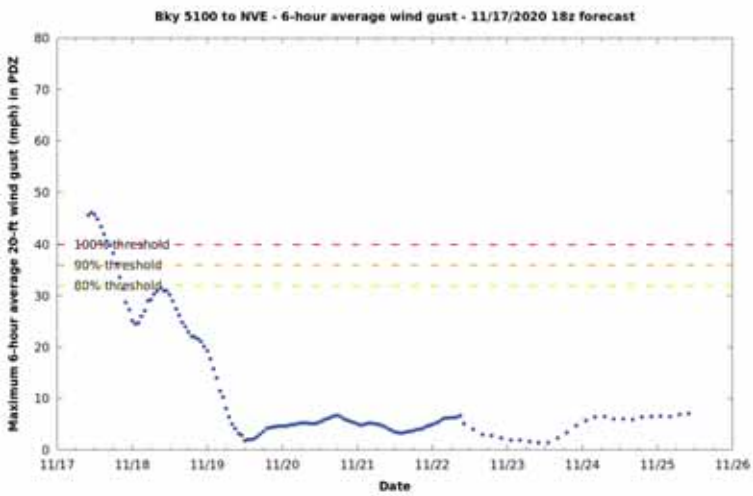
Canterbuy and Commonwealth



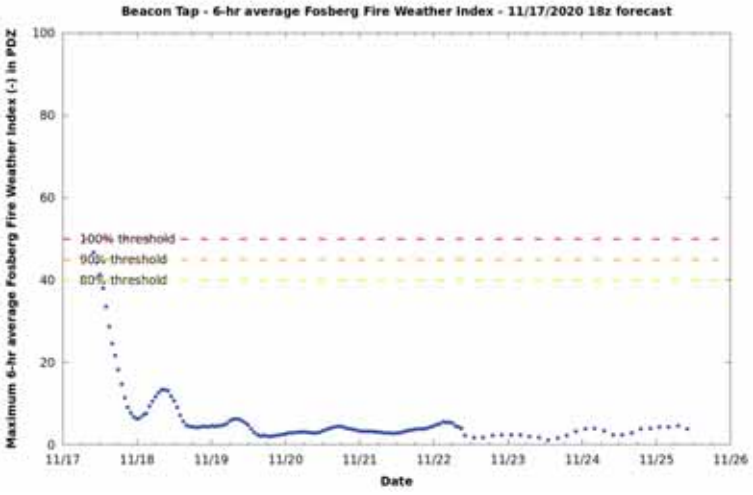


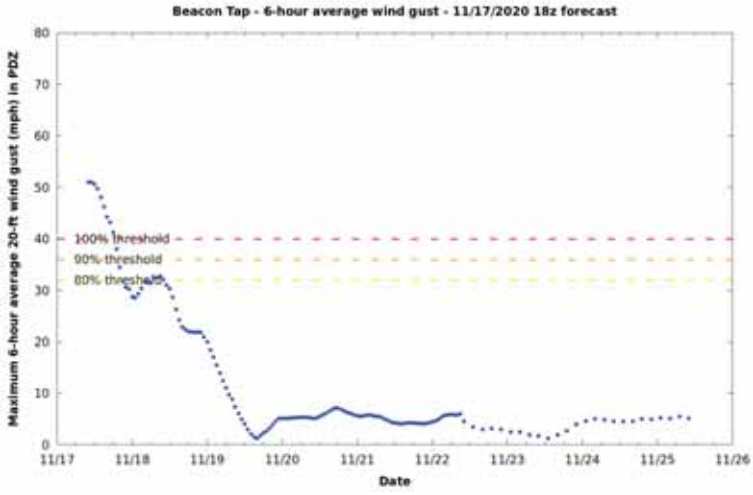
Bky 5100 to NVE



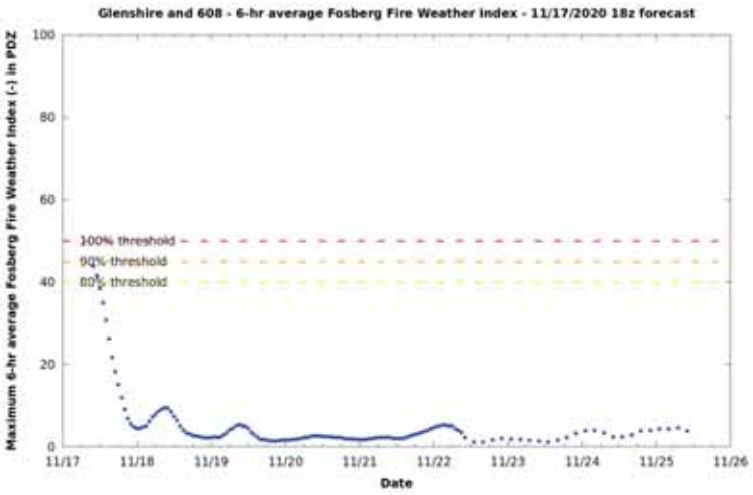


Beacon Tap



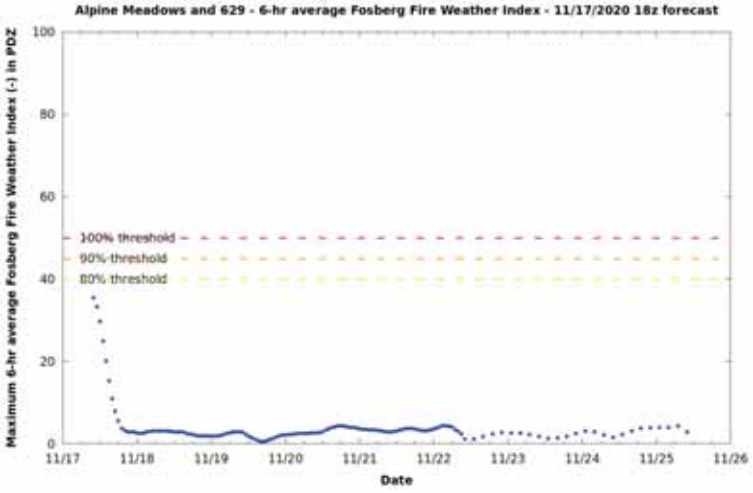


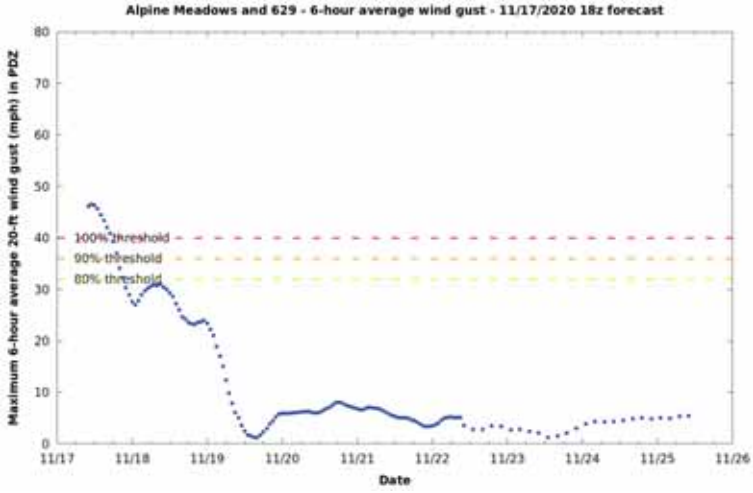
Glenshire and 608



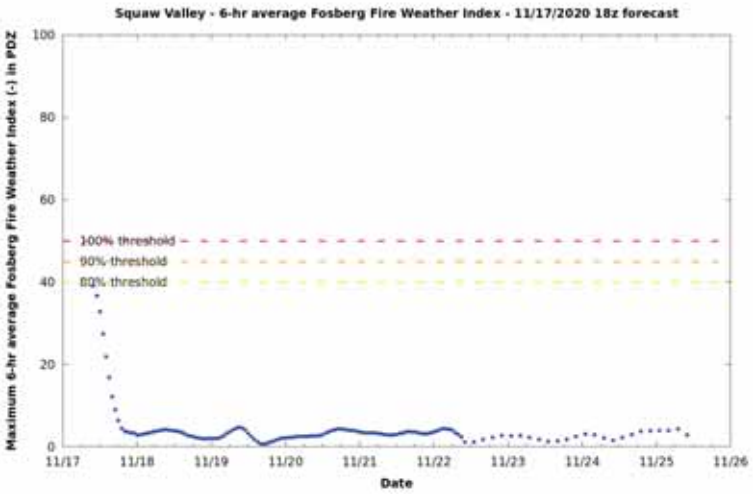


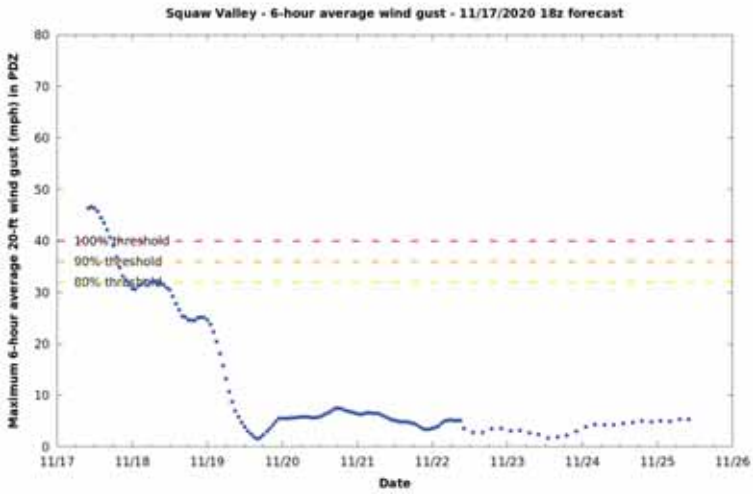
Alpine Meadows and 629



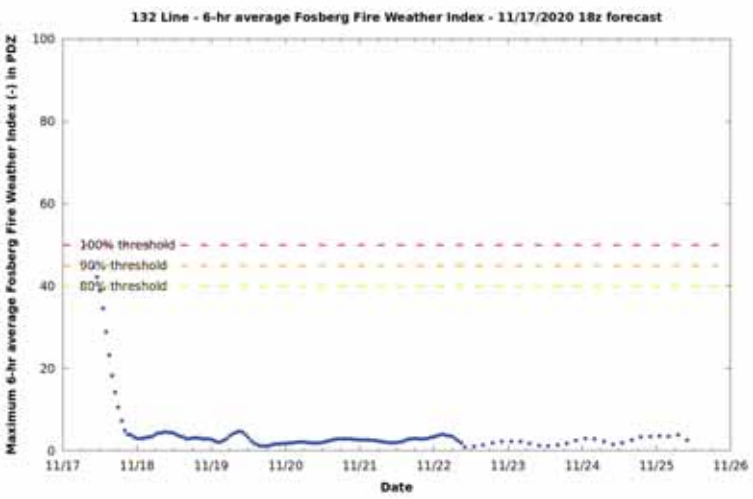


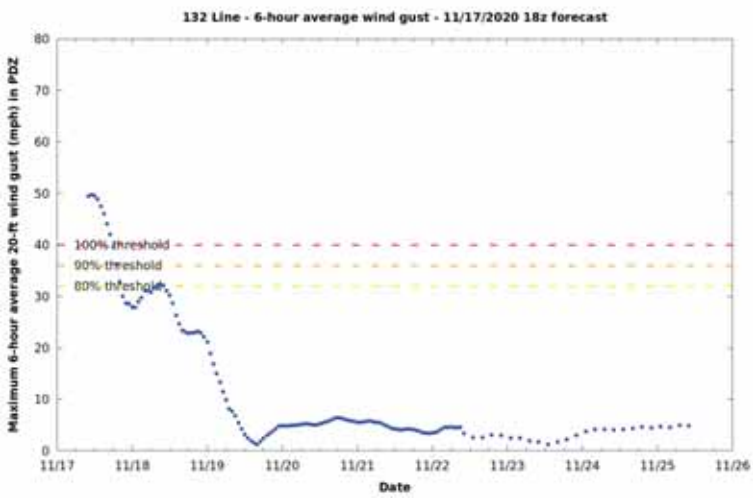
Squaw Valley



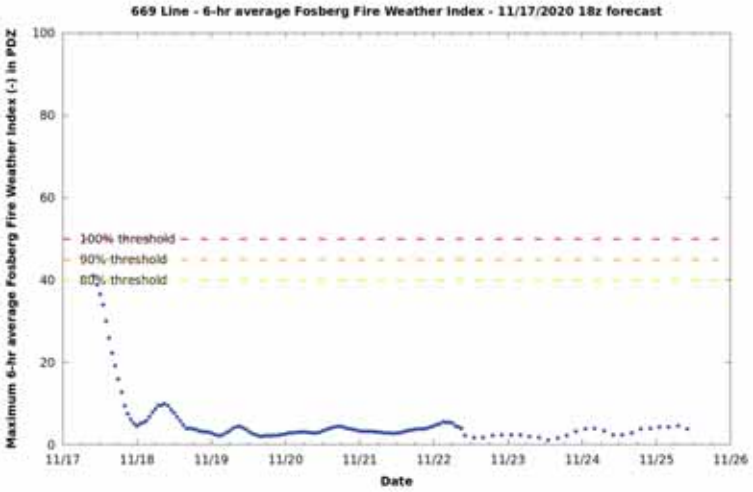


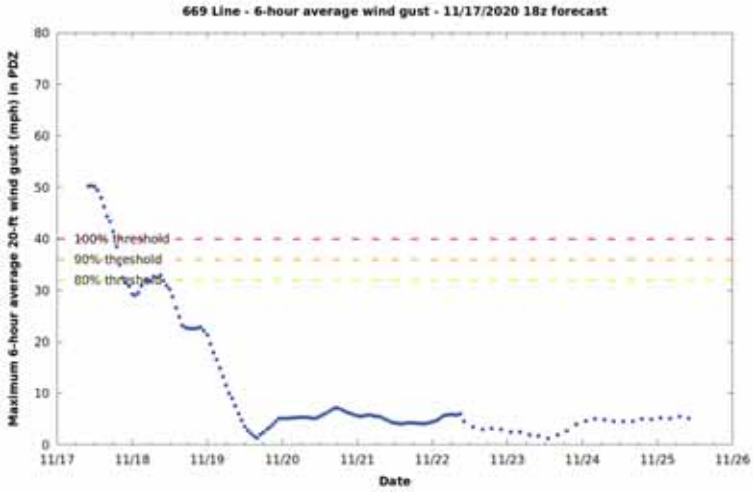
132 Line



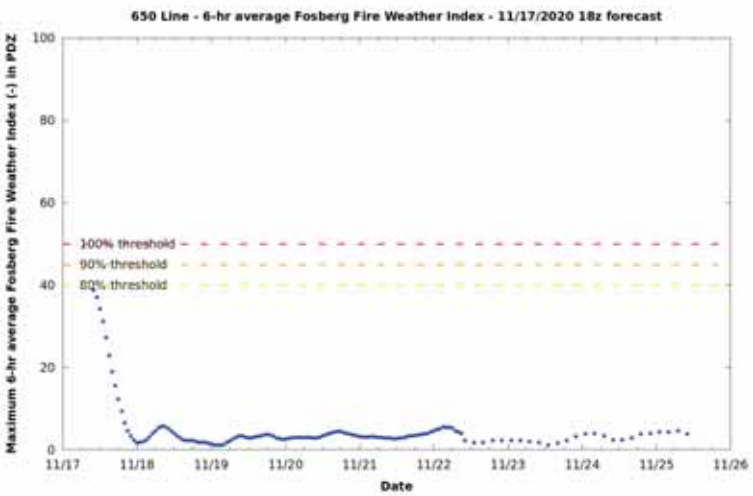


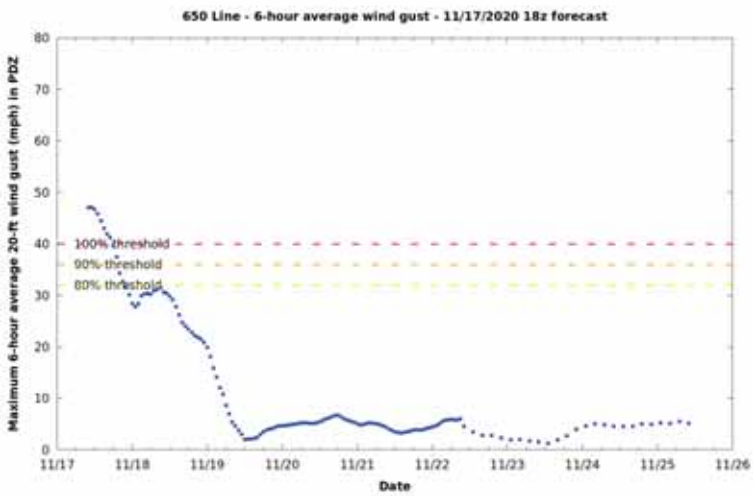
669 Line



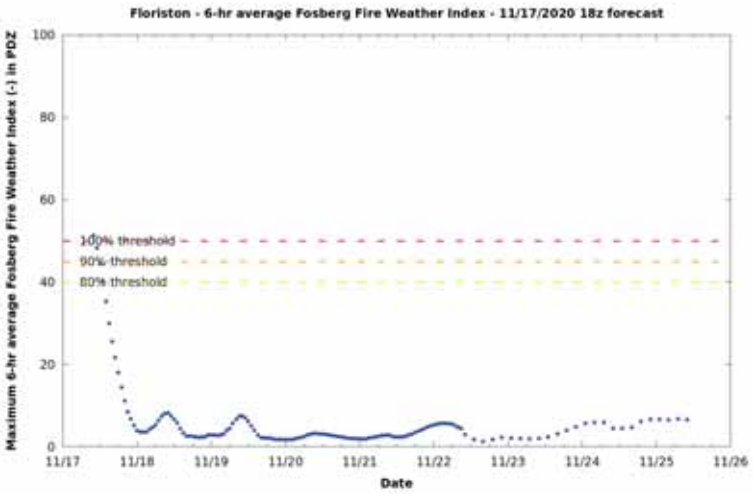


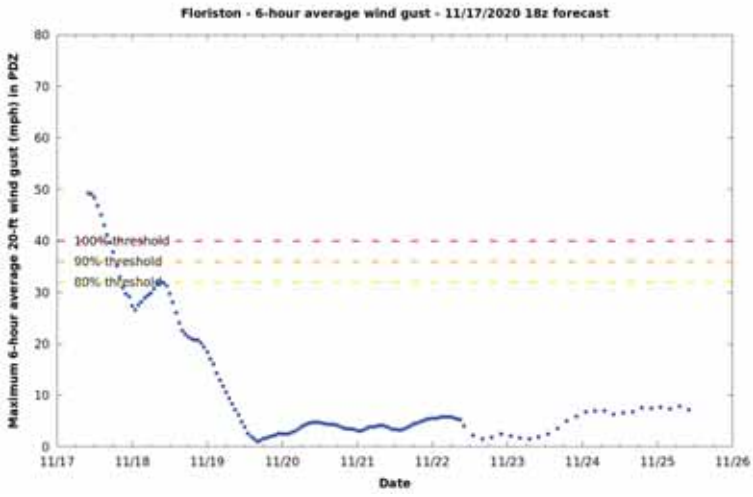
650 Line



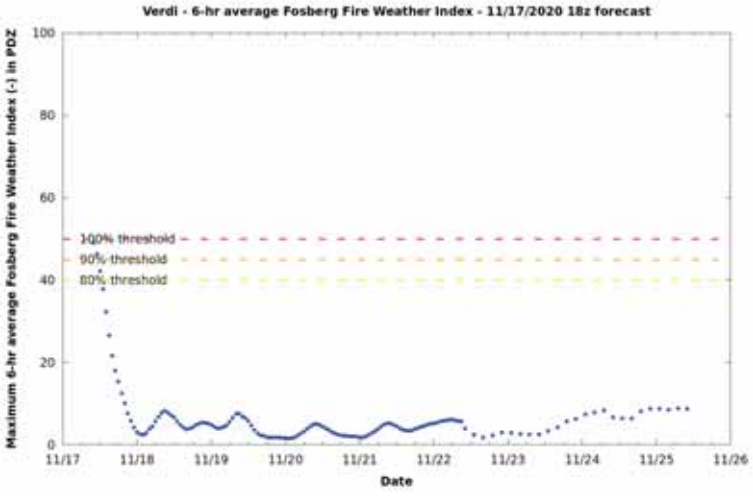


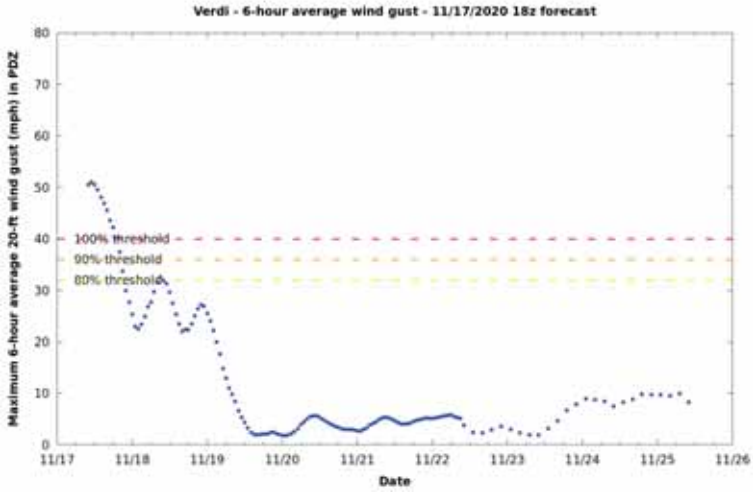
Floriston



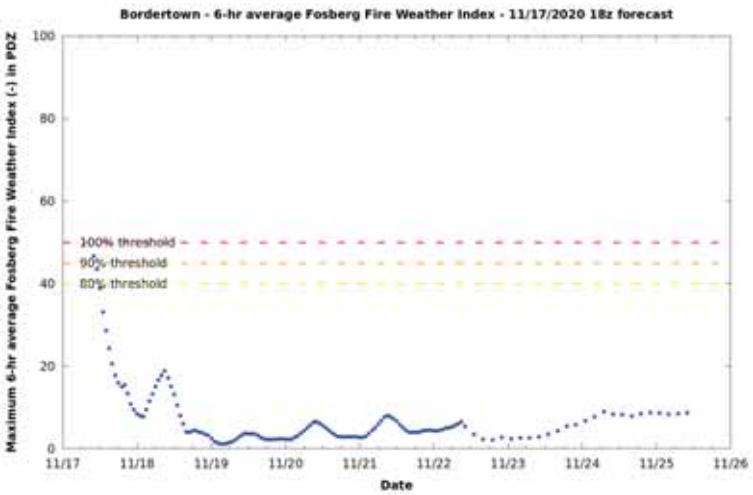


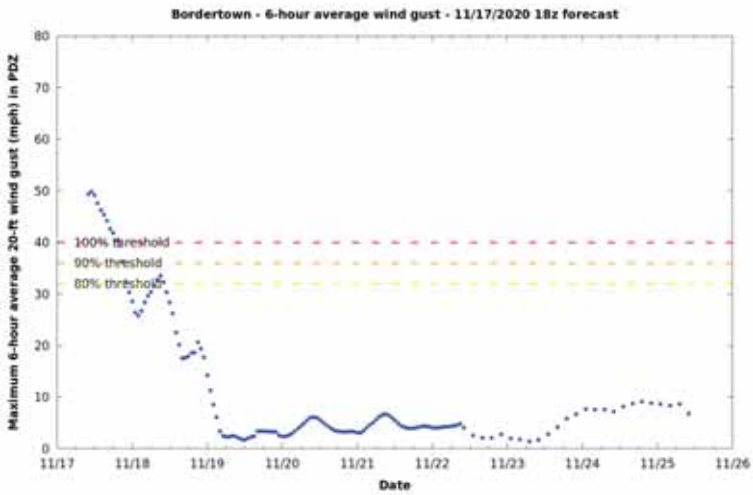
Verdi





Bordertown


Bordertown - 6-hr average Fosberg Fire Weather Index - 11/17/2020 18z forecast
Maximum 6-hr average Fosberg Fire Weather Index (-) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25
11/26


Bordertown - 6-hour average wind gust - 11/17/2020 18z forecast
Maximum 6-hour average 20-ft wind gust (mph) in PDZ
100% threshold
90% threshold
80% threshold
Date
11/17
11/18
11/19
11/20
11/21
11/22
11/23
11/24
11/25
11/26

ATTACHMENT 16

Liberty amended response to data request
CalAdvocates-LIB-A2506017-017
October 22, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

October 22, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

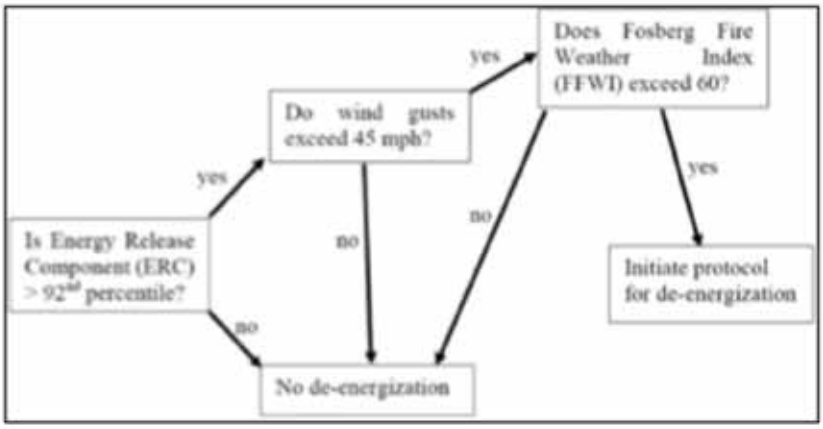
Data Request No.:	CalAdvocates-LIB-A2506017-017
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Cal Advocates Wildfire Discovery CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	September 24, 2025
Due Date:	October 8, 2025
Response Date:	October 8, 2025
Amended Response Date:	October 22, 2025

Situational Awareness

REQUEST NO. 1:

In the Application, Exhibit Liberty-03, page 39, Liberty states:

Figure 17: De-Energization Decision Tree for Topaz and Muller 1296 R3 PSPS Zones



In the Application, Exhibit Liberty-03, page 40, Liberty also states:

> On November 17, 2020, forecast weather and fire risk modeling did not meet Liberty's approved PSPS criteria for the Topaz 1261 Circuit prior to ignition of the Mountain View Fire. Indeed, in the days leading up to November 17, 2020, the FPI forecasts for the Topaz zone for that day ranged from "Low" to "Moderate."

a) Explain how Liberty's FPI forecasts were used in Liberty's approved PSPS criteria.
b) What weight was given to Liberty's FPI forecasts compared to the Energy Release Component (ERC), Wind Gusts, and Fosberg Fire Weather Index (FFWI)?
c) Did Liberty have a way to measure or calculate the ERC in real-time (i.e., using real-time weather station or other data to calculate ERC at a present moment in lieu of calculating a forecasted ERC for a time in the future)?
d) If the answer to subpart (c) is yes, provide copies of Liberty's real-time ERC as calculated on November 16, 2020 and November 17, 2020.
e) If the answer to subpart (c) is no, explain why not.

AMENDED RESPONSE:

a) FPI forecasts were not used for PSPS decision-making. As described in *Liberty-03: Prudence of Operations*, and illustrated in Figure 17 therein, the three criteria for PSPS decision-making were Energy Release Component ("ERC") percentile, (ii) wind gusts, and (iii) Fosberg Fire Weather Index ("FFWI").
b) See Liberty's response to subpart (a).
c) Liberty did not measure or calculate ERC in real-time, as Liberty understands that term. ERC is a National Fire Danger Rating System ("NFDRS") index. Liberty's ERC percentile forecasts were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS") and updated on Liberty's fire weather dashboard daily. With support from its vendor, Liberty also calculated ERC values on a weekly or bi-weekly basis as part of its field fuel moisture sampling to support situational awareness.

d) N/A
e) WFAS typically provided updated ERC values on a daily basis. Because ERC is a fire danger index intended to measure intermediate- to longer-term dryness and its calculation considers antecedent conditions over the prior several weeks, ERC calculations typically show little variation at sub-daily timescales.

REQUEST NO. 2:

In the Application, Exhibit Liberty-03, page 34, Liberty states:

> Liberty's FPI tool provided a seven-day forecast for 11 different geographic zones across Liberty's service area, ranking fire risk conditions on a five-category scale: Low, Moderate, High, Very High, and Extreme.

Explain how each FPI category affected Liberty's operational protocols (e.g., PSPS protocols, recloser operations, Control Center operations).

RESPONSE:

FPI forecasts were used to guide operation and maintenance crew activities, and were not used for PSPS decision-making or system operations. Please refer to attachment *LU Fire Prevention Plan 10-9-2020.pdf*, which described operating procedures for the five categories of FPI risk conditions.

REQUEST NO. 3:

Liberty's response to data request CalAdvocates-LIB-A2506017-008, Question 4 provides "FPI Forecasts.pdf," which shows Liberty's FPI forecast, ERC forecast, 6-hour average FFWI forecast, and Wind Gust Forecasts taken at 0000 hours, 0600 hours, 1800 hours on each day from November 11, 2020 through November 17, 2020.

a) Explain the following discrepancies:
   1. 11/12/2020 at 0600 hours: all FFWI and Wind Gust forecasts are missing data from 11/15 to 11/19;
   2. 11/12/2020 at 1800 hours: all FFWI and Wind Gust forecasts are missing data from 11/13 to 11/20;
   3. 11/13/2020 at 0000 hours: all FFWI and Wind Gust forecasts are missing data from 11/13 to 11/21;
   4. 11/13/2020 at 0600 hours: all FFWI and Wind Gust forecasts are missing data from 11/13 to 11/21;
   5. 11/13/2020 at 1200 hours: all FFWI and Wind Gust forecasts are missing data from 11/13 to 11/21;
   6. 11/14/2020 at 1800 hours: majority of FFWI and Wind Gust forecasts are missing data from 11/17 to 11/22;
   7. 11/15/2020 at 0000 hours: all ERCs went to 0.0 (previous day forecast showed values for Portola and Sierra Brooks) and all FFWI and Wind Gust forecasts are missing data from 11/17 to 11/23; and
   8. 11/15/2020 at 0600 hours: all ERCs stayed at 0.0 and all FFWI and Wind Gust forecasts are missing data from 11/17 to 11/23.
b) Did Liberty notice the discrepancies described in subpart (a)?

c) If the answer to subpart (b) is yes, when did Liberty discover the discrepancies?
d) If the answer to subpart (b) is yes, what did Liberty do about the discrepancies and when did Liberty perform those actions?
e) How often did discrepancies similar to those described in subpart (a) occur?
f) When did similar discrepancies previously occur and what were Liberty's actions?

AMENDED RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome. Subject to and without waiving its objections, Liberty responds as follows:

a) *FPI Forecasts.pdf* reflects information downloaded from Liberty's fire weather dashboard (https://tahoefireweather.com/) shortly after the Mountain View Fire. Liberty is not aware of any specific systemic reporting issues within its fire weather dashboard during the relevant time period that would explain the data issues referenced in this Question. It is possible that on occasion, there were delays in the reporting or incorporation of certain data, which could cause some data points within the FFWI and wind gust forecast plots to appear incomplete at certain points in time. In addition, because the ERC percentile forecasts displayed on Liberty's fire weather dashboard were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS"), it is possible that some data in the ERC tables did not display correctly on occasion due to delays or other issues with WFAS reporting, such as when there was an outage in the WFAS.
b) As explained in Liberty's response to subpart (a), *FPI Forecasts.pdf* reflects information downloaded from Liberty's fire weather dashboard (https://tahoefireweather.com/) shortly after the Mountain View Fire. Liberty does not know exactly when it became aware of the data issues described in this Question regarding forecast information contained in *FPI Forecasts.pdf*.
c) See Liberty's response to subpart (a).
d) See Liberty's responses to subparts (a) and (b). Liberty is not aware of any specific systemic reporting issues within its fire weather dashboard during the relevant time period that would explain these data issues or require a systematic response.
e) Liberty is not aware of records formally tracking instances in which data issues such as those referenced in this Question occurred.
f) See Liberty's response to subpart (e).

Control Center

REQUEST NO. 4:

In the Application, Exhibit Liberty-03, page 33, Liberty states: "By the end of 2018, Liberty's system operations had fully transitioned from NV Energy to Liberty Utilities' System Control Center in New Hampshire."

In the Application, Exhibit Liberty-03, page 34, Liberty also states:

On the day of the Mountain View Fire, a System Operator was actively monitoring Liberty's electric operations, and communicated directly with field personnel about scheduled work and outages on the Topaz 1261 Circuit that day, as discussed further in Section VI.D below.

a) On each of the days leading up to the Mountain View Fire ignition, starting from November 11, 2020, up through November 17, 2020, how many System Operators did Liberty have actively monitoring electric operations and what was their shift coverage?
b) Identify any times, from November 11, 2020 through November 17, 2020, when there was no System Operator on duty.
c) When did Liberty's system operations fully transition to Liberty Utilities' System Control Center in New Hampshire?
d) On each of the days leading up to the Mountain View Fire ignition, starting from November 11, 2020, up through November 17, 2020, was the System Operator for Liberty from NV Energy or Liberty Utilities' System Control Center in New Hampshire? Also, where was the System Operator located?
e) From November 11, 2020 through November 17, 2020, how did the System Operator use Liberty's FPI Forecasts to inform its decision-making?
f) From November 11, 2020 through November 17, 2020, how did the System Operator use Liberty's real-time data (including FPI, ERC, and weather data) to inform its decision-making?

AMENDED RESPONSE:

a) Liberty had four System Operators, one System Operator-in-training and one Manager on shifts monitoring electric operations during the specified time period. System Operators were on 12-hour shift coverage from 6:00 a.m. to 6:00 p.m. Eastern time (daytime shift) and from 6:00 p.m. to 6:00 a.m. Eastern time (nighttime shift). There was at least one Operator working per shift. The Operator-in-training and the Manager typically worked daytime shifts.
b) There was always at least one System Operator on duty during the specified time period.
c) Liberty's system operations had fully transitioned to Liberty Utilities' System Control Center in New Hampshire by February 14, 2019.
d) During the specified time period, the System Operators, System Operator-in training, and Manager were located at Liberty Utilities' System Control Center in Londonderry, New Hampshire.
e) – f) Liberty's operations team in California was responsible for monitoring Liberty's fire weather dashboard and communicating PSPS and other operational decisions to Liberty Utilities' System Control Center in New Hampshire as needed. The System Operators were not directly responsible for monitoring FPI or PSPS criteria. Please refer to Liberty's responses to Questions 1-2 of this set of data requests and Liberty's response to CalAdvocates-LIB-A250617-006, Question 3.

REQUEST NO. 5:

In Liberty's 2020 Wildfire Mitigation Plan (WMP), page 34, Liberty states:

2019 Public Safety Power Shutoff ("PSPS") Near Miss Lessons Learned	
Steering Committee	Bright red line threshold is clear, but as we approach, is there room to define cusp thresholds and potential action items?
Operations	More patrols if there is a forecast threshold exceeds.
Dispatch and Control	New Hampshire Dispatch and Control – indications staffing could be a challenge.
Communications	One agency notification was missed Disjointed systems (Responder, Everbridge, GIS, etc.)
Administration	Logistics, admin requirements are significant and difficult for team lead and other core members to manage in addition to executing the PSPS. Overlap in roles between emergency management and PSPS requirements
Documentation & Records Management	Explore establishing a role dedicated to documentation and records management

a) Explain what the 2019 PSPS Near Miss event was that led to the lesson learned that "New Hampshire Dispatch and Control – indications staffing could be a challenge." When did it occur?
b) What steps did Liberty take to address this lesson learned and when did Liberty implement them?

AMENDED RESPONSE:

a) The event referred to in Liberty's 2020 WMP, page 34, was an activation of Liberty's event team in September 2019 for a potential PSPS event.

b) Liberty understands that the Dispatch and Control issue related to a general concern regarding staffing for emergency events such as PSPS which could require coordination between Liberty Utilities' System Control Center and local emergency operations personnel. Actions that Liberty took to address lessons learned from the September 2019 event included:

- Hired a Manager of Emergency Services and a Fire Protection Specialist to strengthen emergency response capabilities.
- Conducted a tabletop exercise with public safety partners to test communication protocols on November 2, 2019.
- Conducted PSPS tabletop exercises May 11, 2020.
- Conducted Communications Exercise May 12, 2020.
- Planned and executed a comprehensive PSPS simulation on June 25, 2020, to prepare for the 2020 wildfire season.
- Updated the Incident Command Structure roles/responsibilities, cross-trained team members, and identified backup roles to maintain adequate staffing during PSPS events.

Fire Prevention Plan for Overhead Electric Facilities

REVISION HISTORY

The Liberty Utilities (CalPeco Electric), LLC (U 933-E) (Liberty CalPeco) Wildfire Prevention Department (Department) updated the Fire Prevention Plan (FPP or Plan) October 2019.[1] The Department will oversee the execution of required training for Liberty CalPeco personnel and contractors prior to the 2020 fire season.

PURPOSE

In 2017 and 2018, California experienced some of the most destructive wildfires in its history. The combination of drought, extreme winds and build-up of dry vegetation contributed to increased wildland fires. The wildfire season and associated forest fire risk factors have increased due to warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt, leading to higher levels of dry fuels. Liberty CalPeco recognizes that the operations, maintenance and construction on the electric grid, and characteristics of associated equipment may present an ignition risk. Our goal is to develop reasonable and actionable plans to mitigate ignition risks, be prepared to suppress small fires, keep our employees safe while working in wildland areas and provide general fire safety precautions for field operations.

Liberty CalPeco developed this Plan in compliance with Ordering Paragraph 3 of California Public Utilities Commission (CPUC) Decision (D.) 12-01-032 and the revisions of D.17-12-024 pursuant to General Order (GO) 166 Standard 11 and information specified in GO 166 Standard 1, Part E as applicable to Liberty CalPeco's service territory (See Attachment 1). The FPP identifies operational protocols for Liberty CalPeco overhead facilities that lie within Tiers 2 and 3 of the High Fire-Threat District (HFTD) Map adopted by the CPUC on January 19, 2018. The Plan delineates operational pathways in working with electrical assets and overhead facilities that may pose a fire ignition threat under notification of rated fire watch conditions.

The FPP establishes procedures to be followed by the utility for facilities in Tier 2 or 3 of the HFTD or during the Fire Precautionary Period, which is considered to be sustained by the Department of Forestry and Fire Protection (CAL FIRE). Due to the high alpine climate of Liberty CalPeco's electric service territory, late fall and winter months present a seasonal swing of reduced risk due to snow conditions as compared to spring and summer months. Liberty CalPeco personnel operate with consideration of stringent fire safety requirements for high risk areas and conditions. Currently, a combination of Red Flag Warning (RFW) notifications, interpretations from the Reax predictive tool, and information gathered from Liberty CalPeco weather stations will help determine avenues and countermeasures to mitigate the threat of utility-caused fire ignitions during

[1] Navigant Consulting, Inc., a Guidehouse company (Navigant) assisted Liberty CalPeco in preparing this report for filing, based on the information the utility provided. The information presented in this report represents Navigant's professional judgment based on the information available at the time this report was prepared with Liberty CalPeco's overall decision-making. Navigant is not responsible for the reader's use of, or reliance upon, the Plan, or any decisions based on the Plan. NAVIGANT MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED. Readers of this Plan are advised that they assume all liabilities incurred by them, or third parties, as a result of their reliance on the Plan, or the data, information, recommendations, and opinions contained in the report.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

periods of "Low and Moderate," "High," "Very High" and "Extreme" fire ratings. (*See* Fire Potential Index.) These procedures include practices for field operations and maintenance (O&M) activities in applicable areas and conditions.

The FPP establishes procedures and routine operational practices that:

1) Provide employees and contractors an understanding of the enacted processes and procedures that will improve reliable and safe operation of overhead electric facilities in high-risk areas or under fire weather conditions;
2) Establish Liberty CalPeco standards of equipment and vehicle use and operations during fire risk seasons and work near potential ignition sources;
3) Determine work restrictions during cautionary periods issued by internal meteorological and predictive tools and RFWs, as designated by the National Weather Service (NWS);
4) Outline the operational and communication procedures when working adjacent to or immediately after a fire ignition within the service territory;
5) Present the future use of the Fire Potential Index (FPI) as it relates to additional risk measurements that may be warranted and discerning the appropriate operational procedures for field activities; and
6) Introduce general fire safety considerations and precautions for performing work in high risk areas and/or during high risk weather periods.

DEFINITIONS

Activity: Specific operation of a piece of equipment, such as a chainsaw or tractor.

Baseline Fire Tools: Items available to field personnel to prevent and quickly suppress small ignitions for a designated worksite. These tools include but are not limited to:

Fire Box: Container available at the worksite containing fire suppression equipment and additional as deemed appropriate for the performed activity.
Backpack Pump: Canister containing fire suppressant material.
Shovel: Rounded tip with a length of approximately 48 inches.
Wildland McLeod tool: Fire hand tool used for raking and scraping.

Fire Potential Index: Ranking system that aligns predetermined operational practices with elevated risks restrictions due to the threat of potential ignition. Liberty CalPeco has identified five tiers of risk: low and moderate fire risk, high fire risk, very high fire risk and extreme fire risk.

Fire Safety Leader: Designated field supervisor or crew member who has a ***dedicated*** role for fire safety requirement oversight during extreme fire risk working conditions.

Fire Safety Monitor: Designated field supervisor or crew member responsible for fire safety requirement oversight during Elevated Fire Risk working conditions.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Manager in Charge: Non-represented employee designated by Liberty CalPeco to implement this policy during normal hours of operation.

Mechanical Operations: Any activity that requires the use of motorized power equipment.

On-call Supervisor: Employee designated by Liberty CalPeco to implement this policy in the absence of the Manager in Charge.

Operating Area: Property on which active operations, including transportation, are to be conducted. The area within 100 feet of the traveled surface of roads is generally considered part of the Operating Area, whether or not it is included in the rights-of-way or easements.

Red Flag Warning (RFW): The National Weather Service will typically declare a RFW within a zone when wind gusts exceed 30 miles per hour (mph), and the relative humidity is less than 20 percent for more than three hours. Other factors considered include timber conditions and forecasts for weather elements, such as dry lightning. Typically, the RFW is issued for a specified period.

Fire Weather Watch: A National Weather Service notice which alerts land management agencies of the potential for a Red Flag event in the near future. A forecaster is reasonably confident that Red Flag criteria will be met. Fire Weather Watches are generally issued 12-72 hours in advance of an event, but can be issued in the first 12 hours for dry lightning events.

ASSESSMENT METHODOLOGY

Liberty CalPeco pursued a structured approach to determining whether an FPP was required for Liberty CalPeco facilities under the Rulemaking (R.) 08-11-005, as described in the final decision. The approach utilized the information collected to identify specific facilities that meet the Plan criteria for inclusion in the FPP. This Plan is sufficient for most routine work activities. In the event a project-specific fire plan is deemed necessary, the Project Manager, or Project Manager's designee, will coordinate with field crew to frame additional criteria. The assessment methodology for the FPP is described below.

1) Liberty/Reax Fire Forecast: Reax is a predictive tool that captures three main methods of fire weather condition measurement: Energy Release Component (ERC), wind gusts, and the Fosberg Fire Weather Index (FFWI). Liberty CalPeco will issue proactive patrols and inspection procedures during applicable work if a triggered scenario is revealed through the predictive software tool. When the Reax tool predicts potential fire weather conditions, the Manager in Charge or designee will refer to the tiered risk categories in this Plan and initiate operational protocols based on the determined rating.

2) Red Flag Warnings: Fire Weather Zone Boundaries were compared to Liberty CalPeco's service territory, and it was identified that the territory spans portions of three different zones. Liberty

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

CalPeco will monitor the applicable zones 271, Zone 272, and Zone 273. Historical data for the past 10 years' RFWs within each of these zones was collected for each occurrence, so that wind data could be collected and evaluated for each identified RFW.[2]

During Red Flag Events, Liberty CalPeco will monitor wind gusts at the peak elevation located at Bliss State Park using the link below or other available data.[3]

Liberty CalPeco has identified 46 Public Safety Power Shut-off (PSPS) zones that are based on isolation points within certain circuits or areas. If Reax forecasts for these zones that the ERC, wind, and FFWI will come within 80%, 90%, or 100% of the thresholds for de-energization, Liberty CalPeco will enact a PSPS upon or just before reaching 100%. During a PSPS event, Liberty CalPeco will suspend noncritical operational work to focus efforts on current conditions and proactive patrols after de-energizing and when restoring power. Liberty CalPeco adheres to the guidelines provided in R. 18-12-005, an open proceeding that prescribes utilities' PSPS processes, among other issues. Liberty CalPeco will provide updated protocols for internal PSPS practices in the 2020 version of its Wildfire Mitigation Plan.

3) Liberty CalPeco Design Standards: An engineer examined the Liberty CalPeco facilities design standards to evaluate the minimum standard for wind loading design. The design standard utilizes the criteria specified in GO 95 Section IV. However, this is a minimum design standard, and facilities are often oversized for a variety of reasons. Liberty CalPeco will review applicable wind loading design standards, monitor regulatory changes to standard design requirements, and update standards for minimum wind loading design criteria as deemed prudent.

4) Wind Data: NWS Remote Automatic Weather Stations were mapped for the area within 25 miles of the Liberty CalPeco service territory. Wind gust data from the NWS site is monitored for each RFQ. The station automatically records the maximum instantaneous gust over the past hour, while wind speed averages are recorded by the stations over 10-minute periods. Because it is not possible to discern if gusts lasted three seconds or more, it is assumed that all maximum gusts meet the three-second criteria to guard against underestimating a fire threat.

In addition to fire weather and fuels data from the NWS and United States Department of Agriculture National Fire Danger Rating System, Liberty CalPeco tracks instantaneous meteorological conditions received from the 10 weather stations in the service territory. Liberty CalPeco also proposes to install 20 additional weather stations during 2020. The server data capturing meteorological conditions will serve as a principle variable underlying the development of the FPI. Until the FPI is developed and adopted by Liberty CalPeco, operational designations for fire ratings will be derived from the meteorological data expressed above.

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2 Alerts may be monitored using the links below and Liberty CalPeco will make best efforts to subscribe to automatic alert notifications: http://inws.wrh.noaa.gov/page/faq and https://inws.wrh.noaa.gov/alerts.

3 Bliss State Park: https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCDLB

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
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5) Mapping: Tiers 2 and 3 of the HFTD are overlaid on the Liberty CalPeco service territory map. All Liberty CalPeco facilities are mapped without underground facilities, which are not subject to the Plan requirements. Operational work within Tier 2 and 3 of the HFTD or in response to issued RFWs are subject to more stringent fire safety requirements, as described in this Plan. The attached map complies with GO 95 Rule 21.2-D.

6) Fire Potential Index (FPI): The FPI is used as means to develop guidelines for utility and contractor operations and maintenance crews to follow under Liberty CalPeco's defined categories of wildfire risk. The Wildfire Prevention Department is responsible for determining and communicating the FPI on a daily basis. The current status of the FPI will be posted on the Liberty CalPeco intranet and will communicate the status to the Manager in Charge. The FPI rating framework is currently in development.

FIRE POTENTIAL INDEX

Liberty CalPeco is currently developing a FPI methodology that comprehensively assesses the fire risk utilizing several data points to influence operation and maintenance decisions related field work. The FPI forecasting application captures data from situational awareness tools and seven-day projections and will then present a fire ranking that aligns with a "Low", "Moderate", "High", "Very High" or "Extreme" fire potential. The FPI is scheduled for completion in 2020 and will be included in the FPP for the next filing cycle.

The five FPI Risk conditions are defined as follows:

Extreme Fire Risk: As determined by the Wildfire Prevention Department, Extreme Fire Risk is defined as periods of significant risk of wildfires and the associated ignition risks within Tier 2 or 3 of the HFTD. All O&M activities have stipulations, and significant fire mitigation activities are required. The Extreme Fire Risk status is indicated as "Red."

Very High Fire Risk: As determined by the Wildfire Prevention Department, Very High Fire Risk is defined as periods of increasing risk of wildfires and associated ignition risks within Tier 2 or 3 of the HFTD. Many O&M activities have stipulations and additional fire mitigation activities are required. The Very High Fire Risk status is indicated as "Orange."

High Fire Risk: As determined by the Wildfire Prevention Department, High Fire Risk is defined as periods of increasing risk of wildfires and associated ignition risks within Tier 2 or 3 of the HFTD. Many O&M activities have stipulations and additional fire mitigation activities are sometimes

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

required. The High Fire Risk status is indicated as "Yellow."

Moderate Fire Risk: As determined by the Wildfire Prevention Department, Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are not elevated but still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have stipulations and additional fire mitigation activities may be required. The FPI is indicated as "Green."

Low Fire Risk: As determined by the Wildfire Prevention Department, Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are low but may sometimes still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have stipulations and additional fire mitigation activities may be required. The Low Fire Risk status is the default operational state and the FPI is indicated as "Blue."

PROCEDURE

General Safety Instructions for Utility and Contractor Crews

- **General Fire Awareness:** During the execution of work activities and use of company equipment and vehicles, all operating personnel must be actively aware and consider actions that may reduce fire risks and personal exposure.
    - Activities such as idling a vehicle near brush, grassland, or at-risk vegetation is prohibited, and drivers should always perform a perimeter check after exiting the vehicle and inspect underneath for potential fuel risk.
    - The Fire Safety Monitor/Leader should remain alert of crew vehicles traveling over low vegetation or brush.
    - Smoking is only permitted in site-specific designated areas or within a 10' clearance of any vegetation or grass.
    - When possible during days with high temperatures and low humidity, wet down adjacent vegetation when performing work with equipment that may spark or has an exposed exhaust system.
    - Consider the need to disable reclosers on potentially impacted equipment or de-energize circuits within the operating area to prevent potential sparks.
- **Safety Briefings:** When assigned to work within wildland areas, the tailboard safety briefing shall include review of the following:
    - 1. The current daily FPI Rating;
    - 2. Job site-specific fire risks;

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

- 3. Elimination of tasks that pose an elevated fire risk;
- 4. Actions to reduce personal exposure; and
- 5. Any other possible fire risk mitigation actions.

- **Fire Safety Tools Responsibility:** The crew leader must check the availability and condition of the baseline fire tools during the daily truck safety inspection and make fire suppression equipment readily accessible near operating areas.
- **Tailboard Fire Briefings**: If, during the execution of work, the job site-specific fire risks are elevated, the crew leader shall stop work and hold a tailboard meeting to discuss revised actions. If warranted by elevated jobsite risk conditions, the crew leader may elect to declare the next highest level of Fire Potential Index Rating for the job site.
- **Fire Reporting and Actions:**
  - All fires must be reported to 911, verify and be prepared to report your location.
  - If the work crew cannot quickly extinguish a minor fire or rapidly accelerating fire conditions are encountered, the crew leader shall immediately report the situation to dispatch and relocate the crew, equipment, and materials to a safe location.
  - All fires must be reported to dispatch and follow appropriate incident reporting requirements to the CPUC Safety Enforcement Division (SED).

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Safety Instructions for Working Under Extreme Risk Index Conditions

When working under Extreme Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Leader. The Fire Safety Leader will not be assigned any job site tasks and will be assigned the specific duties of fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew. Liberty CalPeco will utilize alerts from Reax to determine if a proactive patrol of electrical equipment and vegetation clearances is warranted. Liberty CalPeco will activate proactive fire patrols if forecasted conditions for Fosberg Fire Weather Index and Average Wind Gust reach 90% or greater for PSPS threshold.

Operating Procedures – Extreme Risk Index Conditions

As a general rule, all work should be suspended during Extreme Risk Index conditions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	**Paved roads or bare improved roads**	**Assure fire safety precautions are followed.**
	Off-road and unimproved roads	**Not Allowed**
Facility Inspections and Patrols	**Driving inspections of poles, equipment, vegetation and security**	**Assign a Fire Safety Monitor**
	Climbing inspections of poles, equipment, vegetation and security	**Assign a Fire Safety Leader**
Overhead Line Corrective Maintenance and Repairs	**Replacement and/or installation of splices, fuses, lightning arrestors, and insulators**	**Perform only those activities that reduce wildfire risks and/or restore customer outages; assign a Fire Safety Leader**
Pole Setting and Removal	**Paved roads or bare improved roads**	**Perform only those activities that reduce wildfire risks and/or restore customer outages; assign a Fire Safety Leader**
	Off-road and unimproved roads	**Not allowed**
Replacing and Stringing Conductor	**Paved roads or bare improved roads**	**Perform only those activities that reduce wildfire risks and/or restore customer outages; assign a Fire Safety Leader**
	Off-road and unimproved roads	**Not allowed**
Vegetation Management Near Poles and Towers	**Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control**	**Not allowed**
T&D Overhead Line Vegetation Management	**Minor maintenance tree trimming and associated branch removals using buckets and/or hand tools to maintain company clearance standards**	**Perform only those activities that reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Leader**

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

	Cycle trimming using buckets and/or hand tools to maintain company clearance standards	**Not allowed**

Safety Instructions for Working Under Extreme Risk Index Conditions (cont'd.)

When working under Extreme Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Leader. The Fire Safety Leader will not be assigned any job site tasks and will be assigned the specific duties of fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew. Liberty CalPeco will utilize alerts from Reax to determine if a proactive patrol of electrical equipment and vegetation clearances is warranted. Liberty CalPeco will activate proactive fire patrols if forecasted conditions for Fosberg Fire Weather Index and Average Wind Gust reach 90% or greater for PSPS threshold.

Operating Procedures – Extreme Risk Index Conditions

As a general rule, all work should be suspended during Extreme Risk Index conditions		
Reciprocating Construction Equipment	**Truck mounted compressors and/or generators**	**Assign a Fire Safety Leader**
	Non-truck mounted compressors and/or generators	**Not allowed**
	Welders and grinders	**Not allowed**
Blasting	**Blasting of rock with explosives**	**Not allowed**

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Fax: 530-581-0341

Safety Instructions for Working Under Very High Risk Index Conditions

When working under Very High Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Monitor or assign a Fire Safety Leader. In addition to the assigned work duties at the job site, the Fire Safety Monitor is responsible for fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew. **The Fire Safety Leader will not be assigned any job site tasks and will be assigned the specific duties of fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew.**

Operating Procedures – Very High Risk Index Conditions

As a general rule, work may be limited during Elevated Risk Index conditions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	Paved roads or bare improved roads	Assure fire safety precautions are followed.
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Facility Inspections and Patrols	Driving inspections of poles, equipment, vegetation and security	Assure fire safety precautions are followed
	Climbing inspections of poles, equipment, vegetation and security	Assign a Fire Safety Monitor
Overhead Line Corrective Maintenance and Repairs	Replacement and/or installation of splices, fuses, lightning arrestors and insulators	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Pole Setting and Removal	Paved roads or bare improved roads	Assign a Fire Safety Monitor
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Leader
Replacing and Stringing Conductor	Paved roads or bare improved roads	Assign a Fire Safety Monitor
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Leader
Vegetation Management Near Poles and Towers	Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control	Perform only those activities which reduce wildfire risks and/or restore Customer outages
T&D Overhead Line Vegetation Management	Minor maintenance tree trimming using buckets and/or hand tools to maintain company clearance standards	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
	Cycle trimming and associated tree/branch removals using buckets and/or hand tools to maintain company clearance standards	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Leader
Reciprocating Construction Equip.	Truck/trailer-mounted compressors and/or generators	Assign a Fire Safety Monitor
	Non-truck-mounted compressors and/or generators	Not allowed

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	Welders and grinders	Not allowed
Blasting	Blasting of rock with explosives	Not allowed

Safety Instructions for Working Under High Risk Index Conditions

When working under High Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Monitor. In addition to the assigned work duties at the job site, the Fire Safety Monitor is responsible for fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew.

Operating Procedures – High Risk Index Conditions

As a general rule, work may be limited during Elevated Risk Index conditions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	Paved roads or bare improved roads	Assure fire safety precautions are followed.
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Facility Inspections and Patrols	Driving inspections of poles, equipment, vegetation and security	Assure fire safety precautions are followed
	climbing inspections of poles, equipment, vegetation and security	Assign a Fire Safety Monitor
Overhead Line Corrective Maintenance and Repairs	Replacement and/or installation of splices, fuses, lightning arrestors and insulators	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Pole Setting and Removal	Paved roads or bare improved roads	Assign a Fire Safety Monitor
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Replacing and Stringing Conductor	Paved roads or bare improved roads	Assign a Fire Safety Monitor
	Off-road and unimproved roads	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Vegetation Management Near Poles and Towers	Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control	Perform only those activities which reduce wildfire risks and/or restore Customer outages
T&D Overhead Line Vegetation Management	Minor maintenance tree trimming using buckets and/or hand tools to maintain company clearance standards	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
	Cycle trimming and associated tree/branch removals using buckets and/or hand tools to maintain company clearance standards	Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor
Reciprocating Construction Equip.	Truck/trailer-mounted compressors and/or generators	Assign a Fire Safety Monitor
	Non-truck-mounted compressors and/or generators	Assign a Fire Safety Monitor
	Welders and grinders	Not allowed

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Blasting	**Blasting of rock with explosives**	**Not allowed**

Safety Instructions for Working Under Low / Moderate Risk Index Conditions

When working under Low/Moderate Risk Fire Index conditions, workers should still maintain high awareness of the fire risk and safety hazards within the operating area.

Operating Procedures – Low/Moderate Risk Index Rating

As a general rule, work can proceed during Normal Risk Index conditions following General Safety Instructions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Facility Inspections and Patrols	**Driving and climbing inspections of poles, equipment, vegetation and security**	**No restrictions**
Overhead Line Corrective Maintenance and Repairs	**Replacement and/or installation of splices, fuses, lightning arrestors and insulators**	**No restrictions**
Pole Setting and Removal	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Replacing and Stringing Conductor	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Vegetation Management Near Poles and Towers	**Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control**	**No restrictions**
T&D Overhead Line Vegetation Management	**Minor maintenance tree trimming using buckets and/or hand tools to maintain company clearance standards**	**No restrictions**
	Cycle trimming and associated tree/branch removals using buckets and/or hand tools to maintain company clearance standards	**No restrictions**
Reciprocating Construction Equipment	**Truck mounted compressors and/or generators**	**No restrictions**
	Non-truck mounted compressors and/or generators	**Assign a Fire Safety Monitor**
	Welders and grinders	**Assign a Fire Safety Monitor**
Blasting	**Blasting of rock with explosives**	**Truck must have permit with restrictions; assign a Fire Safety Monitor**

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ACTIVE FIRE SAFETY PRECAUTIONS

Liberty CalPeco values safety as a core competency of field and hot work performed in high risk areas. For all contractors and utility personnel, these precautions exist for critical work performed within Tiers 2 and 3 of the HTFD under threat of wildland fire. If a small fire ignites call 911 and be prepared to verify and provide your location. If rapid suppression is not achieved by field personnel, field crew are directed to stop work, retreat to a safe area adjacent to the work site, immediately notify dispatch services, and alert nearby agencies and entities.

All contractors and utility personnel working adjacent to active wildland fires should consider the following:

- Use Personal Protective Equipment (P.P.E.) when directed to work within, or adjacent to uncontrolled fire perimeter.
- Maintain communication lines through operational protocols when a fire ignites. This includes correspondence made with office and dispatch centers, local law and fire agencies, customers, and impacted jurisdictions, if any.[4] The Incident Commander (IC), once designated, should coordinate and effectuate these activities.
- Take increased precaution when driving near flames or in smoky conditions. Road obstructions may pose a risk, and drivers and crew should have a general awareness of nearby access and evacuation routes.
- Determine if any potentially impacted electrical assets will pose a risk to spreading the active wildland fire and de-energize if necessary or if requested by fire agency. Field crews should adhere to Liberty CalPeco procedures where applicable.
- Perform any routine investigations after fire suppression. Report incident data to SED and execute necessary reporting procedures as part of Liberty CalPeco business practices.

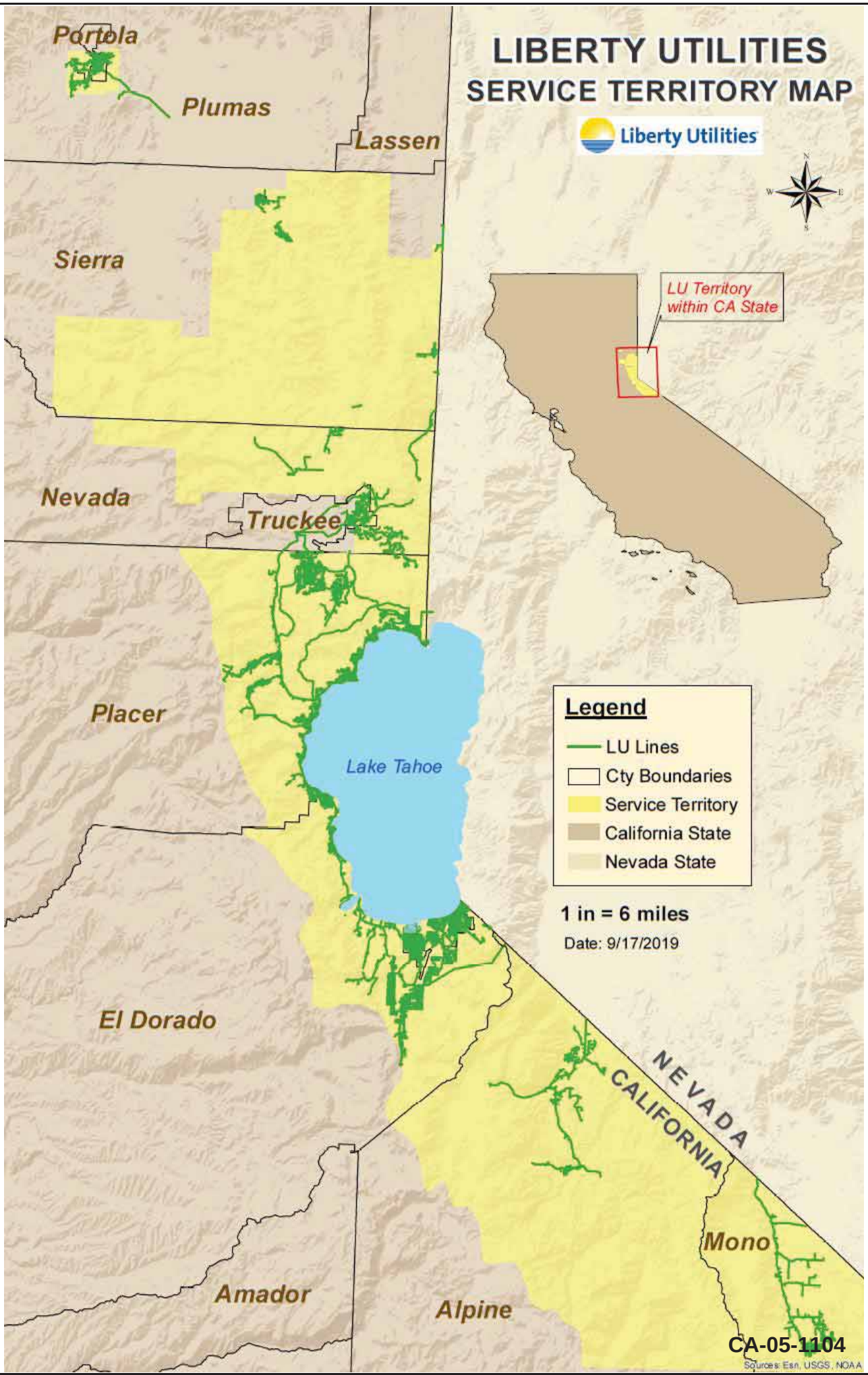
ATTACHMENTS

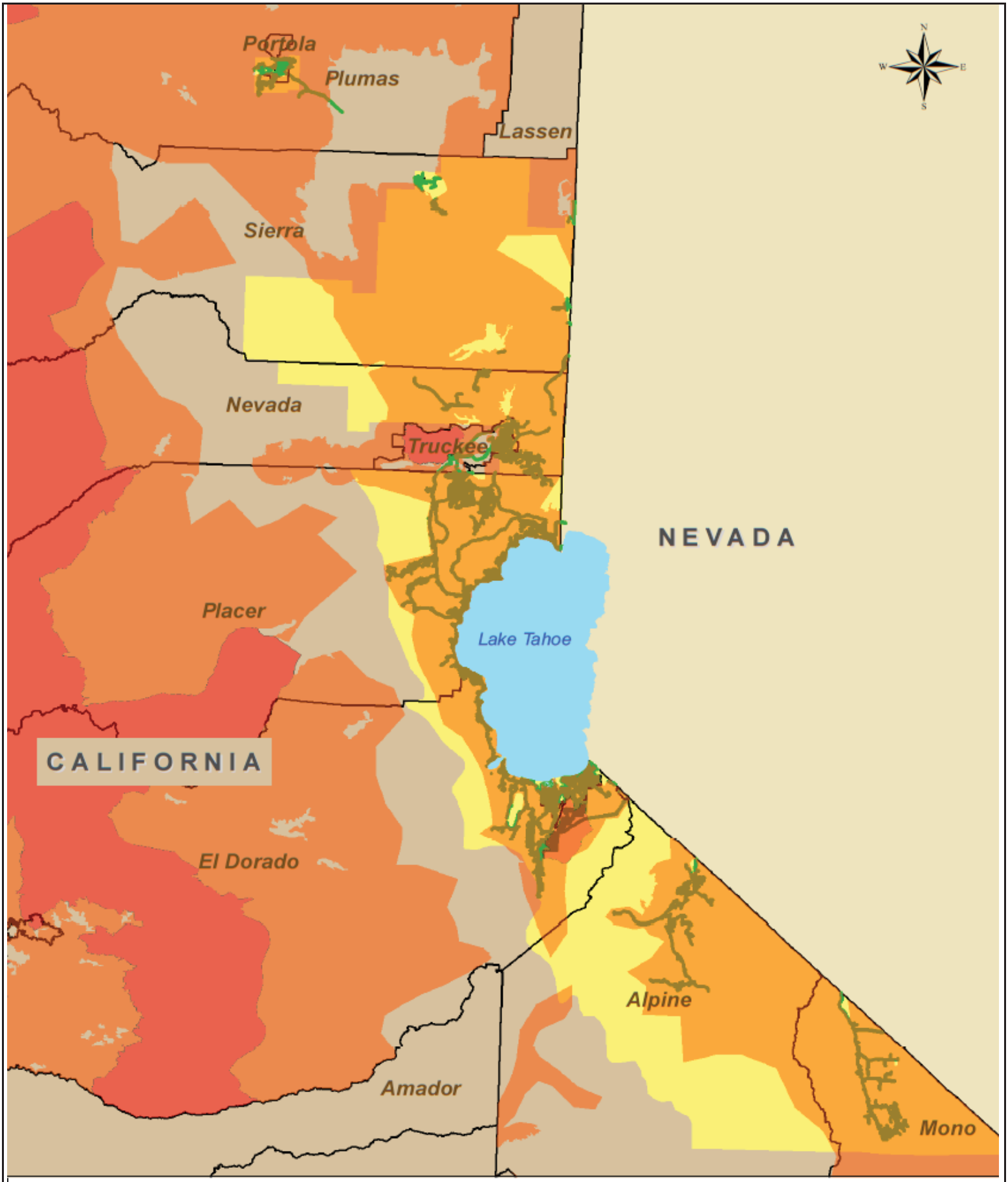
1) Attachment 1- Liberty CalPeco service territory map
2) Attachment 2- Liberty CalPeco service territory overlaid with the HFTD

[4] Notifications to customers during and post-fire suppression should occur in English and Spanish.

933 Eloise Avenue
South Lake Tahoe, CA 96105
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Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341


LIBERTY UTILITIES
SERVICE TERRITORY MAP
Liberty Utilities
Portola
Plumas
Lassen
Sierra
Nevada
Truckee
Placer
Lake Tahoe
El Dorado
Amador
Alpine
Mono
NEVADA
CALIFORNIA
LU Territory within CA State
Legend
LU Lines
Cty Boundaries
Service Territory
California State
Nevada State
1 in = 6 miles
Date: 9/17/2019
CA-05-1104
Sources: Esri, USGS, NOAA


Portola
Plumas
Lassen
Sierra
Nevada
Truckee
NEVADA
Placer
Lake Tahoe
CALIFORNIA
El Dorado
Alpine
Amador
Mono
Legend
LU Lines
California
Nevada
Service Territory
Tier 2 Fire Threat
Tier 3 Fire Threat
HIGH FIRE THREAT WITHIN
LIBERTY UTILITIES
SERVICE TERRITORY
Date: 6/27/2019
1 in = 11 miles
Liberty Utilities
701 National Ave
Tahoe, CA 96148

CA-05-1105

ATTACHMENT 17

Liberty response to data request
CalAdvocates-LIB-A2506017-037
November 22, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

November 24, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-037
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Cal Advocates Wildfire Discovery CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	November 7, 2025
Due Date:	November 22, 2025

Public Safety Power Shutoffs (PSPS)

REQUEST NO. 1:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-Emergency Response PSPS Playbook.docx," pages 6-7, which states:

3.9.2 Activation tree/criticality tiers (needs building out)

- No singular factor ultimately determines a PSPS decision. LU carefully reviews a combination of several factors when determining if power must be turned off for safety. These include:

(1) A Red Flag Warning declared by the NWS; Low humidity levels, generally 20 percent and below; Forecasted sustained winds generally above 25 miles per hour (mph) and wind gusts in excess of approximately 45 mph, depending on location and site-specific conditions such as temperature, terrain and local climate.

(2) Computer simulated ignition spread and consequence modeling based on current conditions;

(3) Condition of dry fuel on the ground and live vegetation (moisture content); and

(4) On-the-ground, real-time wildfire related information from LU's WSOC and field observations from LU field crews.

In Liberty's response to data request CalAdvocates-LIB-A2506017-017, question 2, Liberty provided the attachment "LU Fire Prevention Plan 10-9-2020.pdf," page 3, which states:

> Red Flag Warning (RFW): The National Weather Service will typically declare a RFW within a zone when wind gusts exceed 30 miles per hour (mph), and the relative humidity is less than 20 percent for more than three hours. Other factors considered include timber conditions and forecasts for weather elements, such as dry lightning. Typically, the RFW is issued for a specified period.

a) Explain why the section titled "3.9.2 Activation tree/criticality tiers (needs building out)" states "needs building out."

b) Explain why the NWS Red Flag Warning criteria in "CONFIDENTIAL-Emergency Response PSPS Playbook.docx" differs from NWS Red Flag Warning criteria in "LU Fire Prevention Plan 10-9-2020.pdf."

c) Liberty said that "the first trigger for a potential PSPS event is a forecast of fire danger and high wind conditions."[1] Prior to the Mountain View Fire ignition, how would Liberty have responded to this "first trigger"?

d) Explain the order of priority for the documents "LU Fire Prevention Plan 10-9-2020.pdf" and "CONFIDENTIAL-Emergency Response PSPS Playbook.docx" in Liberty's PSPS and operational decision-making.

e) How did Liberty personnel know which document to follow for Liberty's PSPS protocols?

f) Explain what the meaning of "Computer simulated ignition spread and consequence modeling based on current conditions."

g) From January 1, 2020 through November 17, 2020, provide documentation showing whether Liberty performed "Computer simulated ignition spread and consequence modeling based on current conditions."

h) Explain the meaning of "Condition of dry fuel on the ground and live vegetation (moisture content)."

i) For the period January 1, 2020 through November 17, 2020, provide documentation showing whether Liberty observed "Condition of dry fuel on the ground and live vegetation (moisture content)."

[1] Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, attachment "CONFIDENTIAL-Emergency Response PSPS Playbook.docx" at 7.

j) Explain the meaning of "On-the-ground, real-time wildfire related information from LU's WSOC and field observations from LU field crews" prior to the Mountain View Fire ignition.

k) For the period January 1, 2020 through November 17, 2020, provide documentation showing that Liberty observed "On-the-ground, real-time wildfire related information from LU's WSOC and field observations from LU field crews."

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty is not currently aware of the reason for the referenced language. Liberty notes that its de-energization criteria are discussed in detail in *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and its 2020 WMP.

b) Liberty does not understand the descriptions of Red Flag Warnings in the two referenced documents to be materially different. Both documents describe in general terms hazardous fire weather conditions that may prompt the National Weather Service ("NWS") to issue Red Flag Warnings.

c) Liberty monitored the forecasts displayed in its fire weather dashboard. When forecasts approached or exceeded the relevant PSPS forecast thresholds established in *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, Liberty conferred with its fire science and risk modeling consultant regarding the risk and consequence of wildfire ignition. Based on the forecast information, the relevant PSPS thresholds, and its discussions with its consultant, Liberty would decide whether to activate its IMT for a potential PSPS event.

d) Liberty does not understand what Cal Advocates means by the phrase "order of priority." The documents *LU Fire Prevention Plan 10-9-2020.pdf* and *CONFIDENTIAL-Emergency Response PSPS Playbook.docx* served different purposes. As Liberty explained in its response to CalAdvocates-LIB-A2506017-035, Question 7(e), Liberty used its Fire Prevention Plan (*LU Fire Prevention Plan 10-9-2020.pdf*) to guide operation and maintenance activities based on the five categories of FPI risk conditions. The FPP also summarized how Liberty's PSPS procedures were operationalized and outlined operational restrictions during a PSPS event. As outlined in the document itself, *CONFIDENTIAL-Emergency Response PSPS Playbook.docx* prescribed actions and communication protocols during each stage of a PSPS event, outlined the different levels of emergency activation and corresponding responses, presented the incident command structure with defined roles and functions, identified coordination with other stakeholders, and prescribed other PSPS-related procedures.

e) See Liberty's response to subpart (d).

f) See Liberty's response to subpart (c). Liberty understands the phrase "computer simulated ignition spread and consequence modeling based on current conditions" to refer to PyreCast, an open source fire spread modeling tool that Liberty and its fire science and risk modeling consultant referenced for information regarding the risk and consequence of wildfire ignition, which was then used to inform Liberty's decision to activate its IMT for a potential PSPS event.

g) Liberty did not itself perform "computer simulated ignition spread and consequence modeling based on current conditions." See Liberty's response to subpart (f). Liberty is thus not aware of records formally tracking any such simulations and modeling.
h) Liberty understands "condition of dry fuel on the ground and live vegetation (moisture content)" to refer generally to the fuel moisture levels of 1,000-hour dead fuels and live woody fuels.
i) Please refer to Liberty's response to CalAdvocates-LIB-A2506017-035, Questions 13–14 and attachments contained therein for fuel moisture sampling data gathered by Liberty's vendor between June and November 2020.
j) Liberty understands "on-the-ground, real-time wildfire related information from LU's WSOC and field observations from LU field crews" to refer to observations reported by Liberty's line operations personnel staged on circuits being monitored for potential de-energization during a PSPS activation. These personnel carry anemometers to measure real-time wind speeds and look for the presence of flying debris as a visual indicator of increased wildfire ignition risk. They report observations to the IMT, which uses these field observations to inform PSPS decision-making.
k) Liberty did not have any PSPS activations or PSPS de-energization events in 2020. Liberty is thus not aware of records formally tracking any such observations in the context of a PSPS activation or de-energization event.

REQUEST NO. 2:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 24, Reax states:[2]

> Seasonal variations in ERC (for fuel model G) at Walker RAWS from 1975-2018 are shown in and Figure 24. The 92nd percentile ERC threshold has been exceeded from mid-June through mid-October. Figure 25 plots wind gust against Fosberg Fire Weather Index. Data quality from this station is questionable. Approximately 500 hourly records were identified wherein wind gust and FFWI thresholds were exceeded between June and October. Additional analysis is required to understand if these readings are affected by data quality and whether Walker RAWS is representative of conditions in the Topaz PSPS Zone.

a) Explain the meaning of Liberty's statement that "Data quality from this station is questionable."
b) Explain whether and why Liberty or Reax also considered any ERCs that were forecasted based on information from the Walker RAWS to be "questionable."
c) Provide the "additional analysis" that Liberty or Reax needed to perform to "understand if these readings are affected by data quality and whether Walker RAWS is representative of conditions in the Topaz PSPS Zone."
d) Provide the date that the "additional analysis" was issued and who performed it.
e) Explain whether Liberty changed its models or thresholds based on the "additional analysis." Describe any changes made based on the "additional analysis."

[2] Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf." Reax Engineering, Inc. prepared this attachment for Liberty Utilities on August 20, 2019.

f) If Liberty changed its models or thresholds based on the "additional analysis," provide the date that the change was implemented.
g) If Liberty or Reax did not perform the "additional analysis," explain why.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands this statement to refer to the fact that the Walker RAWS, like other RAWS, sometimes reported data that were clearly erroneous, such as impossibly high winds. As of the date of the analysis, the Walker RAWS station provided the best available historical weather data in the Topaz area.
b) Liberty understands this subpart to refer to ERC percentile forecasts displayed in Liberty's fire weather dashboard. As described in Liberty's amended responses to CalAdvocates-LIB-A2506017-017, Question 1(c), Liberty's ERC percentile forecasts were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS") and thus were not forecasted based on information from the Walker RAWS.
c) Based on the judgment and expertise of its fire science and risk modeling consultant, the need to rely on RAWS decreased over time as Liberty installed weather stations and began to accrue a statistically significant set of weather data, including for the Topaz 1261 Circuit.
d) See Liberty's response to subpart (c).
e) See Liberty's response to subpart (c).
f) See Liberty's response to subpart (c).
g) See Liberty's response to subpart (c).

REQUEST NO. 3:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 30, Reax states "Five fires in the Greater Lake Tahoe region were identified as being of interest, with their locations relative to Liberty Utilities PSPS Zones shown in Figure 27."

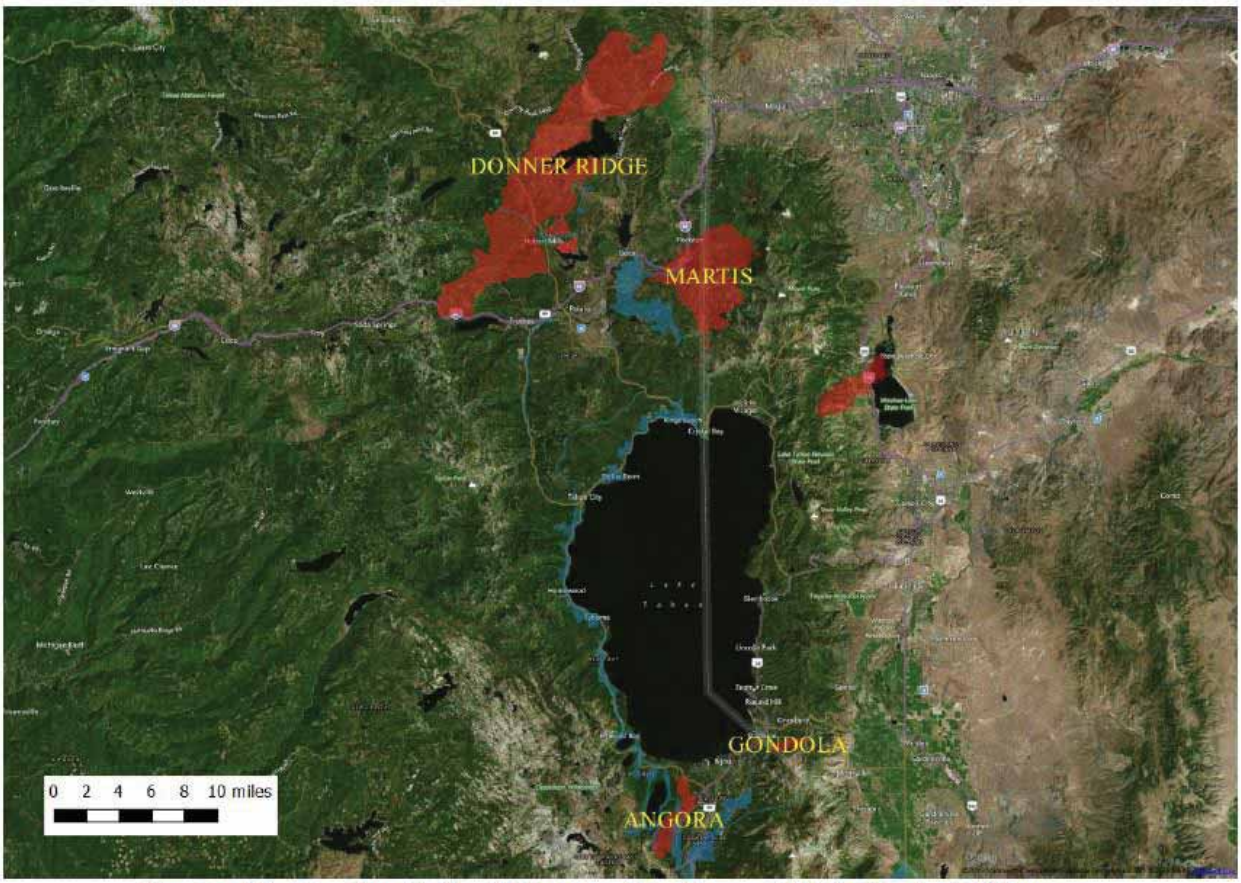


Figure 27. Greater Lake Tahoe region fires of historical significance.

a) Did Reax consider or analyze any other past fires in addition to the five identified above?
b) If the answer to subpart (a) is yes, provide documentation of Reax's consideration or analysis.
c) If the answer to subpart (a) is no, explain why not.
d) Explain why Reax picked these five fires to analyze.
e) Explain why Reax did not consider any past fires south of the Angora fire.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands that its fire weather and risk modeling consultant reviewed historical fires in and around Liberty's service area and, based on its judgment and expertise, identified the five fires identified in Section 5.1 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* as fires of interest for purposes of its analysis because they were fires that either caused damage or had the potential to cause damage under different weather conditions. Liberty's fire weather and risk modeling consultant presented analysis of the five fires of historical significance in Section 5.1, and did not present analysis of other fires.

b) N/A
c) See Liberty's response to subpart (a).
d) See Liberty's response to subpart (a).
e) See Liberty's response to subpart (a). Liberty's fire weather and risk modeling consultant did not identify any fire south of the 2007 Angora Fire as a fire of historical significance.

REQUEST NO. 4:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 31, Reax states:

> 5.2.1 1960 Donner Ridge Fire
>
> The Donner Ridge Fire began on August 25th, 1960. Although no weather station observations are available from conventional sources, it has been reported that winds were in the 60-70 mph range [13], which would have simultaneously exceeded wind gust and FFWI de-energization thresholds.

a) Explain why Reax did not provide an evaluation of the Donner Ridge Fire's ERC.
b) Provide documents showing Reax's full analysis of the Donner Ridge Fire.
c) Explain how Reax concluded that the 60-70 mph winds "would have simultaneously exceeded wind gust and FFWI de-energization thresholds."
d) Identify which information from Reax's analysis of the Donner Ridge Fire Reax used to shape Liberty's PSPS thresholds.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty's fire weather and risk modeling consultant presented detailed analysis of the Energy Release Component ("ERC") threshold in other sections of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, including the strong correlation of ERC with fire occurrence and fire size (Section 3.1) and historical values and seasonal variations in ERC for the five areas comprising Liberty's PSPS zones (Section 4.1). Section 5 focused on available weather station observations relative to the identified de-energization thresholds, which did not encompass ERC.
b) Liberty understands that its fire weather and risk modeling consultant's analysis of the Donner Ridge Fire is reflected on page 31 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and Liberty is not aware of other documents reflecting this analysis within its possession.
c) Liberty's fire science and risk modeling consultant reached this conclusion based on available information regarding wind speeds and its judgment and expertise.
d) Please refer to Section 5 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf.*

REQUEST NO. 5:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 31, Reax states:

> 5.2.2 2001 Martis Fire
>
> The Martis Fire was ignited on June 16, 2001. It consumed over 10,000 acres in its first seven hours and ultimately destroyed a cabin, a mobile home, and 3 vehicles [14]. Conditions at lower elevations were such that the initial rate of spread was rapid, but fuel moistures at higher elevations reduced spread rates. No representative weather station observations are available due to missing or bad data from surrounding stations. Without representative meteorological observations it is inconclusive as to whether de-energization thresholds were exceeded but they most likely were not.

a) Explain why Reax did not provide an evaluation of the Martis Fire's ERC.
b) Provide the documents of Reax's full analysis of the Martis Fire.
c) Explain how Reax concluded that "conditions at lower elevations were such that the initial rate of spread was rapid, but fuel moistures at higher elevations reduced spread rates."
d) Explain how Reax concluded that "it is inconclusive as to whether de-energization thresholds were exceeded but they most likely were not."
e) Explain which information from Reax's analysis of the Martis Fire Reax used to shape Liberty's PSPS thresholds.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) See Liberty's response to Question 4(a) of this set of data requests.
b) Liberty understands that its fire weather and risk modeling consultant's analysis of the Martis Fire is reflected on page 31 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and Liberty is not aware of other documents reflecting this analysis within its possession.
c) Liberty's fire science and risk modeling consultant made this conclusion based on available information and its judgment using its fire weather expertise and experience.
d) Liberty's fire science and risk modeling consultant made this conclusion based on available information and its judgment using its fire weather expertise and experience.
e) Please refer to Section 5 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*.

REQUEST NO. 6:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 31, Reax states:

> 5.2.3 2002 Gondola Fire

The Gondola Fire was ignited around 12:30 PM on July 3, 2002 near the gondola at Heavenly Ski Resort. It ultimately consumed approximately 700 acres and threatened over 500 structures although no structures were destroyed. The fire initially grew relatively slowly, reaching 25 acres several hours after ignition. Observations from the nearby Cave Rock station (Table 6) show relatively mild fire weather conditions. Peak wind gust was 13 mph with FFWI of 8. This is not close to exceeding de-energization thresholds.

a) Explain why Reax did not provide an evaluation of the Gondola Fire's ERC.
b) Provide the documents of Reax's full analysis of the Gondola Fire.
c) Identify which information from Reax's analysis of the Gondola Fire Reax used to shape Liberty's PSPS thresholds.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) See Liberty's response to Question 4(a) of this set of data requests.
b) Liberty understands that its fire weather and risk modeling consultant's analysis of the Gondola Fire is reflected on page 31 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and Liberty is not aware of other documents reflecting this analysis within its possession.
c) Please refer to Section 5 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*.

REQUEST NO. 7:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 32, Reax states:

5.2.4 2007 Angora Fire

The 2007 Angora Fire destroyed over 250 structures near South Lake Tahoe. It was ignited at approximately 2 PM on June 24, 2007. Steady winds of 20-30 mph gusting to 50 mph were reported, but observations at local weather stations showed lower wind speeds.
Table 7 shows observations from the US-50 Kahle Drive station on the afternoon of the first day of the Angora Fire (when most structures were destroyed). The highest wind gust was approximately 29 mph which occurred when FFWI was approximately 26. Although measured wind gusts approached de-energization thresholds, FFWI did not. Given reports of steady winds up to 30 mph with gusts to 50 mph, if a denser network of weather stations was available at the time of the fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds.

a) Explain why Reax did not provide an evaluation of the Angora Fire's ERC.
b) Provide the documents of Reax's full analysis of the Angora Fire.
c) Explain how Reax concluded that "[g]iven reports of steady winds up to 30 mph with gusts to 50 mph, if a denser network of weather stations was available at the time of the

fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds."

d) Identify which information from Reax's analysis of the Angora Fire Reax used to shape Liberty's PSPS thresholds.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) See Liberty's response to Question 4(a) of this set of data requests.
b) Liberty understands that its fire weather and risk modeling consultant's analysis of the Angora Fire is reflected on page 32–33 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and Liberty is not aware of other documents reflecting this analysis within its possession.
c) Liberty's fire science and risk modeling consultant made this conclusion based on available information and its judgment using its fire weather expertise and experience.
d) Please refer to Section 5 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf.*

REQUEST NO. 8:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 33, Reax states:

5.2.5 2016 Little Valley Fire

The October 2016 Little Valley Fire was a holdover fire from an earlier prescribed burn. It rekindled and escaped on October 14, 2016 at approximately 12:30 am, ultimately destroying 23 homes East of Lake Tahoe. Little Valley RAWS (see Table 8) reported a wind gust of 87 mph at 12:38 AM on October 14, 2016, although the veracity of this observation is questionable. Several wind gust readings that morning exceeded 50 mph. However, FFWI remained below 45 because temperatures were low (52 °F), relative humidities were moderate (30% - 50%), and sustained wind speeds did not exceed 20 mph.

In summary, observations at Little Valley RAWS showed wind gusts well in excess of de-energization thresholds. However, peak FFWI reached approximately 87% of the de-energization threshold due to low temperatures, relatively high humidities, and moderate sustained wind speeds. If a denser network of weather stations was available at the time of the fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds.

a) Explain why Reax did not provide an evaluation of the Little Valley Fire's ERC.
b) Provide the documents of Reax's full analysis of the Little Valley Fire.
c) Explain how Reax concluded that "peak FFWI reached approximately 87% of the de-energization threshold due to low temperatures, relatively high humidities, and moderate sustained wind speeds."

d) Explain how Reax concluded that "[i]f a denser network of weather stations was available at the time of the fire, it is likely that weather conditions at more representative stations closer to the fire exceeded de-energization thresholds."
e) Identify which information from Reax's analysis of the Little Valley Fire Reax used to shape Liberty's PSPS thresholds.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as overbroad and unduly burdensome. Liberty further objects to this Question as seeking information not maintained in Liberty's ordinary course of business and not in Liberty's possession. Subject to and without waiving its objections, Liberty responds as follows:

a) See Liberty's response to Question 4(a) of this set of data requests.
b) Liberty understands that its fire weather and risk modeling consultant's analysis of the Little Valley Fire is reflected on page 33–34 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* and Liberty is not aware of other documents reflecting this analysis within its possession.
c) Liberty's fire science and risk modeling consultant made this conclusion based on available information and its judgment using its fire weather expertise and experience.
d) Liberty's fire science and risk modeling consultant made this conclusion based on available information and its judgment using its fire weather expertise and experience.
e) Please refer to Section 5 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*.

REQUEST NO. 9:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 35, Reax states:

> Based on the preceding discussion and analyses, the recommended protocol for de-energization in the Topaz and Mul 1296 r3 PSPS zones involves simultaneously testing whether the following criteria are exceeded:
>
> 1. Observed Energy Release Component (ERC) > 92nd percentile
> 2. Observed wind gust > 45 mph
> 3. Observed Fosberg Fire Weather Index (FFWI) > 60

In the Application, Exhibit Liberty-03, page 37, Liberty states:

> Liberty's refined PSPS protocol was implemented and approved by OEIS as part of its 2020 WMP.45 The PSPS protocol used a predictive tool to capture three fire weather components: (a) Energy Release Component ("ERC"); (b) wind gusts; and (c) Fosberg Fire Weather Index ("FFWI").

a) Explain why Liberty used forecasted ERC, wind gust, and FFWI in its fire weather dashboard rather than observed ERC, wind gust, and FFWI.
b) Explain why Liberty used forecasted ERC, wind gust, and FFWI in its PSPS thresholds rather than observed ERC, wind gust, and FFWI.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty used forecasted ERC, wind gust, and FFWI in its fire weather dashboard because forecast thresholds informed its decision whether to activate a PSPS event. See Liberty's response to subpart (b).
b) Liberty used forecasted ERC, wind gust, and FFWI in its approved PSPS thresholds to assess whether to activate a PSPS event because Liberty needed to issue advance notifications to customers and other stakeholders and prepare its field operations personnel in advance of potential de-energization. Using observed conditions to inform PSPS activation decisions would be infeasible because there would be no time to conduct preparations and issue notifications. As referenced on page 37 of *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, in the event of a PSPS activation, observed data from weather stations and field observers informed the decision to de-energize.

REQUEST NO. 10:

In Liberty's response to data request CalAdvocates-LIB-A2506017-011, question 2, Liberty provided the attachment "CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf," page 35, Reax states:

> Energy Release Component (ERC) is a key index calculated from Remote Automated Weather Station (RAWS) observations as part of the US National Fire Danger Rating System (NFDRS)….ERC depends on live and dead fuel loading by size class (as characterized by an NFDRS fuel model) as well as fuel moisture content of live and dead fuels. In forested areas, ERC values are usually calculated for NFDRS fuel model G which includes a heavy loading of 1000-hour fuels (dead fuels between 3 and 8 inches in diameter). Consequently, ERC for fuel model G (or ERC(G) for short) is therefore quite sensitive to 1000-hour fuel moisture values.

The Fire Environment Mapping System (FEMS) includes NFDRS Fuel Model V, W, X, Y, and Z data.[3]

a) Prior to the Mountain View Fire ignition, did Liberty use the NFDRS ERC fuel model G as inputs to its fire weather dashboard?
b) After the Mountain View Fire ignition, did Liberty continue to use the NFDRS ERC fuel model G as inputs to its fire weather dashboard?
c) If the answer to subpart (b) is yes, explain why.
d) If the answer to subpart (b) is no, state when Liberty switched to a different ERC fuel model input for its fire weather dashboard and what it used.
e) Which of the current NFDRS Fuel Models in FEMS is equivalent to what Liberty used prior to the Mountain View Fire ignition?

RESPONSE:

[3] https://fems.fs2c.usda.gov/ui?FireDanger/hourly/energy_release_component/3/topo/0/12120/Y/false

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as assuming facts. Subject to and without waiving its objections, Liberty responds as follows:

a) As Liberty explained in its amended responses to CalAdvocates-LIB-A2506017-017, Question 1(c), Liberty's ERC percentile forecasts were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS"). Liberty understands that NFDRS ERC fuel model G was in use by the WFAS prior to November 17, 2020.
b) Liberty continued to obtain its ERC percentile forecasts from the WFAS after November 17, 2020. As an end user of WFAS's ERC percentile forecasts, Liberty is not aware of whether or when the WFAS changed its fuel models.
c) See Liberty's response to subpart (b).
d) See Liberty's response to subpart (b).
e) Liberty understands that FEMS was not in existence as of November 17, 2020 and that none of the fuel models in FEMS is equivalent to fuel model G.

ATTACHMENT 18

Liberty response to data request
CalAdvocates-LIB-A2506017-035
November 13, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

November 13, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-035
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Cal Advocates Wildfire Discovery CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	October 30, 2025
Due Date:	November 13, 2025

Public Safety Power Shutoffs (PSPS)

REQUEST NO. 1:

In the Application, Exhibit Liberty-03, page 34, Liberty states:

> In 2020, with the assistance of the third-party fire science and risk modeling consultant, Liberty developed and implemented a Fire Potential Index ("FPI"), a fire risk modeling tool that used multiple data inputs (e.g., live and dead fuel moisture, "green-up" factor, ambient temperature, relative humidity, and the Fosberg Fire Weather Index ("FFWI")) to calculate a standardized numeric ranking of fire threat at any given time and to obtain a forecast of expected fire weather conditions.

a) For the period from November 11, 2020 through November 17, 2020, provide the raw inputs used to calculate Liberty's Fire Potential Index and the source of those inputs (e.g., weather station ID and name).

b) For the period from November 11, 2020 through November 17, 2020, provide the raw inputs used to calculate Liberty's 6-hour average Fosberg Fire Weather Index and the source of those inputs (e.g., weather station ID and name).

c) For the period from November 11, 2020 through November 17, 2020, provide the raw inputs used to calculate Liberty's 6-hour average wind gust and the source of those inputs (e.g., weather station ID and name).

d) For the period from November 11, 2020 through November 17, 2020, provide the raw inputs used to determine the ERC forecast and the source of those inputs (e.g., weather station ID and name).

e) Provide Liberty's fire weather dashboard forecasts for the period from January 1, 2020 through November 10, 2020.

f) Was the data collected from Liberty's weather stations used as an input for any of the forecasts discussed above?

g) If the answer to subpart (f) is yes, explain which weather station provided the data, which data was used, what the data was used for, and when that data was used.

h) If the answer to subpart (f) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows: Liberty understands this Question to be referencing forecasts displayed on Liberty's fire weather dashboard. As Liberty has explained in its responses and amended responses to various questions in CalAdvocates-LIB-A2506017-011, CalAdvocates-LIB-A2506017-014, and CalAdvocates-LIB-A2506017-017, Liberty obtained forecasts displayed on this dashboard from third-party data sources and from its fire science and risk modeling consultant.

a) As Liberty explained in its response to CalAdvocates-LIB-A2506017-014, Question 2, Liberty's FPI forecasts were calculated from two National Fire Danger Rating System ("NFDRS") indices—Energy Release Component ("ERC") and Burning Index ("BI"). The ERC and BI percentile forecasts used to calculate Liberty's FPI originated from the U.S. Forest Service Wildland Fire Assessment System ("WFAS"). Liberty did not calculate the FPI. Liberty drew upon WFAS's calculations and did not archive the raw inputs used by the WFAS within the specified timeframe. Liberty will clarify the referenced testimony in *Liberty-03* in forthcoming errata.

b) The 6-hour average Fosberg Fire Weather Index (FFWI) values displayed on its fire weather dashboard were calculated by its fire weather and risk modeling consultant using inputs from National Weather Service ("NWS") weather forecast models. Liberty and its consultant did not archive this weather model data within the specified timeframe.

c) The 6-hour average wind gust forecasts displayed on its fire weather dashboard were calculated by its fire weather and risk modeling consultant using inputs from NWS

weather forecast models. Liberty and its consultant did not archive this weather model data within the specified timeframe.

d) As Liberty explained in its response to CalAdvocates-LIB-A2506017-017, Question 1, the ERC percentile forecasts displayed on Liberty's fire weather dashboard were not calculated by Liberty but were obtained from the WFAS. WFAS does not distribute the raw inputs that WFAS uses to calculate ERC percentile forecasts.
e) Liberty does not have access to fire weather dashboard data from the specified timeframe given the passage of time.
f) No.
g) N/A
h) Please refer to Liberty's response to CalAdvocates-LIB-A2506017-029, Question 5 for information on how Liberty used data from its weather stations.

REQUEST NO. 2:

In Liberty's Amended response to data request CalAdvocates-LIB-A2506017-017, question 1c, Liberty states:

> Liberty did not measure or calculate ERC in real-time, as Liberty understands that term. ERC is a National Fire Danger Rating System ("NFDRS") index. Liberty's ERC percentile forecasts were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS") and updated on Liberty's fire weather dashboard daily.

For January 1, 2020 through November 17, 2020, provide an Excel file that displays each zone[1] in Liberty's fire weather dashboard that Liberty obtained ERC percentile forecasts for as a row and the following as columns:

a) Weather station ID that the forecast was derived from;
b) Weather station name that the forecast was derived from; and
c) Time Period that Liberty used the weather station that the forecast was derived from.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) As referenced in Liberty's response to Question 1(d) of this set of data requests and its amended response to CalAdvocates-LIB-A2506017-017, Question 1(c), Liberty obtained ERC percentile forecasts displayed on its fire weather dashboard from WFAS. Liberty was an end-user, not a developer, of these ERC percentile forecasts.
b) See Liberty's response to subpart (a) of this Question.
c) See Liberty's response to subpart (a) of this Question.

REQUEST NO. 3:

In the Application, Exhibit Liberty-03, pages 37-38, Liberty states:

[4] Application, Exhibit Liberty-03 at 35 states "Liberty's FPI tool provided a seven-day forecast for 11 different geographic zones across 26 Liberty's service area."

> The PSPS protocol used a predictive tool to capture three fire weather components: (a) Energy Release Component ("ERC"); (b) wind gusts; and (c) Fosberg Fire Weather Index ("FFWI"). Together, these three components were intended to capture the risk of wildfire ignition and spread based on forecasted medium- and long-term environmental conditions and weather conditions.

For January 1, 2020 through November 17, 2020, provide an Excel file that displays each zone[2] in Liberty's fire weather dashboard that Liberty obtained wind gust forecasts for as a row and the following as columns:

a) Weather station ID that the forecast was derived from;
b) Weather station name that the forecast was derived from; and
c) Time Period that Liberty used the weather station that the forecast was derived from.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) As referenced in Liberty's response to Question 1(c) of this set of data requests, wind gust forecasts displayed in Liberty's fire weather dashboard were calculated by its fire weather and risk modeling consultant using inputs from NWS weather forecast models. These forecasts were not based on weather station observations.
b) See Liberty's response to subpart (a) of this Question.
c) See Liberty's response to subpart (a) of this Question.

REQUEST NO. 4:

In the Application, Exhibit Liberty-03, pages 37-38, Liberty states:

> The PSPS protocol used a predictive tool to capture three fire weather components: (a) Energy Release Component ("ERC"); (b) wind gusts; and (c) Fosberg Fire Weather Index ("FFWI"). Together, these three components were intended to capture the risk of wildfire ignition and spread based on forecasted medium- and long-term environmental conditions and weather conditions.

For the period prior to the Mountain View Fire ignition, provide an Excel file with each zone[3] in its fire weather dashboard that Liberty obtained data for use in its FFWI forecasts for as a row and the following as columns:

a) Weather station ID that the forecast was derived from;
b) Weather station name that the forecast was derived from; and
c) Time Period that Liberty used the weather station that the forecast data was derived from.

RESPONSE:

[5] Application, Exhibit Liberty-03 at 35 states "Liberty's FPI tool provided a seven-day forecast for 11 different geographic zones across 26 Liberty's service area."

[6] Application, Exhibit Liberty-03 at 35 states "Liberty's FPI tool provided a seven-day forecast for 11 different geographic zones across 26 Liberty's service area."

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) As referenced in Liberty's response to Question 1(b) of this set of data requests, the FFWI forecasts displayed in Liberty's fire weather dashboard were calculated by its fire weather and risk modeling consultant using inputs from NWS weather forecast models. These forecasts were not based on weather station observations.
b) See Liberty's response to subpart (a) of this Question.
c) See Liberty's response to subpart (a) of this Question.

REQUEST NO. 5:

In Liberty's response to data request CalAdvocates-LIB-A2506017-017, question 1d, Liberty states:

> WFAS typically provided updated ERC values on a daily basis. Because ERC is a fire danger index intended to measure intermediate- to longer-term dryness and its calculation considers antecedent conditions over the prior several weeks, ERC calculations typically show little variation at sub-daily timescales.

a) What does an ERC of 0.0 represent?
b) What would ERC forecast calculations increasing from 0.0 to 60 from one day to another represent?
c) Did Liberty perform calculations on the ERC that it obtained from WFAS in order to create a daily percentile for its fire weather dashboard?
d) If the answer to subpart (c) is yes, provide documents showing how Liberty used WFAS data to create an ERC percentile.
e) If the answer to subpart (c) is no, explain why not

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty understands the term "ERC" and "ERC forecast" in this Question to refer to the ERC percentile forecasts displayed on Liberty's fire weather dashboard. Subject to and without waiving its objections, Liberty responds as follows:

a) ERC percentile forecasts are measures of the potential energy per unit area that would be released in the flaming front of a fire normalized against historical ERC values for a specific area, and vary based on the moisture content of live and dead fuels. An ERC percentile forecast of 0.0 means there is no potential energy available within fuels to sustain the spread of a fire, such as when there is snow cover on the ground. As referenced in Liberty's amended response to CalAdvocates-LIB-A2506017-017, Question 3, at times, an ERC percentile forecast of 0.0 may also reflect data gaps due to delays or other issues with WFAS reporting.
b) An increase of 0.0 to 60 in ERC percentile forecasts means that the amount of potential energy that would be released in the flaming front of a fire has increased due to an increase in fuel dryness, and that raw ERC values are higher than those seen on 60% of historical days at a specific location.

c) Liberty objects that the term "calculations" is vague and ambiguous. Once gridded ERC percentile forecasts were obtained from WFAS, average values were calculated for each of Liberty's pre-defined PSPS zones, and those values were displayed in tabular format in Liberty's fire weather dashboard.
d) N/A
e) The ERC forecasts obtained from WFAS were already in percentile form.

REQUEST NO. 6:

In Liberty's Amended response to data request CalAdvocates-LIB-A2506017-017, question 1c, Liberty states:

> Liberty did not measure or calculate ERC in real-time, as Liberty understands that term. ERC is a National Fire Danger Rating System ("NFDRS") index. Liberty's ERC percentile forecasts were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS") and updated on Liberty's fire weather dashboard daily. With support from its vendor, Liberty also calculated ERC values on a weekly or biweekly basis as part of its field fuel moisture sampling to support situational awareness.

a) Provide documents showing Liberty's calculations and values for the ERC that Liberty calculated weekly or biweekly in the entirety of 2020.
b) Provide Liberty's ERC percentile forecasts that it obtained from the U.S. Forest Service Wildland Fire Assessment System that corresponded to each date and time that Liberty performed ERC calculations for in the entirety of 2020.

RESPONSE:

a) Liberty is providing the information requested by this subpart in the "ERC" and "ERCraw" tabs of attachment *CalAdvocates-LIB-A2506017-035-Q6.xlsx*. This spreadsheet contains records of data collected and calculated by Liberty's vendor from field fuel moisture sampling sites in 2020.
b) Liberty does not have access to the ERC percentile forecasts obtained from WFAS for the specified timeframe given the passage of time.

REQUEST NO. 7:

In Liberty's response to data request CalAdvocates-LIB-A2506017-017, question 2, Liberty provided the attachment "LU Fire Prevention Plan 10-9-2020.pdf," page 4, which states:

> During Red Flag Events, Liberty CalPeco will monitor wind gusts at the peak elevation located at Bliss State Park using the link below or other available data.
> Liberty CalPeco has identified 46 Public Safety Power Shut-off (PSPS) zones that are based on isolation points within certain circuits or areas. If Reax forecasts for these zones that the ERC, wind, and FFWI will come within 80%, 90%, or 100% of the thresholds for de-energization, Liberty CalPeco will enact a PSPS upon or just before reaching 100%. During a PSPS event, Liberty CalPeco will suspend noncritical operational work to focus efforts on current conditions and proactive patrols after de-energizing and when restoring power. Liberty CalPeco adheres to the guidelines provided in R. 18-12-005, an open proceeding that prescribes utilities' PSPS processes, among other issues. Liberty CalPeco

will provide updated protocols for internal PSPS practices in the 2020 version of its Wildfire Mitigation Plan.

In the Application, Exhibit Liberty-03, pages 38-39, Liberty states:

Figure 16: De-Energization Decision Tree for Most of Liberty's PSPS Zones

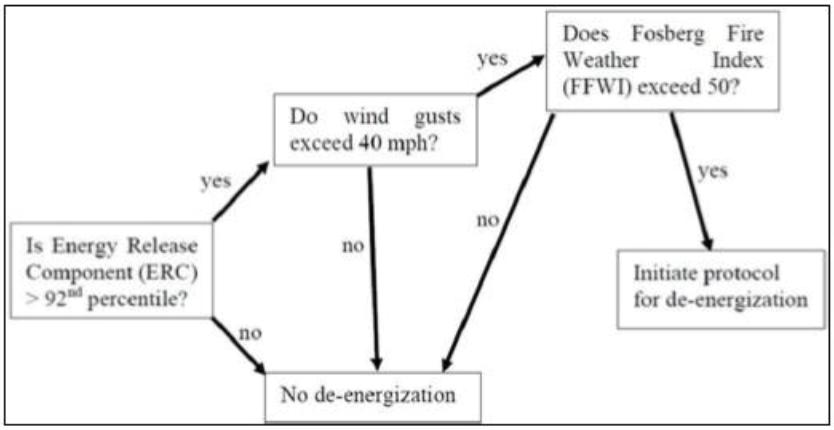
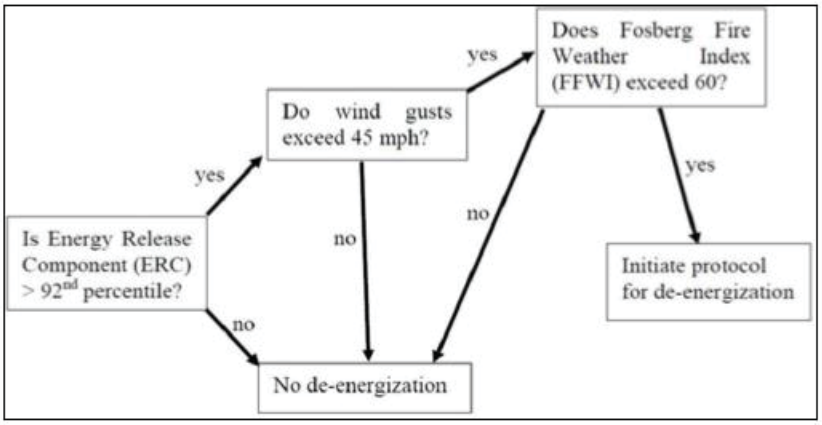


Figure 17: De-Energization Decision Tree for Topaz and Muller 1296 R3 PSPS Zones



a) Clarify the discrepancy between "LU Fire Prevention Plan 10-9-2020.pdf," page 4, "If Reax forecasts for these zones that the ERC, wind, and FFWI will come within 80%, 90%, or 100% of the thresholds for de-energization, Liberty CalPeco will enact a PSPS upon or just before reaching 100%" and Application, Exhibit Liberty-03, pages 38-39 stating that an ERC greater than the 92nd percentile must first be met.
b) Regarding the statement in "LU Fire Prevention Plan 10-9-2020.pdf," page 4, "If Reax forecasts for these zones that the ERC, wind, and FFWI will come within 80%, 90%, or 100% of the thresholds for de-energization, Liberty CalPeco will enact a PSPS upon or just before reaching 100%" Did Liberty interpret this statement to mean that, if either the ERC forecast or the wind gust forecast or the FFWI forecast approached 80% or 90% or

100% of thresholds, then Liberty would initiate a PSPS or did Liberty interpret this statement to mean that if all three thresholds were met simultaneously (ERC forecast, wind gust forecast, and FFWI forecast) approached 80% or 90% or 100%, then Liberty would initiate a PSPS?

c) Define "will come within 80%, 90%, or 100% of the thresholds" and explain whether Liberty included a buffer zone.
d) Explain why Liberty's "LU Fire Prevention Plan 10-9-2020.pdf," page 4, states its ERC, wind, and FFWI forecasts will come within 80% while the Application, Exhibit Liberty-03, pages 38-39, show that the first threshold is ERC of the 92nd percentile.
e) In practice, from October 9, 2020 through November 17, 2020, did Liberty follow the "LU Fire Prevention Plan 10-9-2020.pdf" as it related to Liberty deciding whether to consider a PSPS? If so, state when and how Liberty used "LU Fire Prevention Plan 10-9-2020.pdf." If not, explain why not.
f) In practice, from October 30, 2019 through October 9, 2020, did Liberty follow its Revised 2020 Wildfire Mitigation Plan, attachment "Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities" as it related to Liberty deciding whether to consider a PSPS?[4] If so, state when and how Liberty used "Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities". If not, explain why not.
g) Explain why Liberty used a 6-hour average wind gust forecast versus a 1-hour average wind gust forecast in Liberty's fire weather dashboard.
h) Explain why Liberty used a 6-hour average FFWI forecast versus a 1-hour average FFWI forecast in its fire weather dashboard.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as argumentative and assuming facts. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty does not agree there is a discrepancy between the two sources cited by Cal Advocates. Both the quoted passage from Liberty's Fire Prevention Plan (FPP) (attachment *LU Fire Prevention Plan 10-9-2020.pdf*) and the decision trees that appear in *Liberty-03* refer to Liberty's PSPS procedures in effect as of November 17, 2020 and tie to the same de-energization thresholds. See *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*, attached to Liberty's response to CalAdvocates-LIB-A2506017-011, Question 2. The FPP summarized how Liberty's PSPS procedures were operationalized in advance of a potential PSPS event. Forecasted conditions exceeding 80%, 90%, and 100% of the thresholds informed Liberty's decision to activate its Incident Management Team (IMT) and initiate PSPS notifications while observed conditions exceeding relevant thresholds for the three criteria specified in the decision trees informed Liberty's decision to de-energize.
b) As of November 17, 2020, forecasts would typically have to simultaneously exceed 80%, 90%, or 100% of de-energization thresholds for all three PSPS criteria for Liberty to consider activating its IMT for a PSPS event. As referenced in *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf* (at p. 35), observed conditions

[7] *Liberty Utilities Revised 2020 Wildfire Mitigation Plan*, February 28, 2020, attachment "Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities."

would typically have to simultaneously exceed 100% of de-energization thresholds for all three criteria for Liberty to consider de-energization during a PSPS event.

c) Liberty does not understand what Cal Advocates means by the use of the term "buffer zone." The phrase "will come within 80%, 90%, or 100% of the thresholds" refers to situations where the forecasted values for ERC, FFWI, and wind gusts exceed 80%, 90%, or 100% of the de-energization thresholds for the relevant PSPS zone, as established by and defined in Liberty's PSPS protocol at the time, see *CONFIDENTIAL-2019-08-20 Liberty Utilities de-energization thresholds.pdf*.
d) Liberty objects to this subpart as vague and ambiguous. See Liberty's response to subpart (a).
e) As Liberty explained in its response to CalAdvocates-LIB-A2506017-017, Question 2, Liberty used its Fire Prevention Plan (attachment *LU Fire Prevention Plan 10-9-2020.pdf*) to guide operation and maintenance activities based on the five categories of FPI risk conditions. The FPP summarized how Liberty's PSPS procedures were operationalized and outlined operational restrictions during a PSPS event. Please refer to Liberty's response to CalAdvocates-LIB-A2506017-011, Question 2 for the PSPS procedures that were in effect as of November 17, 2020.
f) See Liberty's response to subpart (e).
g) As a mitigation measure of last resort, Liberty's PSPS protocol was designed to balance customer impact and public safety risks associated with power shutoffs with the risk of utility-caused wildfires. Based on the expertise and judgment of Liberty's fire science and risk modeling consultant at the time, using a 6-hour wind gust average forecast was more suited to balancing these risks and to minimize the potential for customer impact and safety risks during short-duration weather events. Around the time Liberty's fire science and risk modeling consultant designed Liberty's PSPS protocols in 2019, other utilities also used 6-hour average forecasts to inform their PSPS decision-making.
h) See Liberty's response to subpart (g).

REQUEST NO. 8:

In the Application, Exhibit Liberty-03, page 38, footnote 48, Liberty states:

> FFWI is a commonly-used measure of fire risk that takes into account short-term variations in temperature, relative humidity, and wind speed. It does not take into account fuel type, topography, or fuel moisture. The FFWI scale ranges from 0 to 100, with a reading above 50-60 considered high risk. This component complemented the ERC's seasonal considerations by measuring short-term weather conditions conducive to rapidly-spreading fires.

a) From January 1, 2020 to November 17, 2020, how did Liberty calculate its FFWI?
b) Provide documents showing how Liberty calculated its FFWI.
c) From January 1, 2020 to November 17, 2020, did Liberty calculate FFWI in real-time?
d) If the answer to subpart (c) is no, explain why not.
e) If the answer to subpart (c) is yes, explain what Liberty did with its calculated FFWI data with respect to its operations (including but not limited to PSPS protocols).

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) With respect to FFWI forecasts displayed in Liberty's fire weather dashboard, see Liberty's response to Question 1(b) of this set of data requests. With respect to FFWI values recorded by Liberty's weather stations, see Liberty's response to subpart (c).
b) N/A
c) Within the specified timeframe, some of Liberty's weather stations recorded FFWI values, which were calculated based on measurements gathered by certain weather sensors at those stations. See Liberty's response to Question 16(a) of this set of data requests.
d) N/A
e) Refer to Liberty's response to CalAdvocates-LIB-A2506017-029, Question 5 for an explanation of how Liberty used its weather station data.

Fire Potential Index

REQUEST NO. 9:

In Liberty's response to data request CalAdvocates-LIB-A2506017-008, question 8, Liberty provided the attachment "FPI Forecasts.pdf" showing Liberty's fire weather dashboard forecasts (which included Fire Potential Index forecasts, Fosberg Fire Weather Index forecasts, and wind gust forecasts) for the period from November 11, 2020 through November 17, 2020. At 6:00am on November 17, 2020, Liberty's forecast showed that Topaz would have a Fire Potential Index of "Moderate" on November 18, 2020.

a) What was Liberty's plan to prepare for the forecasted "Moderate" conditions it expected on November 18, 2020?
b) When did Liberty begin planning for the forecasted "Moderate" conditions?
c) When did Liberty actually begin to prepare for the forecasted "Moderate" conditions?
d) Provide any documents showing that Liberty staff responded to the forecasted "Moderate" conditions it expected on November 18, 2020.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) Please refer to Liberty's Fire Prevention Plan (FPP) in effect at the time, provided in *LU Fire Prevention Plan 10-9-2020.pdf*, attached to CalAdvocates-LIB-A2506017-017, Question 2. Under Liberty's FPP, the operating procedures for Low and Moderate FPI categories were equivalent to normal operating procedures, which required field personnel to follow general safety instructions with respect to fire awareness and fire safety. *See LU Fire Prevention Plan 10-9-2020.pdf* at 6-7.

b) See Liberty's response to subpart (a). Liberty communicated FPI forecasts to its operations personnel each morning.
c) See Liberty's response to subparts (a) and (b).
d) See Liberty's response to subpart (a). Because there would have been no need for additional operational preparations beyond following general fire safety instructions for the forecasted "Moderate" conditions, Liberty is not aware of records formally tracking Liberty personnel responding to the "Moderate" FPI conditions.

REQUEST NO. 10:

In Liberty's response to data request CalAdvocates-LIB-A2506017-008, question 8, Liberty provided the attachment "FPI Forecasts.pdf" showing Liberty's fire weather dashboard forecasts (which included Fire Potential Index forecasts, Fosberg Fire Weather Index forecasts, and wind gust forecasts) for the period from November 11, 2020 through November 17, 2020. At 12:00pm on November 16, 2020, Liberty's forecast showed that Topaz would have a Fire Potential Index of "Moderate" on November 17, 2020.

a) What was Liberty's plan to prepare for the forecasted "Moderate" conditions it expected on November 17, 2020?
b) When did Liberty begin planning for the forecasted "Moderate" conditions?
c) When did Liberty actually begin to prepare for the forecasted "Moderate" conditions?
d) Provide any documents showing that Liberty staff responded to the forecasted "Moderate" conditions it expected on November 17, 2020.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) See Liberty's response to Question 9(a) of this set of data requests.
b) See Liberty's response to Question 9(b) of this set of data requests.
c) See Liberty's response to Question 9(c) of this set of data requests.
d) See Liberty's response to Question 9(d) of this set of data requests.

REQUEST NO. 11:

In Liberty's response to data request CalAdvocates-LIB-A2506017-017, question 2, Liberty provided the attachment "LU Fire Prevention Plan 10-9-2020.pdf," page 6, which states:

> Moderate Fire Risk: As determined by the Wildfire Prevention Department, Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are not elevated but still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have stipulations and additional fire mitigation activities may be required. The FPI is indicated as "Green."

Low Fire Risk: As determined by the Wildfire Prevention Department, Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are low but may sometimes still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have

stipulations and additional fire mitigation activities may be required. The Low Fire Risk status is the default operational state and the FPI is indicated as "Blue."

a) Explain why Liberty assigned the same Operating Procedures for both Low and Moderate Risk Index Ratings, as shown on "LU Fire Prevention Plan 10-9-2020.pdf," page 12.
b) Explain the purpose of having a Low Risk Rating and a Moderate Risk Rating.
c) Provide the date of Liberty's attachment to its 2020 Wildfire Mitigation Plan (WMP), titled "Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities."[5]
d) Explain the purpose of changing Liberty's FPI Risk condition categorization from three (Normal, Elevated, and Extreme Fire Risk)[6] to five (Low, Moderate, High, Very High, and Extreme Fire Risk).[7]

RESPONSE:

a) Liberty's FPI was a tool designed to support situational awareness of fire risk for its operational activities in the field. Based on Liberty's current understanding, Liberty's FPP prescribed the same operating procedures for Low and Moderate categories because the differences in risk between these two categories did not justify the implementation of additional work restrictions and/or requirements, which could potentially cause disruptions to Liberty's inspection, maintenance, and construction activities and affect Liberty's ability to respond to emergencies on its system.
b) As explained in Liberty's response to CalAdvocates-LIB-A2506017-029, Question 1, the purpose of Liberty's FPI and its different risk categories was to advise Liberty personnel on the level of fire risk, based on correlation with fire occurrence and final fire size of all causes, to inform Liberty's field crews of precautions they should take to mitigate those risks.
c) According to historical records available to Liberty, Liberty understands the FPP attached to its 2020 WMP to have been finalized around October 29, 2019.
d) Based on Liberty's current understanding, at the time when Liberty drafted the FPP that was attached to its 2020 WMP, Liberty's FPI methodology was still in development, as referenced on pages 2 and 5 of that FPP. Liberty updated its FPP in 2020 pursuant to the FPI methodology developed by Liberty's fire science and risk modeling consultant, which contained five risk categories.

Situational Awareness

REQUEST NO. 12:

On November 16, 2020, provide the total circuit-miles of Liberty's system in the categories below:

a) Primary Overhead Distribution System;
b) Secondary Overhead Distribution System; and
c) Overhead Transmission System.

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8 Liberty's Revised 2020 Wildfire Mitigation Plan (Liberty's Revised 2020 WMP), February 28, 2020.
9 Liberty's Revised 2020 WMP, attachment "Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities" at 5.
10 Liberty's response to data request CalAdvocates-LIB-A2506017-017, question 2, Liberty provided the attachment "LU Fire Prevention Plan 10-9-2020.pdf" at 5-6.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty understands the term "transmission" to refer to the Office of Energy Infrastructure Safety (OEIS)'s definition of transmission lines (>65 kV). Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows: Liberty does not have records tracking the number of total circuit-miles specifically as of November 16, 2020. Based on historical records available to Liberty, Liberty is providing circuit mileage data as of January 2021.

a) As of January 2021, Liberty had approximately 694.01 miles of primarily overhead distribution lines.
b) As of January 2021, Liberty had approximately 790 miles of secondary overhead distribution lines.
c) As of January 2021, Liberty had approximately 19.37 miles of transmission lines.

REQUEST NO. 13:

In Liberty's response to data request CalAdvocates-LIB-A2506017-014, question 3, Liberty states:

> In 2020, Liberty performed field fuel moisture sampling on 1,000-hour dead fuels and live woody fuels. Liberty's vendor performed field fuel moisture sampling on a weekly or bi-weekly basis between June 2020 and November 2020…Please refer to the table below for a list of Liberty locations for fuel moisture sampling in 2020 and the primary types of fuels at each location…

Location	Latitude	Longitude	Primary dead fuel	Primary live fuel
Ward Creek	39.1404	-120.191	Jeffrey pine	Manzanita
Burton Creek	39.1866	-120.125	Jeffrey pine	Manzanita
Meyers	38.8553	-120.026	Lodgepole pine	Sagebrush

a) For the period from June 1, 2020 through November 17, 2020, provide an excel file containing the field fuel moisture sampling values and results for the three Liberty locations (Ward Creek, Burton Creek, and Meyers), including the type of sample collected, date of collection, date of analysis.
b) Were these results made available publicly? If so, please provide where these results can be accessed. If not, explain why not.

RESPONSE:

a) See attachment *CalAdvocates-LIB-A2506017-035-Q6.xlsx*. This spreadsheet contains records of data collected and calculated by Liberty's vendor from Liberty and NV Energy field fuel moisture sampling sites in 2020.
b) Fuel moisture sampling data gathered and calculated by Liberty's vendor at Liberty and NV Energy locations within were available at fuelmoisture.com. The line graphs in this database presented weekly averages across all years of sampling, minimum and

maximum values, and current year data. The table displayed in this database presents data gathered and calculated from the most recent 25 samples.

REQUEST NO. 14:

In Liberty's response to data request CalAdvocates-LIB-A2506017-014, question 3, Liberty states:

> Liberty's vendor also conducted field fuel moisture sampling at additional NV Energy locations in the Greater Lake Tahoe area (Alder Creek, Knox 2 RAWS, Spooner Summit, and Kingsbury/Tahoe Rim Trail North), and Liberty had access to data from both Liberty and NV Energy fuel sampling sites.

a) For January 1, 2020 through November 17, 2020, provide an excel file containing the field fuel moisture sampling values and results for the NV Energy locations, including the type of sample collected, date of collection, date of analysis.
c) Were these results made available publicly? If so, please provide where these results can be accessed. If not, explain why not.

RESPONSE:

a) See attachment *CalAdvocates-LIB-A2506017-035-Q6.xlsx*. This spreadsheet contains records of data collected and calculated by Liberty's vendor from Liberty and NV Energy field fuel moisture sampling sites in 2020.
c) Fuel moisture sampling data gathered and calculated by Liberty's vendor at Liberty and NV Energy locations were available at fuelmoisture.com. The line graphs in this database presented weekly averages across all years of sampling, minimum and maximum values, and current year data. The table displayed in this database presents data gathered and calculated from the most recent 25 samples.

REQUEST NO. 15:

In the Application, Exhibit Liberty-03, page 40, Liberty states, "The [National Weather Service (NWS)] issued a high wind warning for the area but did not issue a Red Flag Warning."

a) From January 1, 2020 through November 17, 2020, what did the NWS define as RFW conditions and criteria?
b) From January 1, 2020 through November 17, 2020, did Liberty use its weather station data to observe and confirm whether its territory experienced the conditions and criteria as defined by NWS Red Flag Warning?
c) If the answer to subpart (b) is yes, explain how Liberty used its weather station data and provide documents showing that Liberty utilized the data.
d) If the answer to subpart (b) is no, explain why not.
e) From January 1, 2020 through November 17, 2020, what did the NWS define as high wind warning conditions and criteria?
f) From January 1, 2020 through November 17, 2020, did Liberty use its weather station data to observe and confirm whether its territory experienced the conditions and criteria as defined by NWS high wind warning conditions?
g) If the answer to subpart (f) is yes, explain how Liberty used its weather station data and provide documents showing that Liberty utilized the data.
h) If the answer to subpart (f) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands that, within the specified timeframe, the NWS's Reno office issued Red Flag Warnings when it determined that the following conditions were forecasted:
   - In Tahoe Basin: greater than or equal to 30 miles per hour (mph) wind gusts, relative humidity less than or equal to 20%, and critical fuel moisture levels for 3 hours or greater
   - Outside Basin: greater than or equal to 30 mph wind gusts, relative humidity less than or equal to 15%, and critical fuel moisture levels for 3 hours or greater

   Liberty understands that other conditions such as dry thunderstorms may also have prompted the NWS's Reno office to issue Red Flag Warnings.
b) As referenced in Liberty's response to CalAdvocates-LIB-A2506017-029, Question 5, Liberty's fire science and risk modeling consultant would meet with Liberty to review weather data after the occurrence of weather events such as wind, storm, and precipitation events on its system. Liberty is not aware that it specifically compared weather station data to Red Flag Warning criteria to determine whether Red Flag Warning conditions occurred.
c) See Liberty's response to subpart (b).
d) See Liberty's response to subpart (b).
e) Liberty understands that, within the specified timeframe, the NWS's Reno office issued High Wind Warnings when it determined that the following conditions were forecasted:
   - Below 7,000 ft. elevation: greater than or equal to 40 mph sustained winds and 58 mph wind gusts for one hour or greater
   - Above 7,000 ft. elevation: greater than or equal to 50 mph sustained winds and 75 mph gusts for one hour or greater
f) See Liberty's response to subpart (b). Liberty is not aware that it specifically compared weather station data to High Wind Warning criteria to determine whether High Wind Warning conditions occurred.
g) See Liberty's response to subpart (f).
h) See Liberty's response to subpart (f).

REQUEST NO. 16:

In Liberty's response to data request CalAdvocates-LIB-A2506017-006, question 3(i), Liberty provided an amended "CalAdvocates-LIB-A2506017-006-Q3_Amended.pdf"[8] where each of Liberty's 29 weather stations on November 17, 2020 collected the following data: Dew Point (°F), Fuel Moisture (%), Precipitation (in), Relative Humidity (%), Soil Moisture (%), Soil Temperature (°F), Temperature (°F), Wind Direction (°), Wind Gust (mph), and Wind Speed (mph).

[11] Liberty's response to data request CalAdvocates-LIB-A2506017-014, question 1(a).

a) From its installation on October 20, 2020 to November 17, 2020, explain why Liberty's weather station LIB-3130 (TPZ1261-Eastside Lane) was able to provide Fosberg Fire Weather Index data.[9]
b) From its installation on May 20, 2019 to November 17, 2020, explain why Liberty's weather station LIB-3105 (TPZ1261-Park Ranch) was unable to provide Fosberg Fire Weather Index data.[10]
c) From its installation on May 31, 2019 to November 17, 2020, explain why Liberty's weather station LIB-3106 (TPZ1261-Walker) was unable to provide Fosberg Fire Weather Index data.[11]

RESPONSE:

a) Recording FFWI data required Liberty's weather stations to have sensors for rain gauge, soil moisture, and fuel moisture. Station LIB-3130 was equipped with these sensors from the date of its installation on October 20, 2020 and was able to record FFWI starting on that date.
b) See Liberty's response to subpart (a). Station LIB-3105 was not equipped with the requisite sensors for FFWI reporting at the time of installation. Liberty later purchased these sensors and retrofitted LIB-3105. Western Weather Group was notified around February 17, 2021 that additional sensors had been installed on LIB-3105 and LIB-3105 began recording FFWI on that date.
c) See Liberty's response to subpart (a). Station LIB-3106 was not equipped with the requisite sensors for FFWI reporting at the time of installation. Liberty later purchased these sensors and retrofitted LIB-3106. Western Weather Group was notified around March 10, 2021 that additional sensors had been installed on LIB-3106 and LIB-3106 began recording FFWI on that date.

REQUEST NO. 17:

In Liberty's response to data request CalAdvocates-LIB-A2506017-006, question 3(i), Liberty provided an amended "CalAdvocates-LIB-A2506017-006-Q3_Amended.pdf"[12] which shows that Liberty's weather station LIB-3106 (TPZ1261-Walker) was installed on May 31, 2019.

a) From its installation on May 31, 2019 to June 10, 2019, explain why Liberty's weather station LIB-3106 (TPZ1261-Walker) was unable to provide any data in this time period.[13]
b) How and when did Liberty discover the issue?
c) How and when did Liberty resolve the issue?

RESPONSE:

[12] Mesowest data for LIB26 (LIB-3130) shows a column for "fosberg_fire_weather_index_set_1" which is blank only on November 9, 2020 at 12:10pm. Available at https://mesowest.utah.edu/
[13] Mesowest data for LIB05 (LIB-3105) shows a column for "fosberg_fire_weather_index_set_1" which is blank in its entirety. Available at https://mesowest.utah.edu/
[14] Mesowest data for LIB06 (LIB-3106) shows a column for "fosberg_fire_weather_index_set_1" which is blank in its entirety. Available at https://mesowest.utah.edu/
[15] Liberty's response to data request CalAdvocates-LIB-A2506017-014, question 1(a).
[16] Mesowest data for LIB06 (LIB-3106) shows that data is available from June 11, 2019 to current date. Available athttps://viewer.synopticdata.com/table/lib06/basic-weather/now

a) LIB-3106 recorded weather data beginning on May 31, 2019. As Mesowest is a third-party data reporting platform, Liberty understands the gap in data between May 31, 2019 and June 10, 2019 on Mesowest to likely be a data ingestion issue outside of Liberty's control. Some weather data recorded by LIB-3106 between May 31, 2019 and June 10, 2019 are available at Western Weather Group's publicly accessible website: https://liberty.westernweathergroup.com/search. Additional weather data recorded by LIB-3106 between May 31, 2019 and June 10, 2019 are available to Liberty via Western Weather Group.
b) See Liberty's response to subpart (a).
c) See Liberty's response to subpart (a).

7/12								
Date	Burton Creek	Ward Creek	Meyers	Kingsbury Grade	Jacks Valley	Spooner	Knox 2	
6/9	106	106	150	97	167	104	93	
6/16	116	194	179	88	129	163	85	
6/23	117	113	185	141	91	100	96	
6/30	109	173	167	98	100	140	90	
7/7	107	119	131	144	70	96	80	
7/14	117	172	133	114	93	108	112	
7/21	184	172	101	142	62	128	128	
7/28	140	292	129	133	115	110	128	
8/3	135	153	67	131	83	104	91	
8/10	156	143	99	126	169	111	100	
8/17	128	94	79	98	77	91	104	
8/25	119	120	76	116	107	106	104	
9/3	117	119	130	103	95	89	109	
9/10	105	129	70	100	96	90	85	
9/15	95	125	91	99	98	122	93	
9/22	109	90	57	122	102	99	78	
9/29	108	107	61	92	88	95	92	
10/5	115	109	83	85	98	103	90	88
10/13	82	97	56	91	69	102	82	
10/19	114	114	102	85	118	81	80	
10/28	86	72	72	82	68	91	76	
11/3	101	96	54	72	88	93	88	

2019				Live (%)			
Date	Alder Creek	Knox 2	Spooner	Kingsbury	Meyers	Ward Creek	Burton Creek
	Truckee Donner	Incline Village	Glenbrook	Kingsbury/Roundhill			
7/17	111	136	145		108	114	131
7/26	179	119	159	153	95	181	167
8/6	171	115	147	172	97	150	150
8/14	143	116	146	138	91	151	146
8/21	140	110	142	124	105	156	130
8/28	146	110	139	109	92	156	151
9/4	121	73	117	116	47	148	134
9/10	142	127	126	114	62	108	116
9/17	140	103	108	110	105	165	140
9/24	109	103	107	118	86	119	114
10/16	107	94	100	108	60	117	105
10/29	102	91	99	94	57	104	106
11/13	103	92	97	100	53	99	102

2020								
Date	Burton Creek	Ward Creek	Meyers	Kingsbury Grade	Jacks Valley	Spooner	Knox 2	
6/9	16	39	11	13	4	15	13	
6/16	15	24	12	13	7	11	9	
6/23	11	16	9	20	6	8	6	
6/30	12	12	11	11	8	9	7	
7/7	7	22	9	5	3	6	6	
7/14	11	11	8	6	5	6	5	
7/21	10	30	7	7	3	9	10	
7/28	8	8	10	9	6	9	11	
8/3	8	10	9	8	3	9	10	
8/10	9	11	9	7	5	6	5	
8/17	9	8	7	8	4	7	5	
8/24	11	11	12	10	9	9	10	
9/3	8	8	7	10	5	8	6	
9/10	6	9	7	8	7	8	6	
9/15	7	7	9	7	5	8	6	
9/22	8	9	8	8	9	9	5	
9/29	9	9	6	7	11	9	7	
10/5	7	5	7	5	6	3	5	8
10/13	8	10	8	8	6	7	9	
10/19	9	7	6	5	9	4	7	
10/28	10	8	8	8	11	7	7	
11/3	10	9	7	8	8	9	10	

2019							
Date	Alder Creek	Knox 2	Spooner	Kingsbury	Meyers	Ward Creek	Burton Creek
	Truckee Donner	ncline Village	Glenbrook	sbury/Roundhill			
7/17	28	19	17		17	38	12
7/26	9	7	8	8	7	8	12
8/6	9	6	10	10	6	11	11
8/14	9	8	8	7	8	8	9
8/21	8	7	8	7	8	8	8
8/28	9	11	7	9	7	10	9
9/4	3	10	8	8	7	11	9
9/10	11	11	11	8	7	9	9
9/17	37	15	21	23	30	25	14
9/24	21	12	10	12	14	20	16
10/16	15	8	10	12	11	16	14
11/13	15	9	10	12	9	19	16

Dead (%)

ATTACHMENT 19

Liberty response to data request
CalAdvocates-LIB-A2506017-029
October 29, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

October 29, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-029
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
	Cal Advocates Wildfire Discovery CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	October 15, 2025
Due Date:	October 29, 2025

Attachments to these responses contain information marked confidential in accordance with applicable law and regulation. The basis for confidentiality is set forth in accompanying confidentiality declaration. Public disclosure is restricted.

Situational Awareness

REQUEST NO. 1:

In Liberty's response to Data Request CalAdvocates-LIB-A2506017-017, Question 2, Liberty states:

> "FPI forecasts were used to guide operation and maintenance crew activities, and were not used for PSPS decision-making or system operations. Please refer to attachment LU Fire Prevention Plan 10-9-2020.pdf, which described operating procedures for the five categories of FPI risk conditions."

a) Elaborate on why FPI forecasts were used to guide operation activities but not used for system operations.
b) Other than the activities listed in the Fire Prevention Plan,[1] what else did Liberty use its FPI forecasts for?
c) When did Liberty start generating FPI forecasts?
d) When did Liberty start using its FPI forecasts?
e) Provide a copy of all of Liberty's FPI forecasts for the Topaz 1261 circuit from the time Liberty began generating FPI forecasts through November 10, 2020.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Because the Fire Potential Index forecasts generated on a daily basis were intended to assess fire risk based on correlation with fire occurrence and final fire size of all causes, it was a useful guide for Liberty's operation and maintenance crew activities to mitigate the risk of fire from field work during higher fire risk periods (e.g., use of equipment, off-road driving, assigning fire safety personnel, etc.). The FPI scale differentiated fire risk as low, moderate, high, very high, and extreme, which was not at the level of granularity needed to make PSPS decisions. As explained in *Liberty-03: Prudence of Operations* (at pp. 37-39), Liberty's PSPS decision-making was based on quantitative thresholds for three criteria also intended to capture the risk of wildfire ignition and spread: Energy Release Component; wind gusts; and Fosberg Fire Weather Index. For reclose blocking restrictions, Liberty enabled "fire mode" or non-reclose mode on a seasonal basis based on a variety of factors and with input from its fire science and risk modeling consultant, and did not implement those restrictions based on the daily FPI.
b) The Fire Prevention Plan set forth the comprehensive list of activities and operating restrictions based on FPI levels.
c) Liberty does not generate FPI forecasts internally. In 2019 Liberty hired a fire science and risk modeling consultant to develop an FPI methodology and in 2020, Liberty began populating its fire weather dashboard with FPI forecasts calculated by the U.S. Forest Service Wildland Fire Assessment System ("WFAS") based on two National Fire Danger Rating System ("NFDRS") indices—Energy Release Component ("ERC") and Burning Index ("BI").
d) See Liberty's response to subpart (c).
e) Liberty does not have access to fire weather dashboard data from the specified time frame given the passage of time.

REQUEST NO. 2:

In Liberty's response to Data Request CalAdvocates-LIB-A2506017-008, Question 8a, Liberty states "Liberty's fire science and risk modeling consultant validated its FPI tool by comparing forecasted conditions with real-time weather station observations and archived forecast data."

a) Who was Liberty's fire science and risk modeling consultant?

[1] See FPP at p. 5-6.

b) Did Liberty's fire science and risk modeling consultant provide Liberty with documentation showing that it had validated its FPI tool by comparing forecasted conditions with real-time weather station observations and archived forecast data? If so, provide a copy of that documentation.
c) If the answer to subpart (b) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed and as to the term "validate." Liberty understands the term "validate" to refer to the comparison of predicted outcomes with actual outcomes to assess the accuracy of a model. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty's fire science and risk modeling consultant as of November 17, 2020 was Reax Engineering, and specifically Dr. Chris Lautenberger (now at CloudFire).
b) Liberty understands that its fire science and risk modeling consultant monitored FPI forecasts, but did not specifically perform "validations" of the FPI tool on an ongoing basis. Rather, the consultant performed validations of the PSPS predictive tool through monitoring and comparison of weather forecast models with observed conditions. Liberty will amend its responses to CalAdvocates-LIB-A2506017-008.

   Because Liberty's FPI forecast differentiated fire risk as low, moderate, high, very high, and extreme, it could not be "validated" by comparison to specific weather observations. For details regarding Reax's ongoing monitoring of FPI forecasts, please refer to subtask number eight of Reax's proposed scope of work for the development of a Fire Potential Index for Liberty, on page 3 of confidential attachment *CONFIDENTIAL-2019-10-08 - Reax Liberty Utilities FPI proposal_Redacted.pdf.*
c) N/A

REQUEST NO. 3:

In Liberty's response to Data Request CalAdvocates-LIB-A2506017-008, Question 8b, Liberty states "Validation [of Liberty's FPI tool] performed on an ongoing basis through monitoring and comparison of forecasted versus observed conditions."

a) Provide documentation showing that this validation was performed on an ongoing basis.
b) Did Liberty perform any review of these validations? If so, provide documentation showing Liberty's review.
c) If the answer to subpart (b) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed and as to the term "validation." Liberty understands the term "validation" to refer to the comparison of predicted outcomes with actual outcomes to assess the accuracy of a model. Subject to and without waiving its objections, Liberty responds as follows:

a) Please refer to Liberty's response to Question 2(b) of this set of data requests.
b) See Liberty's response to subpart (a).
c) See Liberty's response to subpart (a).

REQUEST NO. 4:

Regarding Liberty's response to Data Request CalAdvocates-LIB-A2506017-017, Question 2, Liberty's attachment *Fire Prevention Plan for Overhead Electric Facilities* dated October 9, 2020:

a) Was this the version of Liberty's Fire Prevention Plan in effect on November 17, 2020?
b) If the answer to subpart (a) is no, provide the copy of the Fire Prevention Plan that was in effect on November 17, 2020.

RESPONSE:

a) Yes.
b) N/A

REQUEST NO. 5:

In the Application, Exhibit Liberty-03, page 35, Liberty states: "Liberty installed ten weather stations in 2019 and an additional 19 weather stations in 2020."

a) Prior to the Mountain View Fire ignition, what did Liberty use its weather station data for?
b) Prior to the Mountain View Fire ignition, when did Liberty observe its real-time weather station data?
c) Did Liberty have a dashboard or other user interface that it used to pull and observe real-time weather station data? If yes, provide documentation showing how employees used this dashboard or other user interface.
d) If the answer to subpart (c) is no, explain how Liberty would be able to observe its real-time weather station data.
e) Prior to the Mountain View Fire ignition, did Liberty ever use data from its weather stations for any non-forecasting activities? If yes, explain what these were and provide documentation showing how Liberty used this data.
f) If the answer to subpart (e) is no, explain why.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Prior to November 17, 2020, Liberty used its weather station data to monitor weather conditions across its service territory, to validate and improve the accuracy of forecast models, and, in the event of a PSPS activation, to guide the ultimate decision to de-energize along with other inputs such as field observations.
b) In addition to general monitoring of weather conditions across its service territory, Liberty increased its monitoring of real-time weather data during PSPS events and in anticipation of and during severe weather conditions such as winter storms.
c) Liberty objects as vague and ambiguous to the term "documentation." Real-time weather station data reported by Liberty's weather stations are available on Western Weather Group's publicly available website: https://liberty.westernweathergroup.com/. This dashboard was generally available to Liberty employees. See Liberty's responses to subparts (a) and (b) of this Question for how Liberty used real-time weather data.

d) N/A
e) Liberty's fire science and risk modeling consultant would meet with Liberty to review weather data after the occurrence of weather events such as wind, storm, and precipitation events on its system.
f) N/A

REQUEST NO. 6:

In Liberty's response to Data Request CalAdvocates-LIB-A2506017-017, Question 3, Liberty states:

"In addition, because the [Energy Release Component or ERC] percentile forecasts displayed on Liberty's fire weather dashboard were obtained from the U.S. Forest Service Wildland Fire Assessment System ("WFAS"), it is possible that some data in the ERC tables did not display correctly on occasion due to delays or other issues with WFAS reporting, such as when there was an outage in the WFAS."

a) Did Liberty have a protocol in place to address delays or other issues with WFAS reporting? If so, provide a copy of the protocol.
b) If the answer to subpart (a) is no, explain why not.
c) Did Liberty document when these delays or other issues with WFAS reporting occurred? If so, provide a copy of a record prior to the Mountain View Fire ignition showing the most recently documented issue related to delayed or other issues with WFAS reporting.
d) If the answer to subpart (c) is no, explain why not.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty did not have a formal protocol to address delays or other WFAS reporting issues. Liberty's fire science and risk modeling consultant helped monitor system reliability and Liberty communicated with him regarding issues on an as-needed basis.
b) See Liberty's response to subpart (a).
c) Liberty is not aware of records formally tracking delays or other issues with WFAS reporting.
d) See Liberty's response to subpart (a).

REQUEST NO. 7:

In Liberty's 2020 Wildfire Mitigation Plan Annual Report on Compliance, March 31, 2021, at 3 states:

"In 2020, Liberty installed 19 out of 20 targeted weather stations, bringing the total number of weather stations to 29. Fuel moisture sensors were also added to weather stations installed in 2020 and retrofitted to several of the locations installed in 2019. Fuel moisture sensors can help to validate fuel moisture conditions, which is crucial to accurately predict wildfire risk in local areas."

a) Explain why Liberty was unable to install the 20th weather station in 2020.
b) Where was this weather station located, and did Liberty eventually install it?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed and assuming facts. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty targeted the installation of 30 weather stations between 2019 and 2020. Liberty ultimately installed 29 weather stations during that timeframe. After diligent inquiry and reasonable search, Liberty has not located records as to why a 30th weather station was not installed by the end of 2020. After 2020, the next weather station Liberty installed on its system was LIB-3133 (Tahoe-7300 Sugar Pine Point).
b) See Liberty's response to subpart (a).

REQUEST NO. 8:

In Liberty's 2020 Wildfire Mitigation Plan Annual Report on Compliance, March 31, 2021, at 3 states:

In 2020, Liberty installed 19 out of 20 targeted weather stations, bringing the total number of weather stations to 29. Fuel moisture sensors were also added to weather stations installed in 2020 and retrofitted to several of the locations installed in 2019. Fuel moisture sensors can help to validate fuel moisture conditions, which is crucial to accurately predict wildfire risk in local areas.

Provide an Excel file which identifies each Liberty's weather station that Liberty retrofitted with fuel moisture sensors with the following information:

a) Unique ID number or identifier;
b) Name
c) Geographic location
d) Date that weather station was installed
e) Date that Liberty installed the fuel moisture sensor
f) Whether or not the station or fuel moisture sensor was not working
g) If the station or fuel moisture sensor had issues, explain what did Liberty do to address the issue, when did Liberty realize the issue had occurred, and when did Liberty resolve the issue.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome. Subject to and without waiving its objections, Liberty responds as follows: See attachment *CalAdvocates-LIB-A2506017-029-Q8.xlsx* for the information requested in subparts (a)-(d) for the ten Liberty weather stations installed between May 2019 and April 2020. The information requested in subparts (e)-(g) is not maintained in the ordinary course of business and is not readily accessible. Liberty has included a column with information regarding the earliest fuel moisture readings available in archival data for these stations to provide insight regarding the timing of installation of fuel moisture sensors for the Liberty weather stations installed between May 2019 and April 2020. Liberty constructed this spreadsheet using publicly available archival data of Liberty's weather stations at https://liberty.westernweathergroup.com/.

Control Center

REQUEST NO. 9:

In Liberty's response to Data Request CalAdvocates-LIB-A2506017-017, Question 4e and 4f, Liberty states:

"Liberty's operations team in California was responsible for monitoring Liberty's fire weather dashboard and communicating PSPS and other operational decisions to Liberty Utilities' System Control Center in New Hampshire as needed. Please refer to Liberty's responses to Questions 1-2 of this set of data requests and Liberty's response to CalAdvocates-LIB-A250617-006, Question 3."

a) Clarify the name of Liberty's operations team in California who was responsible for monitoring Liberty's fire weather dashboard and communicating PSPS and other operational decisions to Liberty's Control Center.
b) On each of the days leading up to the Mountain View Fire ignition, starting from November 11, 2020, up through November 17, 2020, how many staff in Liberty's operations team in California did Liberty have actively monitoring Liberty's fire weather dashboard and communicating PSPS and other operational decisions to Liberty's Control Center?
c) Identify any times, from November 11, 2020 through November 17, 2020, when there were no staff on duty in Liberty's operations team in California
d) From November 11, 2020 up through November 17, 2020, did Liberty's operations team in California actively monitor Liberty's weather station data in real-time. If yes, elaborate. If not, explain why not.
e) From November 11, 2020 up through November 17, 2020, where was Liberty's operations team in California located?
f) How did Liberty's operations team in California use Liberty's FPI Forecasts to inform its decision-making?
g) How did Liberty's operations team in California use Liberty's real-time weather data (including, but not limited to, weather station data) to inform its decision-making?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows: Liberty did not have a PSPS activation within the specified time frame and did not activate its Incident Management Team (IMT) prior to the Mountain View Fire. Liberty understands the term "operations team" to refer generally to its operations personnel in California, not the IMT that would have been activated during a PSPS event.

a) Liberty's California operations team included the Senior Manager of Wildfire Prevention, the Vice President of Operations, the Director of Operations, and the Emergency Management Manager. This team was responsible for monitoring Liberty's fire weather dashboard and communicating with Liberty's System Control Center and other personnel regarding potential PSPS events.
b) Liberty's fire weather dashboard and real-time weather data were accessible on publicly available websites and available to all employees at all times. Liberty does not have

specific records tracking when and how many operations personnel accessed the data at any given time. See Liberty's response to subpart (a).

c) There would be no time during the specified time frame when Liberty had no California operations personnel available.
d) See Liberty's response to subpart (b).
e) Due to the Covid-19 pandemic, much of Liberty's California operations personnel worked virtually within the specified timeframe. A limited number of operations personnel worked in Liberty's two offices Tahoe Vista and South Lake Tahoe within the specified timeframe.
f) Please refer to Liberty's response to CalAdvocates-LIB-A2506017-017, Question 2 and attachment *LU Fire Prevention Plan 10-9-2020.pdf* contained therein.
g) See Liberty's response to Question 5 of this set of data requests.

REQUEST NO. 10:

In the Application, Exhibit Liberty-03, page 43, Liberty states:

"In accordance with GO 166, Liberty had an Emergency Management Plan ("EMP") in 2020 that contained policies and procedures to enhance Liberty's ability to respond to and recover from emergencies of all levels, including natural disasters."

a) Provide a copy of Liberty's Emergency Management Plan that was in effect on November 17, 2020 if different from the copy provided in Liberty's response to Data Request CalAdvocates-LIB-A2506017-002, Question 2.
b) Identify the date on which the EMP in effect on November 17, 2020 was adopted.
c) Was Liberty's operations team in California required to be trained on Liberty's EMP?
d) Were Liberty's Control Center System Operators and Managers required to be trained on Liberty's EMP?

RESPONSE:

a) Liberty is working to confirm that attachment *Corporate Emergency Management Plan_2020.docx* provided in response to CalAdvocates-LIB-A2506017-002, Question 2 was the version in effect on November 17, 2020 and will update this response accordingly.
b) See Liberty's response to subpart (a).
c) Yes, Liberty requires employees who are part of Liberty's Incident Management Team to be trained on its EMP, consistent with GO 166.
d) System Control Center personnel are included in Liberty's emergency management training and exercises.

Public Safety Power Shutoffs (PSPS)

REQUEST NO. 11:

Regarding Liberty's *2019 PSPS Post-Event Report for September 10 to September 14, 2019,* December 31, 2019:

a) Provide a copy of all the forecasts that Liberty's Tahoe Fire Weather Monitoring tool provided for each day from September 7, 2019 through September 14, 2019.
b) For this event, did Liberty use real-time weather station data in its PSPS decision-making? If so, explain.
c) If the answer to subpart (b) is no, explain why not.
d) Did Liberty's operations team in California alert Liberty's Control Center of the potential PSPS event?
e) What was Liberty's Control Center's role in this event?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty does not have access to fire weather dashboard data from the specified time frame given the passage of time.
b) As set forth in its Post Event Report, see attachment *PSPS Post Event Report for September 10 to September 14, 2019.pdf*, Liberty made the decision to activate and, in turn, de-mobilize its event team based on forecast data.
c) Please refer to attachment *PSPS Post Event Report for September 10 to September 14, 2019.pdf*.
d) Liberty did not locate specific records documenting its communications with the System Control Center during this potential PSPS event, but its PSPS event team would have been in contact with the System Control Center regarding this potential PSPS event.
e) In accordance with its usual role of monitoring Liberty's electric system and coordinating with personnel in California to respond to issues that arise, Liberty's System Control Center would have been responsible for executing operational changes communicated to it by the PSPS event team in California.

REQUEST NO. 12:

Regarding Liberty's *PSPS Report on the November 21, 2018 De-Energization Event*:
a) Provide a copy of all the forecasts that Liberty used from November 15, 2018 through November 21, 2018.
b) For this event, did Liberty use real-time weather station data in its PSPS decision-making? If so, explain.
c) If the answer to subpart (b) is no, explain why not.
d) Where was Liberty's Control Center located?
e) Did Liberty's operations team in California alert Liberty's Control Center of the potential PSPS event?
f) What was Liberty's Control Center's role in this event?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty

in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

a) Please refer to attachment *November 21, 2018 De-Energization Event.pdf* and Attachment 1 contained therein for forecast information Liberty used in the lead up to the November 21, 2018 de-energization event.
b) Liberty objects to the term "PSPS decision-making" as this event predated Liberty's formal PSPS protocol. Please refer to attachment *November 21, 2018 De-Energization Event.pdf* for discussion of Liberty's decision-making based on forecast and actual conditions. At the time of this de-energization event on November 21, 2018, Liberty had not yet installed its own weather stations.
c) See Liberty's response to subpart (b).
d) As described in *Liberty-03: Prudence of Operations* (at p. 32), during the specified time frame, Liberty was in the process of transitioning its system control functions from NV Energy in Nevada to Liberty Utilities in New Hampshire. As of November 21, 2018, NV Energy's system control center operated two of the three de-energized lines (the 625 and 111 Lines) and Liberty's System Control Center in New Hampshire operated the 3400 laterals.
e) Liberty did not locate specific records documenting its communications with the System Control Center during this proactive de-energization event, though the System Control Center would have executed circuit de-energization and re-energization for this event.
f) See Liberty's response to subpart (e).

Station_ID	Station_Name	Latitude	Longitude	Install_Date	Earliest Date When Fuel Moisture Data Was Reported
LIB-3101	GLS7600-Walden	39.331395	-120.073860	5/1/2019	8/26/2020
LIB-3102	TAH7300-DL Bliss	38.975612	-120.100274	5/2/2019	8/7/2020
LIB-3103	MUL1296-Woodfords	38.782650	-119.817862	5/17/2019	1/17/2021
LIB-3104	BKY4201-Summit	39.261196	-120.072017	6/10/2019	7/23/2020
LIB-3105	TPZ1261–Park Ranch	38.641203	-119.520232	5/20/2019	2/17/2021
LIB-3106	TPZ1261-Walker	38.533924	-119.504162	5/31/2019	3/10/2021
LIB-3107	Meyers3400-Uplands	38.895632	-120.037443	4/10/2020	2/17/2021
LIB-3108	111Line-Columbine Trail	38.890617	-119.959654	6/10/2019	6/8/2021
LIB-3109	POR31-Iron Horse	39.778975	-120.502840	6/17/2019	1/14/2021
LIB-3110	619Line-Sierra Valley West	39.759370	-120.374084	6/24/2019	4/9/2021

Liberty Utilities

September 27, 2019

Leslie Palmer, Director
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: PSPS Post-Event Report for September 10 to September 14, 2019

Dear Director Palmer:

Liberty Utilities (CalPeco Electric) LLC ("Liberty CalPeco") respectfully submits the attached report in compliance with PSPS Post-Event Reporting requirements regarding its notification of a potential pro-active de-energization event that began on September 10, 2019. This report has been verified by an Officer of Liberty CalPeco in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

Sincerely,

Dan Marsh
Manager, Rates and Regulatory Affairs
Liberty CalPeco

cc: ESRB_ComplianceFilings@cpuc.ca.gov



Liberty Utilities (CalPeco Electric) LLC
Public Safety Power Shutoff Protocol (PSPS)
Post-Event Reporting in Compliance With Resolution ESRB-8 and Decision 19-05-042
September 10- 14, 2019

Submitted to:

California Public Utilities Commission

Director of the Safety and Enforcement Division

September 27, 2019

Executive Summary

On September 12, 2019, Liberty Utilities (CalPeco Electric) LLC ("Liberty CalPeco") assembled its Event Team to begin coordinating response operations associated with an elevated weather event with the potential for employment of Liberty CalPeco's Public Safety Power Shutoff ("PSPS") protocol. Potentially affected customers numbered 5,794 in Nevada, El Dorado, and Placer Counties. Notifications of the potential event were made to public safety partners, critical infrastructure providers, and medical baseline customers. No other customers were notified, and proactive de-energization was ultimately not required.

Liberty CalPeco submits the following report to the California Public Utilities Commission's Director of the Safety and Enforcement Division pursuant to Resolution ESRB-8 and Decision (D.) 19-05-042. In separate sections of this report, Liberty CalPeco sets forth the reasons for its decision to begin notification of the potential for de-energization, including the day-by-day background for the event, and responds to the questions as required in post-event reporting.

Liberty CalPeco's Decision to Notify Public Safety Partners and Medical Baseline Customers

Liberty CalPeco's decision to notify public safety partners and medical baseline customers of potential use of the Public Safety Power Shutoff (PSPS) protocol was based on the following factors:

- Portions of Liberty CalPeco's service territory were forecast to experience weather conditions reaching or near Liberty CalPeco's PSPS thresholds.
- In past communications, public safety partners had requested notification as far in advance as possible, even if the likelihood of the event was uncertain.

Actions taken to manage the response included:

- Activation of an Event Team for response operations associated with the potential PSPS event;
- Notifications to public safety partners, critical infrastructure providers, and medical baseline customers;
- Patrolling of potentially impacted circuits before and after the event; and
- Live field observations of potentially impacted circuits during the period of concern to determine the need to execute the PSPS event to maintain public safety.

Additional details of the events leading to the decision to provide notifications are in the report timeline below.

Event Timeline [September 10-14, 2019]

Tuesday, September 10

Liberty CalPeco's Tahoe Fire Weather Monitoring tool provided a forecast alert predicting high wind gusts, warming temperatures, and dry conditions beginning Sunday morning, September 15, 2019. The circuits of potential concern included the Tahoe City 7300 and Glenshire circuits, located in Nevada, Placer, and El Dorado Counties. A 3:00 p.m. briefing with Liberty CalPeco's fire weather consultant confirmed that conditions on these circuits should be monitored, although the tool did not currently predict PSPS criteria to be exceeded.

Wednesday, September 11

An updated weather forecast predicted no changes to the previous forecast, and PSPS criteria was still not predicted to be exceeded.

Thursday, September 12

Liberty CalPeco's fire weather consultant provided the most recent forecast to Liberty CalPeco personnel at 9:00 a.m. The forecast, with increasing confidence, predicted sustained elevated wind speeds, high wind gusts, hot temperatures, and very dry conditions for Sunday, September 15, 2019. Additionally, the National Weather Service had issued a Fire Weather Watch for the same time period. Based on the updated forecast, the Tahoe City 7300 and Glenshire circuits were predicted to exceed PSPS criteria on Sunday, September 15, 2019.

Liberty CalPeco's Event Team assembled to prepare to make notifications for a potential PSPS event. Beginning at 5:30 p.m., notifications were made to public safety partners, critical facilities, and medical baseline customers.

Friday, September 13

The updated morning forecast for Sunday, September 15, 2019 predicted lower wind speeds than previously forecast. Additionally, Liberty CalPeco was able to confirm through the sampling of live fuels that live fuel moisture and the energy release component were below PSPS criteria. Monitoring of fire weather conditions continued. At 12:00 p.m., Liberty CalPeco held a briefing with the OES offices of El Dorado, Placer, and Nevada Counties and the Town of Truckee to inform them that PSPS criteria were not forecast to be met, and that monitoring and updates would continue until a final determination was made. Notifications were made to public safety partners, critical facilities, and medical baseline customers. Liberty CalPeco made the decision not to notify other customers due to the downgrade in forecast conditions.

Saturday, September 14

The 9:00 a.m. weather briefing remained consistent, predicting that no Liberty CalPeco circuits would meet PSPS criteria for 72 hours and beyond. Liberty CalPeco determined that no de-energization would take place and the Event Team was demobilized. Notifications were made

to public safety partners, critical facilities, and medical baseline customers that a PSPS event would not occur.

Response to ESRB-8 Requirements

The following material addresses Resolution ESRB-8 requirements in each of the categories associated with notifications. Each of these categories is addressed in a separate section.

1. **The local communities' representatives contacted prior to de-energization, the date on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in General Order 95, Rule 21.2-D.**

Liberty CalPeco maintained ongoing communications with public safety partners in Placer, El Dorado, and Nevada counties and the state of California throughout the duration of the weather event ending September 14, 2019. Additionally, general location information was provided, which was based on the anticipated weather event's geographical impacts and affected PSPS zones.

Initial contact was made more than 48 hours prior to the anticipated PSPS event. The list of public safety partners contacted with details of each communication is provided in Appendix A.

Media Communications

In accordance with Liberty CalPeco's PSPS communications guidelines, Liberty CalPeco was prepared to provide customers and the public with information on the potential PSPS via regular updates on libertyutilities.com and on social media platforms, such as Facebook and Twitter. Liberty CalPeco had also prepared news releases for all local and regional media outlets that would have been released between 36 and 48 hours ahead of the planned PSPS event. Planned communications included the current status in specific geographic areas that would have been impacted by a PSPS in addition to safety tips and guidelines. Due to the favorable change in weather conditions ahead of the 48-hour advanced notice mark, these notifications were not utilized.

2. **If unable to provide customers with notice at least 2 hours prior to the de-energization event, provide an explanation in its report.**

   Not applicable. No circuits were proactively de-energized during this event.

3. **Summarize the number and nature of complaints received as the result of the de-energization event and include claims that are filed due to de-energization.**

   Not applicable. No circuits were proactively de-energized during this event.

4. **Provide a detailed description of the steps taken to restore power.**

   Not applicable. No circuits were proactively de-energized during this event.

5. Identify the address of each community assistance location during a de-energization event, describe the location (in a building, a trailer, etc.), and describe the assistance available at each location, and give the days and hours that it was open.

Not applicable. No circuits were proactively de-energized during this event.

Response to Decision (D.) 19-05-042 Requirements

1. **Decision criteria leading to de-energization.**

   Not applicable. No circuits were proactively de-energized during this event.

2. **A copy of all notifications, the timing of notifications, the methods of notifications and who made the notifications (the utility or local public safety partners).**

   A copy of all notifications, the timing of notifications and the methods of notifications are in Appendix A (Public Safety Partner Notifications) and Appendix B (Medical Baseline Customer Notifications). Liberty CalPeco was the sole provider of public safety partner and medical baseline customer notifications.

3. **An explanation of the circumstances that resulted in failure to communicate a potential pro-active de-energization event, if any.**

   Liberty CalPeco did not have any failures in communication during this potential PSPS event.

4. **A description and evaluation of engagement with local and state public safety partners in providing advanced education and outreach during the de-energization event.**

   Advanced notice of the PSPS event was communicated to all public safety partners in the three counties that were to be impacted by the event approximately 60 hours prior to the potential PSPS event. Regular daily updates were provided throughout the event, including changes to the weather forecast. Additional information regarding Liberty CalPeco's engagement with public safety partners is in Appendix A and the event timeline above.

5. **For those customers where positive or affirmative notification was attempted, an accounting of the customers (which tariff and/or access and functional needs population designation), the number of notification attempts made, the timing of attempts, who made the notification attempt (utility or public safety partner) and the number of customers for whom positive notification was achieved.**

   Liberty CalPeco made several notification attempts to reach the 21 medical baseline customers identified as likely to be impacted by the PSPS event. Liberty CalPeco staff made all notification attempts, which included direct phone calls and door-to-door personal visits. For medical baseline customers not reached by either phone calls or door-to-door visits, door hangers were left at the residence. More information regarding

Liberty CalPeco's efforts to notify medical baseline of the potential PSPS event is in Appendix B.

6. **A description of how sectionalization, i.e., separating loads within a circuit, was considered and implemented and the extent to which it impacted the size and scope of the de-energization event.**

   Not applicable. No circuits were proactively de-energized during this event.

7. **An explanation of how the utility determined that the benefit of de-energization outweighed potential public safety risks.**

   Not applicable. No circuits were proactively de-energized during this event.

8. **The timeline for power restoration (re-energization), in addition to the steps taken to restore power as required in Resolution ESRB-8.**

   Not applicable. No circuits were proactively de-energized during this event.

9. **Lessons learned from the de-energization events.**

   Not applicable. No circuits were proactively de-energized during this event.

10. **Any recommended updates to the guidelines adopted in Resolution ESRB-8 and Decision (D.) 19-05-042.**

    Liberty CalPeco has not identified any recommended updates to the guidelines based on this event.

Appendix A

Public Safety Partner Notifications

Organization/Jurisdiction	Title	First Communication via: Text, Voice, Email Date	Time	Second Communication via: Text, Voice, Email Date	Time	Third Communication via: Text, Voice, Email Date	Time
El Dorado County (Tiers 2 and 3)							
El Dorado County	Emergency Preparedness & Response	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Emergency Medical Services	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Sheriff's Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Sheriff's Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Sheriff's Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Sheriff's Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Communications Director	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
CHP (South Tahoe)	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Barton Hospital	Emergency Coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Supervisor, District 5	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Lake Tahoe El Dorado County	Court Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe El Dorado County	Sheriff's Office/Correctional	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Building Operations Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Dir of Facilities,	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Maintenance Coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County	Sheriff	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
North Taoe Fire Protection District	Fire Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
North Taoe Fire Protection District	Operations Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
North Taoe Fire Protection District	Fire Marshal	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
North Taoe Fire Protection District	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Public Utility District	On Call Line	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Public Utility District	Ops Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County Sheriff	Sgt.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
El Dorado County Sheriff	Lt.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Asst. CEO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Administrative Asst.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Presiding Judge	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Facilities Management	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Facilities Operations Supv.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Court Operations Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
South Tahoe Superior Court	Probation Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Verizon	Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
AT&T	Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
AT&T	Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Executive Director of Business Services	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Superintendent Chief Learning Officer	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Director of Transportation	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Director of Food Service	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Technology Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Unified School District	Director of Technology	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
OES El Dorado County	OES Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
OES El Dorado County	OES Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
OES El Dorado County	OES Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County (Tier 2)							
Nevada County	OES Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County	Administrative Analyst	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County	Fire Captain	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Chief of Police	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	EMS Coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08

Organization/Jurisdiction	Title	First Communication via: Text, Voice, Email		Second Communication via: Text, Voice, Email		Third Communication via: Text, Voice, Email	
		Date	Time	Date	Time	Date	Time
Truckee Police	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Town Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Director of Public Works	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Fire Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County	OES, Director	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	PIO & AGM	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Nevada County	OES Office	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County (Tier 2)							
Tahoe Forest Hospital	Director of Facilities Management	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Forest Hospital	EOC Coordinator/Facilities Management	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Forest Hospital	House Supervisor/Nursing Admin	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Water Superintendent	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Water Operations Foreman	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Water On-Call Operator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Electric Utility Director	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Electric Operations Mgr.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Electric Eng. Mgr	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Donner Public Utility District	Electric On-Call Lineman	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Division Chief Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Fire Marshall	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Battalion Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Battalion Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Battalion Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Battalion Chief / PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Fire Protection District	Prevention / PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Emergency Services Coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Support Services Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Town of Truckee	Chief's Assistant	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	General Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	District Engineer	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	Superintendent	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	Senior Engineer	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	Lift Station Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Sanitation District	On-Call Phone	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Truckee Airport	Director of Aviation	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Verizon	Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Sanitation Agency	Ops Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Sanitation Agency	Chief Operator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Sanitation Agency	Engineering & safety Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Sanitation Agency	Maintenance Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Truckee Sanitation Agency	IT Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Emergency Svs Coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Communications & Public Affairs	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	OES Asst. Director	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Field Rep, District 5	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	EM Program Mgr	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Dispatch Svs. Mgr	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Supervisor, District 5	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Sheriff Lt.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Sheriff Lt.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County Sheriff	Captain	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08

Organization/Jurisdiction	Title	First Communication via: Text, Voice, Email		Second Communication via: Text, Voice, Email		Third Communication via: Text, Voice, Email	
		Date	Time	Date	Time	Date	Time
Placer County CEO office	Admin Assitant	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
CHP Truckee	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar	Fire Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar	Division Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar Community Service District	Dist Engineer	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar Community Service District	Genreal	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar Fire Department	Northstar Fire Department	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar Fire Department	Northstar Fire Department	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Northstar Fire Department	Northstar Fire Department	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Deputy Director/Facilities Management	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Building Maintenance Superintendent	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Tahoe Station Placer County Sheriff	Administrative Lt.	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer Co. Sheriff	Dispatch	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Squaw Valley	Fire Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Squaw Valley Public Service District	Ops Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
North Tahoe Public Utility District	on Call	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Communications	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Placer County	Public Health Department	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Verizon	Operations	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Squaw Valley Alpine Meadows	Operations Manager	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Squaw Valley Alpine Meadows	Operations Supervisor	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
State of California							
California	OES coordinator	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
CalFire	PIO	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
CalFire	Division Chief	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Cal OES	Cal OES	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08
Cal OES	Cal OES	9/12/2019	17:30	9/13/2019	17:59	9/14/2019	15:08

MEMORANDUM

TO: **Liberty Utilities Tahoe (Calpeco) Staff**

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 12, 2019**

RE: **Safety Partner Everbridge Message | Public Safety Power Shutoff**

- Liberty Utilities is alerting our public safety partners of the possibility that a Public Safety Power Shutoff (PSPS) may be implemented as early as Sunday, Sept. 15, and could last at least 24 hours. Please be advised this is a preliminary notification only for our public safety partners. This update has not yet been provided to the public, as a PSPS is not imminent at this time. We anticipate the following areas could be impacted: Westshore Lake Tahoe and Glenshire. We will continue monitoring local conditions and weather forecasts with our fire weather experts, and will provide additional updates as they become available.

###

MEMORANDUM

TO: **Liberty Utilities Tahoe (Calpeco) Staff**

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 13, 2019**

RE: **Safety Partner Everbridge Message | Public Safety Power Shutoff**

Liberty Utilities is updating our public safety partners regarding the alert that a Public Safety Power Shutoff (PSPS) could be implemented as early as Sunday, Sept. 15. As of 6 pm on Friday, Sept. 13, the weather forecast is showing that PSPS thresholds may **NOT** be met; however, Liberty Utilities will continue to monitor weather forecasts and real-time weather data and will share updates on Saturday.

###

MEMORANDUM

TO:

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 14, 2019**

RE: **Safety Partner Everbridge Message | Public Safety Power Shutoff**

Liberty Utilities is updating our public safety partners regarding the alert that a Public Safety Power Shutoff (PSPS) could be implemented. At this time PSPS thresholds are not forecast to be met and a PSPS event is NOT scheduled. Should conditions change we will provide updates.

###

Appendix B

Medical Baseline Customer Notifications

	Thursday, September 12th | Phone Call 1st Attempt			
Account Number	**Date of Contact**	**Time of 1st PSPS Liberty Phone Call Attempt**	**Outcome of Attempted Phone Call**	**Additional Comments**
88506784-88106630	09.12.19	5:34:00 PM	Left Voicemail	
88508787-88179665	09.12.19	5:38:00 PM	Left Voicemail	
88507988-88107823	09.12.19	5:40:00 PM	Left Voicemail	
88505394-88182537	09.12.19	5:43:00 PM	Left Voicemail	Voicemail had Rosanne
88547309-88193942	09.12.19	5:44:00 PM	No Contact	Bad phone number
88508963-88108795	09.12.19	5:48:00 PM	No Contact	Bad phone number
88513425-88162838	09.12.19	5:53:00 PM	Spoke to Customer	Son no longer on oxygen
88514958-88226332	09.12.19	6:02:00 PM	Spoke to Customer	Confirmed equipment
88505446-88180309	09.12.19	6:05:00 PM	Left Voicemail	
88507446-88188994	09.12.19	6:07:00 PM	Left Voicemail	
88521817-88121567	09.12.19	6:09:00 PM	Left Voicemail	
88505820-88105667	09.12.19	6:12:00 PM	Left Voicemail	Called back 09.13, spoke with CSR
88519594-88119359	09.12.19	6:13:00 PM	Spoke to Customer	Confirmed equipment
88522298-88178111	09.12.19	6:17:00 PM	No Contact	Bad phone number
88521355-88203534	09.12.19	6:19:00 PM	Left Voicemail	
88521379-88121134	09.12.19	6:21:00 PM	Spoke to Customer	Mom passed away
88522710-88122454	09.12.19	6:23:00 PM	Left Voicemail	
88546009-88168004	09.12.19	6:24:00 PM	Spoke to Customer	Confirmed equipment
88547951-88121963	09.12.19	6:27:00 PM	Spoke to Customer	Confirmed equipment
88519579-88230998	09.12.19	6:28:00 PM	Spoke to Customer	Added husband's phone number
88519352-88119117	09.12.19	6:39:00 PM	Left Voicemail	

	Friday, September 13th | Phone Call 2nd Attempt			
Account Number	**Date of Contact**	**Time of 2nd PSPS Liberty Phone Call Attempt**	**Outcome of Attempted Phone Call**	**Additional Comments**
88506784-88106630	09.13.19	11:53:00 AM	Left Voicemail	Cell number added 530 452 7210 , left voicemail on both
88508787-88179665	09.13.19	11:59:00 AM	Left Voicemail	Cell number added 530 536 3433, bad phone number; Customer called back and spoke with CSR.
88507988-88107823	09.13.19	12:05:00 PM	Left Voicemail	Cell number added 530 277 2427, mailbox is full
88505394-88182537	09.13.19	12:07:00 PM	Left Voicemail	No alternative number
88547309-88193942	09.13.19	12:10:00 PM	No Contact	Bad phone number, no alternative number
88508963-88108795	09.13.19	12:12:00 PM	Left Voicemail	Cell number added 530 414 0109, left voicemail on cell. Primary number still bad
88513425-88162838	09.13.19	Spoke to customer on first attempt		
88514958-88226332	09.13.19	Spoke to customer on first attempt		
88505446-88180309	09.13.19	12:19:00 PM	Left Voicemail	Other' number added 775 851 7460, bad phone number
88507446-88188994	09.13.19	12:22:00 PM	Left Voicemail	No alternative number
88521817-88121567	09.13.19	12:23:00 PM	Left Voicemail	Cell Number added 916 581 8706, bad phone number
88505820-88105667	09.13.19	Spoke to customer 09.13 CSR Contact		
88519594-88119359	09.13.19	Spoke to customer on first attempt		
88522298-88178111	09.13.19	12:28:00 PM	No Contact	Bad phone number, no alternative number. Spanish speaker necessary
88521355-88203534	09.13.19	12:31:00 PM	Left Voicemail	No alternative number
88521379-88121134	09.13.19	Spoke to customer on first attempt		
88522710-88122454	09.13.19	12:33:00 PM	Left Voicemail	No alternative number
88546009-88168004	09.13.19	Spoke to customer on first attempt		
88547951-88121963	09.13.19	Spoke to customer on first attempt		
88519579-88230998	09.13.19	Spoke to customer on first attempt		
88519352-88119117	09.13.19	12:36:00 PM	Spoke to Customer	

	Friday, September 13th | Door to Door Attempt		
Account Number	**Liberty Door to Door Attempt Results**	**Date of Contact**	**Time of Door to Door Attempt**
88506784-88106630	Door Hanger	09.13.19	3:30 - 5:00 PM
88508787-88179665	Spoke to Customer - Received Voicemail	09.13.19	3:30 - 5:00 PM
88507988-88107823	Door Hanger	09.13.19	3:30 - 5:00 PM
88505394-88182537	Spoke to Customer - Received Voicemail Home Phone: 530 582 1355	09.13.19	3:30 - 5:00 PM
88547309-88193942	Door Hanger	09.13.19	3:30 - 5:00 PM
88508963-88108795	Door Hanger	09.13.19	3:30 - 5:00 PM
88513425-88162838	N/A	N/A	N/A
88514958-88226332	N/A	N/A	N/A
88505446-88180309	Spoke to Customer - Received Voicemail	09.13.19	3:30 - 5:00 PM
88507446-88188994	Door Hanger	09.13.19	3:30 - 5:00 PM
88521817-88121567	Door Hanger	09.13.19	3:30 - 5:00 PM
88505820-88105667	N/A	N/A	N/A
88519594-88119359	N/A	N/A	N/A
88522298-88178111	Spoke to Customer - Received Voicemail Home Phone: 323 646 1567	09.13.19	3:30 - 5:00 PM
88521355-88203534	Door Hanger	09.13.19	3:30 - 5:00 PM
88521379-88121134	N/A	N/A	N/A
88522710-88122454	Door Hanger	09.13.19	3:30 - 5:00 PM
88546009-88168004	N/A	N/A	N/A
88547951-88121963	N/A	N/A	N/A
88519579-88230998	N/A	N/A	N/A
88519352-88119117	Spoke to Customer - Received Voicemail	09.13.19	3:30 - 5:00 PM

	Friday, September 13th | 3rd Phone Call Follow Up			
Account Number	**Date of Contact**	**Time of 3rd PSPS Liberty Phone Call Attempt**	**Outcome of Attempted Phone Call**	**Additional Comments**
88506784-88106630	N/A	N/A	N/A	
88508787-88179665	09.13.19	6:01:00 PM	Spoke to Customer	
88507988-88107823	N/A	N/A	N/A	
88505394-88182537	N/A	N/A	N/A	
88547309-88193942	N/A	N/A	N/A	
88508963-88108795	N/A	N/A	N/A	
88513425-88162838	09.13.19	6:06:00 PM	Spoke to Customer	
88514958-88226332	09.13.19	6:08:00 PM	Spoke to Customer	
88505446-88180309	N/A	N/A	N/A	
88507446-88188994	N/A	N/A	N/A	
88521817-88121567	N/A	N/A	N/A	
88505820-88105667	09.13.19	6:06:00 PM	Left Voicemail	
88519594-88119359	09.13.19	6:08:00 PM	Spoke to Customer	
88522298-88178111	N/A	N/A	N/A	
88521355-88203534	N/A	N/A	N/A	
88521379-88121134	09.13.19	6:10:00 PM	Left Voicemail	
88522710-88122454	N/A	N/A	N/A	
88546009-88168004	09.13.19	6:12:00 PM	Spoke to Customer	
88547951-88121963	09.13.19	6:16:00 PM	Left Voicemail	
88519579-88230998	09.13.19	6:13:00 PM	Spoke to Customer	
88519352-88119117	09.13.19	6:18:00 PM	Spoke to Customer	

	Saturday, September 14th | 4th Phone Call Follow Up - Final			
Account Number	**Date of Contact**	**Time of 3rd PSPS Liberty Phone Call Attempt**	**Outcome of Attempted Phone Call**	**Additional Comments**
88506784-88106630	9.14.19	1:03:00 PM	Left Voice Mail	
88508787-88179665	9.14.19	1:05:00 PM	Left Voice Mail	
88507988-88107823	9.14.19	1:06:00 PM	Left Voice Mail	
88505394-88182537	9.14.19	1:07:00 PM	Left Voice Mail	
88547309-88193942	9.14.19	N/A	# unreachable	
88508963-88108795	9.14.19	N/A	Bad phone number	
88513425-88162838	9.14.19	1:08:00 PM	Left Voice Mail	
88514958-88226332	9.14.19	1:09:00 PM	Spoke to Tina	
88505446-88180309	9.14.19	1:10:00 PM	Spoke to Robin Lee - see comments	Best Utility Company - really appreciated all of the communication. Door to Door was over and above!
88507446-88188994	9.14.19	1:20:00 PM	Spoke to Robert	
88521817-88121567	9.14.19	1:25:00 PM	Left Voice Mail	
88505820-88105667	9.14.19	1:26:00 PM	Spoke to Debra	
88519594-88119359	9.14.19	1:30:00 PM	Spoke to William	
88522298-88178111	9.14.19	N/A	Bad phone number	
88521355-88203534	9.14.19	1:32:00 PM	Left Voice Mail	
88521379-88121134	9.14.19	N/A	N/A	
88522710-88122454	9.14.19	1:33:00 PM	Left Voice Mail	
88546009-88168004	9.14.19	1:34:00 PM	Left Voice Mail	
88547951-88121963	9.14.19	1:36:00 PM	Spoke to Customer	
88519579-88230998	9.14.19	1:40:00 PM	Left Voice Mail	
88519352-88119117	9.14.19	1:42:00 PM	Spoke to Customer	

MEMORANDUM

TO: **Liberty Utilities Tahoe (Calpeco) Staff**

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 12, 2019**

RE: **Medical Baseline Customer Alert Call Script | Public Safety Power Shutoff**

- Good afternoon, my name is <<insert>> and I'm calling from Liberty Utilities with an important update regarding the possibility of an extended power shutdown this weekend.
- Our records indicate that you or a member of your household is a medical baseline customer or may have special medical needs that require electric service. Can you confirm that information?
- Liberty Utilities is alerting our medical baseline customers of the possibility that we may implement a Public Safety Power Shutoff as early as Sunday morning, September 15, for some portions of our service area, including your neighborhood.
- Are you familiar with what a Public Safety Power Shutoff is?
- A Public Safety Power Shutdown is a proactive measure that electric providers like Liberty Utilities have been instructed to implement during periods when wildfire risk is increased because of local conditions and weather forecasts. The Public Safety Power Shutoff is being considered to keep the community and customers safe from the danger associated with a catastrophic wildfire.
- If the Public Safety Power Shutoff does occur, power may be temporarily interrupted for at least 24 hours (or longer), so we are asking our medical baseline customers to plan accordingly in case you need to secure alternative power or relocate for medical needs.
- At this point, it has not yet been determined whether a Public Safety Power Shutoff will occur. However, since it is a possibility, we wanted to give you advanced notice due to your medical needs.
- Our goal is to determine in the next 24 hours whether a Public Safety Power Shutoff will be necessary.
- We will keep you updated with a followup call, either via a personal phone call or an automated call. If a Public Safety Power Shutoff is iminent, we will also post that information to our website at www.LibertyUtilities.com.
- I'd like to personally thank you for being a Liberty Utilities customer. We appreciate your understanding as we work to keep the community safe.
- <<Close Call>>

###

MEMORANDUM

TO: **Liberty Utilities Tahoe (Calpeco) Staff**

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 12, 2019**

RE: **Medical Baseline Customer Alert Voicemail Script | Public Safety Power Shutoff**

- Good afternoon, my name is <<insert>> and I'm calling from Liberty Utilities with an important update regarding the possibility of an extended power shutdown this weekend.
- Liberty Utilities is alerting our medical baseline customers of the possibility that we may implement a Public Safety Power Shutoff as early as Sunday morning, September 15, for some portions of our service area, including your neighborhood.
- A Public Safety Power Shutoff may be necessary due to a weather forecast condusive to high fire risk.
- Please call our Customer Care Center at 1-800-782-2506 on Friday after 8 a.m. for additional information.
- Our goal is to determine in the next 24 hours whether a Public Safety Power Shutoff will be necessary.
- We will keep you updated with a followup call, either via a personal phone call or an automated call. If a Public Safety Power Shutoff is iminent, we will also post that information to our website at www.LibertyUtilities.com.
- I'd like to personally thank you for being a Liberty Utilities customer. We appreciate your understanding as we work to keep the community safe.

###

MEMORANDUM

TO: **Liberty Utilities Tahoe (Calpeco) Staff**

FROM: **Kurt Althof, Program Manager, Communications and Community Relations**

DATE: **September 13, 2019**

RE: **Medical Baseline Customer Alert Call Script | Public Safety Power Shutoff**

- Good afternoon, my name is <<insert>> and I'm calling from Liberty Utilities with an update regarding the possibility of an extended power shutdown this weekend.
- As of 6 pm on Friday, Sept. 13, the weather forecast is showing that Shutoff thresholds may **NOT** be met; however, Liberty Utilities will continue to monitor weather forecasts and real-time weather data and will share updates on Saturday.

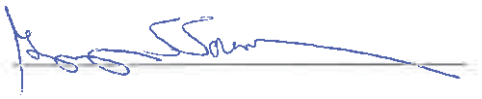
###

Officer Verification

I am an officer of the applicant corporation herein, and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing document are true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 27th day of September, 2019 at Downey, California.



Gregory Sorensen

President

Liberty Utilities

Liberty Utilities (CalPeco Electric) LLC ("Liberty CalPeco") Report on the November 21, 2018 De-Energization Event

Decision to Cut Off Power

Liberty CalPeco staff received weather reports from the National Weather Service ("NWS") indicating a storm was approaching with high winds, and the conditions warranted a Fire Weather Watch. This was the first significant storm of the season, and the local vegetation had not received enough precipitation to reduce the high fire danger.

The focus of the Public Safety Power Shut-off ("PSPS") was on maximum line exposure versus minimal customer disruption. Liberty CalPeco determined that two transmission circuits could be de-energized safely without dropping load to customers. Additionally, some distribution laterals in the South Tahoe area that primarily service unoccupied cabins that had been gated off for the winter could be de-energized with minimal customer disruption. Combined, approximately 50 miles of line exposure were reduced, which impacted approximately 30 occupied homes.

The de-energized circuits (625 line, 111 line, 3400 laterals) were to be restored as soon as they could be patrolled and the area had received enough precipitation to alleviate the fire danger. It was anticipated to be a 10-hour outage based on the weather forecast.

Factors Considered

The NWS reports indicated wind speeds would reach 50-60 mph, with ridges experiencing 70-90 mph gusts, humidity in the 25-35% range, and temperatures around 50°. The area had not received any appreciable amount of precipitation in several weeks, and the vegetation was extremely dry. The routes of the two transmission circuits cross heavily-forested ridges with difficult access in rugged terrain.

Liberty CalPeco was concerned about repairs that needed to be accomplished on the 111 line prior to the storm. The repairs had been scheduled, but would not be completed until early December 2018 due to access, helicopter availability, and the ability to switch out the line. There were no repair concerns regarding the 625 line; however, with two strong sources into Kings Beach and Tahoe City, the 625 line could be de-energized without impact to customers.

The 3400 circuit laterals reside in rugged terrain that experienced a similar scenario in October 2016, which resulted in the Emerald fire. The Emerald fire event started during an early season storm when the fire danger was still high. In both the Emerald fire and the circumstances leading into this PSPS event, weather forecasts called for significant wind preceding the rain and snow. The PSPS event targeted laterals where most of the service locations were summer cabins that are unoccupied through winter, and the access roads are gated. Liberty CalPeco's focus was on selecting as many line miles as possible while minimizing customer disruption.

PSPS Event Details

The PSPS event began at 12:00 PM on November 21, 2018 and lasted until 3:00 PM that afternoon. The wind and storm impacts did not develop to the extent forecast. Liberty CalPeco staff determined that the fire danger had passed, and the decision was made to restore all circuits.

Figure 1 identifies the location of the 111 Line in South Lake Tahoe, CA. This circuit runs through rugged wooded terrain south of the city of South Lake Tahoe. This is one of the two 120 kV sources to South Lake Tahoe. De-energizing this circuit reduced fire exposure and did not impact service to any Liberty CalPeco customers.

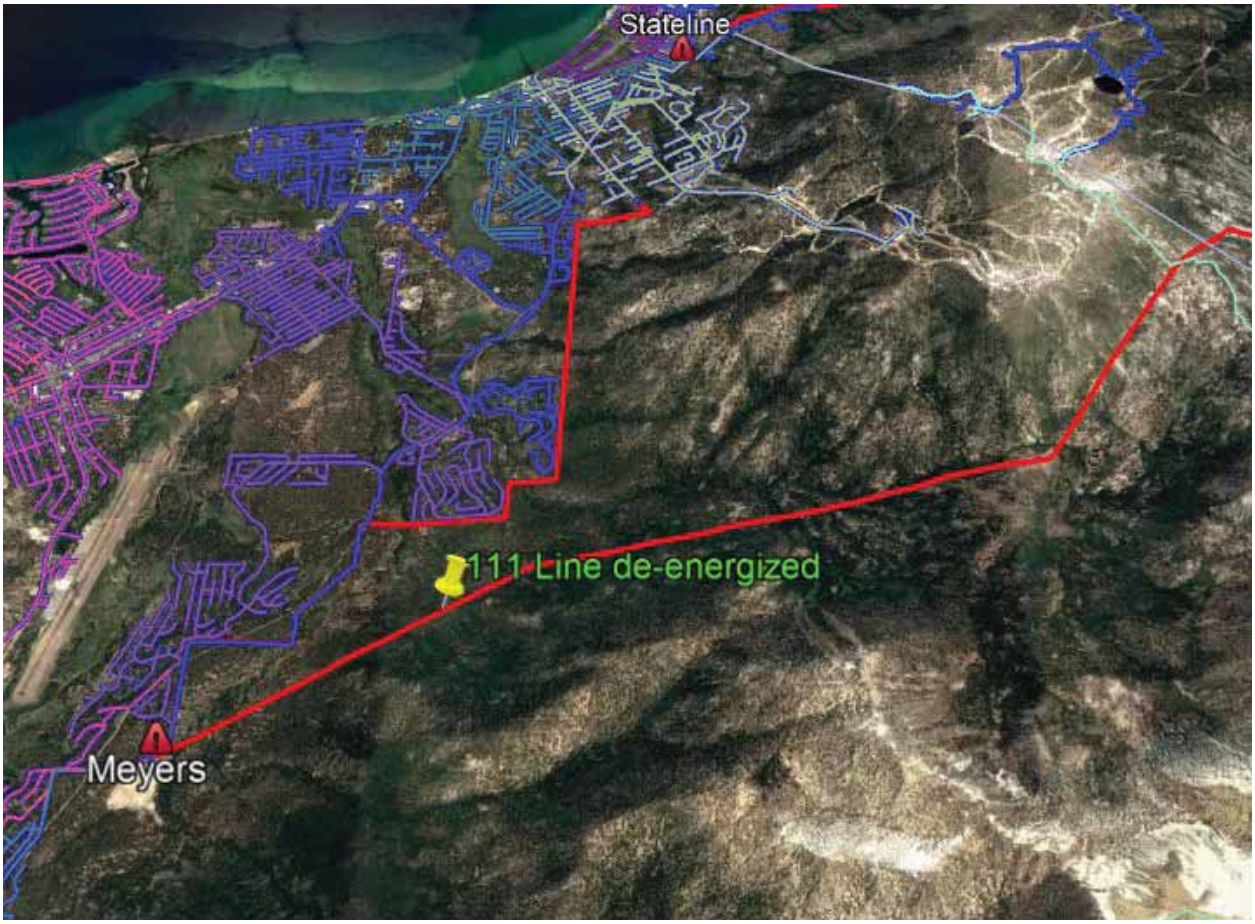


Figure 1 identifies the 111 Line which was de-energized as part of the PSPS on November 21, 2018.

Figure 2 identifies the location of the 625 Line between Kings Beach and Tahoe City, CA. This circuit runs through rugged wooded terrain with high elevations, which are difficult to patrol without helicopter. This is a 60 kV line that completes a sub-transmission loop around north Tahoe. De-energizing this circuit reduced fire exposure and did not impact service to any Liberty CalPeco customers.

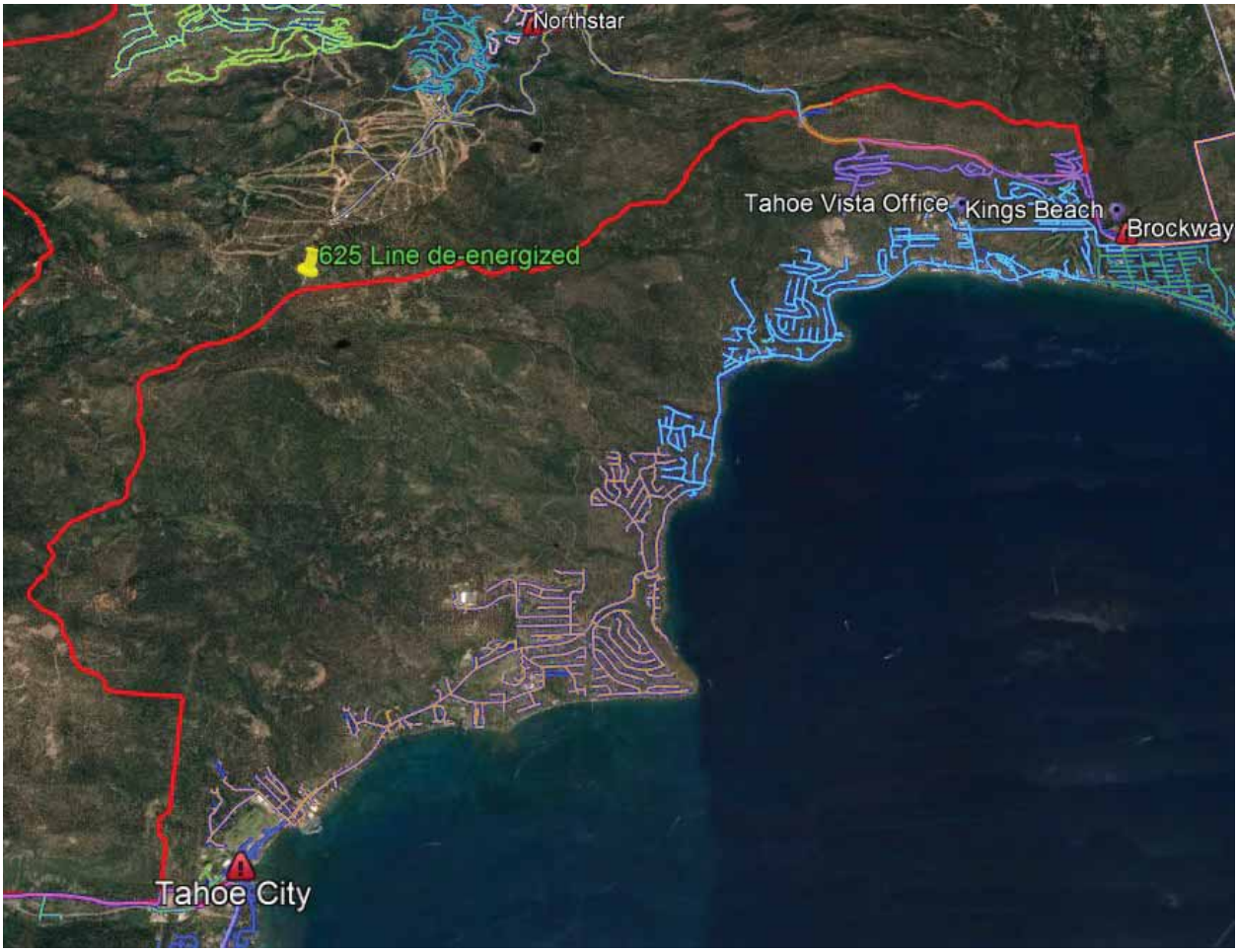


Figure 2 identifies the 625 Line which was de-energized as part of the PSPS on November 21, 2018.

Figure 3 identifies the location of the 3400 circuit laterals in South Lake Tahoe, CA. These four laterals were de-energized due to the difficult access, elevated fire risk, recent fire history, and limited impact to customers.

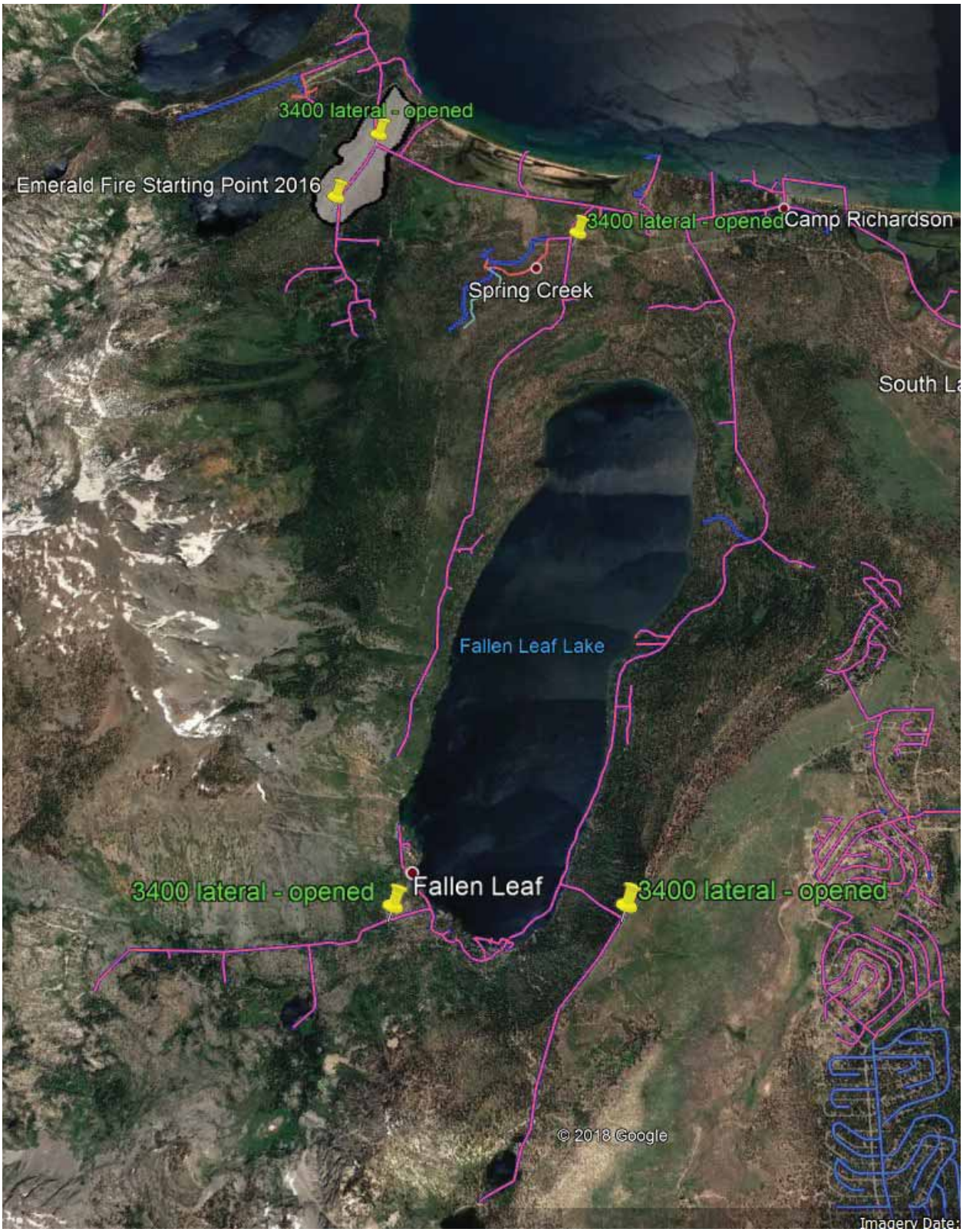


Figure 3 identifies the four specific 3400 circuit laterals which were de-energized as part of the PSPS on November 21, 2018.

Customers Affected

The 30 affected customers are categorized below:

- 29 residential (occupied)
- 0 medical baseline
- 1 commercial
- 0 other

Wind-Related Damage in PSPS Event Areas

Three structures along the 111 line had broken crossarms and bracing prior to the PSPS event. Once the decision was made to restore all circuits, patrols along the de-energized lines were conducted. No additional damage was noted on any of the circuits and restoration proceeded.

Customer Notifications and Mitigations

At 2:47pm on November 20, 2018, Liberty CalPeco deployed a cascading notification via our Everbridge software to 176 customers in the affected areas, and nine customers not included in the Everbridge notification received a phone call by customer service representatives.

The cascading notification process used by the Everbridge software attempts to reach customers by any and all contact information available in their account including email, voice, and text or SMS message until a customer indicates they have received the message.

After notifications were sent, customer service received approximately six phone calls by concerned customers seeking additional information. In all of these cases the customers understood the reasoning and accepted the inconvenience.

One formal written complaint was received.

Other Information

Please see Attachment 1, which provides a NWS weather briefing report that includes relevant details to Liberty CalPeco's PSPS decision.

Additionally, Figure 4 provides the Fire Threat map adopted by the CPUC on January 19, 2018. This map indicates that the 111 line is located in the Tier 3 area for extreme fire danger while the 625 line and 3400 circuit laterals are in the Tier 2 area.

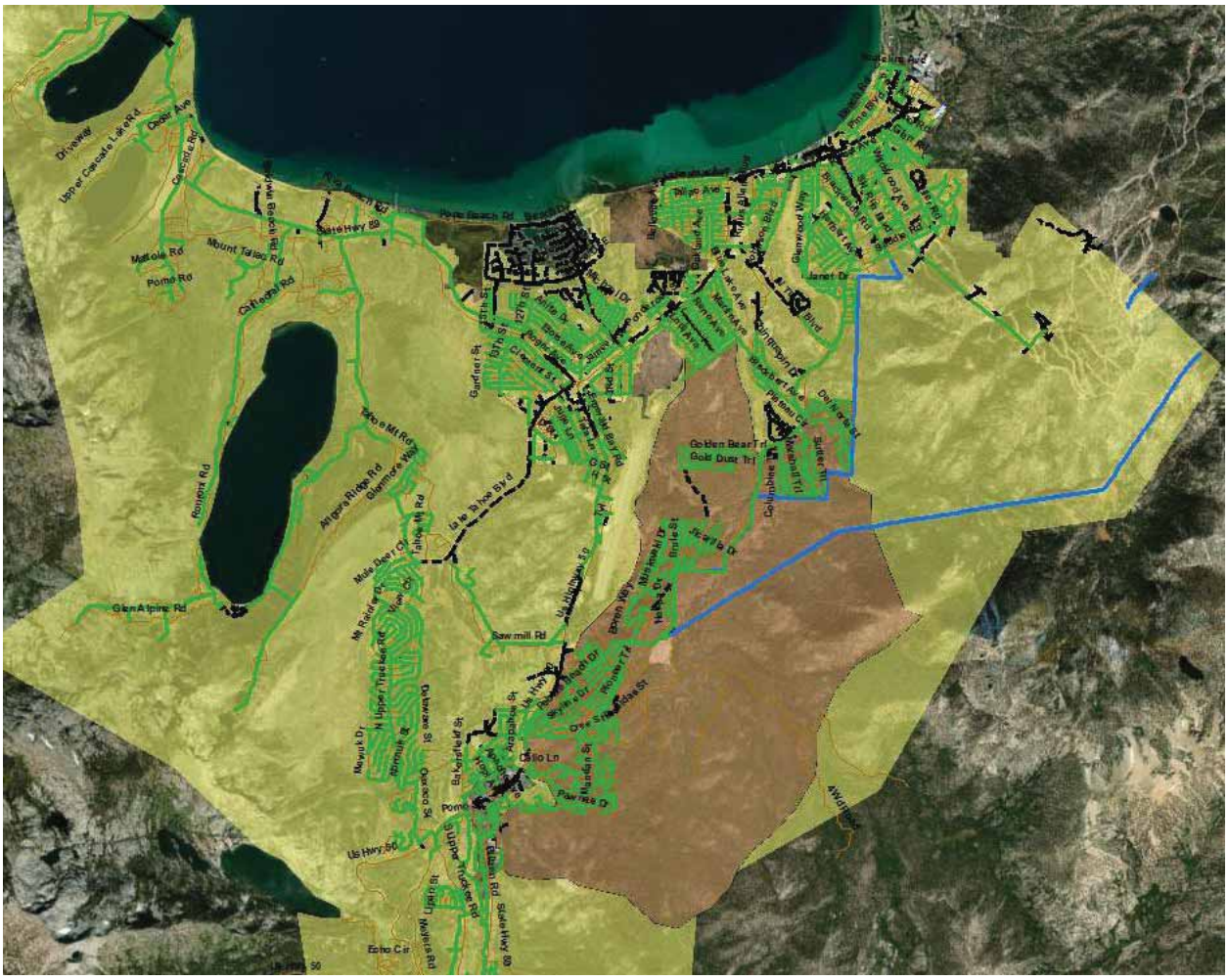


Figure 4 illustrates Tiers 2 and 3 of the Fire Threat Map which was adopted by the CPUC on January 19, 2018. A significant portion of the 111 Line is located within Tier 3.

Attachment 1

National Weather Service Briefing

Winter is Knocking at the Door - And wants to stay



What You Need to Know Up-Front

Key Points

- Modest storms with **Thanksgiving holiday travel impacts Wed-Fri** . Rain/snow threat Wednesday, Rain, snow and wind Thursday PM - Friday. **Worst travel impacts likely late Wednesday afternoon-Wednesday night in the Sierra.** Have an alternate travel plan.
- Windy today, further ramping up speeds Thursday. **Strong, potentially damaging winds are looking more likely for Friday with gusts 50-70 mph,** locally higher in wind prone locations.
- If we don't receive a wetting rain by Wednesday night, we could have fire weather concerns late Thursday into Friday.

Important Changes

- **Winds continue to look stronger Thursday and especially Friday.**
- **Fire Weather Watch for Friday (contingent on lack of wetting rains tonight)**
- **Long range forecast (end of next week-ish) is looking to stay active with more storms probable.**

How much has the forecast changed?

No changes | **Moderate changes** | Lots of changes

Situational Awareness - When Should I Freakout?

NWS Reno 7-14 Day Scan for Unusual Upcoming Weather across the Eastern Sierra and Western Nevada

	Wed 11/21	Thur 11/22	Fri 11/23	Sat 11/24	Sun 11/25	Mon 11/26	Tue 11/27	W2 11/28-12/3
Wind (travel, rec, property impacts)	Gusty S-SW 20-35 mph. 50-60 mph gusts ridges	SW wind gusts 35-55 mph. 70-90 mph gusts ridges.	Strong W-SW winds Turbulence, blowing dust, travel restrictions. **Valleys gusts 60+ mph**, ~100mph Sierra Ridges.	Lighter Winds.				Continued stormy pattern looking more likely for the second half of next week. Initial estimate is ....
Snow (travel, rec impacts)	Sierra: Periods of rain and snow. Travel Delays possible NV Valleys: Rain Wed Evening and perhaps Friday			Additional rain/snow showers. Nothing significant.	No snow expected.			
Flooding (flash floods, river flooding)	No concerns here.							
Unusual Cold or Heat (health impacts)	Nothing unusually warm or cold.							
Fire Weather (wind and low humidity, lightning starts, big plume days)	None. Periods of gusty winds with rain/snow in the forecast.	Breezy W-SW winds Thu. Winds start increasing, but moisture should too.	Strong W-SW winds Fri. Could be a significant concern if there is no wetting rain Wednesday.	None.				
Air Quality (big smoke plumes, air stagnation)	None.							Should be fine

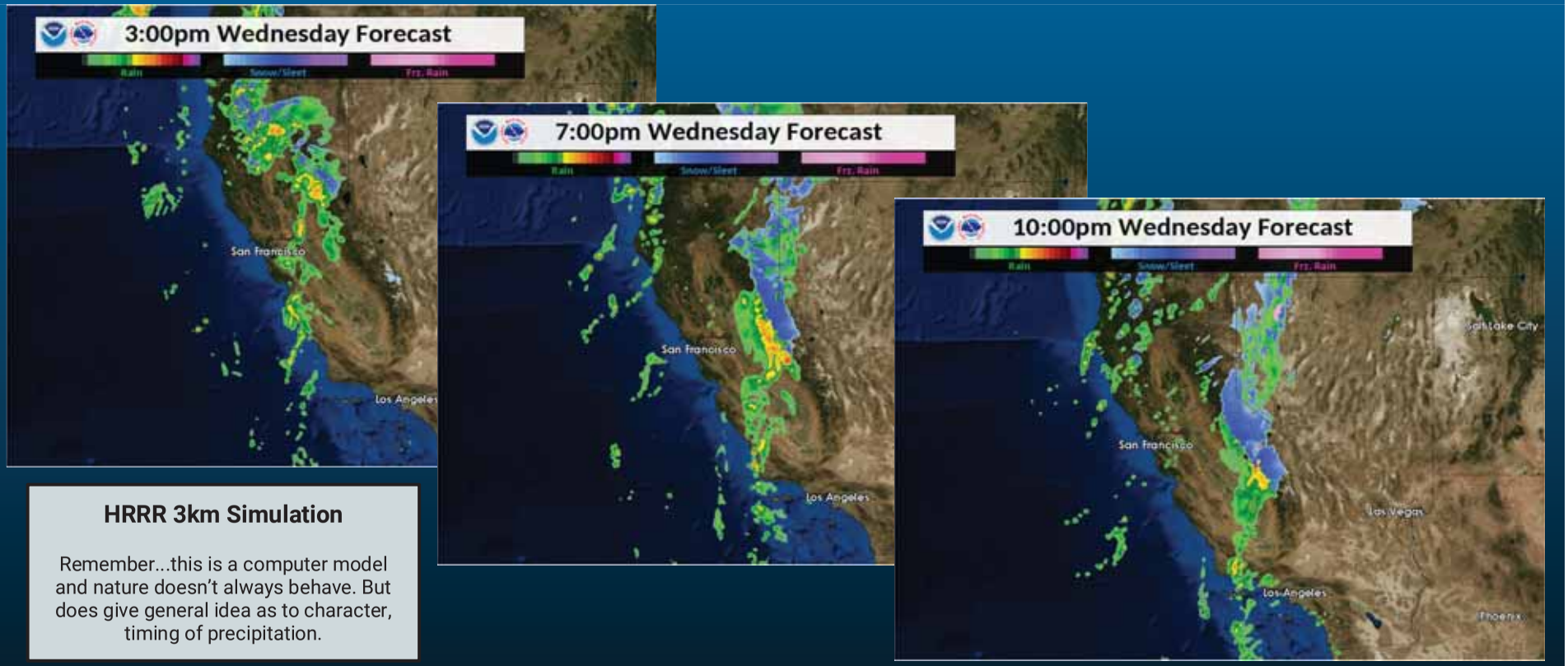
What Does This Mean? Integrates impacts and confidence

No worries | **Low freakoutness** | **Moderate freakoutness** | **High freakoutness** | **Really bad**

CA-05-1188

Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905

Forecast Radar Rapidly deteriorating travel in the Sierra tonight



HRRR 3km Simulation

Remember...this is a computer model and nature doesn't always behave. But does give general idea as to character, timing of precipitation.

CA-05-1189

Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905

Anticipated Liquid Precip Totals (Middle of the Road Forecast)



Two Distinct Storms -

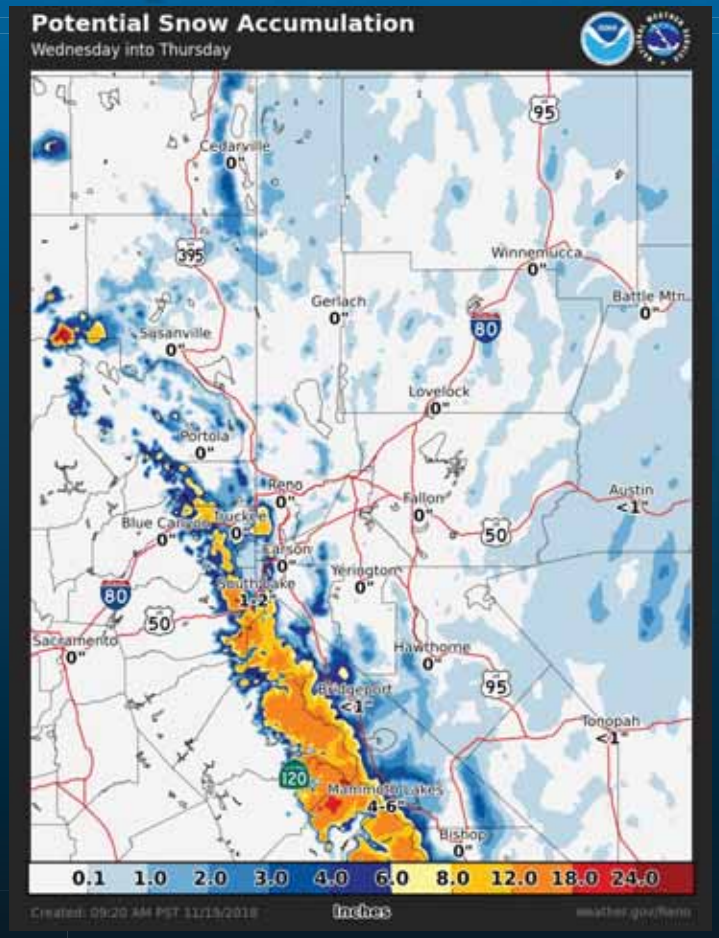
First storm this afternoon-tonight. Precip will lighten Thanksgiving Day in Sierra and NE CA, and likely stop in Wrn NV. Second storm Thanksgiving night into Friday.

Lower confidence for precip from second storm in Wrn NV.



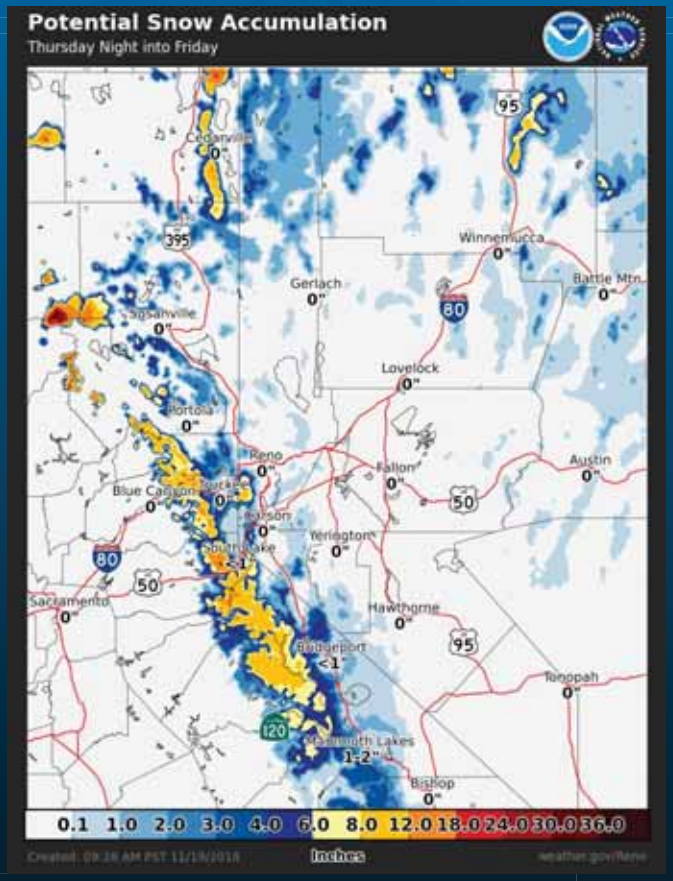
Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905

Anticipated Snow Accumulation (A middle of the road 50/50 approach)



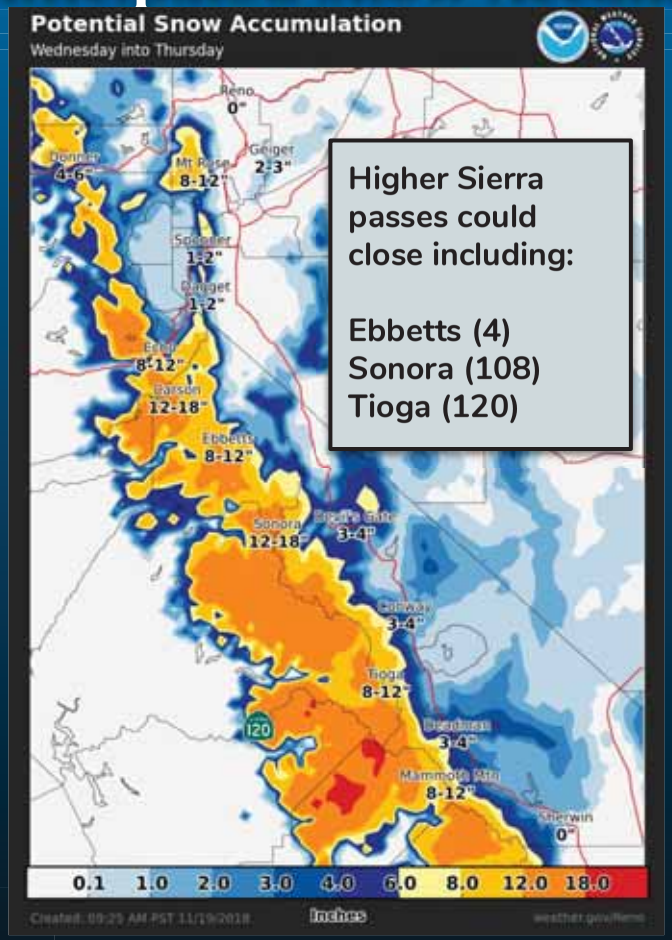
Greatest uncertainty in accumulation is the 6000-7000 foot range due to variable snow levels through the two storms.

Should be all snow above 7500-8000 feet.



Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905

Anticipated Snow Accumulation - Sierra Focus (Middle of the road)

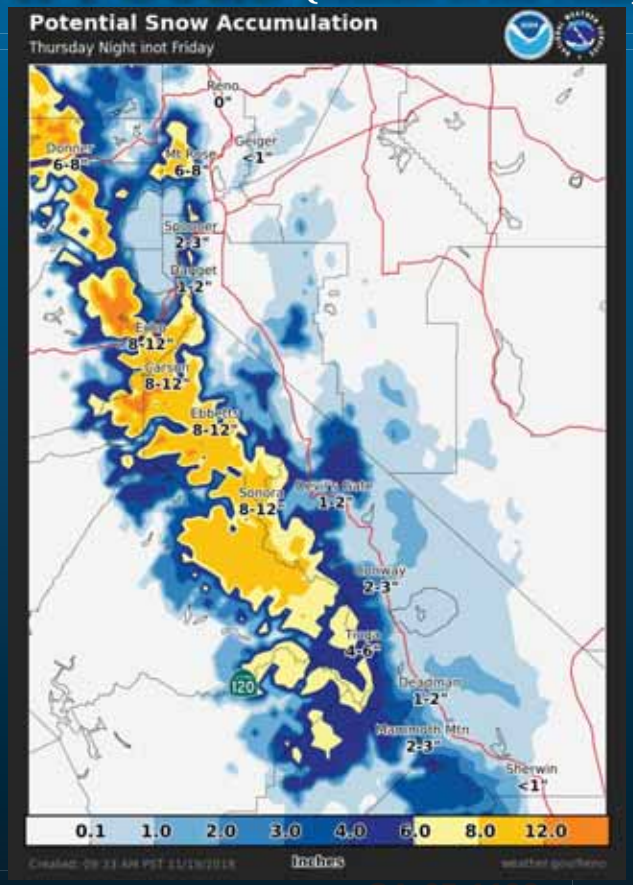


Higher Sierra passes could close including:

Ebbetts (4)
Sonora (108)
Tioga (120)

Greatest uncertainty in accumulation is the 6000-7000 foot range due to variable snow levels through the two storms.

Should be all snow above 7500-8000 feet.



Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905



Peak Winds- Wednesday & Thursday

Wednesday - South to Southwest in direction. (Favorable for low level wind shear at KRNO)

Thursday - Southwest to west in direction. Stronger across ridges.



Peak winds Friday morning through afternoon



Increasing confidence in a period of strong and damaging winds Friday.

These wind speeds could be higher than shown, especially in wind prone areas

Looking like a classic downslope event:

Air travel - turbulence, mountain waves, wind shear.

Ground travel - restrictions for high profile vehicles.

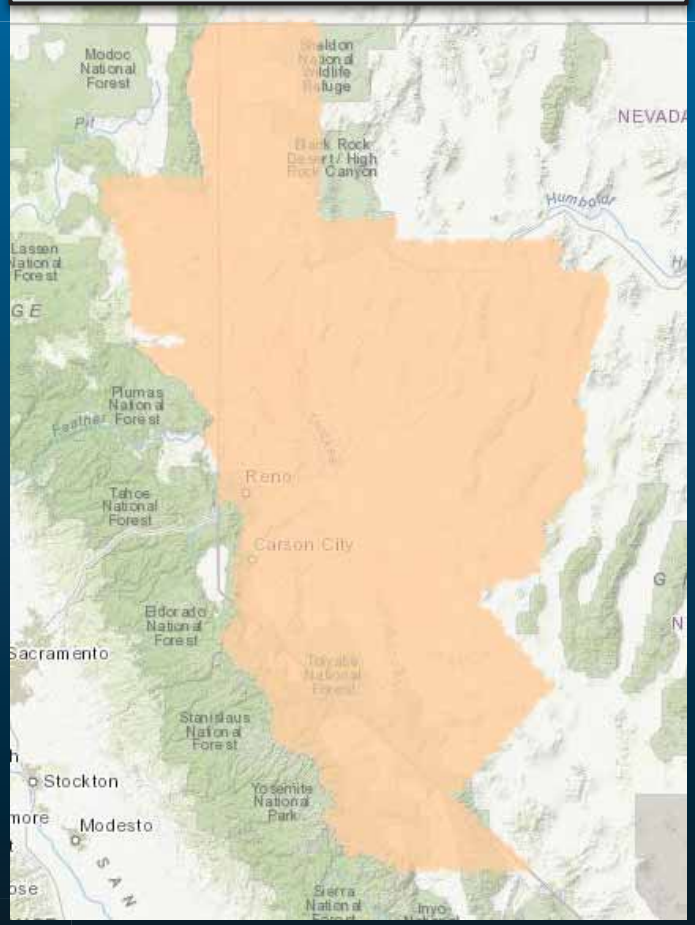
Dangerously choppy lakes.

Wind Prone locations could see gusts up to 70+ mph.

Reno National Weather Service
Forecasting for the Sierra and western Nevada since 1905

Fire Weather Watch Friday

Fire Weather Watch area



Very Strong Winds and moderate humidity:

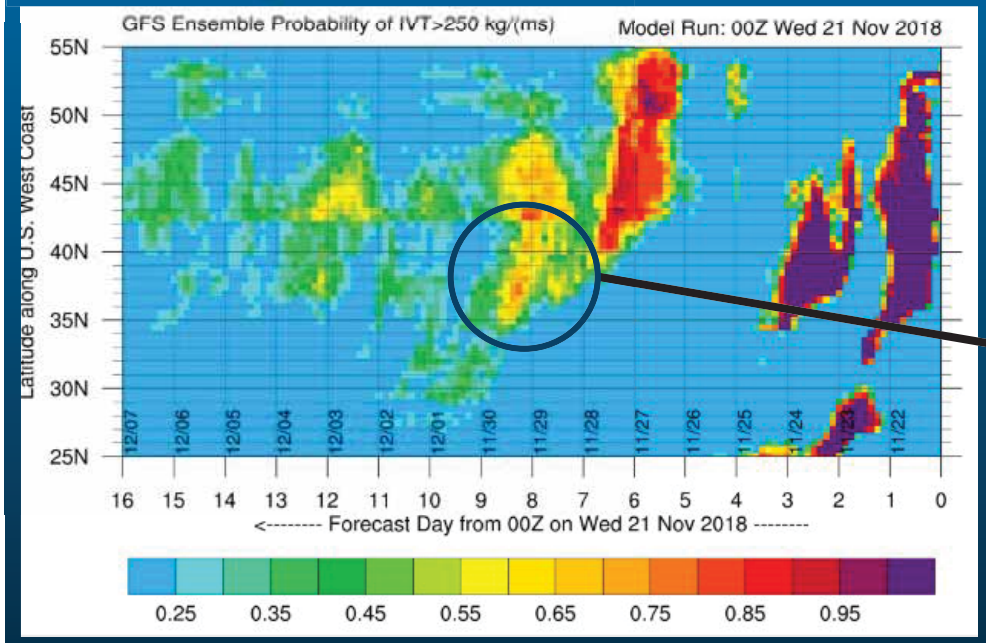
South-southwest winds 20 to 35 mph with gusts of 50 to 70 mph.

Humidity 25-35 percent.

Duration of 4 to 8 hours.

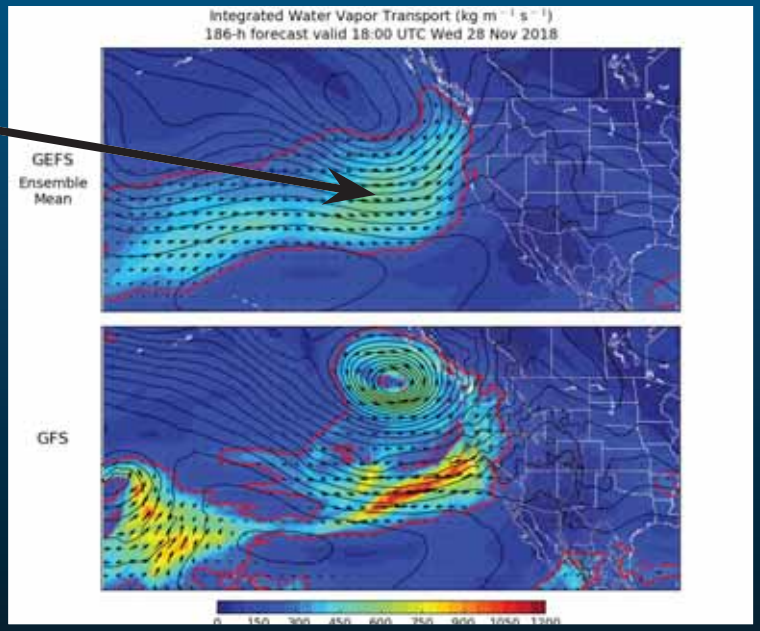
<u>Fire concerns are contingent on rainfall Wednesday night</u>. If solid wetting rains fall Wednesday night, fire weather concerns will be much lower.

Atmospheric River Outlook - More Winter Weather Probable



Main Message

Lots of details to ironed out, but more active weather is looking 'more likely than not' for the end of next with an another atmospheric river approaching the west coast.



What Is This?

Chart above shows percent of simulations with atmospheric river landfall at coastline. Times are in GMT/UTC, 8 hours ahead of PST. **High percent = higher confidence.**

Source - cw3e.ucsd.edu

ATTACHMENT 20

Liberty's 2016 Electric System Reliability Report, July 15, 2017

Energy Division Central Files Document Coversheet

Directions: Submit all documents and submittal questions to Energy Division Central Files via email EnergyDivisionCentralFiles@cpuc.ca.gov

1. Fill out coversheet completely. Coversheet can be embedded as page 1 of the electronic compliance filing, or can be submitted as a separate document that is attached to the email that delivers the compliance filing.
2. All documents are required to be submitted in an electronically *searchable* format.
3. Documents need to reference the reason for the mandate that ordered the filing in Section B or C. If you are unable to reference a proceeding or explain the origin of your filing, please contact Energy Division Central Files.
4. To find a proceeding number (if you only have a decision number), go to http://docs.cpuc.ca.gov/DecisionsSearchForm.aspx; enter the decision number, and the results shown include the proceeding number.

A. Document Name

Today's Date (Date of Submittal) 5/31/2017

Name:

1. Utility Name: Liberty Utilities (CalPeco Electric) LLC (U 933 E)
2. Document Submission Frequency (Annual, Quarterly, Monthly, Weekly, Once, Ad Hoc): Annual
3. Report Name: Electric System Reliability Annual Report
4. Reporting Interval (the date(s) covered by the data, e.g. 2015 Q1): 2016
5. Name Suffix: Cov (for an Energy Division Cover Letter), Conf (for a confidential doc), Ltr (for a letter from utility)
6. Document File Name (format as 1+2 + 3 + 4 + 5): LIBERTY Annual Electric System Reliability Annual Report 2016

Sample Document Names:
Utility Name + Submittal Frequency + Report Name + Year + Reporting Interval
SCE Annual Procurement Report 2014
SDG&E Ad Hoc DR Exception 2015Q1 Conf
SEMPRA Monthly Gas Report 201602
SEMPRA Daily Gas Report 20160230 <no suffix for regular, non-confidential compliance data>
SEMPRA Daily Gas Report 20160230 Cov
SEMPRA Daily Gas Report 20160230 Ltr

7. Identify whether this filing is ☒original or ☐revision to a previous filing.
    a. If revision, identify date of the original filing: Click here to enter text.

B. Documents Related to a Proceeding

All submittals should reference both a proceeding and a decision, if applicable. If not applicable, leave blank and fill out Section C.

1. Proceeding Number (starts with R, I, C, A, or P plus 7 numbers): R1412014
2. Decision Number (starts with D plus 7 numbers): D1601008
3. Ordering Paragraph (OP) Number from the decision: 1

C. Documents Submitted as Requested by Other Requirements

If the document submitted is in compliance with something other than a proceeding, (e.g. Resolution, Ruling, Staff Letter, Public Utilities Code, or sender's own motion), please explain: Click here to enter text.

Energy Division Central Files Document Coversheet

D. Document Summary

Provide a Document Summary that explains why this report is being filed with the Energy Division. This information is often contained in the cover letter, introduction, or executive summary, so you may want to copy if from there and paste it here.
The report has been prepared in response to D.16-01-008, which established reliability recording, calculation, and reporting requirements for Liberty Utilities.

E. Sender Contact Information

1. Sender Name: Daniel W. Marsh
2. Sender Organization: Liberty Utilities (CalPeco Electric) LLC
3. Sender Phone: 562-299-5104
4. Sender Email: dan.marsh@libertyutilities.com

F. Confidentiality

1. Is this document confidential? ☒No ☐Yes
   a. If Yes, provide an explanation of why confidentiality is claimed, a declaration of confidentiality, and identify the expiration of the confidentiality designation (e.g. Confidential until December 31, 2020.) Click here to enter text.

G. CPUC Routing

Energy Division's Director, Edward Randolph, requests that you not copy him on filings sent to Energy Division Central Files. Identify below any Commission staff that were copied on the submittal of this document.

1. Names of Commission staff that sender copied on the submittal of this Document: Doris Lo, David Lee

ver.7/6/2016



ELECTRIC SYSTEM RELIABILITY ANNUAL REPORT

2016

LIBERTY UTILITIES (CALPECO ELECTRIC) LLC (U 933 E)

Prepared for

California Public Utilities Commission

July 15, 2017

CA-05-1200

EXECUTIVE SUMMARY

The Electric System Reliability Annual Report for 2016 has been prepared in response to CPUC Decision 16-01-008, which was approved January 20, 2016. Decision 16-01-008 established reliability recording, calculation, and reporting requirements for Liberty Utilities (CalPeco Electric) LLC.

CalPeco Electric does not provide transmission services. CalPeco Electric does not have an Open Access Transmission Tariff (OATT). Therefore data is presented for the distribution services only. All statistics and calculations include forced distribution outages. Forced outages are those that are not prearranged. For the purposes of this report, sustained outages are outages that lasted more than five minutes in duration, while momentary outages are outages that lasted five minutes or less in duration.

The reliability indicators that are tracked are as follows:

1. SAIDI (System Average Interruption Duration Index) - minutes of sustained outages per customer per year.
2. SAIFI (System Average Interruption Frequency Index) - number of sustained outages per customer per year.
3. MAIFI (Momentary Average Interruption Frequency Index) - number of momentary outages per customer per year.
4. CAIDI (Customer Average Interruption Duration Index) – is the average time required to restore service to a utility customer.

CalPeco Electric presents six years (2011 through 2016) of data, which represents the period in which Liberty Utilities purchased CalPeco Electric from NV Energy.

Beginning in 2013, the measurement of each reliability performance indicator excludes IEEE Major Event Days (MED) instead of CPUC Major Events. An IEEE Major Event Day is defined in IEEE-1366, Section 4.5 as a day in which the daily system SAIDI exceeds a threshold value. These threshold major event days are referred to as “TMED”. Thus, any day in which the total system SAIDI exceeds TMED is excluded from CalPeco Electric’s reliability results. The applicable TMED value is calculated at the end of each year using CalPeco Electric’s daily SAIDI values for the prior five years. CalPeco Electric’s TMED value for 2016 was 104.57 minutes of daily system SAIDI. Other reliability indices in this report are not calculated using methodologies or formulas exactly as described in the IEEE guide for electric power Distribution Reliability indices (IEEE-1366).

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1) System Indices for the Last 6 Years (Years CalPeco Electric in business)

a. Separate tables with SAIDI, SAIFI, MAIFI and CAIDI (Major Event Day (MED)) included and excluded.

I. Distribution System Indices (Major Event included and excluded)

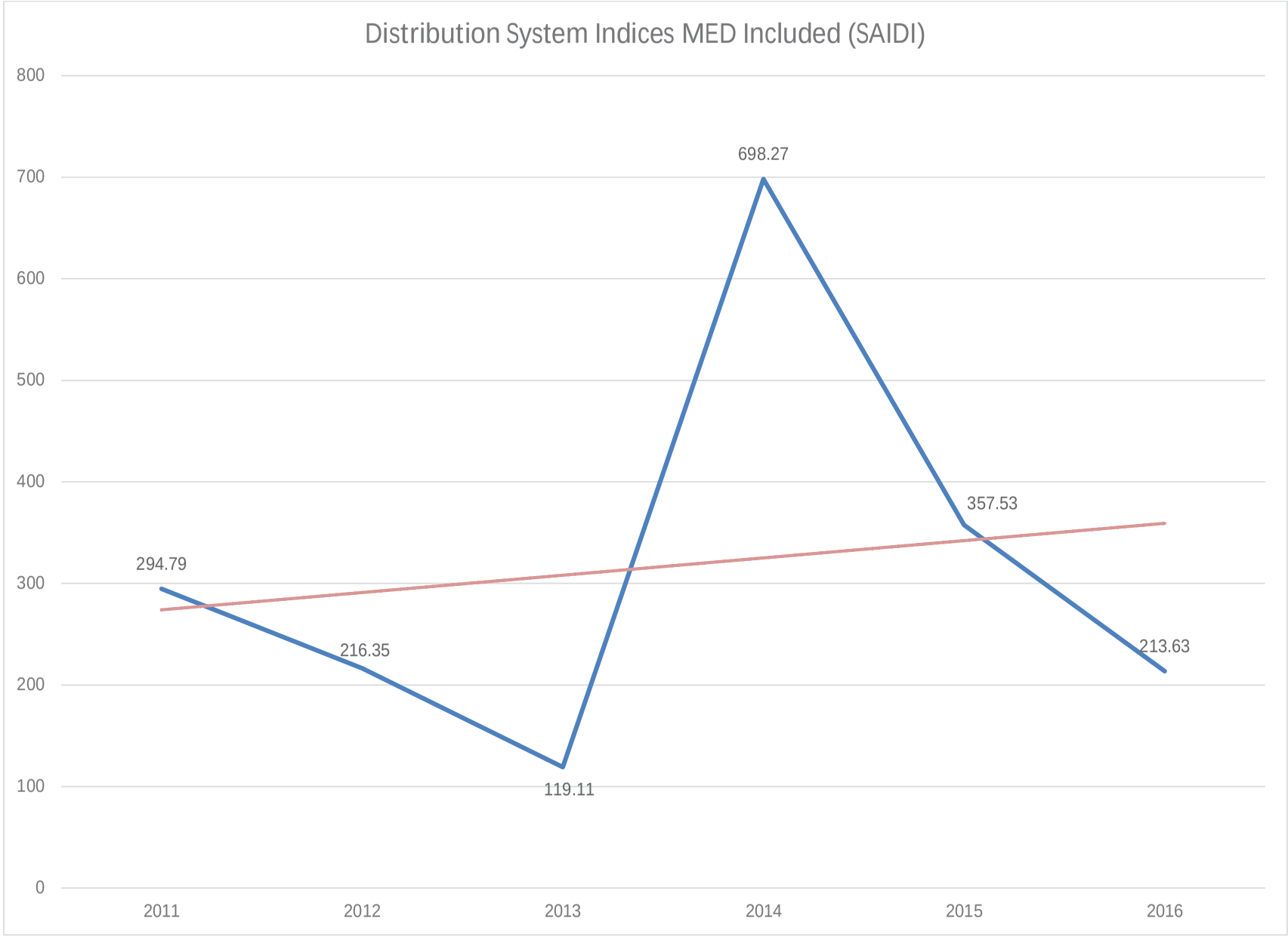
Liberty Utilities (CalPeco Electric), LLC
Distribution Historical System Reliability Data 5 Years (Years in Business)

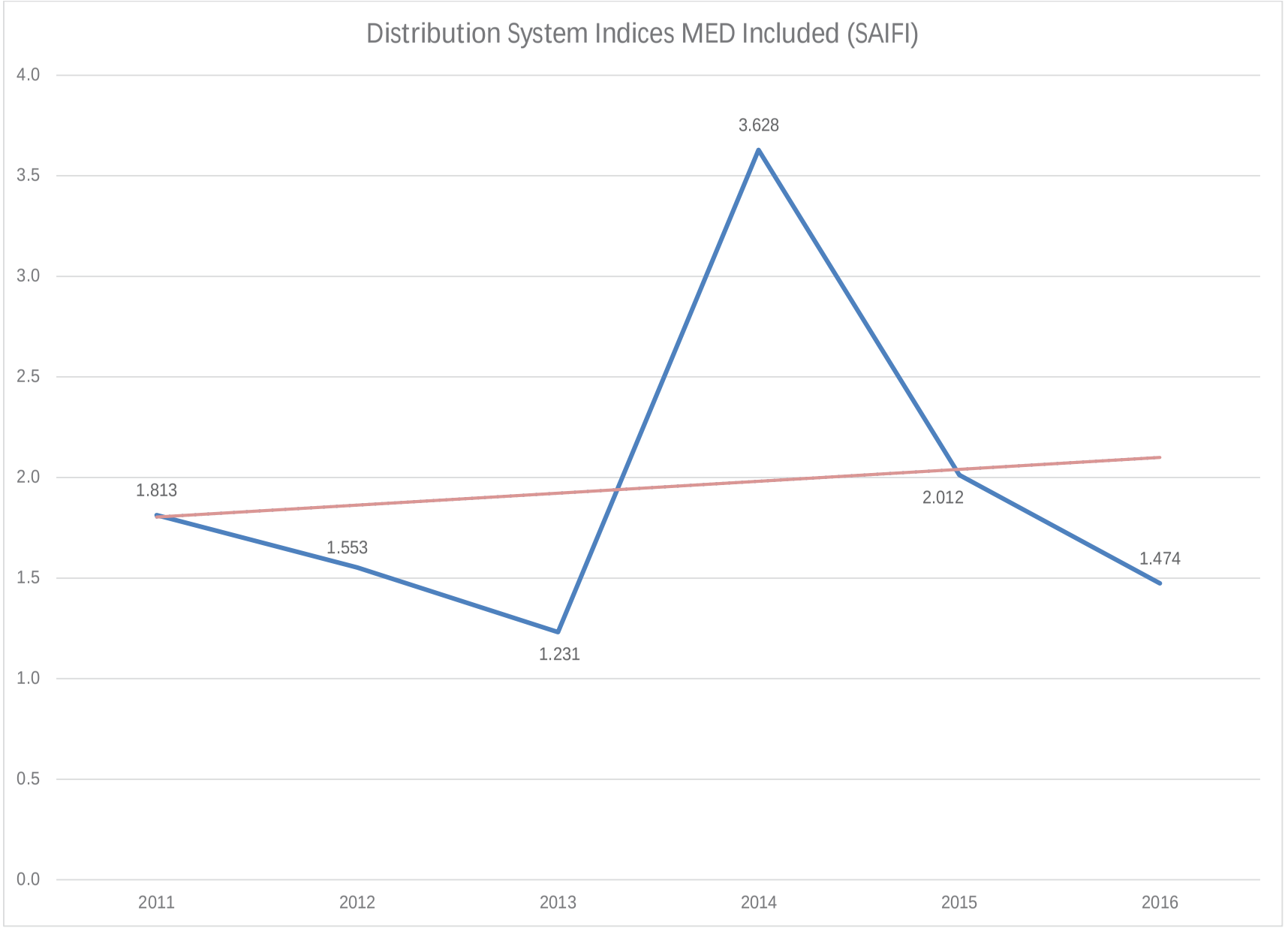
	Major Event Included				Major Event Excluded			
Year	SAIDI	SAIFI	CAIDI	MAIFI	SAIDI	SAIFI	CAIDI	MAIFI
2016	213.63	1.4735	144.98	1.08	213.63	1.4735	144.98	1.08
2015	357.53	2.0122	177.68	1.15	357.53	2.0122	177.68	1.15
2014	698.27	3.6284	192.44	2.15	352.37	2.4039	146.58	2.15
2013	119.11	1.2311	96.75	2.08	119.11	1.2310	96.79	2.08
2012	216.35	1.5530	139.31	2.75	216.35	1.5530	139.31	2.75
2011	294.79	1.8130	162.60	1.88	192.22	1.2460	154.27	1.88

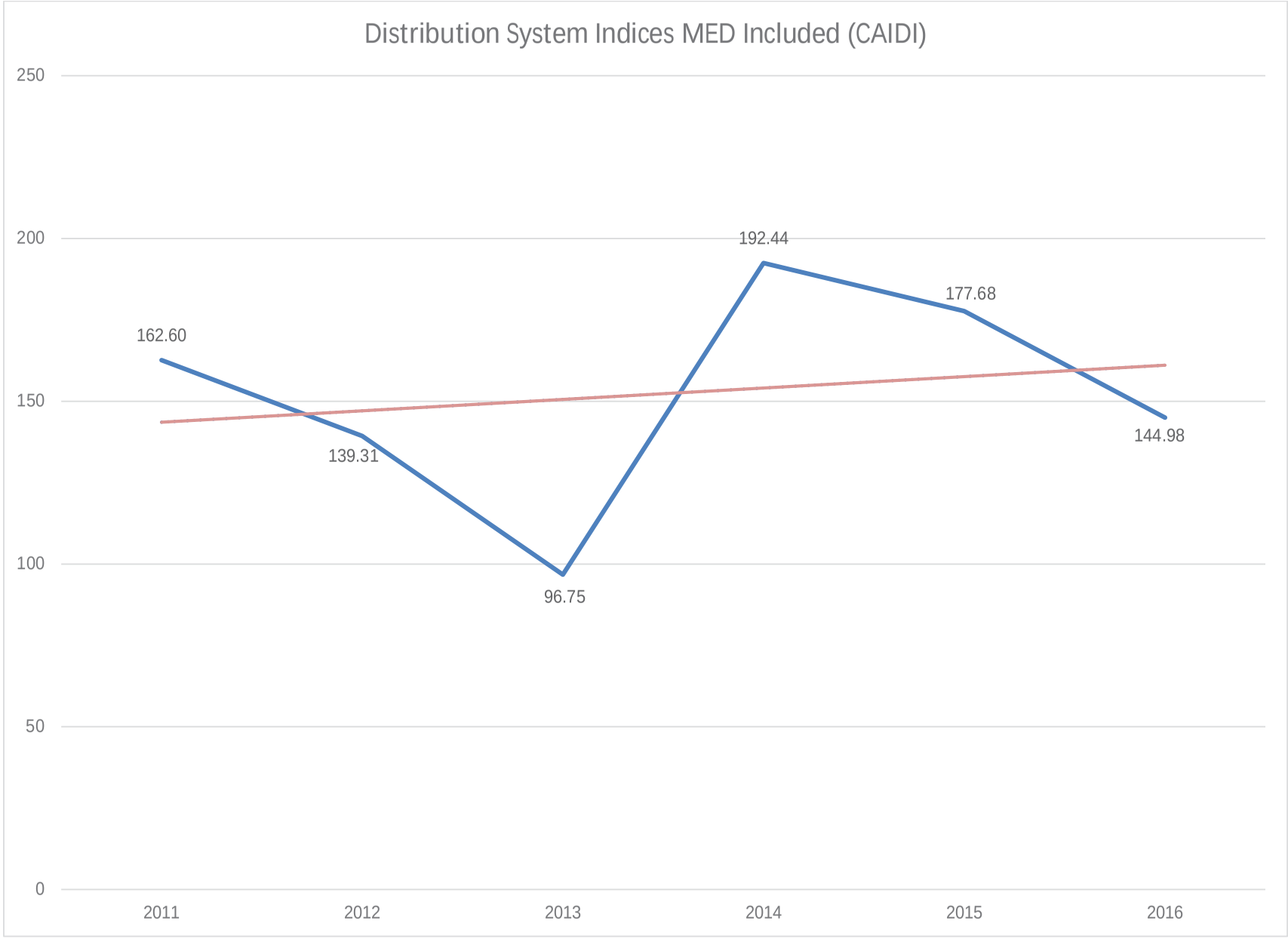
II. Transmission System Indices (MED Included and Excluded)

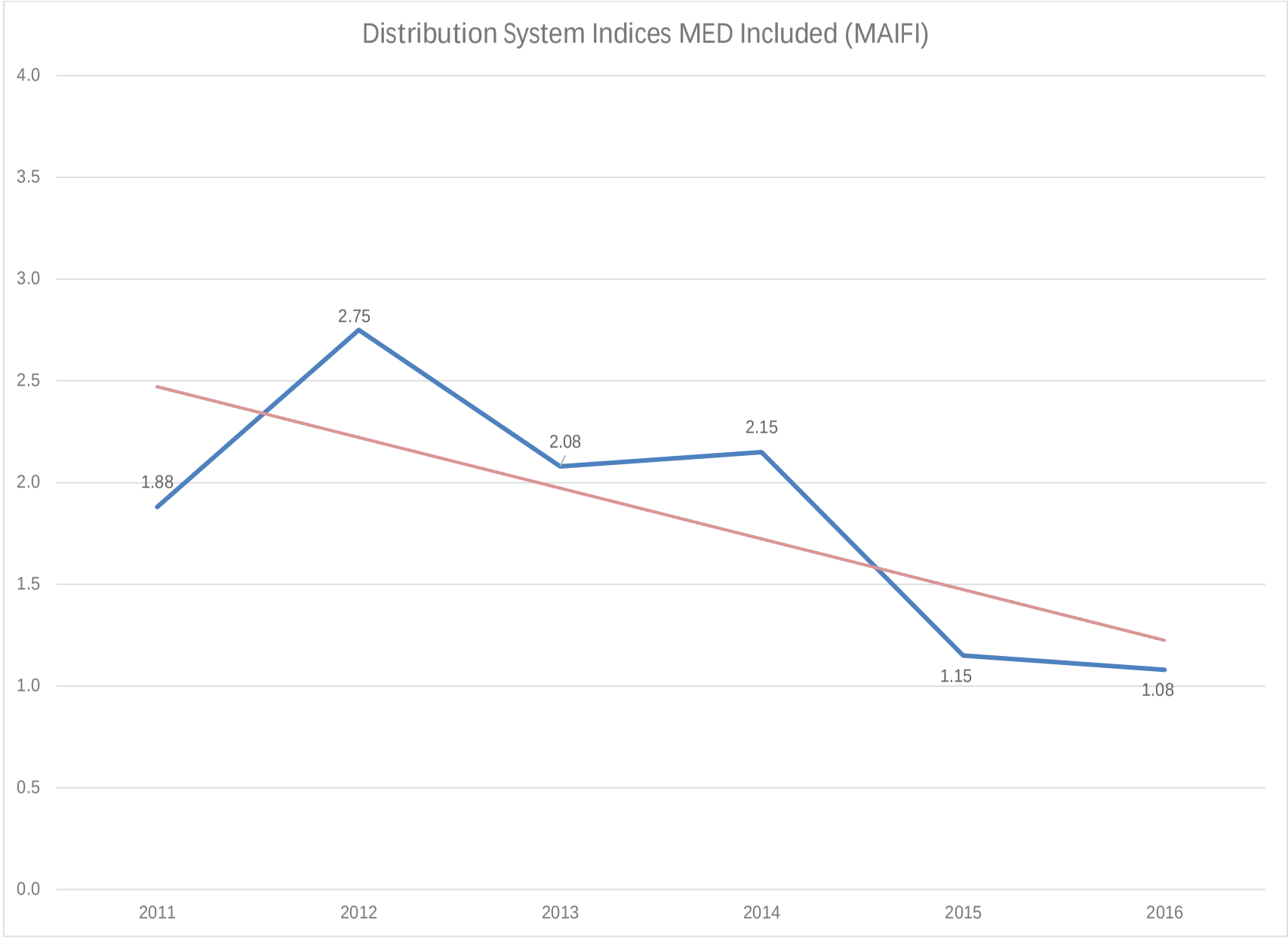
Liberty Utilities (CalPeco Electric), LLC does not own Transmission.

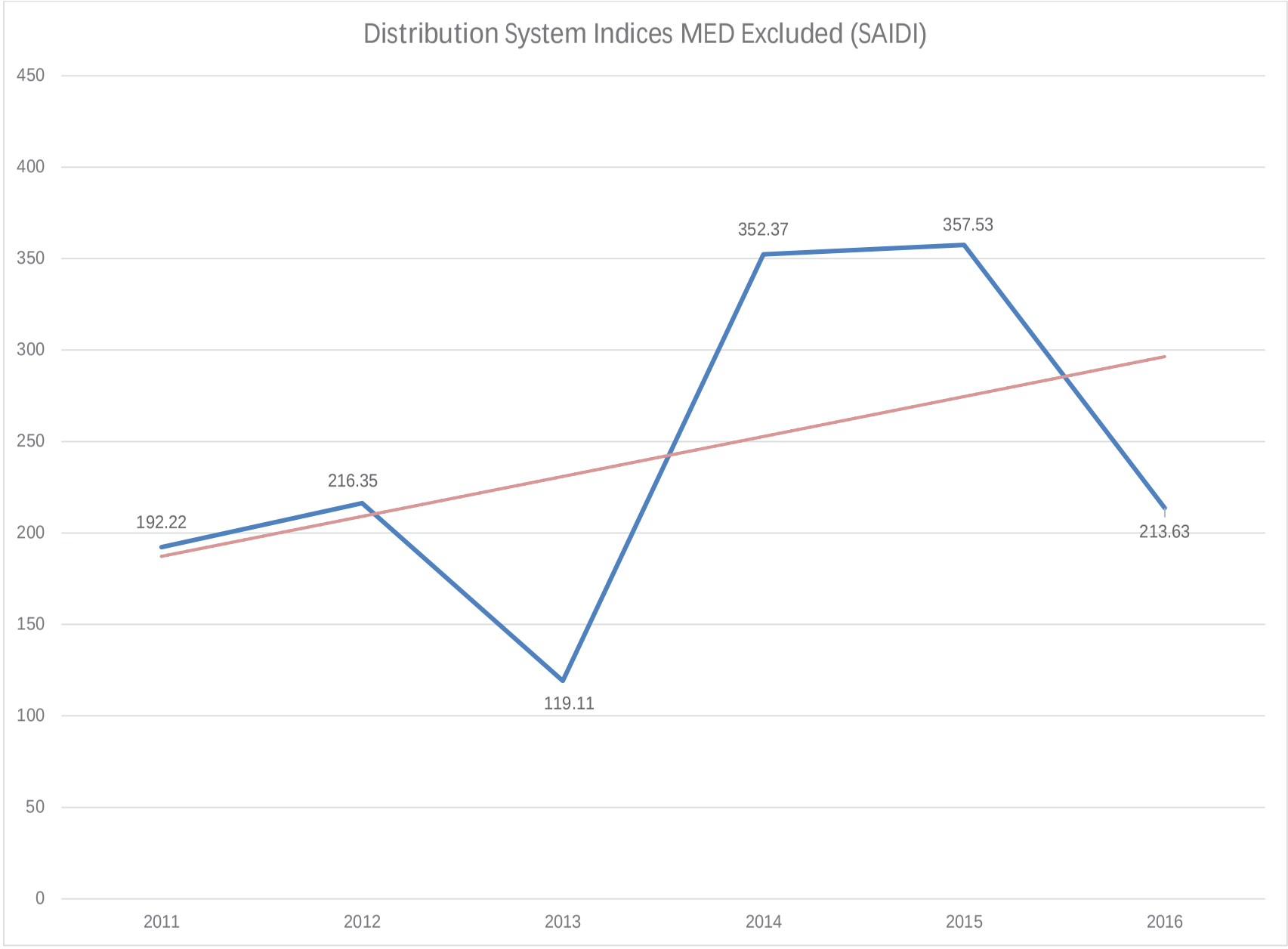
b. Separate charts showing a line graph of distribution system SAIDI, SAIFI, MAIFI, and CAIDI for the past 6 years (year in business) with linear trend line (TMED included and excluded).

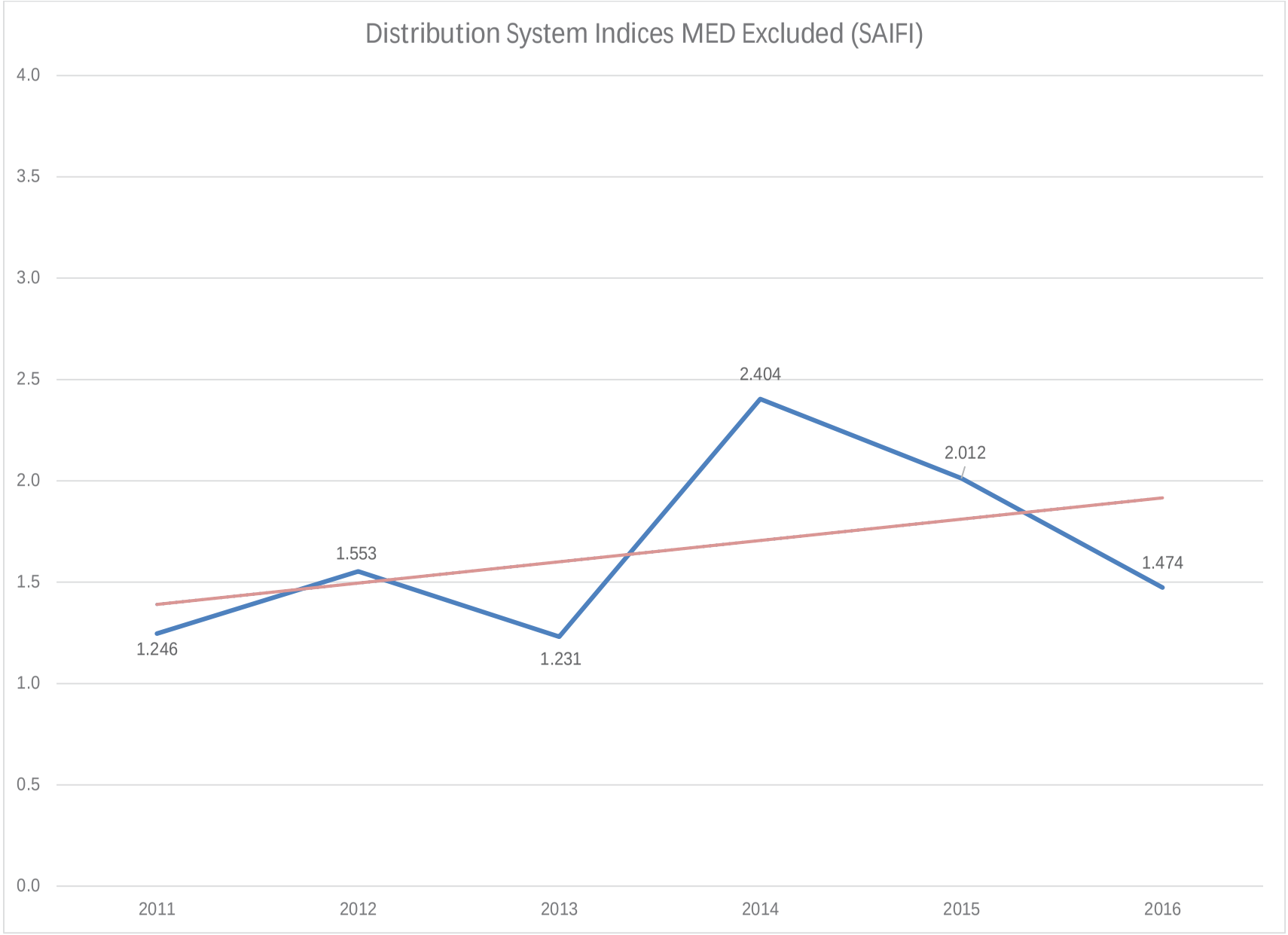

Distribution System Indices MED Included (SAIDI)
800
700
600
500
400
300
200
100
0
294.79
216.35
119.11
698.27
357.53
213.63
2011
2012
2013
2014
2015
2016

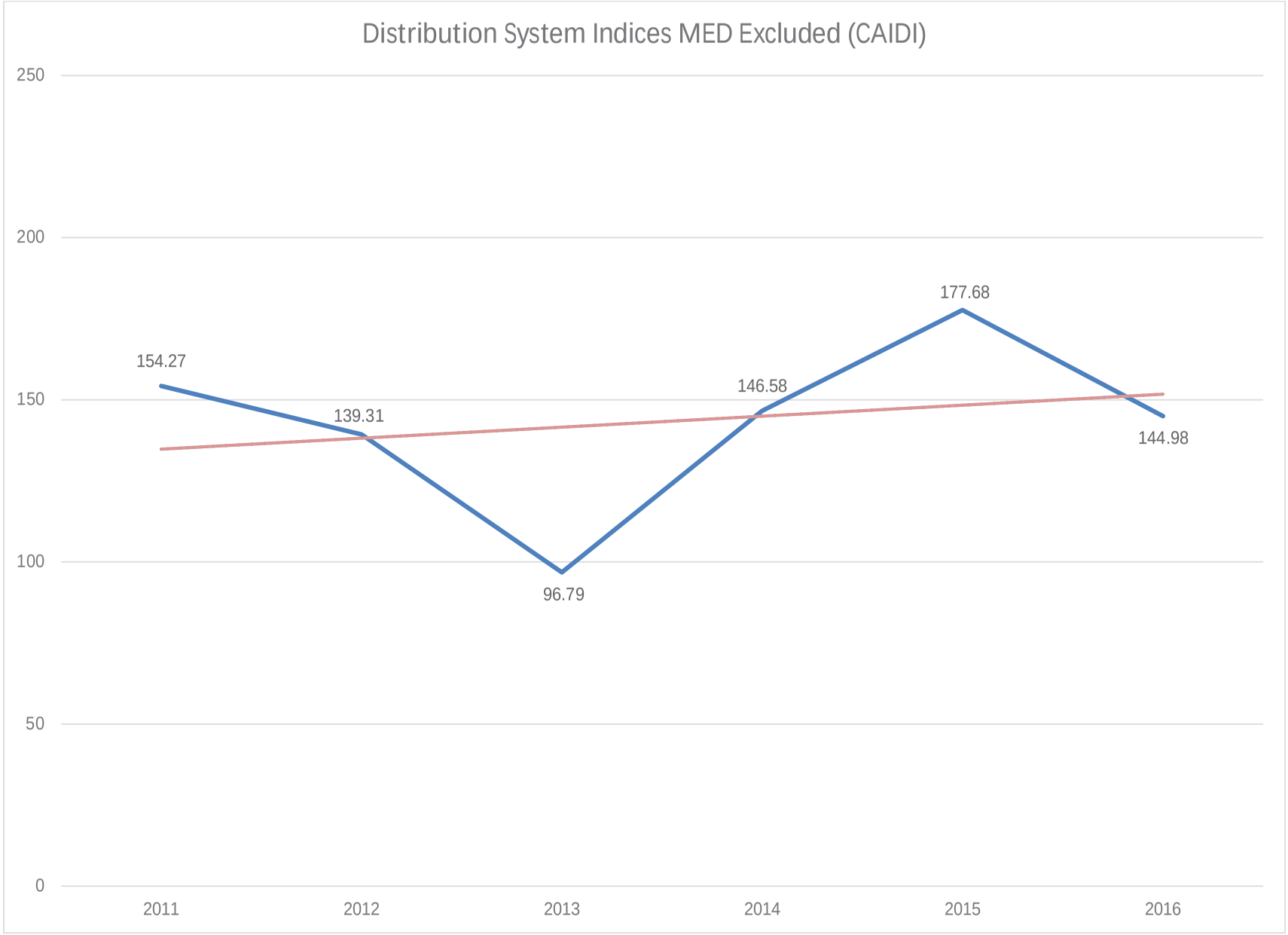

Distribution System Indices MED Included (SAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.813
1.553
1.231
3.628
2.012
1.474
2011
2012
2013
2014
2015
2016

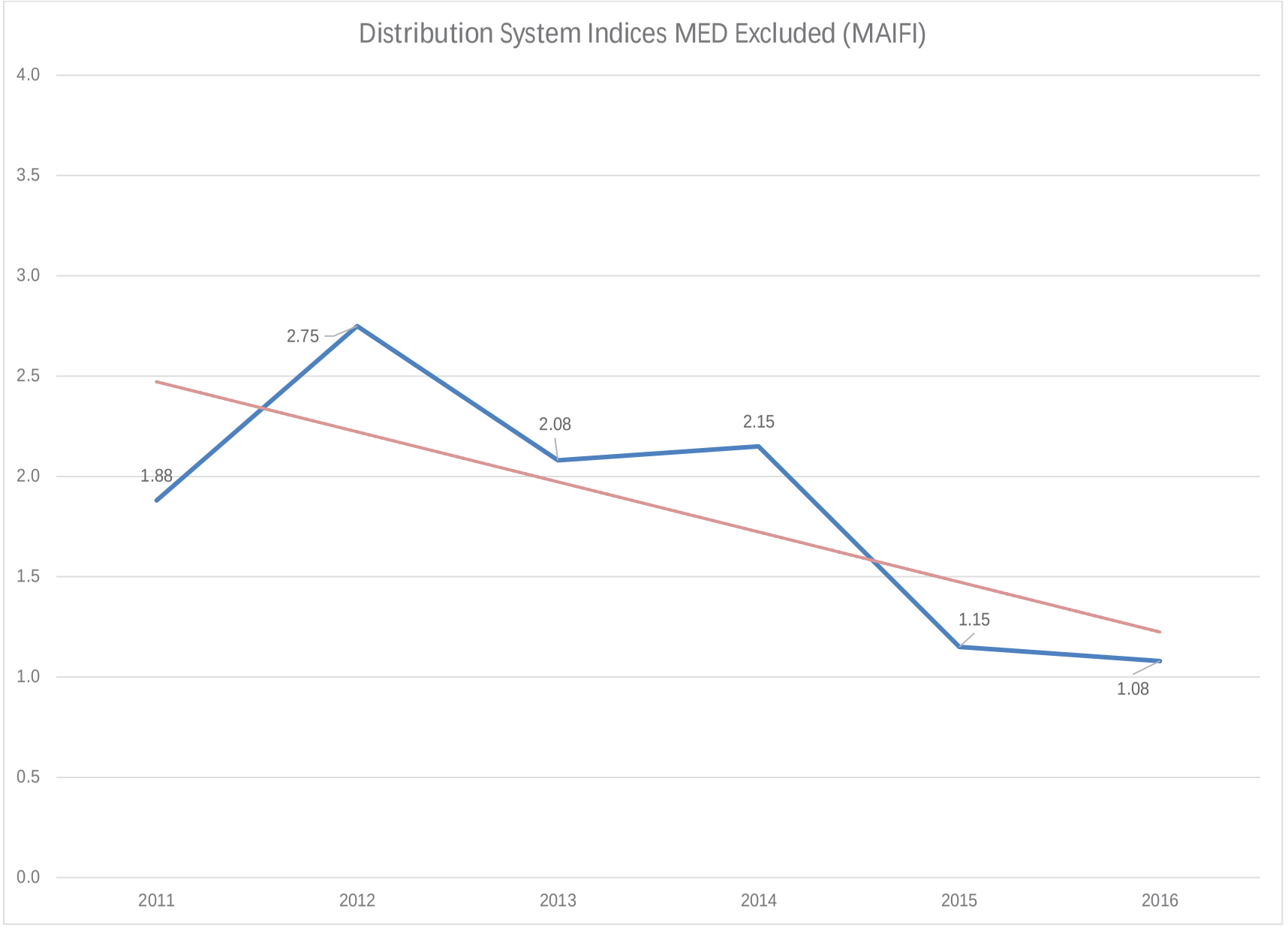

Distribution System Indices MED Included (CAIDI)
250
200
150
100
50
0
162.60
139.31
96.75
192.44
177.68
144.98
2011
2012
2013
2014
2015
2016


Distribution System Indices MED Included (MAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.75
1.88
2.08
2.15
1.15
1.08
2011
2012
2013
2014
2015
2016


Distribution System Indices MED Excluded (SAIDI)
450
400
350
300
250
200
150
100
50
0
192.22
216.35
119.11
352.37
357.53
213.63
2011
2012
2013
2014
2015
2016


Distribution System Indices MED Excluded (SAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.246
1.553
1.231
2.404
2.012
1.474
2011
2012
2013
2014
2015
2016


Distribution System Indices MED Excluded (CAIDI)
250
200
150
100
50
0
154.27
139.31
96.79
146.58
177.68
144.98
2011
2012
2013
2014
2015
2016


Distribution System Indices MED Excluded (MAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.75
2.08
2.15
1.88
1.15
1.08
2011
2012
2013
2014
2015
2016

2) Division (or District) Reliability Indices for the past 10 years

Liberty Utilities (CalPeco Electric), LLC has one division, Lake Tahoe. See section 1 for indices.

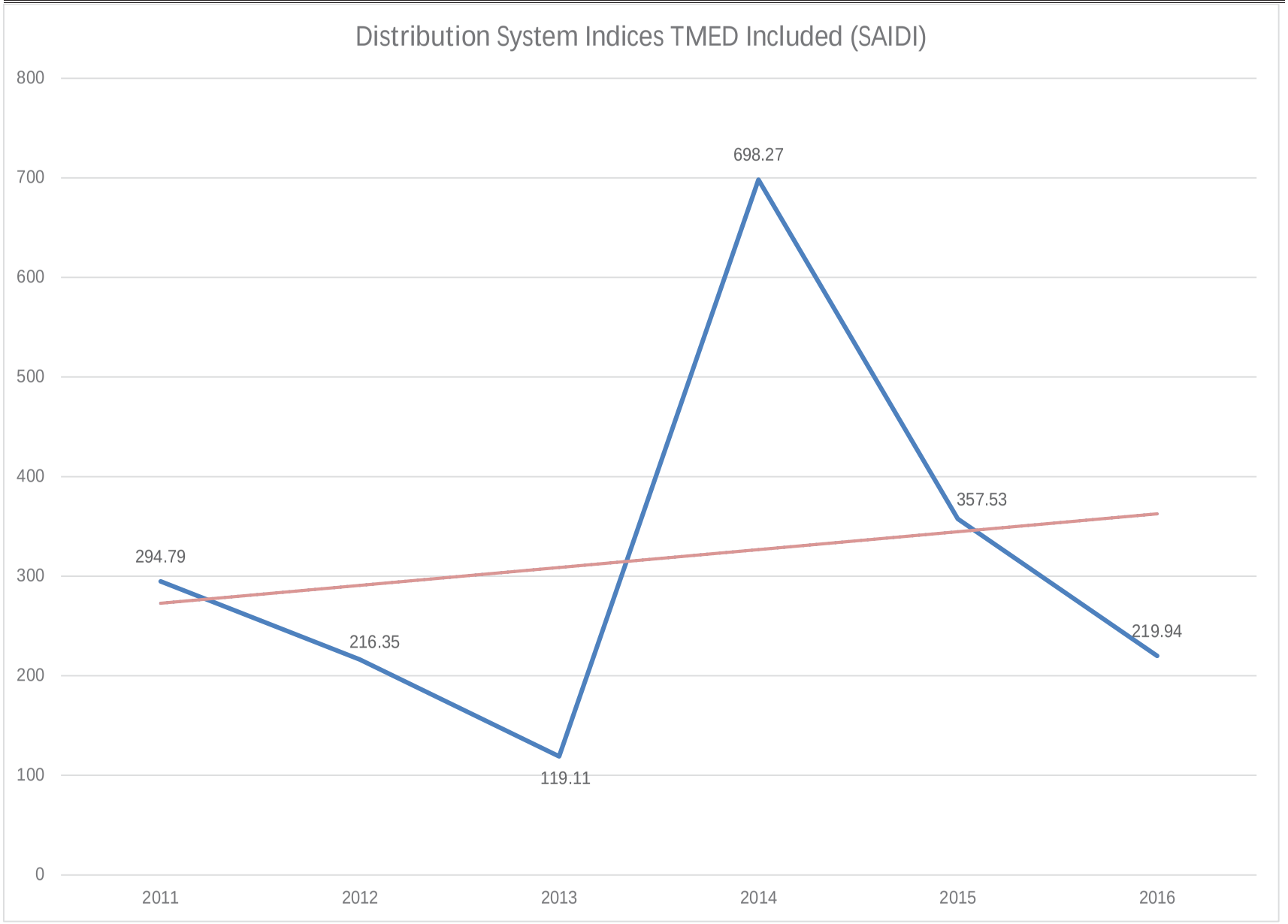
3) System and Division indices based on IEEE 1366 for the past 6 years including planned outages and including and excluding TMED

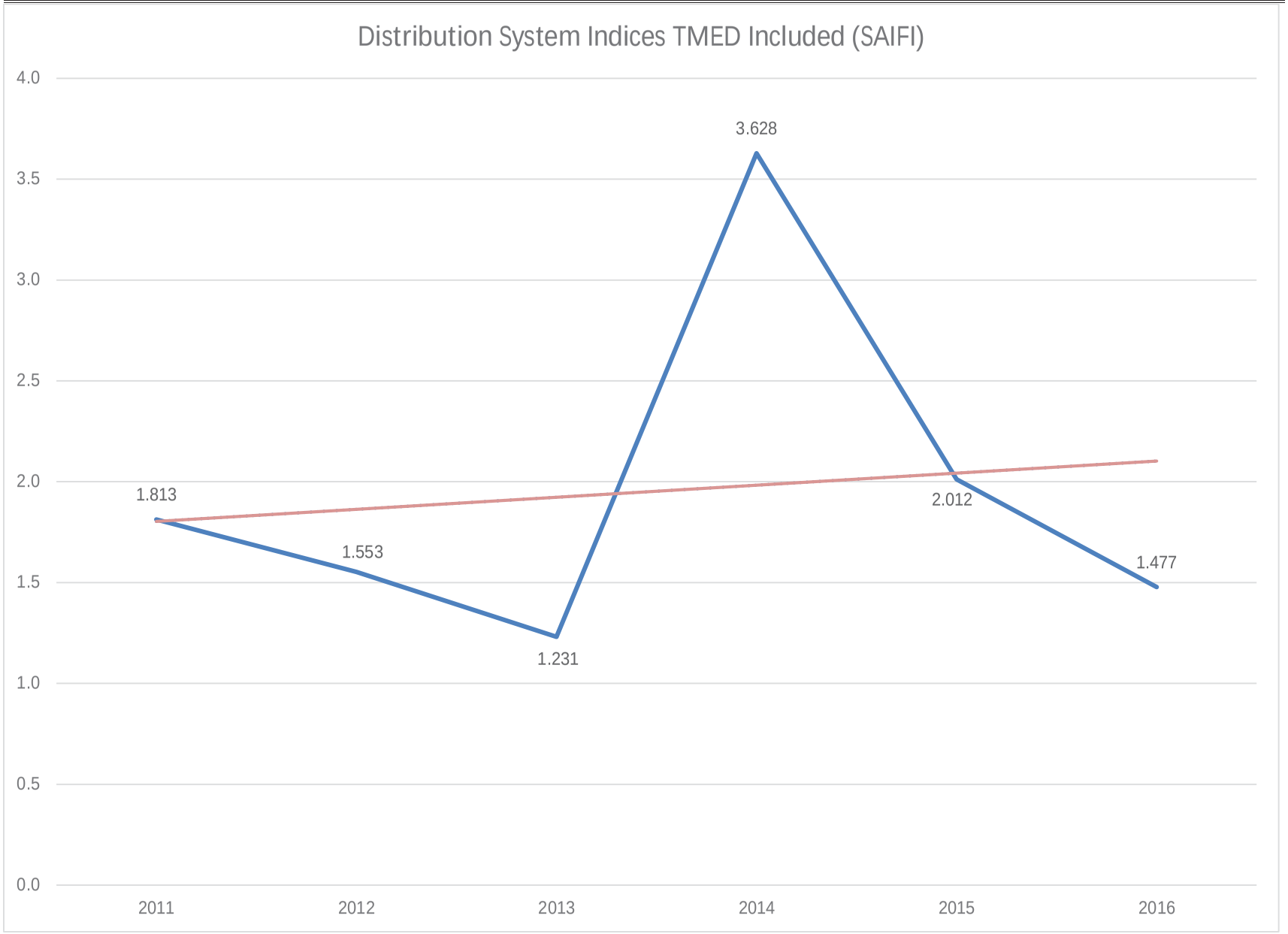
a. SAIDI, SAIFI, MAIFI, and CAIDI Data

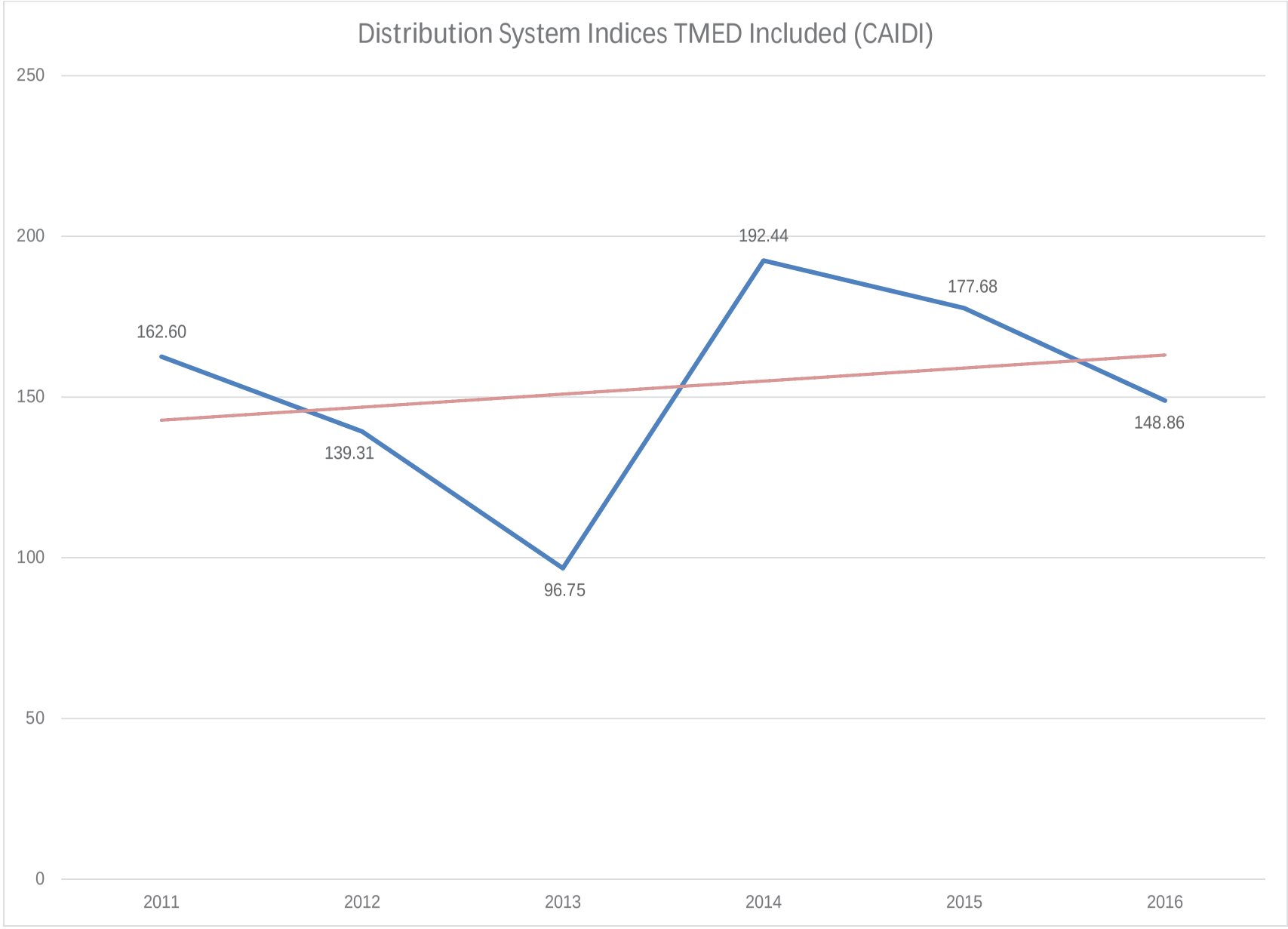
Liberty Utilities (CalPeco Electric), LLC
Distribution Historical System Reliability Data 6 Years (Years in Business)

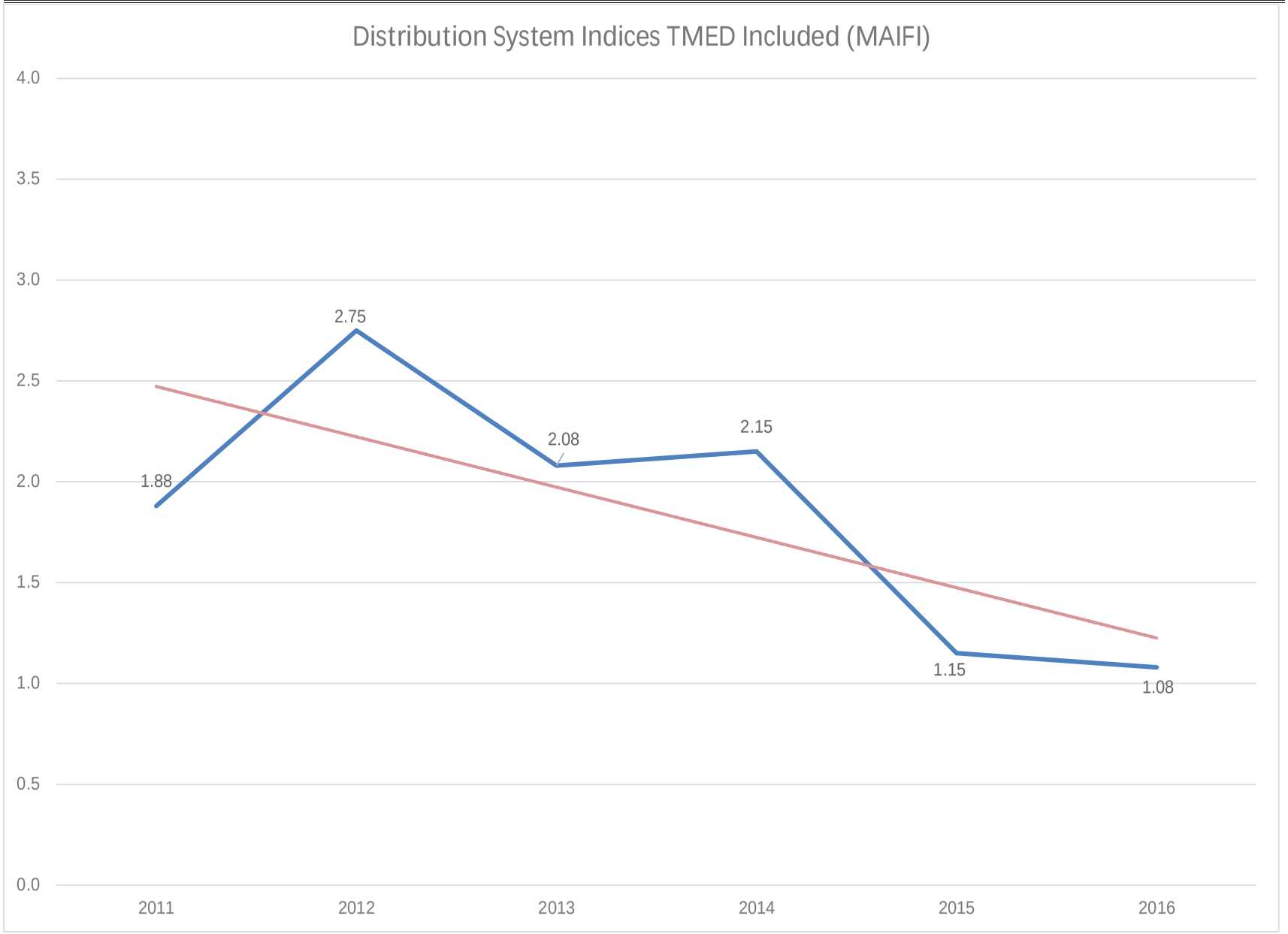
	TMED Included				TMED Excluded			
Year	SAIDI	SAIFI	CAIDI	MAIFI	SAIDI	SAIFI	CAIDI	MAIFI
2016	219.938	1.4774	148.86	1.08	219.938	1.4774	148.86	1.08
2015	357.531	2.0122	177.68	1.15	207.868	1.7409	119.40	1.15
2014	698.273	3.6284	192.44	2.15	323.745	2.2384	144.63	2.15
2013	119.109	1.2311	96.75	2.08	119.168	1.2311	96.79	2.08
2012	216.349	1.5530	139.31	2.75	170.439	1.5490	110.03	2.75
2011	294.795	1.8130	162.60	1.88	147.351	1.3207	111.57	1.88

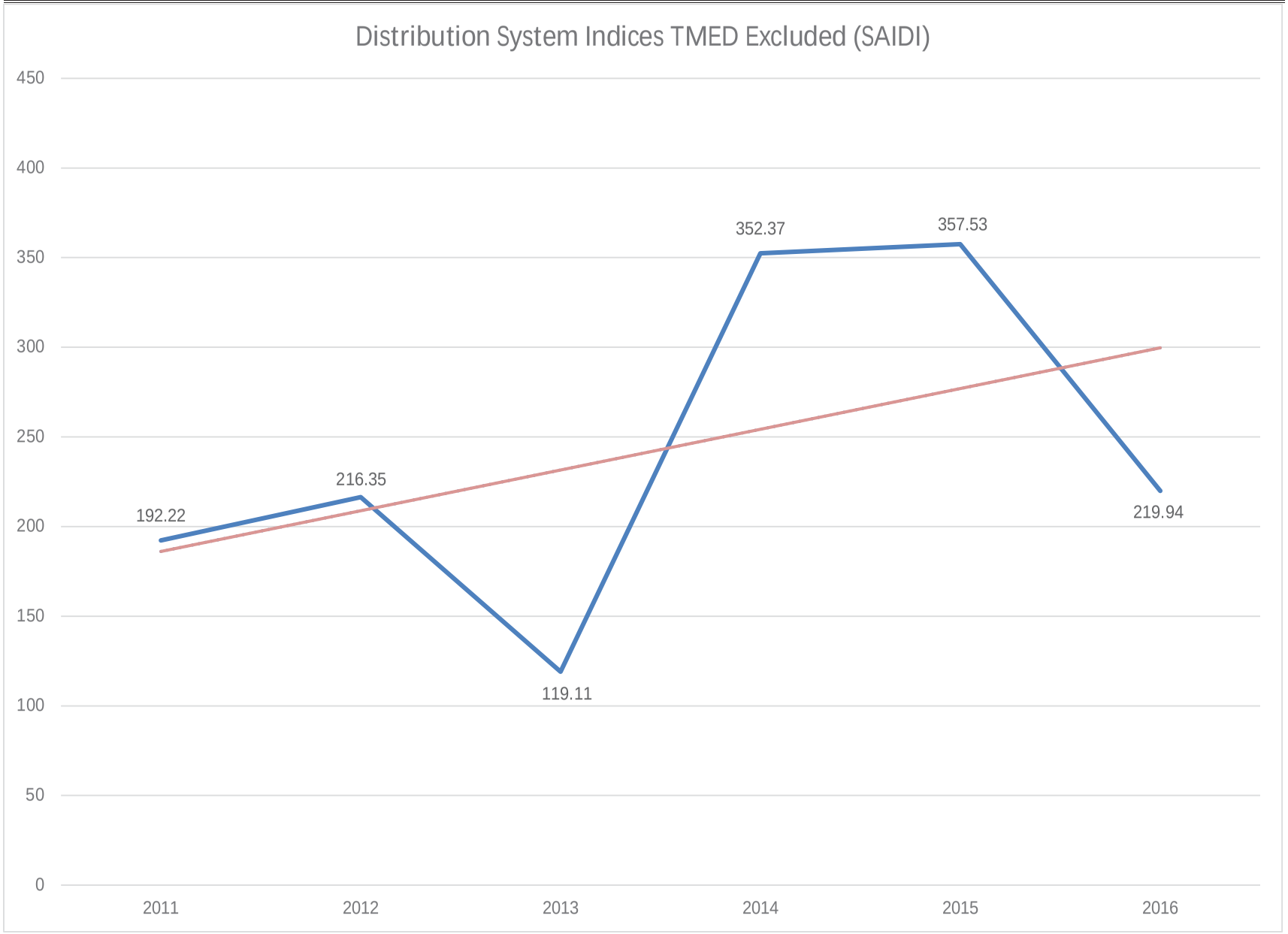
CalPeco Electric has been in business for 6 years and therefore does not have 10 years of data.

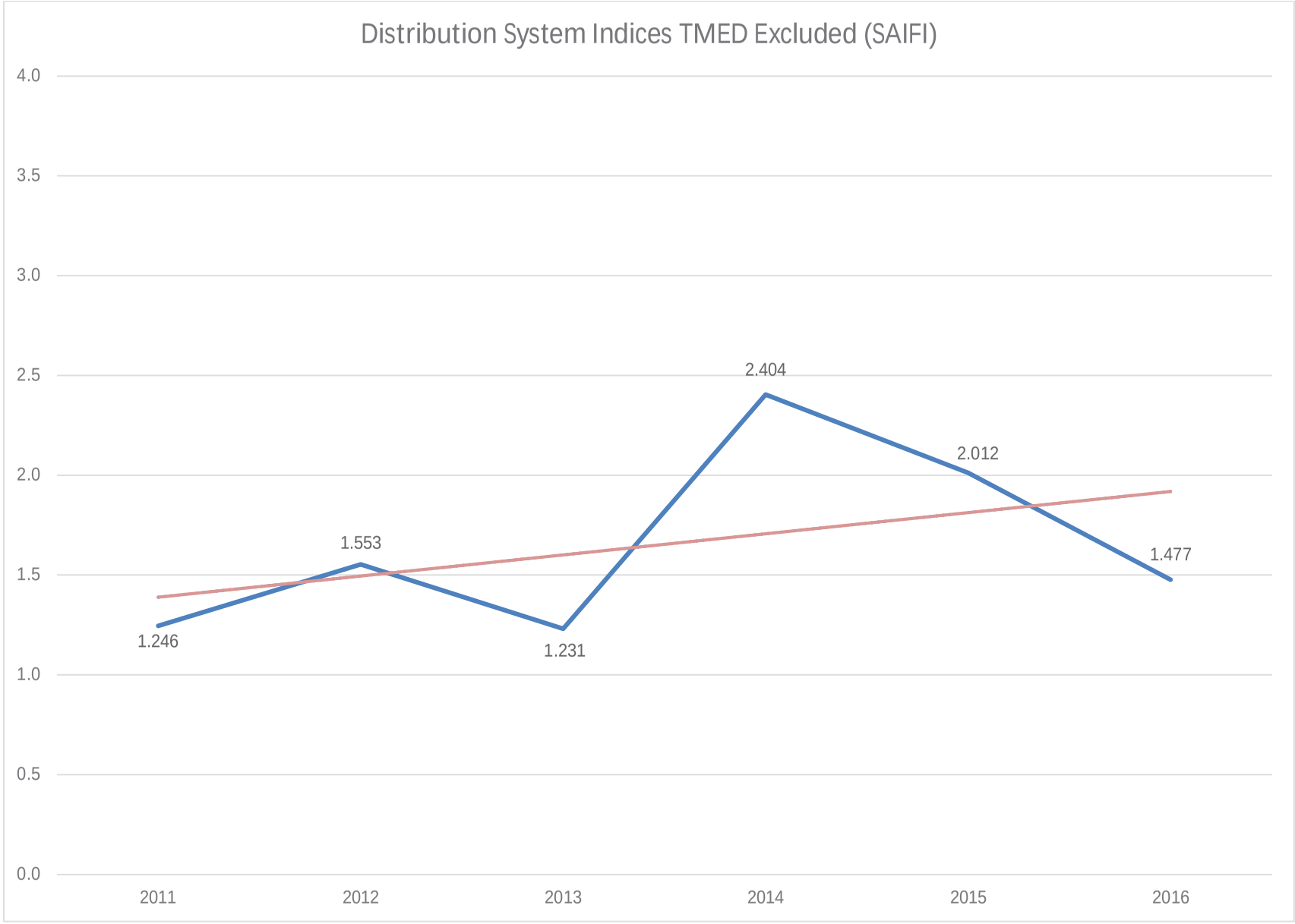

Distribution System Indices TMED Included (SAIDI)
800
700
600
500
400
300
200
100
0
294.79
216.35
119.11
698.27
357.53
219.94
2011
2012
2013
2014
2015
2016

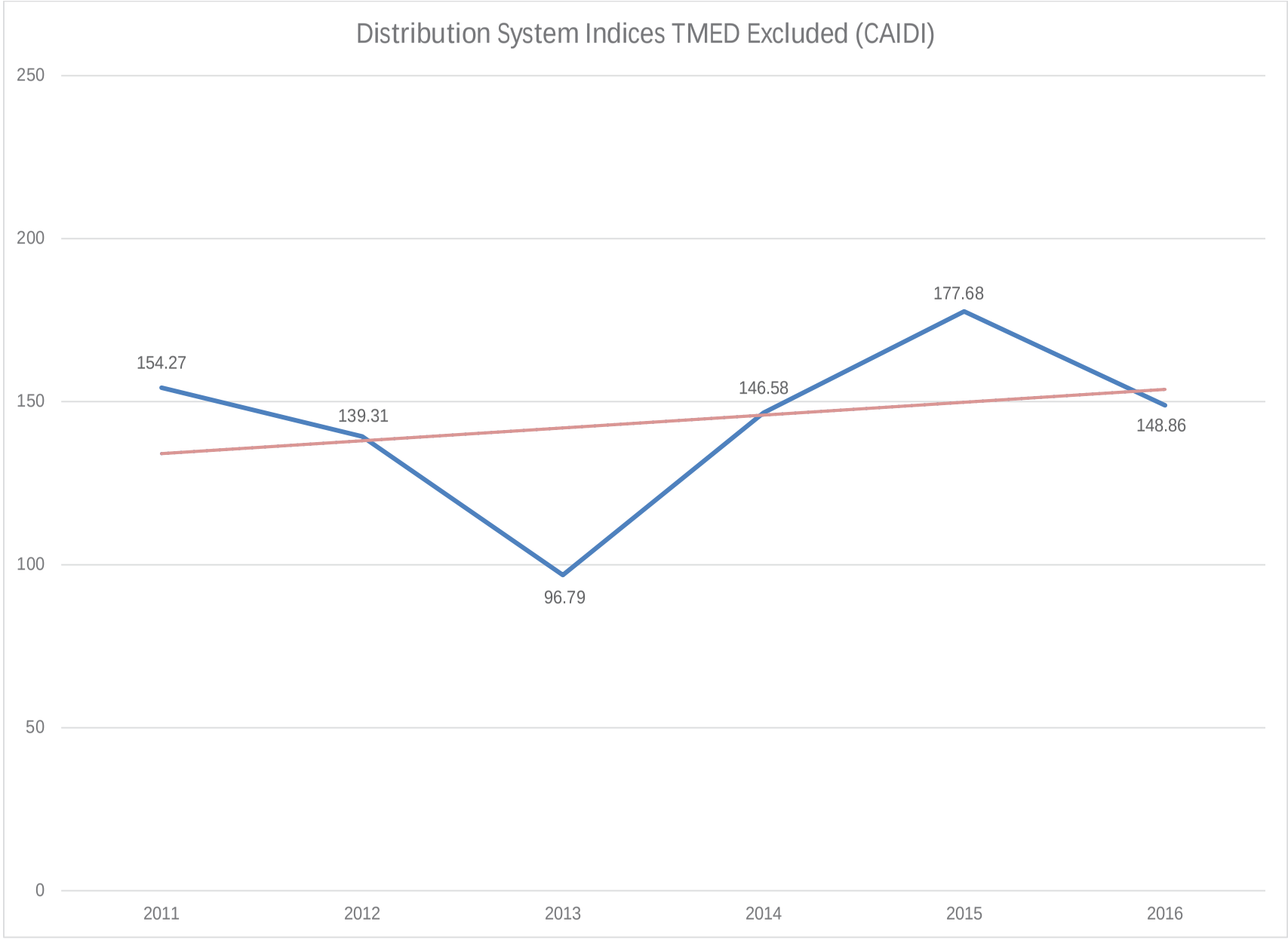

Distribution System Indices TMED Included (SAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.813
1.553
1.231
3.628
2.012
1.477
2011
2012
2013
2014
2015
2016

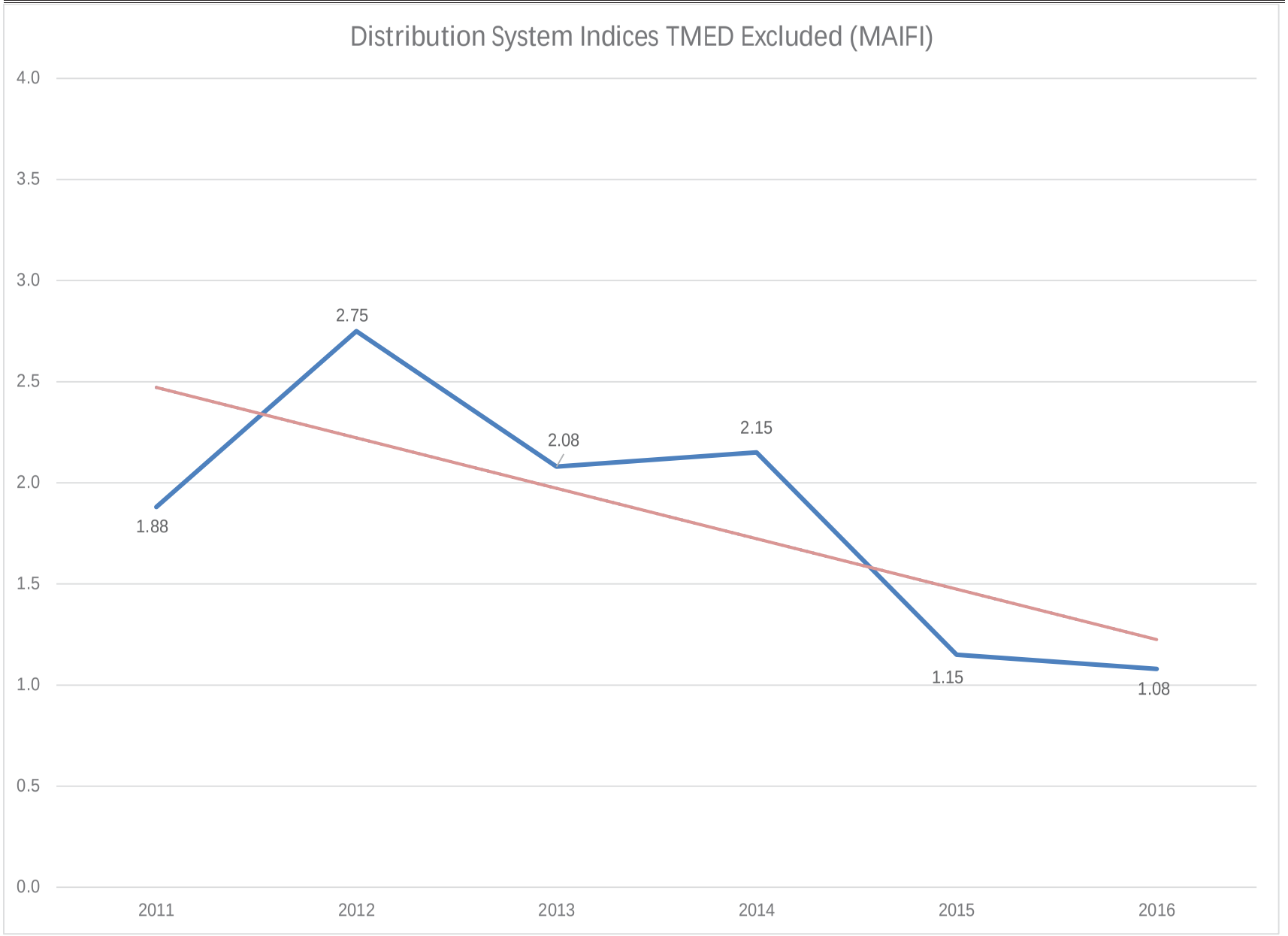

Distribution System Indices TMED Included (CAIDI)
250
200
150
100
50
0
162.60
139.31
96.75
192.44
177.68
148.86
2011
2012
2013
2014
2015
2016


Distribution System Indices TMED Included (MAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.75
1.88
2.08
2.15
1.15
1.08
2011
2012
2013
2014
2015
2016


Distribution System Indices TMED Excluded (SAIDI)
450
400
350
300
250
200
150
100
50
0
192.22
216.35
119.11
352.37
357.53
219.94
2011
2012
2013
2014
2015
2016


Distribution System Indices TMED Excluded (SAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.246
1.553
1.231
2.404
2.012
1.477
2011
2012
2013
2014
2015
2016

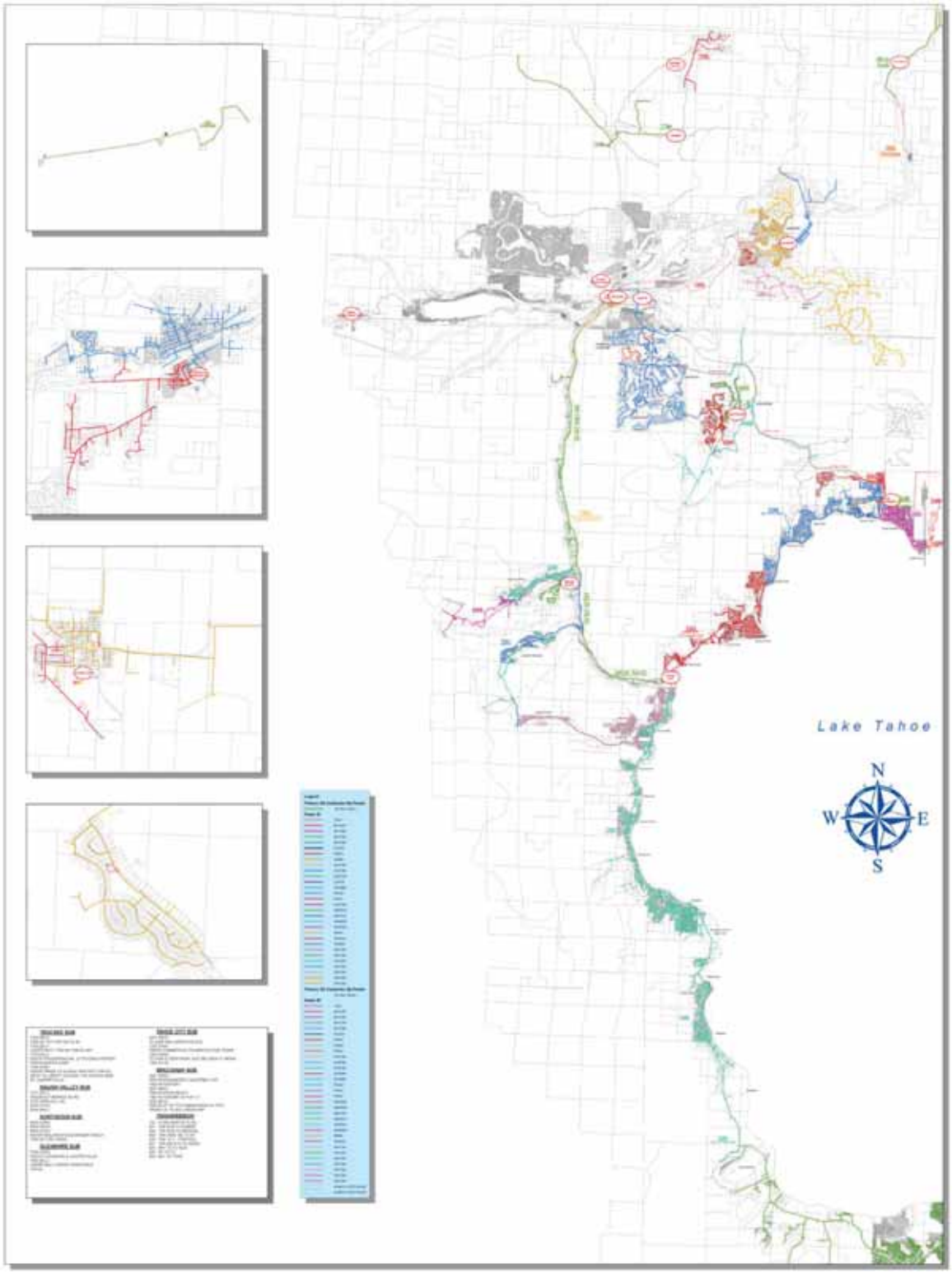

Distribution System Indices TMED Excluded (CAIDI)
250
200
150
100
50
0
154.27
139.31
96.79
146.58
177.68
148.86
2011
2012
2013
2014
2015
2016


Distribution System Indices TMED Excluded (MAIFI)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.75
2.08
2.15
1.88
1.15
1.08
2011
2012
2013
2014
2015
2016

b. The number, date, and location of planned outages

Circuit	District	Number of Planned Outages By Year					
		2016	2015	2014	2013	2012	2011
31	Tahoe		1				
32	Tahoe	1					
41	Tahoe	1					
201	Tahoe				1		
204	Tahoe	1					
619	Tahoe					1	
650	Tahoe		1			1	
1296	Tahoe		5	1			
2200	Tahoe		1	1			
2300	Tahoe		1	2		1	
3100	Tahoe					1	1
3101	Tahoe			2	2		
3200	Tahoe		1			1	
3300	Tahoe		3			2	
3400	Tahoe		5		2	4	
3500	Tahoe		1				
3501	Tahoe		2	2	4	1	1
4201	Tahoe	1					
4202	Tahoe				2	5	1
5100	Tahoe				1	1	
5200	Tahoe		4	1	1	3	
5201	Tahoe	5	4	1		1	
7100	Tahoe			1	1	4	
7200	Tahoe		1	1	1	2	
7201	Tahoe	1	2	1			
7202	Tahoe		2	3	1		
7203	Tahoe		2	2	4		
7300	Tahoe	6	4	16	4	5	2
7400	Tahoe	1	1				1
7600	Tahoe		1				1
7700	Tahoe			1			
7800	Tahoe			2			
8200	Tahoe	3	2	4			1
8300	Tahoe		6			2	
8400	Tahoe						
8500	Tahoe	1			1	2	
8600	Tahoe		4			2	

4) Service territory map including divisions of districts



5) Top two worst performing circuits (WPC) excluding TMED

I. For each of these circuits each utility shall include the following information in its annual report: 1) Circuit Name; 2) District/Division; 3) Customer Count; 4) Substation name; 5) Circuit-miles; 6) Percentage underground, or "% UG"; 7) Percentage overhead or "% OH"; 8) Number of mainline/feeder/backbone outages resulting in the operation of either a circuit breaker ("CB") or automatic re-closer ("AR"); and, 9) its preferred reliability metric.

Circuit	District	Customer Count	Substation Name	Circuit Miles	Facilities		Number of Mainline/ Feeder/Backbone Outages	*Circuit SAIDI	Circuit SAIFI
					OH	UG			
1261*	Tahoe	790	Topaz	75.5	90.7%	9.3%	8	1338	10.0
7201	Tahoe	603	Squaw Valley	33.0	63.0%	37%	1	1030	1.2

Note: Preferred Metric is Circuit SAIDI

II. Any circuit appearing on this list of “deficient” WPC circuits that also appeared on the previous year's list would be marked by an asterisk. For each asterisked circuit, each utility shall provide the following information:

I. An explanation of why it was ranked as a "deficient" circuit, i.e., the value of the metric used to indicate its performance;

The calculated circuit SAIDI for the Topaz 1261 circuit in 2016 was 1,338 customer outage minutes.

II. A historical record of the metric;

The Topaz 1261 circuit had a SAIDI score of 3,003 customer outage minutes in 2015. The circuit SAIDI score reduced to 1,338 customer outage minutes in 2016.

III. An explanation of why it was on the deficiency list again;

The 1261 circuit experienced high circuit SAIDI in 2016 due to multiple circuit lockouts, wire slapping during windy conditions, and loss of supply.

IV. An explanation of what is being done to improve the circuit's future performance and the anticipated timeline for completing those activities (or an explanation why remediation is not being planned); and

Through 2016, CalPeco Electric has invested over $500,000 to replace aging poles throughout the circuit. Additionally, over $100,000 has been invested to upgrade and replace conductor in areas that have low capacity, extensive splices, or damage from wire slapping. The conductor upgrade and replacement project continues through 2017 with a budget of $100,000.

V. A quantitative description of the utility's expectation for that circuit's future performance.

With a combined total of over $700,000 invested by the end of 2017 to improve the Topaz 1261 circuit, CalPeco Electric expects the quantity of sustained outages due to wire slapping in windy conditions to be significantly reduced. In 2016, this circuit experienced twelve outages that were suspected wire slapping events and accounted for 780 customer outage minutes.

III. Language to explain how the IOUs' include a cost effectiveness review as part of their respective internal review processes for circuit remediation projects.

I. Definitions of terms, acronyms, limitations, and assumptions;

Definitions:

WPC- Worst Performing Circuits

CB- Circuit Breaker

AR- Automatic re-closer

Assumptions

- Our analysis excludes planned outages and TMED outages

II. A clear explanation of the utility's process to determine the worst performing circuits:

The top 2 Worst Performing Circuits (WPC) are determined based upon the calculated Circuit SAIDI. This index is calculated on sustained outages by taking the total customer minutes of interruption and dividing by the number of customers on the circuit.

III. A clear explanation of the utility's process to determine cost-effective remediation projects. This shall include why the utility may decide to implement a project to address one worst performing circuit issue while deciding to not implement a project to address a different worst performing circuit.

The Regional Engineer presents proposals for reliability improvement projects along with a circuit analysis, cost-benefit analysis, and details on customer impact to the Business Manager, Engineering and Planning Manager, and Vice President of Operations. Collectively, the group determines which projects to approve or suggest alternatives and further analysis.

6) Top 10 major unplanned power outage events within a reporting year

a. The cause of each outage event; and

b. The location of each outage event.

Rank	Outage Date	Cause	Location	Customer Impact	SAIDI	SAIFI
1	3/13/2016	Loss of Source – External System	Lake Tahoe	6,882	6.21	0.1411
2	10/16/2016	Wind / Trees	Lake Tahoe	4,125	8.80	0.0845
3	10/4/2016	Underground Fault	Lake Tahoe	4,125	21.89	0.0845
4	3/22/2016	Downed Wire	Lake Tahoe	4,125	7.74	0.0845
5	3/13/2016	Car / Pole	Lake Tahoe	3,517	4.87	0.0812
6	1/1/2016	Failed Overhead Hardware	Lake Tahoe	3,500	8.92	0.0717
7	3/1/2016	Trees	Lake Tahoe	3,258	2.07	0.0668
8	6/29/2016	Underground Fault	Lake Tahoe	2,859	4.89	0.0586
9	8/23/2016	Primary Contact – 3rd Party	Lake Tahoe	2,772	3.31	0.0568
10	6/15/2016	Trees	Lake Tahoe	2,732	4.70	0.0560

*Based on customer impact

7) Summary list of 2016 TMED per IEEE 1366

a. The number of customers without service at periodic intervals for each TMED;

b. The cause of each Major Event (ME); and

c. The location of each ME.

TMED as of 2016 = 104.57

CalPeco Electric did not experience an event in 2016 where the daily SAIDI was higher than the calculated TMED. Therefore, CalPeco Electric did not experience any Major Events in 2016 which would be excludable per IEEE 1366.

8) Historical 10 largest unplanned outage events for the past 10 years*

*Based on Customers Affected

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers-hours affected	CPUC Major Event?
1	Loss of Source – External System	3/13/2016	6,882	0.75	5,046.80	No
2	Wind/Trees	10/16/2016	4,125	1.75	7,150.00	No
3	Underground Fault	10/4/2016	4,125	4.31	17,793.30	No
4	Downed Wire	3/22/2016	4,125	1.70	6,294.80	No
5	Car/Pole	3/13/2016	3,517	1.00	3,957.90	No
6	Failed Overhead Hardware/Material	1/1/2016	3,500	5.50	7,250.00	No
7	Trees	3/1/2016	3,258	0.50	1,683.30	No
8	Underground Fault	6/29/2016	2,859	8.42	3,975.10	No
9	Primary Contact – 3rd Party	8/23/2016	2,772	5.15	2,693.25	No
10	Trees	6/15/2016	2,732	8.15	3,822.70	No

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers-hours affected	CPUC Major Event?
1	Storm	4/25/2015	4,120	6.50	12,380.00	No
2	Underground Fault	2/14/2015	3,587	0.50	2,511.00	No
3	Downed Wire	12/11/2015	3,587	10.00	17,251.00	No
4	Trees	2/6/2015	3,548	0.50	1,360.00	No
5	Bird/Animal	5/24/2015	3,000	6.50	12,340.00	No
6	Fire	2/20/2015	3,000	0.50	1,650.00	No
7	Weather/Lightning	7/4/2015	3,000	2.00	5,600.00	No
8	Weather/Lightning	7/7/2015	3,000	0.25	1,000.00	No
9	Operations	8/11/2015	3,000	0.25	750.00	No
10	Weather/Lightning	8/7/2015	3,000	1.75	5,400.00	No

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers-hours affected	CPUC Major Event?
1	NV Energy Outage	9/27/2014	27,046	4.27	115,396.27	Yes
2	Flashing	7/20/2014	26,000	5.12	2,690.45	Yes
3	Tree-Green	12/11/2014	15,853	4.03	63,940.43	No
4	Relay Failure	9/23/2014	8,900	0.22	1,928.33	No
5	Trees	3/11/2014	3,587	1.83	6,521.17	No
6	Weather/Lightning	7/20/2014	3,587	0.75	2,690.25	No
7	Trees	8/30/2014	3,587	0.30	1,195.67	No
8	Trees	1/30/2014	3,548	4.25	2,109.00	No
9	Bird/Animal	8/31/2014	3,548	0.50	1,774.00	No
10	Trees	7/20/2014	3,500	5.00	17,266.67	No

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers -hours affected	CPUC Major Event?
1	Wire Down Transformer	7/4/2013	5,650	9.82	10,816.02	No
2	Tree Trimming	8/14/2013	4,800	2.35	4,334.50	No
3	Car/Pole	10/25/2013	3,548	0.40	1,419.20	No
4	Cable Failure	8/7/2013	3,475	8.50	4,412.50	No
5	Trees	3/14/2013	3,315	0.30	1,049.75	No
6	Hardware Failure	3/6/2013	3,000	8.13	14,740.00	No
7	Weather/Lightning	7/2/2013	3,000	2.10	6,300.00	No
8	Weather/Lightning	7/25/2013	2,042	3.46	911.83	No
9	Bird/Animal	10/5/2013	2,000	4.00	2,108.00	No
10	Unknown Cause	6/30/2013	2,000	0.76	1,533.33	No

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers -hours affected	CPUC Major Event?
1		8/19/2012	8,677	1.08	9,400.08	No
2	Overhead Hardware/Material	11/29/2012	4,200	.067	3,488.33	No
3	Trees	4/1/2012	4,120	12.70	37,471.67	No
4	Hardware Failure	4/13/2012	4,120	2.95	12,154.00	No
5	Trees	5/24/2012	4,120	0.73	3,021.33	No
6	Bird/Animal	6/28/2012	3,587	0.47	1,673.93	No
7	Weather/Lightning	7/23/2012	3,548	1.16	909.50	No
8	Car/Pole	7/16/2012	3,315	8.83	2,724.17	No
9	Bird/Animal	5/11/2012	3,201	2.48	7,949.15	No
10	Bird/Animal	6/25/2012	1,967	5.60	11,015.20	No

Rank	Description	Date	Customers Affected	Longest Interruption (hours)	Customers -hours affected	CPUC Major Event?
1	NV Energy Outage	5/9/2011	24,550	3.02	74,059.17	Yes
2	Relays	2/17/2011	8,005	3.40	12,738.90	No
3	Overcurrent	3/20/2011	4,396	0.98	4,396.00	No
4	Trees	5/25/2011	4,120	10.23	21,658.83	No
5	Trees	11/18/2011	4,120	21.50	15,792.33	No
6	Lateral Fuse	3/16/2011	3,957	2.96	11,739.10	No
7	Bird/Animal	9/24/2011	3,885	0.25	769.50	No
8	Hardware Failure	9/12/2011	3,475	1.12	2,780.42	No
9	Relays	1/25/2011	3,201	1.68	5,388.35	No
10	Trees	6/29/2011	3,200	4.35	11,786.67	No

9) Number of customer inquiries on reliability data and the number of days per response

CalPeco Electric received one reliability inquiry in 2016. A response letter was sent out on November 3rd, addressing the customer's question about reliability investments in the Coleville community.

Date Received	Date Responded	Description of Inquiry
10/15/2016	11/3/2016	Inquiring about power outages in the Coleville community, specifically during windy conditions, and what CalPeco Electric is doing to improve the reliability.

ATTACHMENT 21

Liberty response to data request
TURN-Liberty-004
November 17, 2025

CONFIDENTIAL

ATTACHMENT 22

Liberty response to data request CalAdvocates-LIB-A2506017-022 September 5, 2025

The internally attached audio files are available upon request

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ATTACHMENT 23

Liberty's Revised 2020 Wildfire Mitigation Plan, February 28, 2020



Liberty Utilities (CalPeco Electric) LLC (U 933-E)

Revised 2020 Wildfire Mitigation Plan

February 28, 2020

CA-05-1254

2020 Wildfire Mitigation Plan

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Plan Overview

Liberty CalPeco's 2020 WMP is a comprehensive plan that incorporates lessons learned from Liberty CalPeco's 2019 efforts, the plans of the other California electric utilities, and guidance from the Commission. As shown in the table below, Liberty CalPeco's WMP includes approximately $40 million in capital investments covering all aspects of the WMP, including inspection plans, system hardening, operational practices, and situational awareness.

Liberty CalPeco WMP Capital Forecast
$(000)

Program/Project	Category	2020	2021	2022	Total
System Survey/Inventory	Asset Management & Inspections	$ 6,000	$ -	$ -	$ 6,000
Tree Attachment Removal Program	Grid Design & System Hardening	600	600	600	1,800
LIDAR Technology	Asset Management & Inspections	250	300	300	850
Covered Conductor Program	Grid Design & System Hardening	3,198	8,337	9,734	21,269
Fuse Replacement Program	Grid Design & System Hardening	1,544	1,544	1,544	4,632
Wire Upgrade Program (Open-Wire & Gray Wire)	Grid Design & System Hardening	150	250	350	750
Sagehen Microgrid	Grid Design & System Hardening	616	-	-	616
Automatic Reclosers and Fast-Curve Setting	Grid Operations & Protocols	360	540	360	1,260
Transportation & Equipment	Asset Management & Inspections	254	98	-	352
Weather Station Installations	Situational Awareness & Forecasting	300	300	15	615
Fire Potential Index	Situational Awareness & Forecasting	70	10	10	90
Distribution Fault Anticipation	Situational Awareness & Forecasting	-	706	162	868
Emerging Programs	Situational Awareness and Forecating	200	200	200	600
Total		$ 13,542	$ 12,885	$ 13,275	$ 39,702

Key projects and programs include a system survey and inventory project, the Sagehen microgrid, and various system hardening programs. Liberty CalPeco plans to undertake a complete system survey in 2020 that will create an asset inventory database documenting the location and condition of every overhead distribution asset in Liberty CalPeco's service territory. This database will provide a complete look at the system and enable Liberty CalPeco to identify and mitigate hazards at a programmatic level on a system-wide basis.

The Sagehen project will install a microgrid pilot project at Sagehen near Truckee, CA. The microgrid will include solar panels and battery storage to serve UC Berkeley's Sagehen research facility that is served by a three mile line that runs through a high-fire area. The cost of the Sagehen project is significantly less than the cost to harden the distribution line serving this single customer. The microgrid will allow Liberty CalPeco to de-energize the line during the fire season.

Liberty CalPeco's WMP also includes a ramping up of the system hardening projects included in its 2019 WMP, including covered conductors, fuse replacements, and tree attachment removals. The 2020 WMP also includes various programs to improve situational awareness, including installing additional weather stations and distribution fault anticipation monitoring sensors.

1. Persons responsible for executing the WMP

Provide an accounting of the responsibilities of the responsible person(s) executing the plan, including:

1. Executive level with overall responsibility
2. Program owners specific to each component of the plan

Ensure that the plan components described in (2) include an accounting for each of the WMP sections and subsections.

Description	Name	Title
1. Executive level with overall responsibility	Chris Alario	President, California
2. Program owners specific to each component of the plan	Eliot Jones	Sr. Manager, Wildfire Prevention
1 Persons responsible for executing the WMP	Eliot Jones	Sr. Manager, Wildfire Prevention
1.1 Verification	Chris Alario	President, California
2 Metrics and underlying data	Eliot Jones	Sr. Manager, Wildfire Prevention
2.1 Lessons learned: how tracking metrics on the 2019 plan has informed the 2020 plan	Eliot Jones	Sr. Manager, Wildfire Prevention
2.2 Recent performance on progress metrics, last 5 years	Eliot Jones	Sr. Manager, Wildfire Prevention
2.3 Recent performance on outcome metrics, annual and normalized for weather, last 5 years	Eliot Jones	Sr. Manager, Wildfire Prevention
2.4 Description of additional metrics	Eliot Jones	Sr. Manager, Wildfire Prevention
2.5 Description of program targets	Eliot Jones	Sr. Manager, Wildfire Prevention
2.6 Detailed information supporting outcome metrics	Eliot Jones	Sr. Manager, Wildfire Prevention
2.7 Mapping recent, modelled, and baseline conditions	Todd Gee	Manager, Operations Compliance
3 Baseline ignition probability and wildfire risk exposure	Eliot Jones	Sr. Manager, Wildfire Prevention
3.1 Recent weather patterns, last 5 years	Eliot Jones	Sr. Manager, Wildfire Prevention
3.2 Recent drivers of ignition probability, last 5 years	Jeremy Vanyi	Engineer IV
3.3 Recent use of PSPS, last 5 years	Eliot Jones	Sr. Manager, Wildfire Prevention
3.4 Baseline state of equipment and wildfire and PSPS event risk reduction plans	Todd Gee	Manager, Operations Compliance
3.4.1 Current baseline state of service territory and utility equipment	Todd Gee	Manager, Operations Compliance
3.4.2 Planned additions, removal, and upgrade of utility equipment by end of 3-year plan term	Todd Gee	Manager, Operations Compliance
3.4.3 Status quo ignition probability drivers by service territory	Eliot Jones	Sr. Manager, Wildfire Prevention
4 Inputs to the plan and directional vision for wildfire risk exposure	Eliot Jones	Sr. Manager, Wildfire Prevention
4.1 The objectives of the plan	Eliot Jones	Sr. Manager, Wildfire Prevention
4.2 Understanding major trends impacting ignition probability and wildfire consequence	Eliot Jones	Sr. Manager, Wildfire Prevention
4.2.1 Service territory fire threat evaluation and ignition risk trends	Eliot Jones	Sr. Manager, Wildfire Prevention
4.3 Change in ignition probability drivers	Eliot Jones	Sr. Manager, Wildfire Prevention
4.4 Directional vision for necessity of PSPS	Eliot Jones	Sr. Manager, Wildfire Prevention
5 Wildfire mitigation strategy and programs for 2019 and for each year of the 3-year WMP term	Eliot Jones	Sr. Manager, Wildfire Prevention
5.1 Wildfire mitigation strategy	Eliot Jones	Sr. Manager, Wildfire Prevention
5.2 Wildfire Mitigation Plan implementation	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3 Detailed wildfire mitigation programs	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3.1 Risk assessment and mapping	Greg Campbel	Sr. Analyst, Rates and Regulatory Affairs
5.3.2 Situational awareness and forecasting	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3.3 Grid design and system hardening	Blaine Ladd	Manager, Substations
5.3.4 Asset management and inspections	Blaine Ladd	Manager, Substations
5.3.5 Vegetation management and inspections	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3.6 Grid operations and protocols	Blaine Ladd	Manager, Substations
5.3.7 Data governance	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3.8 Resource allocation methodology	Greg Campbel	Sr. Analyst, Rates and Regulatory Affairs
5.3.9 Emergency planning and preparedness	Eliot Jones	Sr. Manager, Wildfire Prevention
5.3.10 Stakeholder cooperation and community engagement	Kurt Althof	Program Manager, Communications and Media Relations
5.3.11 Definitions of initiative activities by category	Eliot Jones	Sr. Manager, Wildfire Prevention
5.4 Methodology for enterprise-wide safety risk and wildfire-related risk assessment	Greg Campbel	Sr. Analyst, Rates and Regulatory Affairs
5.5 Planning for workforce and other limited resources	Eliot Jones	Sr. Manager, Wildfire Prevention
5.6 Expected outcomes of 3-year plan	Eliot Jones	Sr. Manager, Wildfire Prevention
5.6.1 Planned utility infrastructure construction and upgrades	Eliot Jones	Sr. Manager, Wildfire Prevention
5.6.2 Protocols on Public Safety Power Shut-off	Eliot Jones	Sr. Manager, Wildfire Prevention
6 Utility GIS attachments	Eliot Jones	Sr. Manager, Wildfire Prevention
6.1 Recent weather patterns	Todd Gee	Manager, Operations Compliance
6.2 Recent drivers of ignition probability	Todd Gee	Manager, Operations Compliance
6.3 Recent use of PSPS	Todd Gee	Manager, Operations Compliance
6.4 Current baseline state of service territory and utility equipment	Todd Gee	Manager, Operations Compliance
6.5 Location of planned utility equipment additions or removal	Todd Gee	Manager, Operations Compliance
6.6 Planned 2020 WMP initiative activity by end-2022	Todd Gee	Manager, Operations Compliance

1.1 Verification

I am an officer of the applicant limited liability company herein and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 28, 2020 at Downey, California.

Chris Alario
President, California

2. Metrics and Underlying Data

2.1. Lessons learned from 2019 WMP

Major themes of lessons learned from Liberty CalPeco's 2019 WMP include resource constraints limiting the implementation of the plan, external constraints related to construction planning and proper execution, lack of established data metrics, and the need to develop and coordinate plans with public safety partners.

Other Lessons Learned since filing the 2019 WMP are listed below:

- A system-wide asset inventory is necessary to facilitate data tracking on maintenance, inspections, and replacements at the location/circuit level. Inspection and ignition driver data is tracked in paper forms and the data needs to be consolidated and analyzed for consistency and data integrity.
- Due to resource constraints in 2019, Liberty CalPeco only implemented a few WMP programs with attainable and measurable targets. The 2020 plan incorporates long-term plans with established accounting and tracking capabilities to identify at-risk assets of the electric system. Data records associated with this software can be easily reviewed and compiled for subsequent evaluation, giving more direct access to all of the electrical assets and hazardous surrounding vegetation. Constraints in 2019 included workforce and material shortages and siting issues.
- Liberty CalPeco did not rely heavily on performance against metrics implemented in the 2019 WMP to inform its 2020 WMP initiatives. This 2020 WMP primarily consists of a complete and comprehensive evaluation of resource capabilities and system-wide assets to reduce overall wildfire risks based on mitigating programs outlined in section 5.3 that relied on lessons learned from last year, review of other California utilities WMPs and guidance from the Commission.
- Going forward, Liberty CalPeco plans to front-load the design, permitting, and material orders for its programs to optimally prepare for work each year.
- As discussed later in this plan, Liberty CalPeco needs to increase staffing in key areas to execute the programs contained in the 2020 WMP. Liberty CalPeco is staffing a new Wildfire Mitigation group to manage its WMP. Liberty CalPeco is also focused on enhancing emergency management with new personnel and engaging with public safety partners on communication and coordination plans for PSPS events and wildfire threats. Plans for 2020 also include revamping the utility's data collection practices to better align with the ongoing information required by the Wildfire Safety Division ("WSD") and other parties.
- Liberty CalPeco has also reviewed its successful project targets for the 2019 year. Deploying the iRestore Responder application for inspections and future response needs has been a successful initiative to prepare for emergency events and identify at-risk elements of the electric system. Data records associated with this software can be easily reviewed and compiled for subsequent evaluation, giving more direct visibility to all of the electrical assets and hazardous surrounding vegetation. Liberty CalPeco also received authorization from the United States Department of Agriculture Forest Service to begin activities related to its Forest Resiliency Corridor initiative, which aims to reduce the risk of wildland fires caused by vegetation contact with electrical equipment leading to

landscape resilience and critical infrastructure safety. This joint effort for fuels management and treatment conveys Liberty CalPeco's prioritized strategy to develop collaborative initiatives with key fire and public safety partners.

2.2. Recent performance on progress metrics

Table 1: Recent performance metrics, last 5 years

#	Progress metric name	Annual performance					Unit(s)	Comments
		2015	2016	2017	2018	2019		
1	Grid condition findings from inspection	Level 1 = 0 Level 2 = 0 Level 3 = every .39 miles	Level 1 = 0 Level 2 = every 1.5 miles Level 3 = every .45 miles	Level 1 = every 90.34 miles Level 2 = every 29.61 miles Level 3 = every .42 miles	Level 1 = 0 Level 2 = every 21.19 miles Level 3 = every .42 miles	Level 1 = 0 Level 2 = every 4.72 miles Level 3 = every .26 miles	Number of Level 1, 2, and 3 findings per mile of circuit in HFTD, and per total miles of circuit for each of the following inspection types: 1. Patrol inspections 2. Detailed inspections 3. Other inspection types	Liberty CalPeco's inspection data is still in paper format so location by HFTD is difficult to compile. The overwhleming majority of Liberty Calpeco's facilities are classified as HFTD with only small sections being Non-HFTD (7.7% of facilities can be classifed as such). For the purpose of this exercise it is assumed all detailed inspections occurred in HFTD areas. Liberty CalPeco is only able to provide unit data for Detailed Inspections at this time but is putting mechanisms in place to better capture Patrol and Other Inspection types.
2	Vegetation clearance findings from inspection	7.07 Trees/Mile	8.61 Trees/Mile	10.12 Trees/Mile	7.71 Trees/Mile	8.17 Trees/Mile	Percentage of right-of-way with noncompliant clearance based on applicable rules and regulations at the time of inspection, as a percentage of all right-of-way inspected	Liberty CalPeco tracks the number of line miles inspected and the number of trees identified with non compliant clearance which can be used to calculate the number of non compliant trees per circuit mile. This is a sound progress metric as defined by WSD in attachment 4. It is unclear how to calculate percentage of non compliant trees as a percentage of all ROW inspected. Owner: Eliot Jones Dataset: Attachment 1 Table 1 Q2 - Veg Non Compliance Data
3	Extent of grid modularization					1. HFTD: Sec devices / mi = (1946 devices/1922 mi) = 1.01 devices per mile; Automated control equipment: 28 auto line reclosers, 2 motor operated switches = 30 auto devices all in HFTD; 2. Non-HFTD = 28 devices/134 mi = .21 devices per mile;	Number of sectionalizing devices per circuit mile plus number of automated grid control equipment in: 1. HFTD 2. Non-HFTD	Air switches and reclosers. 2019 data only. Doesn't specify just primary/secondary or u/g vs. o/h, so included all for line miles and devices. - Blaine Ladd
4	Data collection and reporting	N/A	N/A	N/A	N/A	____% (Assuming this question was intended to indicate the completeness of the 2020 WMP submission)	Percent of data requested in SDR and WMP collected in initial submission	Eliot Jones

2.3. Recent performance on outcome metrics, annual and normalized for weather

Table 2: Recent performance on outcomes metrics, last 5 years

Metric type	#	Outcome metric name	Annual performance					Unit(s)	Comments
			2015	2016	2017	2018	2019		
1. Near misses	1.a.	Number of all events (such as unplanned outages, faults, conventional blown fuses, etc.) that could result in ignition, by type according to utility-provided list (total)	99	111	137	115	278	Number per year	Included all overhead outages. Underground outages related to terminators and vehicle contact with padmounted equipment were included.
	1.b.	Number of all events (such as unplanned outages, faults, conventional blown fuses, etc.) that could result in ignition, by type according to utility-provided list (normalized)	0.038	0.262	0.124	0.039	0.342	Number per RFW circuit mile day per year	
	1.c.	Number of wires down (total)	5	10	3	4	5	Number of wires down per year	Wire down events unrelated to vegetation contact.
	1.d.	Number of wires down (normalized)	0.002	0.024	0.003	0.001	0.006	Number per RFW circuit mile day per year	
2. Utility inspection findings	2.a.	Number of Level 1 findings that could increase the probability of ignition discovered per circuit mile inspected	-	-	3	-	-	Average number of Level 1 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	These are the most severe violations and consist of broken crossarms, leaning/broken poles, broken insulators, etc. Liberty CalPeco believes all of these conditions are likely to increase the probability of ignition and provided a total instead of an average as requested.
	2.b.	Number of Level 2 findings that could increase the probability of ignition discovered per circuit mile inspected	-	98	14	8	43	Average number of Level 2 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	These are the moderate violations and consist of damaged crossarms, damaged poles, cracked insulators, etc. Liberty CalPeco believes all of these conditions are likely to increase the probability of ignition and provided a total instead of an average as requested.
	2.c.	Number of Level 3 findings that could increase the probability of ignition discovered per circuit mile inspected	-	-	-	-	-	Average number of Level 3 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	These are low level violations such as missing high voltage signs, guy guards, ground molding, etc., and are very unlikely to increase the probability of ignition.

Table 2: Recent performance on outcomes metrics, last 5 years (Continued)

Metric type	#	Outcome metric name	Annual performance					Unit(s)	Comments
			2015	2016	2017	2018	2019		
3. Customer hours of PSPS and other outages	3.a.	Customer hours of planned outages including PSPS (total)	Unknown	5,124	7,025	31,470	113,282	Total customer hours of planned outages per year	Planned outages were not tracked with this level of detail prior to 2016.
	3.b.	Customer hours of planned outages including PSPS (normalized)	Unknown	12.08	6.36	10.74	139.3	Total customer hours of planned outages per RFW circuit mile day per year	
	3.c.	Customer hours of unplanned outages, not including PSPS (total)	112,599	111,988	133,267	75,720	246,866	Total customer hours of unplanned outages per year	
	3.d.	Customer hours of unplanned outages, not including PSPS (normalized)	43.28	264.01	120.67	25.85	303.57	Total customer hours of unplanned outages per RFW circuit mile day per year	
	3.e.	Increase in System Average Interruption Duration Index (SAIDI)	-137.98	-18.16	26.22	-66.33	216.16	Change in minutes compared to the previous year	
4. Utility ignited wildfire fatalities	4.a.	Fatalities due to utility-ignited wildfire (total)	-	-	-	-	-	Number of fatalities per year	
	4.b.	Fatalities due to utility-ignited wildfire (normalized)	-	-	-	-	-	Number of fatalities per RFW circuit mile day per year	
5. Accidental deaths resulting from utility wildfire mitigation initiatives	5.a.	Deaths due to utility wildfire mitigation activities (total)	-	-	-	-	-	Number of fatalities per year	
6. OSHA-reportable injuries from utility wildfire mitigation initiatives	6.a.	OSHA-reportable injuries due to utility wildfire mitigation activities (total)	-	-	-	-	-	Number of OSHA-reportable injuries per year	
	6.b.	OSHA-reportable injuries due to utility wildfire mitigation activities (normalized)	-	-	-	-	-	Number of OSHA-reportable injuries per year per 1000 line miles of grid	
7. Value of assets destroyed by utility- ignited wildfire, listed by asset type	7.a.	Value of assets destroyed by utility-ignited wildfire (total)	-	$315,649.02	-	-	$9,855.29	Dollars of damage or destruction per year	Total cost of rebuild. For 2016, see attached doc 8800-0216-0148 Job Assets. For 2019 see attached doc 8800-0219-0433 Job Assets.
	7.b.	Value of assets destroyed by utility-ignited wildfire (normalized)	-	$744.14	-	-	$12.12	Dollars of damage or destruction per RFW circuit mile day per year	Need the RFW circuit mile day per year.

Table 2: Recent performance on outcomes metrics, last 5 years (Continued)

Metric type	#	Outcome metric name	Annual performance					Unit(s)	Comments
			2015	2016	2017	2018	2019		
8. Structures damaged or destroyed by utility- ignited wildfire	8.a.	Number of structures destroyed by utility-ignited wildfire (total)	-	18 poles	-	-	-	Number of structures destroyed per year	Number of utility poles only. No homes damaged.
	8.b.	Number of structures destroyed by utility-ignited wildfire (normalized)	-	0.042	-	-	-	Number of structures destroyed per RFW circuit mile day per year	
9. Acreage burned by utility-ignited wildfire	9.a.	Acreage burned by utility-ignited wildfire (total)	10.25	196	-	-	0.5	Acres burned per year	
	9.b.	Acreage burned by utility-ignited wildfire (normalized)	0.0039402	0.46206799	-	-	0.0006148	Acres burned per RFW circuit mile day per year	
10. Number of utility wildfire ignitions	10.a.	Number of ignitions (total) according to existing ignition data reporting requirement	2	1	-	-	1	Number per year	
	10.b.	Number of ignitions (normalized)	0.001	0.002	-	-	0.001	Number per RFW circuit mile day per year	
	10.c.	Number of ignitions in HFTD (subtotal)	2	1	-	-	1	Number in HFTD per year	
	10.c.i.	Number of ignitions in HFTD Zone 1	-	-	-	-	-	Number in HFTD Zone 1 per year	
	10.c.ii.	Number of ignitions in HFTD Tier 2	2	1	-	-	1	Number in HFTD Tier 2 per year	
	10.c.iii.	Number of ignitions in HFTD Tier 3	-	-	-	-	-	Number in HFTD Tier 3 per year	
	10.d.	Number of ignitions in HFTD (subtotal, normalized)	0.001	0.002	-	-	0.001	Number in HFTD per RFW circuit mile day per year	
	10.d.i.	Number of ignitions in HFTD Zone 1 (normalized)	-	-	-	-	-	Number in HFTD Zone 1 per RFW circuit mile day per year	
	10.d.ii.	Number of ignitions in HFTD Tier 2 (normalized)	0.0007688	0.00235749	-	-	0.0012297	Number in HFTD Tier 2 per RFW circuit mile day per year	
	10.d.iii.	Number of ignitions in HFTD Tier 3 (normalized)	-	-	-	-	-	Number in HFTD Tier 3 per RFW circuit mile day per year	
	10.e.	Number of ignitions in non-HFTD (subtotal)	-	-	-	-	-	Number in non-HFTD per year	
	10.f.	Number of ignitions in non-HFTD(normalized)	-	-	-	-	-	Number in non-HFTD per RFW circuit mile day per year	
11. Critical infrastructure impacted	11.a.	Critical infrastructure impacted by PSPS	-	-	-	-	-	Number of critical infrastructure (in accordance with D.19-05-042) locations impacted per hour multiplied by hours offline per year	single PSPS event in 2018 did not impact any critical infrastructure
	11.b.	Critical infrastructure impacted by PSPS (normalized)	-	-	-	-	-	Number of critical infrastructure (in accordance with D.19-05-042) locations impacted per hour multiplied by hours offline per year hour multiplied by hours offline per RFW circuit mile day per year	single PSPS event in 2018 did not impact any critical infrastructure

Near miss data includes outages that could have resulted in an ignition. Liberty CalPeco excluded outages that occurred in January and February of 2017 due to the historic snowfall and known weather conditions, which included several extreme atmospheric rivers. No other exclusions were made because snow accumulation in the other years did not warrant the elimination of possible ignition events.

2.4. Description of additional metrics

Liberty CalPeco has not identified additional metrics beyond the performance metrics provided in Tables 1 and 2.

2.5. Description of program targets

Table 4: 2019 WMP program targets

Program target	2019 performance	Units	Underlying assumptions	Third-party validation
High-Speed Clearing (Automatic Reclosers and Fast-Curve Sensitive Relay Settings). Program target was to install 6 automatic reclosers with "fire season" settings in 2019.	Installed six new or upgraded vacuum reclosers with SCADA controls with "fire season" settings. Continued installation of new relays that allow for remote setting changes to reduce spark potential during fire season.	Number of reclosers installed	Remote monitoring of system assets promotes faster outage response. Supervisory controls will provide the settings necessary to reduce electrical igniton, while also helping to mitigate power outages.	Purchase orders and receipts for relay and recloser equipment, work orders, job design, field verification of installation.
Improve situational awareness and determination of local conditions.	Contracted Reax Engineering to develop fire weather forecasting and monitoring webtool. The system allows for advanced notification of elevated fire risk conditions as well as monitoring and visualization of regional weather conditions.		Improved situational awareness results in inproved PSPS decision making.	Quote, purchase order, access to fire monitoring website, fire weather notification emails and text messages.
Fuse replacement program. Replace 60 fuses per month starting at approval date of 2019 WMP.	Replaced 250 expulsion fuses in HFTD Tier 3 areas with current limiting, non-expulsion fuses.	Number of fuses installed	Energy and spark potential at faulted locations is mitigated by non-expulsion fuses.	Quote for material, purchase order, fuse installation tracking spreadhseet, field verification of installation.
Installation of 2.7 miles of covered conductor in HFTD Tier 2 areas.	Deisgned and permitted 2.7 miles of covered conductor in HFTD Tier 2 areas. Construction not yet complete.	Miles of covered conductor installed	Mitigate contact of igniton source by covering the wire.	Quote for material, purchase order, job designs.
Install of 13 weather stations in 2019-2020 to support weather forecasting and monitoring efforts.	10 weather stations installed.	Weather stations installed	Improved situational awareness results in inproved PSPS decision making.	Quote for material, purchase order, field verification of installation.
Routine Vegetation Maintenance - Increase vegetation management budget from $2.5 million to $4 million to allow for additional contractor staffing to support additional tree inspections, trimming, and removal.	Increased number of trees worked from 2018 to 2019 by 39% and number of trees inspected by 12%.	Percent increase in number of trees worked and inspected	Increase in number of trees inspected will result in decrease in non-compliant trees, tree related outages, and potential ignitions.	Work orders, work tracking spreadsheets, verification of identification and trimmed trees.
Elevated Weather Events Operations.	Activation of "fire mode" settings during fire season.	Number of devices with fire season settings activated. Including substation breakers and reclosers	Elimination of reclosing operations reduces potential ignition events.	Physical fire season tags, SCADA records of "fire mode" activation.
Perform On-Ground Routine Inspections and Equipment Asset Inspections.	GO 165 inspections completed.	Number of devices and locations inspected.	Completed inspections result in detection of non-compliant items and decrease in potential ignition events.	GO165 inspection records stored.

Table 4: 2019 WMP program targets (Continued)

Program target	2019 performance	Units	Underlying assumptions	Third-party validation
Perform Vegetation Risk Inspections.	Increased number of trees inspected by 12%	% increase in # of trees inspected	Increase in number of trees inspected will result in decrease in non-compliant trees, tree related outages, and potential ignitions.	Tree inspection records, vegetation contractor invoices.
Perform pole loading calculations and replacement on new conductor or pole replacement projects.	Performed pole loading calculations on all replaced poles or poles where attachments / new equipment was added.	Number of pole loading calculations completed	Determine if structural integrity of the pole is within calculated threshold.	Pole loading calculation files (O-Calc) stored with each project folder.
Substation Design Hardening.	Awaiting approval of Brockway substation removal in 2019 GRC. Replacement of OCB's under substation equipment replacement program. Continuing to evaluate substation design hardening opportunites.		Hardened design of substation leads to less equipment failure and decrease in potential ignitions.	Design drawings for Brockway removal and replacement of OCB's. Meeting notes. Field verification of replaced breakers.
Tree Attachment Removal.	35 poles were set to remove at least 35 tree attachments.	Number of tree attachments removed per year.	Decrease in number of tree attachements results in decrease in potential ignitions.	Tree attachment removal job folders.
Tree Mortality Removal Project.	Removed 1539 dying trees.	Number of Trees removed	Removal of dying trees in or adjacent to right of way decreases potential ignitions.	Work orders, work tracking spreadsheets, invoices.
Forest Resiliency Corridor Development.	Grant application denied, no FRC projects were implemented, obtained categorical exclusion from USFS to streamline program implementation for future FRC projects.	Number of acres treated	Expanded vegetation management and fuel reduction in the forest reduces ignition source and minimizes fire propagation .	Work orders.
PSPS events.	No events in 2019.	Number of PSPS events	De-energization of power lines under elevated fire risk conditions results in decreased potential ignitions.	PSPS event reports.
Post-incident recovery, restoration, and remediation.	Did not need to enact procedures related to de-energization or emergency disaster relief proceedings.	Number of events	Post-incident recovery, restoration and remediation allows for expedited recovery and power restoration following emergencies.	Documentation of training, program elements, comprehensive emergency plans, exercises, debriefing, corrective action and evaluations for due diligence, training, and regulatory compliance.

2.6. Detailed information supporting outcome metrics

Table 5: Accidental deaths due to wildfire mitigation initiatives, last 5 years

Activity	Victim															Total
	Full-time employee					Contractor					Member of public					
Year	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetation management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utility fuel management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grid hardening	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 6: OSHA-reportable injuries due to utility wildfire mitigation initiatives, last 5 years

Activity	Victim															Total
	Full-time employee					Contractor					Member of public					
Year	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetation management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utility fuel management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grid hardening	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

As shown in Table 7, Liberty CalPeco monitors various data points to evaluate the probability of an ignition event in its service territory. As found in Liberty CalPeco's Fire Prevention Plan ("FPP"), data that the company monitors includes Red Flag Warning ("RFW") notifications, notifications from its predictive software tool Reax, wind gust information from the National Weather Service ("NWS") and information from the company's weather stations. Liberty CalPeco is developing a Fire Potential Index ("FPI") methodology to comprehensively assess fire risk that utilizes several data points to guide decisions on what type of operation and maintenance field work is appropriate at a given time. The FPI forecasting application is anticipated to capture data from situational awareness tools and seven-day projections and to calculate a fire ranking that aligns with a "Normal," "Elevated," or "Extreme" fire potential.

Liberty CalPeco is developing a comprehensive risk-based decision-making ("RBDM") framework that will include modeled predictive drivers and consequences for utility-caused fire ignitions. Using its incident reporting tool, the outage management system ("OMS") Responder, Liberty CalPeco will be able to identify reported incidents, which are the foundation of identifying potential ignition-causing events. By carefully evaluating its reported ignition-risk event logs and near misses, Liberty CalPeco will be able to identify drivers that caused the event. Supplementing its own data, Liberty CalPeco will utilize peer utility and nationally available data as it relates to predictive drivers and impacts of consequences of a utility-caused wildfire. Integration of weather data from Reax, NWS, FPI, and weather station data are examples of inputs that will be modeled in the RBDM framework.

Liberty CalPeco will follow the methodology utilized by the larger California IOUs in the Risk Assessment and Mitigation Phase ("RAMP")/Safety Model Assessment Proceeding ("S-MAP") proceedings and guidance for Small and Multi-Jurisdictional Utilities ("SMJU") Voluntary Agreement in D.19-04-020 to develop its RBDM framework. Liberty CalPeco's RBDM framework will provide Liberty CalPeco with a more quantitative, probabilistic modeling approach to evaluate wildfire risks in the future.

Table 7: Methodology for potential impact of ignitions

List of all data inputs used in impact simulation	Sources of data inputs	Data selection and treatment	Assumptions, including SME input	Equation(s), functions, or other algorithms used to	Output type(s), e.g., wind speed model	Comments
Vegetation characteristics	https://landfire.gov		LANDFIRE provides best available landscape-level fuels information including disturbances through 2016.			
Topography	https://landfire.gov					
Structure density / building footprints	2010 US Census data and Microsoft building footprints dataset https://github.com/microsoft/USBuildingFootprints		Census-based metrics provide structure density at the census-block level but highly granular building footprints provide more accurate strucutre location/density data			
Fire weather (historical)	Historical surface Wx observations and archived weather forecast/reanalysis dataincluding CPUC Fire Map 1 10-year climatology					
Fire history	https://frap.fire.ca.gov/mapping/gis-data/		Past fire history of a region influences the state of vegetation and provides insight into local fire risk from ignitions from nearby locations.			
Tree mortality	"https://www.arcgis.com/apps/MapJournal/index.html?appid=0098db792f5d48bbbc82515c3e0e7abf"		Tree mortality, which may change year to year, can increase surface fuel loads and ingition probability due to hazard trees contacting overhead electrical utilities.			
Live fuel moisture	Field sampling					
Fire weather (forecast)	"High Resolution Rapid Refresh (HRRR) North American Mesoscale Forecast System (NAM) Global Forecast System (GFS)"					

2.7. Mapping recent, modelled, and baseline conditions

Table 8: Map file requirements for recent and modelled conditions, last 5 years

Table 8 was recorded in Liberty CalPeco's GIS map files.

Table 9: Map file requirements for baseline condition for 2020

Table 9 was recorded in Liberty CalPeco's GIS map files.

3. Baseline ignition probability and wildfire risk exposure

3.1. Recent weather patterns

Table 10: Recent weather patterns, last 5 years

Weather Measurement	2015	2016	2017	2018	2019	5-year historical average	Unit(s)
Red Flag Warning Days	2,601	424	1,104	2,930	813	1,575	RFW circuit mile days per year
Days rated at the top 30% of proprietary fire potential index or similar fire risk index measure	4,792	10,154	12,296	17,027	19,811	12,816	Circuit mile days where proprietary measure rated above top 30% threshold per year
95th percentile wind conditions	19,938	55,059	78,355	96,396	116,492	73,248	Circuit mile days with wind gusts over 95th percentile historical (meaning the prior 10 years, 2005-2014) conditions per year
99th percentile wind conditions	3,546	15,607	20,689	24,455	28,127	18,485	Circuit mile days with wind gusts over 99th percentile historical (meaning the prior 10 years, 2005-2014) conditions per year

3.2. Recent drivers of ignition probability

Table 11: Key recent drivers of ignition probability, last 5 years

Incident type by ignition probability driver		Near misses tracked (y/n)?	Number of incidents per year						Average percentage probability of ignition per incident						Number of ignitions per year from this driver					
			2015	2016	2017	2018	2019	Average	2015	2016	2017	2018	2019	Average	2015	2016	2017	2018	2019	Average
Contact from object	All types of object contact	N	37	27	34	19	60	35	2.7%	3.7%	0.0%	0.0%	0.0%	1.1%	1.0	1.0	-	-	-	0.4
	Animal contact	Y	13	3	9	2	20	9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Balloon contact	N	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Veg. contact	Y	21	17	15	14	35	20	0.0%	5.9%	0.0%	0.0%	0.0%	1.0%	-	1.0	-	-	-	0.2
	Vehicle contact	Y	3	7	10	3	5	6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
All types of equipment / facility failure	All types	N	43	38	51	44	79	51	2.3%	0.0%	0.0%	0.0%	1.3%	0.8%	1.0	-	-	-	1.0	0.4
	Capacitor bank failure	N	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Conductor failure—all	N	2	10	4	4	8	6	0.0%	0.0%	0.0%	0.0%	12.5%	3.6%	-	-	-	-	1.0	0.2
	Conductor failure— wires down	Y	2	10	3	4	5	5	0.0%	0.0%	0.0%	0.0%	20.0%	4.2%	-	-	-	-	1.0	0.2
	Fuse failure—all	Y	33	21	34	30	50	34	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Fuse failure—convention al blown fuse	Y	33	21	34	30	50	34	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Lightning arrestor failure	Y	3	1	4	1	5	3	33.3%	0.0%	0.0%	0.0%	0.0%	6.7%	1.0	-	-	-	-	0.2
	Switch failure	N	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
	Transformer failure	Y	5	6	9	9	16	9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
Wire-to-wire contact / contamination		Y	11	24	4	6	45	18	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-	-
Other		Y	29	21	6	36	85	35	3.4%	0.0%	0.0%	0.0%	0.0%	0.6%	1.0	-	-	-	-	0.2

3.3. Recent use of PSPS

Table 12: Recent use of PSP, last 5 years

PSPS characteristic	2015	2016	2017	2018	2019	Unit(s)
Frequency of PSPS events (total)	-	-	-	1.0000	-	Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof to reduce ignition probability, per year
Frequency of PSPS events (normalized)	-	-	-	0.0003	-	Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof in order to reduce ignition probability, per RFW circuit mile day per year
Scope of PSPS events (total)	-	-	-	1.0000	-	Circuit-events, measured in number of events multiplied by number of circuits de-energized per year. Less than one full circuit de-energized during PSPS, rounding up to 1
Scope of PSPS events (normalized)	-	-	-	0.0003	-	Circuit-events, measured in number of events multiplied by number of circuits targeted for de- energization per RFW circuit mile day per year
Duration of PSPS events (total)	-	-	-	90.0000	-	Customer hours per year
Duration of PSPS events (normalized)	-	-	-	0.0310	-	Customer hours per RFW circuit mile day per year
Other						

3.4. Baseline state of equipment and wildfire and PSPS event risk reduction plans

3.4.1. Current baseline state of service territory and utility equipment

Table 13: Current baseline state of service territory and equipment

Land use	Characteristic tracked	In non- HFTD	In HFTD Tier 2	In HFTD Tier 3
In urban areas	Circuit miles	91.94	743.61	73.21
	Circuit miles in WUI	104.89	1,415.30	116.18
	Number of critical facilities	-	-	-
	Number of critical facilities in WUI	-	-	-
	Number of customers	3,147	26,052	1,857
	Number of customers in WUI	3,406	40,012	2,817
	Number of customers belonging to access and functional needs populations	41	142	14
	Number of customers belonging to access and functional needs populations in WUI	44	185	20
	Circuit miles of overhead transmission lines	0.54	0.51	-
	Circuit miles of overhead transmission lines in WUI	0.68	3.82	0.03
	Circuit miles of overhead distribution lines	62.64	572.21	68.86
	Circuit miles of overhead distribution lines in WUI	72.45	1,001.10	107.54
	Number of substations	-	1	-
	Number of substations in WUI	1	6	-

Table 13: Current baseline state of service territory and equipment (Continued)

Land use	Characteristic tracked	In non- HFTD	In HFTD Tier 2	In HFTD Tier 3
In rural areas	Circuit miles	12.95	671.68	42.97
	Circuit miles in WUI	104.89	1,415.30	116.18
	Number of critical facilities	-	-	-
	Number of critical facilities in WUI	-	-	-
	Number of customers	259	13,960	960
	Number of customers in WUI	3,406	40,012	2,817
	Number of customers belonging to access and functional needs populations	3	43	6
	Number of customers belonging to access and functional needs populations in WUI	44	185	20
	Circuit miles of overhead transmission lines	0.14	3.32	0.03
	Circuit miles of overhead transmission lines in WUI	0.68	3.82	0.03
	Circuit miles of overhead distribution lines	9.81	428.89	38.68
	Circuit miles of overhead distribution lines in WUI	72.45	1,001.10	107.54
	Number of substations	1	5	-
	Number of substations in WUI	1	6	-
In highly rural areas	Circuit miles	28.86	370.52	19.40
	Circuit miles in WUI	104.89	1,415.30	116.18
	Number of critical facilities	-	-	-
	Number of critical facilities in WUI	-	-	-
	Number of customers	308	2,237	145
	Number of customers in WUI	3,406	40,012	2,817
	Number of customers belonging to access and functional needs populations	2	3	4
	Number of customers belonging to access and functional needs populations in WUI	44	185	20
	Circuit miles of overhead transmission lines	0.23	12.28	2.32
	Circuit miles of overhead transmission lines in WUI	0.68	3.82	0.03
	Circuit miles of overhead distribution lines	23.90	264.31	15.61
	Circuit miles of overhead distribution lines in WUI	72.45	1,001.10	107.54
	Number of substations	1	4	1
	Number of substations in WUI	1	6	-

Table 14: Summary data on weather stations

Weather station count type	Current count	Unit(s)
Number of weather stations (total)	10	Total number located in service territory and operated by utility
Number of weather stations (normalized)	0.005	Total number located in service territory and operated by utility, divided by total number of circuit miles in utility service territory (2,055 circuit miles)
Number of weather stations in non- HFTD (total)	1	Total number located in non-HFTD service territory and operated by utility
Number of weather stations in non-HFTD (normalized)	0.007	Total number located in non-HFTD service territory and operated by utility, divided by total number of circuit miles in non-HFTD service territory (134 circuit miles)
Number of weather stations in HFTD Zone 1 (total)	-	Total number located in HFTD Zone 1 service territory and operated by utility
Number of weather stations in HFTD Zone 1 (normalized)	-	Total number located in HFTD Zone 1 service territory and operated by utility, divided by total number of circuit miles in HFTD Zone 1 service territory
Number of weather stations in HFTD Tier 2 (total)	8	Total number located in HFTD Tier 2 service territory and operated by utility
Number of weather stations in HFTD Tier 2 (normalized)	0.004	Total number located in HFTD Tier 2 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 2 service territory (1,786 circuit miles)
Number of weather stations in HFTD Tier 3 (total)	1	Total number located in HFTD Tier 3 service territory and operated by utility
Number of weather stations in HFTD Tier 3 (normalized)	0.007	Total number located in HFTD Tier 3 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 3 service territory (136 circuit miles)

Table 15: Summary data on fault indicators

Fault indicator count type	Current count	Unit(s)
Number of fault indicators (total)	239	Total number located in service territory and operated by utility
Number of fault indicators (normalized)	0.116	Total number located in service territory and operated by utility, divided by total number of circuit miles in utility service territory (2,055 circuit miles)
Number of fault indicators in non-HFTD (total)	6	Total number located in non-HFTD service territory and operated by utility
Number of fault indicators in non-HFTD (normalized)	0.003	Total number located in non-HFTD service territory and operated by utility, divided by total number of circuit miles in non-HFTD service territory (134 circuit miles)
Number of fault indicators in HFTD Zone 1 (total)	-	Total number located in HFTD Zone 1 service territory and operated by utility
Number of fault indicators in HFTD Zone 1 (normalized)	-	Total number located in HFTD Zone 1 service territory and operated by utility, divided by total number of circuit miles in HFTD Zone 1 service territory
Number of fault indicators in HFTD Tier 2 (total)	228	Total number located in HFTD Tier 2 service territory and operated by utility
Number of fault indicators in HFTD Tier 2 (normalized)	0.128	Total number located in HFTD Tier 2 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 2 service territory (1,786 cicuit miles)
Number of fault indicators in HFTD Tier 3 (total)	5	Total number located in HFTD Tier 3 service territory and operated by utility
Number of fault indicators in HFTD Tier 3 (normalized)	0.037	Total number located in HFTD Tier 3 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 3 service territory (136 circuit miles)

3.4.2. Planned additions, removal, and upgrade by end of 3-year plan term

Table 16: Location of planned utility equipment additions or removal

Land use	Characteristic tracked	Changes by end-2022			
		In non-HFTD	In HFTD Zone 1	In HFTD Tier 2	In HFTD Tier 3
In urban areas	Circuit miles of overhead transmission lines	-	-	-	-
	Circuit miles of overhead distribution lines	-	-	2.564	0.127
	Circuit miles of overhead transmission lines in WUI	-	-	-	-
	Circuit miles of overhead distribution lines in WUI	0.004	-	9.569	0.668
	Number of substations	-	-	1.000	-
	Number of substations in WUI	-	-	1.000	-
	Number of weather stations	-	-	-	-
	Number of weather stations in WUI	-	-	-	-
In rural areas	Circuit miles of overhead transmission lines	-	-	-	-
	Circuit miles of overhead distribution lines	0.004	-	7.005	0.541
	Circuit miles of overhead transmission lines in WUI	-	-	-	-
	Circuit miles of overhead distribution lines in WUI	0.004	-	9.569	0.668
	Number of substations	-	-	2.000	-
	Number of substations in WUI	-	-	2.000	-
	Number of weather stations	-	-	-	-
	Number of weather stations in WUI	-	-	-	-
In highly rural areas	Circuit miles of overhead transmission lines	-	-	-	-
	Circuit miles of overhead distribution lines	0.031	-	12.648	5.366
	Circuit miles of overhead transmission lines in WUI	-	-	-	-
	Circuit miles of overhead distribution lines in WUI	0.004	-	9.569	0.668
	Number of substations	-	-	1.000	-
	Number of substations in WUI	-	-	1.000	-
	Number of weather stations	-	-	-	-
	Number of weather stations in WUI	-	-	-	-

Table 17: Location of planned utility infrastructure upgrades

Land use	Characteristic tracked	In non-HFTD			In HFTD Zone 1			In HFTD Tier 2			In HFTD Tier 3		
		2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Total circuit miles planned for hardening each year, all types and locations		-	-	0.036	-	-	-	5.857	10.697	5.663	-	-	6.034
Total number of substations planned for hardening each year, all locations		-	-	-	-	-	-	4.000	2.000	1.000	-	-	-
In urban areas	Circuit miles planned for grid hardening of overhead transmission lines	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead distribution lines to harden	-	-	-	-	-	-	0.738	0.787	1.039	-	-	0.127
	Circuit miles of overhead distribution lines in WUI to harden	-	-	0.004	-	-	-	2.733	5.030	1.806	-	-	0.668
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Number of substations to harden	-	-	-	-	-	-	1.000	-	-	-	-	-
	Number of substations in WUI to harden	-	-	-	-	-	-	1.000	-	-	-	-	-
In rural areas	Circuit miles of overhead transmission lines to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead distribution lines to harden	-	-	0.004	-	-	-	1.995	4.243	0.768	-	-	0.541
	Circuit miles of overhead distribution lines in WUI to harden	-	-	0.004	-	-	-	2.733	5.030	1.806	-	-	0.668
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Number of substations to harden	-	-	-	-	-	-	-	2.000	-	-	-	-
	Number of substations in WUI to harden	-	-	-	-	-	-	-	2.000	-	-	-	-
In highly rural areas	Circuit miles of overhead transmission lines to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Circuit miles of overhead distribution lines to harden	-	-	0.031	-	-	-	3.124	5.667	3.857	-	-	5.366
	Circuit miles of overhead distribution lines in WUI to harden	-	-	0.004	-	-	-	2.733	5.030	1.806	-	-	0.668
	Circuit miles of overhead transmission lines in WUI to harden	-	-	-	-	-	-	-	-	-	-	-	-
	Number of substations to harden	-	-	-	-	-	-	-	-	1.000	-	-	-
	Number of substations in WUI to harden	-	-	-	-	-	-	-	-	1.000	-	-	-

3.4.3. Status quo ignition probability drivers by service territory

Table 18: Key drivers of ignition probability

Ignition probability drivers		Number of incidents per year (according to 5-year historical average)	Average likelihood of ignition per	Ignitions from this driver (according to 5-year historical average)				
				Total	In non-HFTD	In HFTD Zone 1	In HFTD Tier 2	In HFTD Tier 3
Contact from object	All types of object contact	35	1.1%	0.4	-	-	0.4	-
	Animal contact	9	0.0%	-	-	-	-	-
	Balloon contact	-	-	-	-	-	-	-
	Vegetation contact	20	1.0%	0.2	-	-	0.2	-
	Vehicle contact	6	0.0%	-	-	-	-	-
All types of equipment / facility failure	All types	51	0.8%	0.4	-	-	0.4	-
	Capacitor bank failure	-	-	-	-	-	-	-
	Conductor failure— all	6	3.6%	0.2	-	-	0.2	-
	Conductor failure—wires down	5	4.2%	0.2	-	-	0.2	-
	Fuse failure—all	34	0.0%	-	-	-	-	-
	Fuse	34	0.0%	-	-	-	-	-
	Lightning arrestor failure	3	6.7%	0.2	-	-	0.2	-
	Switch failure	-	-	-	-	-	-	-
	Transformer failure	9	0.0%	-	-	-	-	-
Wire-to-wire contact / contamination		18	0.0%	-	-	-	-	-
Other *		35	0.6%	0.2	-	-	-	-

4. Inputs to the plan and directional vision for wildfire risk exposure

Liberty CalPeco's WMP incorporates both short-term and long-term strategies to mitigate wildfire risks. The short-term plan includes development of resiliency corridors during PSPS events, operational awareness, and conservative work practices during high fire threat weather. The long-term plan includes extensive system hardening, increased operational awareness, and conservative, clearly defined work practices.

4.1. The objectives of the plan

Liberty CalPeco plans to execute the following initiatives:

4.1.1. Before the upcoming wildfire season

- Asset Survey – Liberty CalPeco plans to issue an RFP for a complete system-wide assessment and asset inventory. Liberty CalPeco will partner with iRestore to create an asset inventory database that houses results from the system-wide survey along with detailed inspections documenting the condition of each overhead distribution asset in its service territory. The asset inventory will provide a complete look at the system and enable Liberty CalPeco to understand, identify, and remove hazards at a programmatic level on a system-wide basis.
- WF Risk Analysis and Assessment – Liberty CalPeco will expand and refine its current wildfire risk analysis and initial assessments to prioritize WMP initiatives expected for the remainder of 2020 and will reevaluate annually for budget planning. Because of the age of the system, Liberty CalPeco does not have a complete inventory of system components. Once the asset survey is complete, Liberty CalPeco will utilize this data in future WMPs.

4.1.2. Before the next annual update

- Update dataset using iRestore mobile application to get real-time asset data, responder data, GIS, asset inventory in one centralized location. Use this to track asset life cycle using maintenance/replacement work in HFTDs.
- Implement new operational procedures discussed in section 5.3 and train employees/contract crews of new work requirements during RFW days or high fire risk conditions.
- Continue to implement system hardening initiatives detailed in section 5.3 and incorporate possible new programs that arise following the system survey.
- Continue development of resiliency corridors to prepare for a PSPS event.
- Hire additional staff required to implement the 2020 WMP.

4.1.3. Within the next 3 years

- Continue multi-year system hardening initiatives (overhead line replacements and substation upgrades), improve situational awareness with additional weather station installations, fire potential index, distribution fault anticipation, and emerging technology pilot programs.

4.1.4. Within the next 10 years

- Achieve significant progress on system hardening and situational awareness programs, minimizing the need for PSPS events.
- Complete resiliency corridors, enabling critical infrastructure to remain in power during a PSPS event in most regions of the service territory.
- Address critical issues identified in the system survey and asset inventory.
- Deploy emerging technology programs.

4.2. Understanding major trends impacting ignition probability and wildfire consequence

A. Describe how the utility monitors and accounts for the contribution of weather to ignition probability

In order to objectively compare and evaluate wildfire risk mitigation strategies, Liberty CalPeco utilizes its current ERM methodology to identify inherent risk, residual risk, existing controls, and future mitigation efforts after determining the likelihood and impact of wildfire risk in the Liberty CalPeco service territory. Liberty CalPeco is diligently working toward a RBDM framework that incorporates elements of the Commission's S-MAP/RAMP proceedings, as well as adopting the Commission's recommendations toward a probabilistic modeling methodology with MARS/MAVF scoring. Liberty CalPeco will also adhere to the RBDM requirements from D.19-04-020.

Liberty CalPeco utilizes REAX Engineering to help monitor fuel moisture content. Field sampling of wildland fuels will be conducted in key areas identified through a joint review from REAX and Liberty CalPeco. The fuel moisture condition data will provide insight into potential fire behavior and facilitate calculations of the National Fire Danger Rating System fuel indices (specifically the Energy Release Component of reported information). Energy Release Component ("ERC") is a key index calculated from Remote Automated Weather Station ("RAWS") observations as part of the US National Fire Danger Rating System ("NFDRS"). The physical meaning of an ERC value is 4% of the energy per unit area that would be released during a fire in units of BTU/square foot. In other words, multiplying an ERC value by 25 gives the number of BTUs per square foot that would be released in a fire, e.g., an ERC of 10 corresponds to 250 BTU per square foot. ERC depends on live and dead fuel loading by size class (as characterized by an NFDRS fuel model) as well as fuel moisture content of live and dead fuels. In forested areas, ERC values are usually calculated for NFDRS fuel model G which includes a heavy loading of 1,000-hour fuels (dead fuels between 3 and 8 inches in diameter). Consequently, ERC for fuel model G (or ERC(G) for short) is therefore quite sensitive to 1,000-hour fuel moisture values.[1]

In addition to depending on fuel loading/fuel model, ERC varies daily due to changes in moisture content of both live and dead fuels, which are in turn dependent on antecedent precipitation, relative humidity, and temperature. ERC is a "build up" index that, in the western United States, typically peaks during summer months and drops off after rains return and temperatures drop. Figure 1, below, shows an example seasonal variation of ERC. Since ERC depends on fuel loading/fuel model at each RAWS station, absolute ERC values are commonly converted to percentiles to facilitate comparison of seasonal ERC trends between RAWS stations with different fuel models. Conversion of an absolute ERC value to a percentile ERC value is accomplished by analyzing historical weather station observations using software developed by the USDA Forest Service known as Fire Family Plus. This will be based upon actual field observations and disseminated through the Wildland Fire Assessment System (WFAS) to report field conditions.

During the 2019 fire season, field sampling was conducted by REAX Engineering and Spatial Informatics Group. Typically, fuel moistures are sampled on a bi-weekly basis (an interval of 10-14 days). Sampling also occurred after heavy rain events. For this and ongoing efforts, Greenleaf Manzanita and Snowbrush Ceanothus will be prioritized for observations with Sagebrush targeted when neither Manzanita nor Snowbrush are present.

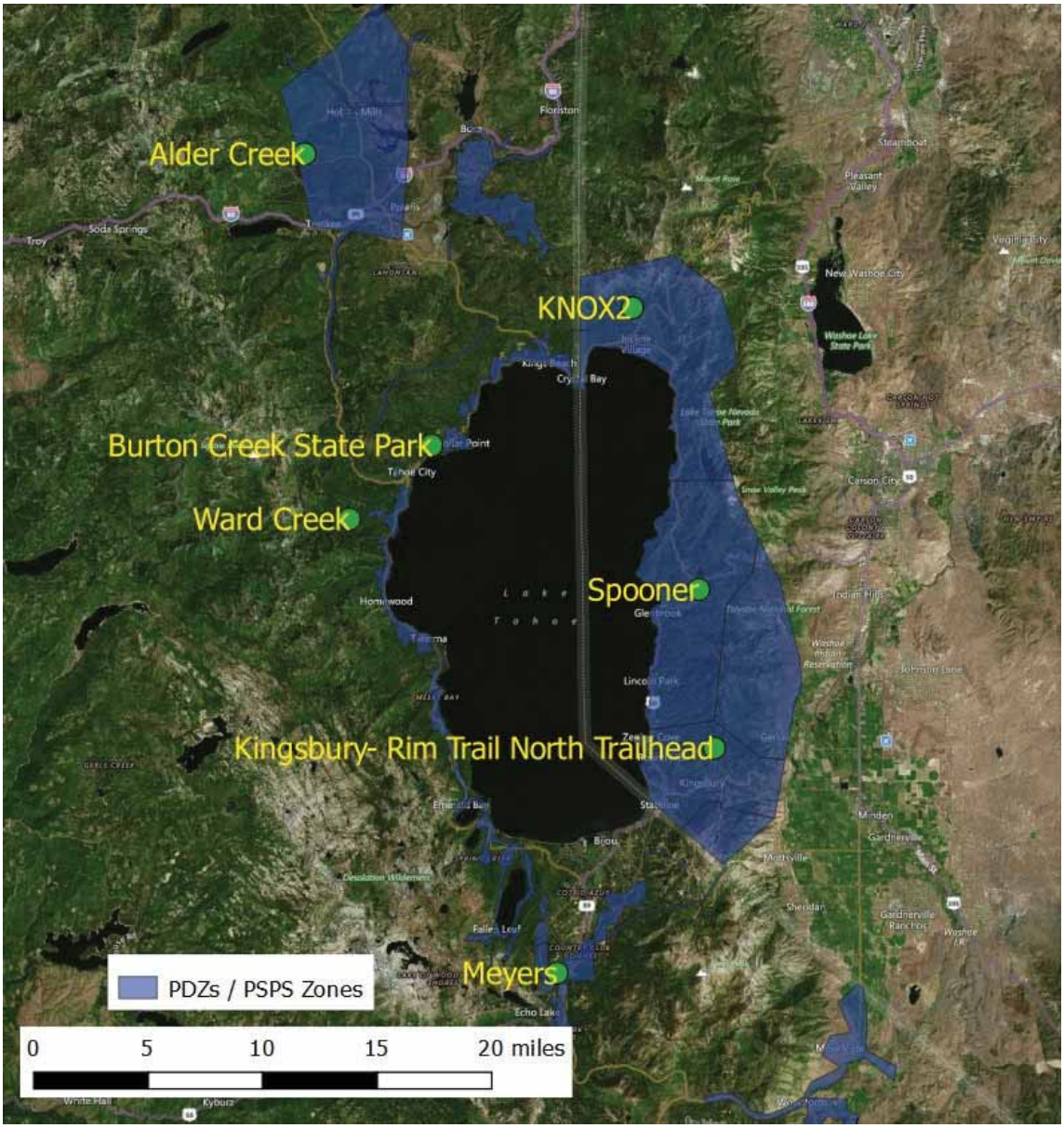
Sampling occurred at the following locations:

1. Alder Creek (NV Energy Truckee PDZ)
2. Knox 2 RAWS (NV Energy Incline PDZ)
3. Spooner Summit (NV Energy Glenbrook PDZ)
4. Kingsbury / Tahoe Rim Trail North (NV Energy Roundhill PDZ)
5. Meyers / Baron RAWS (Liberty CalPeco south shore PSPS zones)
6. Ward Creek (Liberty CalPeco west and north shore PSPS zones)

[1] REAX Engineering. Liberty CalPeco De-Energization Thresholds. August 20, 2019.

7. Burton Creek State Park (Liberty CalPeco west and north shore PSPS zones)

Figure 1: Fuel Moisture Sampling Locations in Greater Lake Tahoe Area



Source: REAX Engineering, 2019

Sampling protocol

To the extent possible, sampling follows recommendations in the U.S. Forest Service fuel moisture collection and equipment guide.[2]

[2] Zahn, S. and Henson, C., "A Synthesis of Fuel Moisture Collection Methods and Equipment – A Desk Guide," US Department of Agriculture Forest Service, National Technology & Development Program, May 2011.

Drying, reporting, and calculations
Samples will be weighed in the field, dried in a lab oven at 100 °C for 24 hours, and then weighed again to calculate moisture content. The resulting moisture content values will then be used to calculate ERC using Fuel Model G. Since this calculation gives values with units of BTU/square foot, a Fire Family Plus climatology analysis of the nearest NFDRS weather station will be used to convert ERC values in BTU/square foot to percentiles.

The three FPI Risk conditions are defined as:

Extreme Fire Risk –Extreme Fire Risk is defined as periods of significant risk of wildfires and the associated ignition risks within Tier 2 or 3 of the HFTD. All operations and maintenance (O&M) activities have stipulations and significant fire mitigation activities are required. The Extreme Fire Risk status is indicated as "red."
Elevated Fire Risk –High Fire Risk is defined as periods of increasing risk of wildfires and associated ignition risks within Tier 2 or 3 of the HFTD. Many O&M activities have stipulations and additional fire mitigation activities are required. The Elevated Fire Risk status is indicated as "yellow."
Normal Fire Risk –Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are not elevated but still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have stipulations and additional fire mitigation activities may be required. The Normal Fire Risk status is the default operational state and the FPI is indicated as "green."
As presented in Liberty CalPeco's Fire Prevention Plan, filed on October 30, 2019 in its annual General Order 166 filing, methodologies for forecasting and monitoring fire weather conditions as well as triggered operational practice modes are outlined below:

ASSESSMENT METHODOLOGY

Liberty/Reax Fire Forecast – Reax is a predictive tool that captures three main methods of fire weather condition measurement: Energy Release Component (ERC), wind gusts, and the Fosberg Fire Weather Index (FFWI). CalPeco will issue proactive patrols and inspection procedures during applicable work if a triggered scenario is revealed through the predictive software tool. When the Reax tool predicts potential fire weather conditions, the Manager-in-Charge or designee will refer to the tiered risk categories in this Plan and initiate operational protocols based on the determined rating.

1) Red Flag Warnings - Fire Weather Zone Boundaries were compared to CalPeco's service territory and it was identified that the territory spans portions of three different Zones. The applicable Zones include Zone 271, Zone 272 and Zone 273, which CalPeco will monitor. Historical data for the past ten years' RFWs within each of these zones was collected for each occurrence so that wind data could be collected an evaluated for each identified RFW. During Red Flag Events, CalPeco will monitor wind gusts at the peak elevation located at Bliss State Park using the link below or other available data. CalPeco has identified 46 Public Safety Power Shut-off (PSPS) zones that are based on isolation points within certain circuits or areas. After receiving a forecast from each of the zones through Reax, and if the ERC, wind, and FFWI are forecasted to come within 80%, 90%, or 100% of the thresholds for de-energization, a PSPS will be enacted upon reaching, or just before,

100%. During a PSPS event, noncritical operational work will be suspended to focus efforts on current conditions and proactive patrols after de-energizing and when restoring power. CalPeco leans on the guidelines provided by the CPUC through R. 18-12-005, which is an open proceeding to examine utilities' PSPS processes among other issues. CalPeco will provide updated protocols for internal PSPS practices in the 2020 version of its Wildfire Mitigation Plan.

2) CalPeco Design Standards - The CalPeco facilities design standards were reviewed by an engineer to evaluate the minimum standard for wind loading design. The design standard utilizes the criteria specified in G.O. 95 Section IV. However, it is known that this is a minimum design standard and that facilities are often oversized for a variety of reasons. CalPeco will review applicable wind loading design standards, monitor regulatory changes to standard design requirements, and update standards for minimum wind loading design criteria as deemed prudent.

3) Wind Data - NWS Remote Automatic Weather Stations were mapped for the area within 25 miles of the CalPeco service territory. For each RFW, wind gust data from the NWS site is monitored. The station automatically records the maximum instantaneous gust over the past hour and wind speed averages are taken by the stations over a ten-minute period. Because it is not possible to discern if gusts lasted three-seconds or more, it is assumed that all maximum gusts met the three-second criteria to guard against underestimating the fire threat.

   In addition to fire weather and fuels data from the NWS and United States Department of Agriculture National Fire Danger Rating System, CalPeco tracks instantaneous meteorological conditions received from the ten weather stations in the service territory. CalPeco also proposes to install 20 additional weather stations during 2020. The server data capturing meteorological conditions will serve as a principle variable underlying the development of the FPI. Until the FPI developed and adopted by CalPeco, operational designations for fire ratings will be derived from the meteorological data expressed above.

4) Mapping - Tiers 2 and 3 of the HFTD are overlaid on the CalPeco service territory map. All CalPeco facilities are mapped without underground facilities which are not subject to the Plan requirements. Operational work within Tier 2 and 3 of the HFTD or as a response to issued RFWs are subject to more stringent fire safety requirements, as described in this Plan. The attached map complies with G.O. 95 Rule 21.2-D.

5) Fire Potential Index (FPI) – The FPI is used as means to develop guidelines for Utility and Contractor operations and maintenance crews to follow under CalPeco defined categories of wildfire risk. The Wildfire Prevention Department is responsible for determining and communicating the FPI on a daily basis. The Wildfire Prevention Department will assure that the current status of the FPI is posted on the Company Intranet and will communicate the status to the Manager in charge. The FPI rating framework is in development.

B. Describe how the utility monitors and accounts for fuel conditions to ignition probability

Fuel moisture conditions during fire season in 2019 were monitored by in-situ fuel moisture content sampling conducted at four sites within Liberty's service territory. The focus of sampling was live and 1000-hr fuels because fuel moisture models are less accurate for those fuel types than for 1-hr, 10-hr, and 100-hr fuels. Live and 1000-hr fuels were sampled approximately weekly from mid-July through mid-November. Live samples were predominantly manzanita or sagebrush. For live fuels, fuel moisture contents of approximately 60% is considered critical for sagebrush, and ~80% for manzanita. 1000-hr fuels were minimum 3" diameter samples from dead-and-downed branches or trunks of various species. Sampling is anticipated to begin in late May / early June and end in late Fall for the upcoming 2020 year, with the understanding the start and end dates are dependent on numerous climatological factors.

Moisture content results were reported in percentages and used to calculate Energy Release Component (ERC) for NFDRS Fuel Model G which has a high correlation with wildland fire occurrence and size. ERC values (in units of BTU/square foot) were converted to percentile based on long-term historical ERC values and climatology. ERC percentiles are used to quantify intermediate to long-term drying.

4.2.1 Service territory fire-threat evaluation and ignition risk trends

Liberty CalPeco has not performed any cursory or comprehensive study in 2019 to determine whether expansion of the HFTD tiers are necessary. Since Liberty CalPeco's territory comprises of mainly Tier 2 and some Tier 3 of the HFTD, enhanced operational practices that include fire-threat conditions/stipulations are considered as part of general business practice due to the unique mountainous terrain. The decision to redesign the tiers to modify the boundaries of where Tier 2 and 3 intersect is not considered to be appropriate at this time. Liberty CalPeco likewise did not meet trigger thresholds to initiate a PSPS event during the 2019 fire season, leading to the understanding that the Commission has suitably mapped the fire threat profile for the service territory at this time.

Upon implementing the full system asset survey project, Liberty CalPeco will consider evaluating terrain conditions as it relates to the underlying risk drivers of the HFTD tiers. The utility will also consider re-evaluating this determination in future WMP filings.

Table 19: Macro trends impacting ignition probability and/or wildfire consequence

Rank	Macro trends impacting utility ignited ignition probability and estimated wildfire consequence by year 10	Comments
1	Change in ignition probability and estimated wildfire consequence due to climate change	Reduction in live and dead fuel moisture values relative to the historical baseline correlate with increased fire severity. Tree mortality induced by climate change may increase ignitions associated with trees contacting powerlines. Hotter summers, with drought conditions and more extremenity in the winter.
5	Change in ignition probability and estimated wildfire consequence due to relevant invasive species, such as bark beetles	Tree mortality induced by disturbances such as bark beetles may increase ignitions associated with trees contacting powerlines. The relationship between tree mortality and fire behavior is not clear and remains an active research area. Vegetation such as cheatgrass has taken over native grasslands and is highly flammible.
2	Change in ignition probability and estimated wildfire consequence due to other drivers of change in fuel density and moisture	100+ years of fire suppression and exclusion have contributed to higher fuel loading. This results in a shift from frequent, low intensity fires that benefit the landscape to periodic, intense fires that have negative effects.
7	Population changes (including Access and Functional Needs population) that could be impacted by utility ignition	This macro trend was interpreted to refer to aging population and individuals with limited mobility and/or cognitive impairments and how they could be impacted by utility-caused ignitions. Due to relatively scarce urban populations, this is not viewed as a major driver of fire consequence in Liberty's service territory.
8	Population changes in HFTD that could be impacted by utility ignition	Future demographic trends are unknown, thus this is not considered a major driver of fire consequence in Liberty's service territory.
6	Population changes in WUI that could be impacted by utility ignition	Structures in Wildland Urban Interface or Intermix are more vulnerable to fire losses than those in urbanized areas. As more structures are built in WUI/Intermix areas fire losses from all causes, not just utility ignitions, may increase.
3	Utility infrastructure location in HFTD vs non-HFTD	As additional utility infrastructure is added to HFTD areas to serve new development, ignition probability may increase due to the presence of utilities in areas that previously had no utility infrastructure. This increase in ignition probabilty may be partially offset by improved real-time monitoring of circuits and fire prevention measures such as proactive de-energization.
4	Utility infrastructure location in urban vs rural vs highly rural areas	As more structures are built in rural and highly rural areas that are connected to the grid, increased presence of utilities in areas that previously contained no utilities may increase ignition probability. This increase in ignition probability may be partially offset by improved real-time monitoring of circuits and other fire prevention measures such as proactive de-energization.

4.3. Change in ignition probability drivers

Liberty CalPeco experienced over 7,000 events over the past five years, none of which caused significant fires.[3] The number of incidents reported in the Liberty CalPeco service territory remained constant from 2015-2018 at about 110. In 2019, the company experienced 269 reported incidents, as shown in Table 11 above. The trend was driven mostly by sharp increases in vegetation contact, animal contact, fuse failures, wire-to-wire contact, and other reported incidents.

In order to address the challenges faced in 2020, Liberty CalPeco plans to front-load the design and permitting of seasonally constrained upgrades to prepare for the working months to the greatest extent possible. As a result, the number of reported incidents is anticipated to decrease as system upgrades increase.

While 94% of Liberty CalPeco's overhead lines are in a HFTD, the spread of fire is often suppressed by the cold weather and snow, which is prevalent in Liberty CalPeco's service territory. Additionally, as system hardening measures continue to be implemented, Liberty CalPeco expects the probability of ignition from events to decrease.

4.4. Directional vision for necessity of PSPS

Liberty CalPeco's PSPS program will be influenced in the future by PSPS events and lessons learned through its responses to those events. Much of the regulatory framework in place today was not in place during Liberty CalPeco's 2018 event. In 2019, Liberty CalPeco did not initiate a PSPS, but it did initiate the processes and ultimately determined a PSPS event was unnecessary. The PSPS framework has helped Liberty CalPeco develop better decision-making processes and communication plans. Liberty CalPeco does not analyze future quantitative impacts of the number of customers and circuits affected by PSPS events. The protocols and thresholds used to determine if power will be shutoff are detailed in the Fire Prevention Plan submitted in Liberty CalPeco's annual G.O. 166 compliance report. Additionally, since the WUI designation is new in this 2020 WMP, Liberty CalPeco does not have a set process as it relates to the PSPS program and serving customers in urban, rural, and highly rural areas. Moving forward, Liberty CalPeco will study possible differences in approaches to the PSPS protocol across the customer classes in the WUI designation.

[3] The referenced events include outage and non-outage events.

2019 Public Safety Power Shutoff ("PSPS") Near Miss Lessons Learned	
Steering Committee	Bright red line threshold is clear, but as we approach, is there room to define cusp thresholds and potential action items?
Operations	More patrols if there is a forecast threshold exceeds.
Dispatch and Control	New Hampshire Dispatch and Control – indications staffing could be a challenge.
Communications	One agency notification was missed Disjointed systems (Responder, Everbridge, GIS, etc.)
Administration	Logistics, admin requirements are significant and difficult for team lead and other core members to manage in addition to executing the PSPS. Overlap in roles between emergency management and PSPS requirements
Documentation & Records Management	Explore establishing a role dedicated to documentation and records management

Table 20 – Anticipated characteristics of PSPS use over next 10 years

At this time, Liberty CalPeco has insufficient recent experience with PSPS events in its own service territory to feel confident ranking the characteristic of PSPS events anticipated to change the most and have the greatest impact on reliability over the next ten years.

5. Wildfire Mitigation Strategy and Programs for 2019

5.1 Wildfire mitigation strategy

5.1.A

The threat of a wildfire in the Liberty CalPeco service territory is a risk the company and its parent companies take very seriously. Providing its customers safe and reliable service is paramount. The devastating consequences of wildfires include loss of service, property, and even life. The wildfire risk mitigation programs discussed in the Liberty CalPeco WMP are explicitly designed to keep its customers and surrounding populations safe.

In order to objectively compare and evaluate wildfire risk mitigation strategies, the company utilizes its current Enterprise Risk Management ("ERM") methodology to identify inherent risk, residual risk, existing controls, and future mitigation efforts after determining the likelihood and impact of wildfire risk in the Liberty CalPeco service territory. The company is developing a Risk-Based Decision Making ("RBDM") framework that incorporates elements of the IOU S-MAP/RAMP proceedings, as well as adopting the Commission's recommendations toward a probabilistic modeling methodology with MARS/MAVF scoring.

Furthermore, to evaluate the risk associated with wildfire events, Liberty CalPeco will isolate the risk of wildfire separate from other safety and reliability risk events. Preventing the loss of any life due to wildfire is of the utmost importance. Specific measures must be implemented to mitigate the driving forces behind ignitions in the Liberty CalPeco service territory. Therefore, when comparing wildfire risk to other safety/reliability risks, wildfires should be evaluated and modeled as a standalone risk.

1) **Before upcoming wildfire season –** The Company is working to complete a draft of the RBDM framework to bolster its ability to evaluate, model, and mitigate ignition events in its service territory. At this stage, the end of the evaluation phase of the RBDM should be taking place.
2) **Before the next annual update –** Liberty CalPeco expects its RBDM framework to be complete and useful before the next annual update.
3) **Within the next 3 years –** Within the next three years, Liberty CalPeco expects to enhance its RBDM framework through the addition of more resources, technological upgrades, richer data sets for modeling purposes, and generally more experience to refine its risk models as they relate to wildfires.
4) **Within the next 10 years –** Liberty CalPeco expects to continuously build upon its developed risk models to evaluate wildfire risk and expects to take advantage of all possible technologies available.

5.1.B

Please see the discussion included in Section 2.1 for the major themes of lessons learned from the 2019 WMP and how this shaped the development of Liberty CalPeco's 2020 WMP. The table below shows a summary of Liberty CalPeco's WMP initiatives by the wildfire mitigation categories presented in Section 5.3.

Item #	Wildfire Mitigation Category	WMP Initiative	Recorded	Forecast			
			2019	2020	2021	2022	Total
1	Situational Awareness	Advanced Weather Monitoring and Weather Stations	199,297	300,000	300,000	15,000	814,297
2	Situational Awareness	Continuous Monitoring Sensors	-	-	706,000	162,000	868,000
3	Situational Awareness	Fire Potential Index	-	70,000	10,000	10,000	90,000
4	Situational Awareness	ALERTTahoe	-	80,000	80,000	80,000	240,000
		Subtotal	**199,297**	**450,000**	**1,096,000**	**267,000**	**2,012,297**
5	Grid Design & System Hardening	Covered Conductor Installation	550,000	3,198,000	8,337,000	9,734,000	21,819,000
6	Grid Design & System Hardening	Distribution Pole Replacement	300,000	-	-	-	300,000
7	Grid Design & System Hardening	Expulsion Fuse Replacement	170,000	1,544,000	1,544,000	1,544,000	4,802,000
8	Grid Design & System Hardening	Grid Topology Improvements	-	616,000	-	-	616,000
9	Grid Design & System Hardening	Install System Automation Equipment	-	360,000	540,000	360,000	1,260,000
10	Grid Design & System Hardening	Pole Loading Infrastructure Hardening	550,000	1,515,000	2,820,000	3,535,000	8,420,000
11	Grid Design & System Hardening	Undergrounding Overhead Lines (Rule 20A)	-	1,757,500	6,100,000	-	7,857,500
12	Grid Design & System Hardening	Tree Attachment Removal	244,148	600,000	600,000	600,000	2,044,148
13	Grid Design & System Hardening	Wire Upgrade Program	-	150,000	250,000	350,000	750,000
14	Grid Design & System Hardening	Repairs and G.O. 165 Outcome from System Survey	-	3,500,000	-	-	3,500,000
		Subtotal	**1,814,148**	**13,240,500**	**20,191,000**	**16,123,000**	**51,368,648**
15	Asset Management and Inspections	Detailed Inspections - Asset Survey and GIS Update	-	6,000,000	-	-	6,000,000
16	Asset Management and Inspections	Improvements of Inspections	-	890,000	360,000	260,000	1,510,000
17	Asset Management and Inspections	Intrusive Pole Inspections	13,044	118,554	145,308	80,887	357,793
18	Asset Management and Inspections	LiDAR Inspections of Electic Lines and Equipment	-	250,000	300,000	300,000	850,000
		Subtotal	**13,044**	**7,258,554**	**805,308**	**640,887**	**8,717,793**
19	Vegetation Management	Additional Efforts to Manage Community and Environmental Impacts	-	660,000	660,000	660,000	1,980,000
20	Vegetation Management	Detailed Inspections of Vegetation around Lines and Equipment	450,000	610,000	556,000	570,000	2,186,000
21	Vegetation Management	Fuel Management and Reduction of "Slash"	-	2,000,000	2,500,000	2,500,000	7,000,000
22	Vegetation Management	Other Discretionary Inspection of Vegetation around Lines and Equipment	-	50,000	50,000	50,000	150,000
23	Vegetation Management	Other Vegetation Management	-	400,000	400,000	400,000	1,200,000
24	Vegetation Management	Patrol Inspections of Vegetation around Lines and Equipment	260,000	300,000	300,000	300,000	1,160,000
25	Vegetation Management	QA/QC of Inspections	-	250,000	250,000	250,000	750,000
26	Vegetation Management	Remediation of at-risk-Species	4,504,905	4,500,000	4,500,000	5,000,000	18,504,905
		Subtotal	**5,214,905**	**8,770,000**	**9,216,000**	**9,730,000**	**32,930,905**
27	Data Governance	Centrailized Repository for Data	-	465,000	415,000	365,000	1,245,000
28	Data Governance	Collaborative Research on Utility Ignition/Wildfire	-	200,000	-	-	200,000
		Subtotal	**-**	**665,000**	**415,000**	**365,000**	**1,445,000**
29	Emergency Planning and Preparedness	Adequate and Trained Workforce	-	**240,000**	**240,000**	**240,000**	**720,000**
30	Stakeholder Cooperation and Community Engagement	Community Engagement	-	**75,000**	-	-	**75,000**
		GRAND TOTAL	**7,241,394**	**30,699,054**	**31,963,308**	**27,365,887**	**97,269,643**

5.1.C

Liberty CalPeco is concerned about limited resources over the next three to five years. The company is already short-staffed in field personnel. Liberty CalPeco has historically had retention issues with the high cost of living in the Lake Tahoe region and the long commutes to affordable housing in the area.

Liberty CalPeco plans to supplement its staff with qualified contractors as much as possible, but even this has been difficult recently because, with the surplus of fire hardening work throughout California, many contractors "follow the money." Nevertheless, to the extent possible, Liberty CalPeco will aggressively pursue its Wildfire Mitigation Plan using resources, both internal and external, to their maximum potential.

In addition to labor resource constraints, Liberty CalPeco expects the high demand for wildfire hardened materials (*e.g.*, covered conductor, non-expulsion fuses, exempt hardware, etc.) will result in long material lead times.

Liberty CalPeco does not anticipate that these resource challenges will change over the next three years.

5.1.D

Liberty CalPeco has included several new technologies and innovations in its three-year WMP. This will impact resources, but Liberty CalPeco plans to use outside resources for help in many of these areas:

- Substation rebuilds – Liberty CalPeco plans to decommission or rebuild 3 substations (Brockway, Stateline, and Squaw Valley) over the next three years (2020-2022).[4] This includes fire hardening and new technologies implemented. Old, aging wooden bus structure and oil filled equipment will be replaced with steel bus, gas or vacuum breakers, and FR3 oil filled equipment (such as transformers and voltage regulators).
- Microgrid pilot project – Liberty CalPeco plans to implement a microgrid pilot project at Sagehen near Truckee, CA in 2020-2021. The technology will be solar with battery storage to feed a single customer (Cal Berkley's Sagehen research facility). Initially, the customer will stay "plugged in" to the grid but would eventually be planned to disconnect from the grid entirely and three miles of overhead line is planned for removal
- Non-expulsion fuses and electronic fuse replacements – Liberty CalPeco has already begun replacing many of its expulsion fuses as included in its approved 2019 WMP at a rate of approximately 60 fuses per month over nine years. Liberty CalPeco has also implemented a pilot program to install electronic dropout reclosers at various locations where non-expulsion fusing is difficult to coordinate.
- Distribution Fault Anticipation (DFA) – Liberty CalPeco plans to embark on a collaborative research project with Texas A&M to evaluate this emerging technology (as directed by the CPUC in D.19-05-040). Initial program will be to implement DFA on 10 feeders in 2020-2021.
- Auto-reclosers – Liberty CalPeco plans to continue replacing older line reclosers and installing new reclosers at ideal locations throughout its territory. Many of these will roll into use as part of Liberty CalPeco's distribution automation program.
- Emerging technologies (high impedance fault detection, rapid earth fault current limiting) – Liberty CalPeco will consider implementing these technologies based upon further research and cost effectiveness.

5.2 Wildfire mitigation plan implementation

5.2.A

Liberty CalPeco plans to identify and track costs associated with each major WMP initiative. Unique identifiers will be assigned to each specific WMP initiative for tracking purposes. When job orders are created for capital projects or programs, an operations analyst will track costs and develop methods for tracking all metrics and data related to wildfire mitigation. The reports created will be used by management to plan for WMP work activities, to measure performance of the WMP over time, and to make informed WMP risk-based decision making. After conducting the system-wide asset survey, Liberty CalPeco will have an updated GIS containing a

[4] Liberty CalPeco plans to spend $17.4 million for the substation rebuilds.

database that houses all the asset data by geographic coordinates. Going forward, Liberty CalPeco can utilize this information to develop risk mapping and to prioritize WMP work initiatives based on wildfire risk.

5.2.B

Achieving a robust, all-encompassing approach to mitigate wildfire risk from the utility is the primary objective of aggregating respective plans, protocols, and strategies into the WMP. Staff responsible for assigned mitigation areas have the role of vetting current procedures and recommending changes or enhancements to build upon initiatives that result in unfavorable risk spend efficiency. If regulatory changes, emerging technologies, external constraints, resource adequacy limitations, or other unforeseen circumstances yield deficiencies within the WMP, Liberty CalPeco will report in subsequent filings identified remediation solutions. The VP of Operations, or his designee, will be responsible for spearheading discussions about correcting deficiencies when updating the WMP in each comprehensive filing.

5.2.C

Liberty CalPeco inspects and repairs facilities in accordance with G.O. 165. Any issues found impacting safety and reliability are addressed as outlined in G.O. 165. Liberty CalPeco constantly evaluates its facilities while performing other activities, such as outage patrols, new business planning, engineering studies, pole replacements, and related field work. Monitoring the effectiveness of inspection practices will occur through ongoing tracking and annually review of findings resulting from internal process. As part of the full system asset survey, the conditions of each piece of equipment or hardware will be visually inspected and accounted for more efficient grid hardening efforts in the future. Because this activity will be performed in part by contracted support, Liberty CalPeco will provide escort personnel to assist in appropriately identifying assets and to provide expert knowledge of Liberty CalPeco's system.

The VP of Operations, or his designee, will review concerns found during routine field work and equipment and line inspections. Additionally, the Wildfire Prevention personnel will record equipment and line corrections or deficiencies for WMP effectiveness evaluation, as these responsibilities were formally established during the 2019 wildfire season. Liberty CalPeco will use this information to assess inspection procedure effectiveness. Annually, Liberty CalPeco will review inspection records, identify deficiencies, and determine corrective actions. An internal report will be provided to the utility's leadership in deliberation of future strategies to strengthen the utility's wildfire prevention priorities in 2020. Related strategies that mitigate wildfire risk will be identified and proposed in the next iteration of the WMP.

Aggregating this data will guide future decision-making regarding wildfire mitigation strategy with the goal of reducing incidents and system-wide hazards.

5.2.D

To manage data collection requests, the utility will direct and train staff to track and regularly verify recorded data and to update respective metrics for future WMP filings and data requests.

Liberty CalPeco uses several software applications to normalize different data sets to present a uniform scaled unit that can be measured across another variable data point. Generally, this activity occurs through statistical and forecast models through spreadsheets, as well as ArcGIS

mapping computations. The mapping platform allows for this process to occur through visualized data points, lines, rasters, and polygons built upon multiple layers involving unique calculations. These activities are performed on a project-need basis or routinely in an effort to draw comparisons of varying datasets. Liberty CalPeco relies on its recordkeeping practices to influence its risk-based decision-making activities related to utility capital investments.

The two tables below describe areas crucial to wildfire mitigation data collection, where that information is stored, the value of its assessment in wildfire risk reduction, and the metadata and data dictionary to explain each article/attribute collected. Pursuant to R. 18-10-007, Liberty CalPeco filed its Data Collection for WMPs Report to the CPUC on July 30, 2019.[5] This report identifies the mechanisms and types of data that are regularly tracked by the utility at the time of reporting.

Data and Map Product Catalogue

Data Collection Area	Data/Map Products	Software/File Type & Storage	Access / Responsible Group	Description	Assessment Value
Vegetation Management	Vegetation Management System Tree Inventory	Software Database	Internal system access / Vegetation Management Department	Captures and records results of vegetation inspections, work status, and completed tree crew work.	Capturing the results of vegetation inspections can lead to a better understanding of the trends that are developing on Liberty CalPeco's system. By capturing the type of work needed, Liberty CalPeco can determine timelines for frequency of inspections and tree work needed. The tree work completed allows Liberty CalPeco to determine the effectiveness of the work type and allows for integration with

[5] *"Data Collection for WMPs Report"*

					the GIS system to geospatially view inspections and tree work activities.
Outage Tracking	Outage Log	Report from Outage Management System	Internal OMS / System Operations Group	Collects incidents detailing the duration, weather conditions, cause, and impacted facilities associated with each outage event.	Fire Incident Data collection is annually updated by the CPUC Safety Enforcement Division (SED) and is an approved reporting method. This supports the underlying data.
Infrastructure/ Operations	Substation Inspections	Record-keeping Application	Internal paper and electronic records / Engineering & Operations Group	Records substation inspections.	Regular, detailed inspections will help identify repairs and reduce the risk of substation equipment failures.
Infrastructure/ Operations	Mobile Mapping	GIS Application	Smart phone device for vendor database application / Field Crew & Operations Personnel	Provides field personnel with a view to the GIS system.	Mobile mapping will provide field personnel with maps of the system and equipment in fire threat areas.
Infrastructure/ Operations	Pole Test and Treat	Excel Workbook	Physical and electronic forms and / Field Operations	Inspects and tests poles on an annual basis.	Identification of damaged or failing infrastructure that is then scheduled for replacement or repair will help structural integrity of facilities, which reduces fire risk.
Infrastructure/ Operations	Covered Wire Pilot Program	GIS Database	Physical and electronic forms	Tracks covered conductor as	This program will allow for tracking of covered conductor

			translated into map products / Field Operations & GIS Specialists	it is installed in the field in the GIS.	installations. Covered conductor is shown to reduce potential ignitions and arc events.
Infrastructure/ Operations	G.O. 165 Inspection Program	Excel Workbook	Physical and electronic forms and / Field Operations & Engineering	Inspects distribution and transmission lines per CPUC requirement.	Regular, detailed inspections of facilities will identify required repairs, which should reduce the risk of equipment failures and potential ignition events.
Infrastructure/ Operations	Expulsion Limiting Fuse Locations	GIS Database	Physical and electronic forms translated into map products / Field Operations & GIS Specialists	Tracks conventional fuse replacements in GIS system	Installation of new fuses throughout the system designed will minimize ignition events. As replacements are done, they can be compared to other areas that do not have the same type of fuses to measure effectiveness.
Situational Awareness/ Weather Conditions	Weather Station Database	Database, Web Map	Internal weather data feed / GIS Specialists & Operations	Displays current conditions at each location.	The information is utilized when making PSPS events as well as provides operations current weather conditions at a given location.
Situational Awareness/ Weather Conditions	Weather Station Locations	GIS Database	GIS map application / GIS Specialists	Provides GIS locations for each weather station and the associated facilities.	This gives operations exact locations of weather stations and current weather details.

Data Dictionary

Data Product	Field ID/Metadata	Description
Outage Log	Incident ID	Associated incident ID for tracking
	Substation	Substation from which the circuit is sourced
	FederID	ID of circuit
	Address	Location of incident
	Customer count	Number of customers impacted
	Cause	Cause of incident
	Equipment	Type of equipment and relevant notes
	Outage time	Time outage was logged
	Restoration time	Time outage was restored
Substation Inspections	Substation	Name of substation inspected
	Date	Time and date stamp of inspection
	Equipment ID	Type of equipment and relevant notes
	Pass/Fail	Whether equipment passes or fails inspection
Mobile Mapping	Metadata	A base map that contains service territory, locations of lines and facilities, HFTD tiers
Pole Test and Treat	Inspect_Date	Date of inspection
	POLENUMBER	Facility ID of pole
	Species	Type of wood pole
	VISUAL	Whether a visual inspection occurred
	SOUNDBORE	Whether a sound and bore test occurred
	Height	Height of pole
	ORIGGLCIRC	Original circumference of pole
Covered Wire Pilot Program	Install date	Date installed
	Conductor type	Information about conductor type and materials
	Voltage	Voltage of wire
G.O. 165 Inspection Program	Metadata	Dataset that contains tracking and information around the G.O. 165 inspections and relevant maintenance programs
Expulsion Limiting Fuse Locations	Pole number	Associated pole
	Fuse type	Type of fuse
	Voltage	Voltage of equipment

	Manufacturer	Name of equipment manufacturer
Weather Station Database	Metadata	Database that stores meteorological measurements, such as temperature, wind chill, heat index, dew point, altitude, humidity, wind speed, wind gusts, barometer pressure
Weather Station Locations	Metadata	Locations of weather stations and associated equipment
Vegetation Management System Tree Inventory	Tree number	Unique identifier for a single tree or group of trees with similar location /characteristics
	Circuit	Circuit where the tree is located
	Ownership type	Owner of the tree
	Pole ID	Pole number/span the tree
	Tree species	Common name of the tree species
	Tree hazard(s)	Tree condition/reason for work needed
	Trim type	Type of work needed
	INSP date	Date the tree was inspected
	Clearance	The distance the vegetation is prescribed to be removed from the nearest conductor
	Status	Status of the tree work order (e.g., pending, permissioned, completed, etc.)
	Crew type	Type of equipment and personnel needed to complete the work
	Date completed	Date the work was completed
Pole Clearing Data	DateInsAndCleared	Date the pole was inspected and cleared
	CircuitNameNumber	Circuit associated with the pole
	Pole ID	Pole number
	Subject hardware	Type of hardware on the pole that requires the pole to be cleared
	Comments	Comments related to the work

5.3 Detailed wildfire mitigation programs

5.3.1 Risk assessment and mapping

Liberty CalPeco plans to implement a risk mapping tool using Hexagon Smart M.Apps, which will provide the utility with the ability to do dynamic analysis on its incident reporting overlaying various maps of the utility's service territory. The software allows for filtering by many informational characters, including, but not limited to, outage cause, date, number of customers affected, location, and circuit. Liberty CalPeco intends to incorporate the analytical capabilities of Smart M.Apps into the WMP and RBDM framework programs. The software will also be able to show ignition probability by circuit.

5.3.1.1 Risk mapping model

The inclusion of climate/weather driven risk mapping, initiative mapping, and PSPS risk-reduction impact are all initiatives the company will implement by the next wildfire season and in its next GRC as part of the company's RBDM framework. Monte Carlo simulation analysis will also be included as part of the quantitative modeling phase. Before the next annual update, Liberty CalPeco expects that the data modeling and evaluation methods will build upon what was in place at the time of the 2020 wildfire season. In the next three years, the company will utilize the best technology available to mitigate wildfire risk.

Project Timeline:

- Before the upcoming wildfire season – status quo.
- Before the next annual update – develop risk map.
- Within the next three years – evaluate risk map, make changes, review data.
- Within the next 10 years – evaluate risk map, make changes, review data.

5.3.2 Situational awareness and forecasting

Liberty CalPeco sees the need to enhance its situational awareness and forecasting tools to enable the company to better predict the potential for a wildfire impacting our service territory and surrounding areas by monitoring, assessing, and predicting various weather conditions. The Fire Potential Index, described below, is a key predictive operating and assessment tool, that once implemented will allow Liberty CalPeco to forecast fire threat up to 7 days in advance. Installing weather stations with fuel moisture and precipitation sensors allows for more accurate fuel moisture and ERC calculations. In addition, installing Distribution Fault Anticipation (DFA) monitoring sensors at key system locations to identify potential line failure events that could ignite wildfires is crucial for Liberty CalPeco to continue to explore these new and emerging technologies to better detect wildfires and reduce overall wildfire risk. Partnering (retaining services) with Reax Engineering to develop a weather monitoring tool to monitor elevated fire risk has allowed Liberty CalPeco to plan for, and potentially execute, PSPS events.

5.3.2.1 Advanced weather monitoring and weather stations

Liberty CalPeco deployed 10 weather stations in 2019 and plans to deploy 40 additional stations through 2021. All stations will be installed with fuel moisture and precipitation sensors. The new sensors will allow for automated Energy Release Component (ERC) calculations to be compared with existing fuel moisture sampling. Weather stations help to evaluate and forecast the need for PSPS events during elevated fire risk conditions. Additionally, in 2019, Liberty CalPeco contracted Reax Engineering to develop a weather monitoring and notification tool to warn of potential elevated fire risk.

Figure 2 below, shows locations of existing and proposed weather stations.

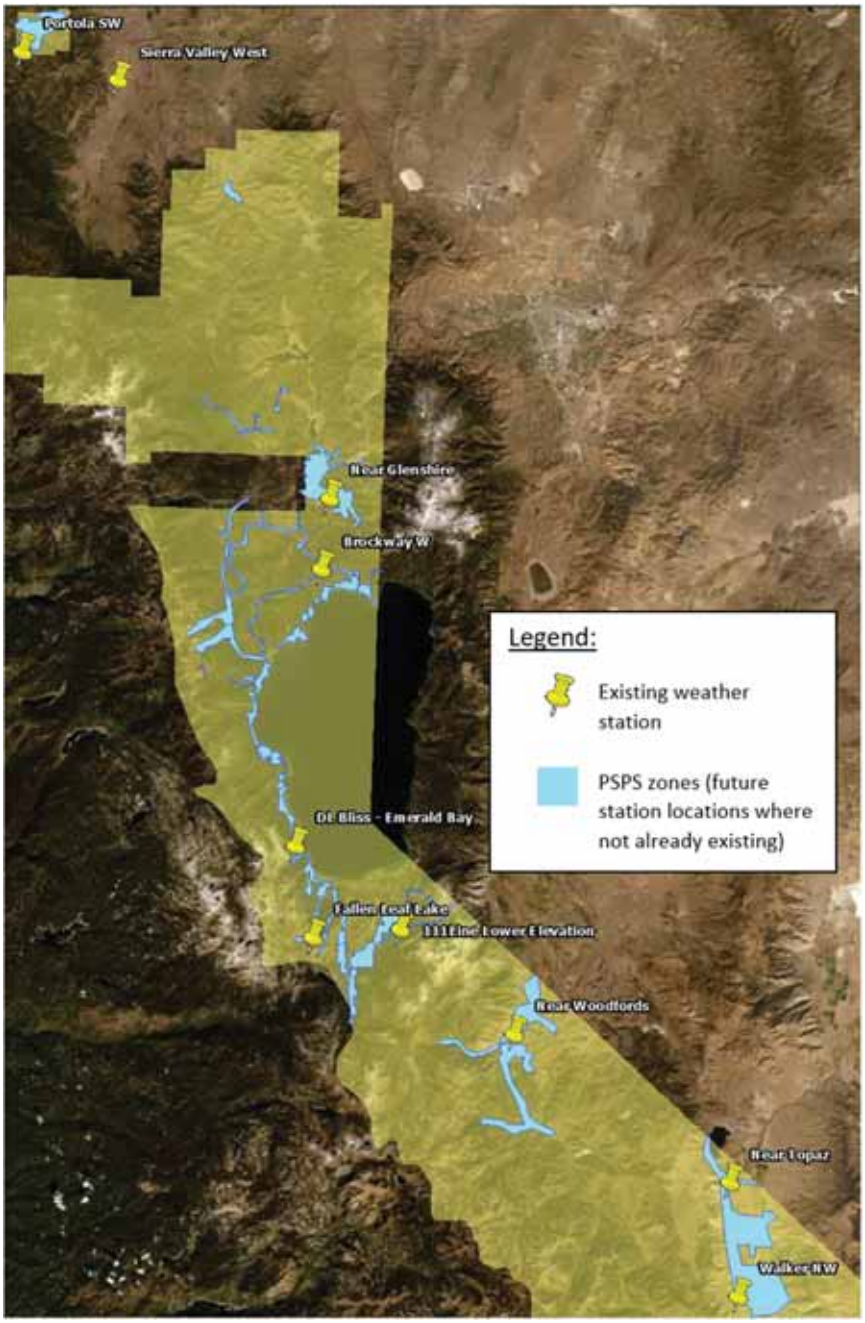
Program Timeline:

- **Before the upcoming wildfire season** – Order material and prepare for installation of weather stations as soon as conditions permit.
- **Before the next annual update** – Install 20 weather stations.
- **Within the next 3 years** – Install up to 20 additional weather stations through 2021.
- **Within the next 10 years** – Continue to maintain weather network.

Table 22: Advanced weather monitoring and weather stations

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Advanced weather monitoring and weather stations	2019 plan	148,720	2,055	72	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing	2019 WMP	WMP memorandum account	Exceeding	N/A	2019 Plan included installation of 13 weather stations. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2019 actual	199,297	2,055	97	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing	2019 WMP	WMP memorandum account	Exceeding	N/A	Installation of 10 weather stations and development of advanced weather monitoring tool by Reax Engineering. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2020	300,000	2,055	146	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	Exceeding	N/A	Installation of 20 new weather stations. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2021	300,000	2,055	146	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	Exceeding	N/A	Installation of 20 new weather stations. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2022	15,000	2,055	7	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	Exceeding	N/A	Installation or upkeep of stations. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2020-2022 plan total	615,000												

Figure 2: Locations of Existing and Proposed Weather Stations



5.3.2.2a Continuous monitoring sensors – distribution fault anticipation

Liberty CalPeco is considering a collaborative research initiative with Texas A&M University called Distribution Fault Anticipation ("DFA"). This technology uses real-time electric waveforms to detect anomalies on the system that have a high potential of ignition (*e.g.*, arcing connections). The DFA technology was recently presented at the Wildfire Technology Innovation Summit. Liberty CalPeco intends to pilot DFA technology on 10 distribution feeders in HFTD Tier 2 and Tier 3 areas. The expectation is that DFA technology will be able to continuously identify incipient line failure events that may be undetectable by traditional inspection methods.

Program Timeline:

- **Before the upcoming wildfire season –** Continue to investigate DFA, define contractual obligations and pricing.
- **Before the next annual update –** Make provisions for deployment of DFA.
- **Within the next 3 years –** Deploy DFA on 10 feeders.
- **Within the next 10 years –** Continue to monitor viability of DFA and potentially expand to include more feeders.

Table 22a: Continuous monitoring sensors

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Continuous monitoring sensors	2019 plan													
	2019 actual													
	2020													
	2021	706,000	313	2,256	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	Distribution fault anticipation (DFA) at Stateline, Northstar, Tahoe City. All OH miles out of those 3 subs.
	2022	162,000	313	518	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	Distribution fault anticipation (DFA) at Stateline, Northstar, Tahoe City. All OH miles out of those 3 subs.
	2020-2022 plan total	868,000												

5.3.2.2b Continuous monitoring sensors – ALERTWildfire cameras

Liberty CalPeco is proposing to work with ALERTWildfire to support the local ALERTTahoe wildfire camera network. ALERTWildfire deploys pan-tilt-zoom (PTZ) cameras monitoring high fire risk areas to allow for discovery of ignition events and support fire resources throughout a wildfire event. ALERTWidlfire's first project, ALERTTahoe provided camera coverage for the majority of Liberty CalPeco's service territory. Liberty CalPeco plans to partner with ALERTWildfire to update and maintain the cameras in the Lake Tahoe area to provide camera control to Liberty CalPeco. See alertwildfire.org/about for more information.

Program Timeline:

- **Before the upcoming wildfire season** – Partner with ALERTWildfire to maintain ALERTTahoe camera network.
- **Before the next annual update** – Evaluate replacement of cameras with higher resolution models.
- **Within the next 3 – 10 years** – Continue to support ALERTTahoe camera network through maintenance or addition of cameras.

Table 22b: Continuous monitoring sensors – ALERTTahoe Cameras

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Continuous monitoring sensors	2019 plan													
	2019 actual													
	2020	80,000	2,055	39	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	Liberty CalPeco to maintain 8 cameras that are part of the ALERTTahoe camera network.
	2021	80,000	2,055	39	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	
	2022	80,000	2,055	39	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	
	2020-2022 plan total	240,000												

5.3.2.3 Fault indicators for detecting faults on electric lines and equipment

Liberty CalPeco uses fault indicators to detect and shorten outages. There is no plan to expand the use of fault indicators as a wildfire mitigation initiative. Liberty CalPeco will continue to look into line monitoring technologies and their potential ability to mitigate wildfire risk.

Program Timeline:

- **Before the upcoming wildfire season** – No current program plans.
- **Before the next annual update** – Research new line monitoring technologies and their potential ability to mitigate wildfire risk.
- **Within the next 3 – 10 years** – Implement new line monitoring technologies if applicable.

5.3.2.4 Forecast of a fire index, fire potential risk, or similar

The Fire Potential Index (FPI) is a comprehensive assessment tool developed by San Diego Gas and Electric (SDG&E) for operational decision making to reduce fire threats and risks. The tool converts environmental, statistical, and scientific data into an easily understood forecast of short-term fire threat for the utility's service territory. The FPI forecasts up to seven days of fire threat potential.

Threshold values for each ranking were determined through evaluation of historical fire incidents and typical seasonal values. Using FPI allows for more precise predictions of fire risk for a specific geographic area and may provide hourly danger ratings that could be forecasted and used to guide which work activities can be conducted on specific days. The development of the FPI will include the following:

1. Develop an FPI methodology for Liberty CalPeco's service territory based on SDG&E and PG&E methodologies. Factors considered include climatological, geographical, and fuel source conifer and timber understory fuels in Liberty CalPeco's service territory. The FPI calculation includes fuel moisture (both dead and live), "green-up" factor, ambient temperature, relative humidity, and Fosberg Fire Weather Index, among other factors. This work will establish the number of FPI classes as well as the fuel and weather criteria that delineate FPI classes.
2. Identify FPI zones / polygons. Several FPI zones will be developed to capture approximately homogeneous fuels, weather, and topography within each zone. The number of zones and their extent will be developed at project execution and will encompass all of Liberty CalPeco's service territory.
3. Establish Fire Potential Index (FPI) thresholds for each FPI zone based on historical weather analyses.
4. Extend existing proactive de-energization monitoring and operational support tool to include seven-day FPI calculation by zone.
5. Continue monitoring PSPS and FPI weather analytics systems

Program Timeline:

- **Before the upcoming wildfire season** – Implement fully functional FPI.
- **Before the next annual update** – Refine use of FPI to aid operational decision-making.

- **Within the next 3 years –** Continue to evaluate use cases for FPI.
- **Within the next 10 years –** Continue use of FPI to inform operational decisions.

Table 22: Forecast of a fire risk index, fire potential index, or similar

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Forecast of a fire risk index, fire potential index, or similar	2019 plan													
	2019 actual													
	2020	70,000	2,055	34	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	FPI under development by Reax as of Jan. 2020. Considers all line miles as treated since entire service territory is in scope. Line miles provided by GIS dept.
	2021	10,000	2,055	5	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	
	2022	10,000	2,055	5	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	
	2020-2022 plan total	90,000												

5.3.2.5 Personnel monitoring areas of lines and equipment in elevated fire risk conditions

Liberty CalPeco has defined new working procedures for elevated fire risk conditions under a recent update to the FPP. The new working procedures include Liberty CalPeco or contracted personnel monitoring areas of electric lines and equipment in elevated fire risk conditions. However, the anticipated cost of these working procedures is dependent on the number of elevated fire risk days and other variable factors that are unknown at this point.

Program Timeline:

- **Before the upcoming wildfire season** – Train and retain internal or contracted resources on the policies regarding need to monitor areas of electric lines in elevated fire risk conditions.
- **Before the next annual update** – Continue to monitor electric lines and equipment in elevated fire risk conditions.
- **Within the next 3-10 years –** Continue to monitor electric lines and equipment in elevated fire risk conditions.

5.3.2.6 Weather forecasting and estimating impacts on electric lines and equipment

Liberty CalPeco consulted Reax Engineering to develop an operational support tool inclusive of weather forecasting functionality. Part of the scope of Reax's weather monitoring project included weather forecasting costs that are reflected in in total in the Advanced Monitoring and Weather Station table in Section 5.3.2.1. Liberty CalPeco may work with Reax or other consultants to estimate impacts of weather conditions on electric equipment but costs are unknown at this point.

Program Timeline:

- **Before the upcoming wildfire season –** Continue use of weather forecasting tool and evaluate options to estimate weather impacts on electric lines and equipment in Liberty CalPeco's service territory.
- **Before the next annual update –** Potentially develop tool to estimate weather impacts on electric lines and equipment primarily used for risk analysis. Continued use of existing weather forecasting tools.
- **Within the next 3-10 years** – Plans will be dependent upon whether new tool above is developed.

5.3.3 Grid design and system hardening

Liberty CalPeco's efforts toward Grid Design and System Hardening include various programs in this section, but covered conductor and an effort to identify and replace non-exempt hardware (per CalFire) are the most significant of these programs. The tables below summarize the current inspection and maintenance and/or replacement programs initiated by G.O. 165, G.O. 174, and the new WMP initiatives related to strengthening Liberty CalPeco's electric grid.

Existing WMP-related Initiatives (in Base GRC Rates)

	WMP Initiative	Compliance-Driven and/or GRC program	Table Reference
1.	Capacitor Maintenance/Replacement	G.O. 165	1
2.	Circuit Breaker Maintenance/Replacement	G.O. 174	2
3.	Crossarm Maintenance/Replacement	G.O. 165	5
4.	Pole Replacements	G.O. 165	6
5.	Covered Conductor Program	(Topaz and 7300 line in GRC)	3
6.	Transformers Maintenance/Replacement	G.O. 165	14
7.	UG lines	Rule 20A	16

New WMP Initiatives (WMP Memo Account)

	WMP Initiative	Table Reference
1	Expulsion Fuse Replacement	7
2	Other Covered Conductor projects (non-GRC)	3
3	Grid Topology Improvements – Sagehen	8
4	Install System Automation Equipment	9
5	Pole Loading Assessment Program	13
6	Other Corrective Actions – Wire Upgrade Program, Tree Attachment Removal, Repairs from Asset Survey	18

Describe utility approach to the following categories of maintenance of transmission lines, distribution lines, and equipment, respectively:

1. Liberty CalPeco's maintenance programs and protocols are driven by its inspection programs, which meet requirements as outlined in General Orders 165 and 174. Liberty CalPeco performs detailed inspections on approximately 20% of the system and visually patrols the system on an annual basis utilizing the operations department staff. All substations have detailed inspections completed on an annual basis.
   In addition, when planning new projects, all existing equipment impacted within the project scope is evaluated for upgrade or replacement during the design process. The Planning and Engineering departments manage a handful of programs that target areas of the system for improvements or upgrades.

2. Non-routine maintenance:
   a. Liberty CalPeco tracks this type of work through paper forms. Outage reporting, maintenance, and repair activities that are performed during emergency work are turned into Planning and Engineering for evaluation and updating of asset records.
   b. Items identified needing repair or maintenance through inspections are turned into the Planning and Engineering departments for further evaluation. Other field activities or customer reports that identify issues are also tracked and addressed by the Planning and Engineering departments.

Discuss proactive replacement programs versus run-to-failure models for each group, including:

1. The general maintenance approach is that all distribution and transmission equipment fall under a run-to-failure model. However, Liberty CalPeco does have some proactive programs to replace aging facilities such as the North Lake

Tahoe transmission loop replacement project, pole replacements due to intrusive or visual pole inspections, covered conductor replacement program, submersible transformers, areas of bad underground and known hazards such as copper wire on primary and replacing live front transformers.

2. These programs are driven by utilizing metrics from SAIDI/SAIFI circuit reports or address environmental and/or safety concerns, as is the case for submersible and live front transformers. Another effort is underway to replace aging substation equipment, including oil circuit breakers, transformers, and regulators based on dissolved gas analysis (DGA) and replacing old wooden structures at substations in an effort to reduce wildfire hazards.
3. These programs are based on information obtained through inspections, outage data or operational knowledge of the system. In addition to these programs, Liberty CalPeco is performing a complete system inventory under the Enhanced Detailed Visual Inspection initiative. This should help determine new opportunities for potential proactive maintenance programs by identifying areas with aging hardware, out dated or missing equipment, conventional fuses, lightning arrestors, etc.
4. Liberty CalPeco utilizes inspection data, engineering evaluations, manufacturer guidelines, and collaboration between departments to determine the need and prioritization of these programs.

5.3.3.1 Capacitor maintenance and replacement program

Liberty CalPeco has no defined capacitor maintenance program. Maintenance is performed on an as-needed basis per inspections or as turned in by field personnel. Capacitor banks have historically been exempt equipment per CalFire, so maintenance on them has been a low priority to date. Liberty CalPeco plans to reassess its capacitor maintenance program and determine risk/cost benefit in the coming years.

Program Timeline:

- **Before the upcoming wildfire season and before the next annual update –** Continue maintenance as needed pursuant to G.O. 165 inspections and as turned in by field personnel. No identified program changes.
- **Within the next 3** years – Evaluate current inspection program and inventory of capacitors and evaluate risk benefit of capacitor maintenance program. Evaluate effectiveness of non-expulsion fusing with capacitor banks.
- **Within the next 10** years – If deemed beneficial, implement capacitor maintenance program. If deemed effective, replace all non-expulsion fusing and non-exempt hardware.

5.3.3.2 Circuit breaker maintenance and installation

Liberty CalPeco has no defined breaker maintenance program aside from as needed pursuant to G.O. 174 inspections. Liberty CalPeco intends to replace all oil circuit breakers with either gas or vacuum circuit breakers to reduce fire risk and improve reliability. Replacing oil circuit breakers with gas or vacuum greatly reduces the wildfire risk associated with this equipment. This, coupled with replacement of wood structures at

substations, will alleviate any fire risk at the substation level. Liberty plans to have a breaker maintenance program in place by end of 2020.

Program Timeline:

- **Current Program** – Liberty CalPeco has no defined breaker maintenance program aside from as needed pursuant to G.O. 174 inspections. Liberty CalPeco intends to replace all oil circuit breakers with either gas or vacuum circuit breakers to reduce fire risk and improve reliability.
- **Before the upcoming wildfire season** – Continue maintenance as needed pursuant to G.O. 174 inspections and as turned in by field personnel. Proceed with breaker replacements.
- **Before the next annual update** – Continue maintenance as needed pursuant to G.O. 174 inspections and as turned in by field personnel. Proceed with breaker replacements.
- **Within the next 10 years** – Breaker maintenance program established and running. All OCBs replaced.

5.3.3.3 Covered conductor installation

Liberty CalPeco follows the covered conductor program as stated in the Wildfire Mitigation Plan, which is the reconductoring of bare electrical lines in various locations in Liberty CalPeco's Tier 2 and Tier 3 HFTD. Several factors drive the ability to begin reconductoring. These factors include: (1) receipt of the construction permit by regulatory authorities, (2) availability of material, (3) resources to perform the work, and (4) line clearance (maintaining reliability). Liberty CalPeco began reconductoring in 2019 as the first two projects were prioritized based on the ability to receive the construction permit in the same year.

Liberty CalPeco intends to replace all overhead primary conductor with covered conductor, given that its service territory is in Tier 2 or 3 Wildfire Threat areas. Liberty CalPeco has not yet developed a methodology to accurately track the effectiveness of the covered conductor, but, generally, installing covered conductor greatly reduces the wildfire risk associated with primary overhead conductor. Alternatives considered were rebuilds with open air conductor and undergrounding lines. Some underground sections are being designed pursuant to Rule 20. However additional underground projects may be evaluated in the future if they will greatly reduce risk in a particular area and are deemed cost-effective. Open air conductor was rejected due to limited risk mitigation.

Program Timeline:

- **Before the upcoming wildfire season -** Continue with covered conductor installation already in progress.
- **Before the next annual update –** Continue with covered conductor installation already in progress.
- **Within the next 3 years** – Continue to increase the amount of covered conductor installation.
- **Within the next 10 years –** Continue to increase the amount of covered conductor installation.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Covered Conductor Installation	2019 plan	700,000	3	255,474	All types of object contact, conductor failure - all.	Unknown	Unknown	Unknown	Existing	WMP Approval	N/A	In compliance	N/A	Estimated $614,000 per mile, plus $15,000 per pole, estimated 50% of poles needing to be replaced.
	2019 actual	550,000	-	-	All types of object contact, conductor failure - all.	Unknown	Unknown	Unknown	Existing	WMP Approval	N/A	In compliance	N/A	20 poles installed, no conductor.
	2020	3,198,000	5	609,143	All types of object contact, conductor failure - all.	Unknown	Unknown	Unknown	Existing		N/A	In compliance	N/A	
	2021	8,337,000	11	775,535	All types of object contact, conductor failure - all.	Unknown	Unknown	Unknown	Existing		N/A	In compliance	N/A	
	2022	9,734,000	10	995,297	All types of object contact, conductor failure - all.	Unknown	Unknown	Unknown	Existing		N/A	In compliance	N/A	Includes the 60kV 640 transmission line.
	2020-2022 plan total	21,269,000												

5.3.3.4 Covered conductor maintenance

As covered conductor is installed, field personnel will review the condition of the covered conductor to evaluate the need for a maintenance program. At a minimum, conductor will be visually inspected during routine G.O. 165 inspections.

5.3.3.5 Crossarm maintenance, repair, and replacement

Liberty CalPeco has no defined crossarm maintenance program aside from as needed pursuant to G.O. 165 inspections. Liberty CalPeco performs maintenance on an as needed basis per inspections or as turned in by field personnel.

5.3.3.6 Distribution pole replacement and reinforcement, including with composite poles

Liberty CalPeco has a pole test and treatment program, pursuant to G.O. 165. This program inspects and treats all poles in a 10-year cycle. All poles are treated with a wood preservative and then inspected for structural integrity. If a pole needs to be reinforced, a steel stub is scheduled for installation at the bottom of the pole. If a pole cannot be steel-reinforced due to deterioration, then it is scheduled for replacement, pursuant to G.O. 165, to reduce fire risk and to improve reliability. Liberty CalPeco has not yet developed methodology to accurately track the effectiveness of pole testing and treating. Pole replacements that occur out of this program are capital expenditures that go through appropriate approval channels. No alternatives to this program are being considered.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Distribution pole replacement and reinforcement, including with composite poles	2019 plan	45,000	12	3,750	All types of equipment / facility failure	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	See attached intrusive dist pole inspection schedule.
	2019 actual	300,000	12	25,000	All types of equipment / facility failure	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2020	Unknown	Unknown	Unknown	All types of equipment / facility failure	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2021	Unknown	Unknown	Unknown	All types of equipment / facility failure	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2022	Unknown	Unknown	Unknown	All types of equipment / facility failure	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2020-2022 plan total													

Current intrusive pole testing program involves testing all poles on a 10-year cycle.
Poles are replaced on an as needed basis per inspections or as turned in by field personnel.

5.3.3.7 Expulsion fuse replacement

Liberty CalPeco has started its expulsion fuse replacement program with a plan of fully implementing by 2026. This includes changing all of its current expulsion fuses to non-expulsion fuse types or electronic devices. This will alleviate spark hazards associated with its current expulsion fuse types (a non-exempt hardware per CalFire). The first priority is to replace all transformer fusing. In the coming years, the larger tap/lateral fusing will be replaced with non-expulsion type or electronic fault interrupters in order to coordinate with the downstream transformer fusing and upstream line reclosers or substation breakers. Liberty CalPeco plans to track ignition events going forward with an expectation that ignitions due to expulsion fusing will be completely alleviated by 2026.

Program Timeline:

- **Current Program** – Liberty CalPeco is focused on replacing expulsion fuses with non-expulsion "Fault Tamers' at all overhead transformer locations.
- **Before the upcoming wildfire season** – Continue with transformer fuse replacements. Pilot dropout recloser program initiated. Start addressing non-exempt hardware at each location where fuses are changed out
- **Before the next annual update** – Continue with transformer fuse replacements. Pilot dropout recloser program underway. Continue addressing non-exempt hardware at each location where fuses are changed out.

- **Within the next 3 years** – Expand the fuse replacement program to all lateral and any mainline fuses. Target all fuses within 6-year program (started in 2019).
- **Within the next 10 years** – All expulsion fuses replaced with non-expulsion fuses or electronic device (such as dropout reclosers).

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Expulsion fuse replacement	2019 plan	721,550	2,055	351	Fuse failure - conventional blown fuse	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2019 actual	170,000	2,055	83	Fuse failure - conventional blown fuse	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2020	1,544,000	2,055	751	Fuse failure - conventional blown fuse	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2021	1,544,000	2,055	751	Fuse failure - conventional blown fuse	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2022	1,544,000	2,055	751	Fuse failure - conventional blown fuse	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2020-2022 plan total	4,632,000												

5.3.3.8 Grid topology improvements to mitigate or reduce PSPS events

Liberty CalPeco's grid topology efforts primarily reside in its Rule 20 undergrounding program. The Sagehen microgrid project would also qualify as a grid topology improvement to reduce PSPS because the customer would have generation onsite. Rule 20 projects are ongoing. The Sagehen project is a 2020 effort to add solar with battery backup at a small research facility in Liberty CalPeco's Tier 2 area. The project will initially allow the customer to remain with power while the three-mile line feeding through high fire threat area is de-energized for the fire season. The long-term plan is to eventually remove the line completely and allow the customer to be offline. The underground projects are included in other efforts in this section, so costs are not included here. Only costs for the Sagehen microgrid are shown in the below table.

Program Timeline:

- **Current Program** – Include Rule 20 underground programs and identify the Sagehen project as a pilot program to improve grid topology.
- **Before the upcoming wildfire season** – Get Sagehen project online as pilot microgrid.
- **Before the next annual update** – Evaluate Sagehen if complete or complete Sagehen if delayed by permitting.
- **Within the next 3-10 years** – Evaluate risk/cost benefit of microgrid projects and plan others if cost-effective.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Grid topology improvements to mitigate or reduce PSPS events	2019 plan													Installation of Sagehen Microgrid
	2019 actual													
	2020	616,000	4	154,000	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	N/A	
	2021	-	-	-										
	2022	-	-	-										
	2020-2022 plan total	616,000												

5.3.3.9 Installation of system automation equipment

Liberty CalPeco plans to continue replacing older reclosers and line air switches with new recloser technology with a focus on moving toward a robust Distribution Automation Control (DAC) scheme. These are being strategically placed for better sectionalization of lines during switching and PSPS events, but also in an effort to bring DAC into play in the next three years. The goal of DAC is to have an automated switching control in place, working in parallel with the current SCADA system, to keep as many customers in service as possible during a system event. Liberty CalPeco will prioritize more populated areas in its territory and will also prioritize devices with notorious issues, replacing them with newer, more reliable equipment. The resulting benefits include improved reliability, smaller PSPS zones affecting fewer customers, faster remote switching ability via SCADA, and reduced outage times.

- **Current Program** – Liberty CalPeco is replacing many older recloser types for improved reliability and adding SCADA control. Many older air switches/motor operated switches are also being targeted for replacement.
- **Before the upcoming wildfire season** – Continue with recloser installs already in progress.
- **Before the next annual update** – Continue with recloser installs already in progress.
- **Within the next 3 years –** Install reclosers at a rate of four per year. Implement Distribution Automation Control system.
- **Within the next 10 years** – Continue replacements/new installs as deemed necessary. Operate fully implemented Distribution Automation Control system.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Automatic recloser operations	2019 plan	440,000	2,055	214	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing	2019 WMP	WMP memorandum account	In compliance	N/A	Reclosers are put on one shot during fire season for wildfire prevention.
	2019 actual	-	2,055	-	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing	2019 WMP	WMP memorandum account	In compliance	N/A	Reclosers are put on one shot during fire season for wildfire prevention.
	2020	360,000	2,055	175	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	In compliance	N/A	Reclosers are put on one shot during fire season for wildfire prevention.
	2021	540,000	2,055	263	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	In compliance	N/A	Reclosers are put on one shot during fire season for wildfire prevention.
	2022	360,000	2,055	175	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	Existing		WMP memorandum account	In compliance	N/A	Reclosers are put on one shot during fire season for wildfire prevention.
	2020-2022 plan total	1,260,000												

5.3.3.10 Maintenance, repair, and replacement of connectors, including hotline clamps

Liberty CalPeco has no program to replace any pole hardware other than on an emergency or urgent repair basis. Liberty CalPeco plans to inventory its entire service territory with an emphasis on poles with non-exempt hardware (per CalFire), open wire secondary, cracked grey wire secondary, and copper primary conductor sections. Liberty CalPeco will then replace all of this hardwire/wire on a reasonable timeline. Benefits will include fewer ignitions (with a drive to zero).

Program Timeline:

- **Current Program** – Liberty CalPeco has no program in place for maintenance, repair, and replacement of connectors except as needed in urgent or emergency situations.

- **Before the upcoming wildfire season** – Complete system inventory and include in GIS.
- **Before the next annual update** – Complete system inventory and include in GIS. Repair critical issues discovered in inventory.
- **Within the next 3 years** – Identify areas of maintenance needed in HFTD Tier 3 and complete replacements of non-exempt hardware in Tier 3 fire threat areas.
- **Within the next 10 years** – Identify areas of maintenance needed in HFTD Tier 2 and 3 and complete replacements of non-exempt hardware in Tier 2 and 3 fire threat areas.

5.3.3.11 Mitigation of impact on customers and other residents affected during PSPS event

None.

5.3.3.12 Other corrective actions

See 5.3.3.18 – Other.

5.3.3.13 Pole loading infrastructure hardening and replacement program

Liberty CalPeco does not have a Pole Loading Assessment program but does pole loading calculations on all poles that are being replaced or have an increase in loading from proposed new attachments, pursuant to G.O. 95. Pole loading calculations are completed on all poles as part of the covered conductor installation program in the WMP to remove the possibility of pole failures for improved system reliability.

Program Timeline:

- **Current Program** – As part of the efforts outlined in 5.3.3.3, Liberty CalPeco is performing pole loading calculations as well as pole health evaluation to determine the strength and weight-bearing ability to support covered wire.
- **Before the upcoming wildfire season** – Continue pole loading calculations as part of covered conductor program.
- **Before the next annual update** – Continue pole loading calculations as part of covered conductor program.
- **Within the next 3 years –** – Continue pole loading calculations as part of covered conductor program.
- **Within the next 10 years** – Continue pole loading calculations as part of covered conductor program.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
13. Pole loading infrastructure hardening and replacement program based on pole loading assesment program	2019 plan	930,000	3	339,416	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	Following covered conductor plan.
	2019 actual	550,000	1	550,000	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2020	1,515,000	5	288,571	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2021	2,820,000	11	262,326	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2022	3,535,000	10	361,452	All types of object contact, All typse of equpment/facility failure.	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2020-2022 plan total	7,870,000												

5.3.3.14 Transformers maintenance and replacement

Liberty CalPeco has no defined distribution transformer maintenance and replacement program. Annual DGA analysis is completed on substation transformers and replacement projects are planned, if necessary, as informed by testing. Liberty CalPeco performs maintenance and replacement as needed basis per inspections (DGA and G.O. 165) or as turned in by field personnel. If transformer maintenance requests increase during G.O. 95 inspections or as turned in by field personnel, then Liberty CalPeco may reevaluate the need for a separate program beyond the G.O. 165 inspection program.

Program Timeline:

- **Current Program** – Liberty CalPeco has no defined distribution transformer maintenance program. Maintenance and transformer replacement are performed on an as-needed basis per inspections, DGA analysis, or as turned in by field personnel.
- **Before the upcoming wildfire season** – Continue maintenance as needed per inspections and as turned in by field personnel.
- **Before the next annual update** – Continue maintenance as needed per inspections and as turned in by field personnel.
- **Within the next 3 years** – Continue maintenance as needed per inspections and as turned in by field personnel.

- **Within the next 10 years** – Continue maintenance as needed per inspections and as turned in by field personnel.

5.3.3.16 Undergrounding of electric lines and/or equipment

Liberty CalPeco has no defined program to underground electric lines and/or equipment aside from the Rule 20 program. If undergrounding electric lines and/or equipment outside of the Rule 20 program becomes necessary, then Liberty CalPeco may reevaluate the need for a separate program.

Program Timeline:

- **Current Program** – Work with counties and cities to prioritize areas that qualify to be undergrounded pursuant to Rule 20.
- **Before the upcoming wildfire season** – Continue to underground pursuant to Rule 20.
- **Before the next annual update** – Continue to underground pursuant to Rule 20.
- **Within the next 3-10 years -** Evaluate the ability to expand the Rule 20 program to include undergrounding for wildfire mitigation

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Undergrounding electric lines and/or equipment	2019 plan	-	-	-										
	2019 actual	-	-	-										
	2020	1,757,500	4	481,507	Overhead Primary Conductor	Unknown	Unknown	Non-Exempt Hardware	Existing	Rule 20 Program	N/A	In compliance	Rule 20	
	2021	6,100,000	1	4,880,000	Overhead Primary Conductor	Unknown	Unknown	Non-Exempt Hardware	Existing	Rule 20 Program	N/A	In compliance	Rule 20	
	2022	-	-	-										
	2020-2022 plan total	7,857,500												

5.3.3.17 Updates to grid topology to minimize risk of ignition in HFTDs

See discussion in 5.3.3.8.

5.3.3.18 Other / not listed

Tree Attachment Removal

Current Program: Out of convenience, prior utilities attached secondary and service conductors to trees, so as to avoid new pole installations. Liberty CalPeco's Tree Attachment Removal program will install poles to remove these tree attachments and attach to utility owned poles.[6] Poles are installed on an as needed basis per customer request to remove a service from a dead tree, scheduled by the customer for removal, or as turned in by field personnel that have identified a tree as dead or dying and a pole installation request is made to Engineering.

[6] Advice Letter No. 133-E, Report on Possible Wildfire Mitigation Plan Off Ramps, including Tree Attachment Removal as a necessary modification to Liberty CalPeco's 2019 Wildfire Mitigation Plan.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Other Corrective Action - Tree Attachment Removal	2019 plan	200,000	2,055	97	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown						
	2019 actual	244,148	2,055	-	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown						
	2020	600,000	2,055	292	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP Memo Account	In compliance	GO165	Following covered conductor plan.
	2021	600,000	2,055	292	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP Memo Account	In compliance	GO165	
	2022	600,000	2,055	292	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP Memo Account	In compliance	GO165	
	2020-2022 plan total	1,800,000												

Wire Upgrade Program

Open Wire Secondary Replacement:

In the past there was a construction standard that allowed for the installation of open wire secondary. Open wire secondary uses three or four bare conductors spread out on a cross arm to extend secondary voltage from pole to pole. The current construction standard requires the installation of a triplex or quadraplex conductor, which is three or four insulated conductors wrapped together. The open wire secondary replacement program was created to replace all open wire secondary with covered triplex or quadraplex conductor throughout the service territory to reduce potential vegetation contacts as part of the WMP.

Grey Wire Replacement:

In the past, there was a quadraplex and triplex secondary and service conductor that used a grey insulation for protection on it. Liberty CalPeco field personnel have discovered that this grey insulation, overtime, in some cases, has begun to develop small cracks and fractures that have led to the insulation actually falling off, leaving gaps and exposing the conductor to the elements, without any protection. With the insulation falling off, in small sections, the triplex or quadraplex bare conductor creates, not only a safety issue, but also a potential to cause wildfires due to the energized conductor shorting and falling to the ground. The Grey Wire replacement program was created to replace all grey wire secondary and service conductor throughout the service territory to reduce the risk of a wildfire as part of the WMP.

Overhead Asset Repairs from Asset Survey/GIS Update

As a result of the system-wide asset survey and GIS update, Liberty CalPeco estimates a portion of the assets from G.O. 165 review will require repairs and replacements of overhead assets.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Other Corrective Actions - Repairs and GO 165 Outcomes from Asset Survey/GIS Update	2019 plan													
	2019 actual													
	2020	3,500,000	2,055	1,703	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	Estimated Repairs/Replacements resulting from System-wide survey of all assets
	2021	-	-	-										
	2022	-	-	-										
	2020-2022 plan total	3,500,000												

5.3.4 Asset management and inspections

Liberty CalPeco's maintenance programs and protocols are almost entirely driven by its inspection of distribution and transmission lines, which meet schedule requirements as outlined in G.O. 165 and G.O. 174. In addition, when planning new projects, Liberty CalPeco evaluates all existing equipment impacted within the project scope for upgrade or replacement during the design process. The repair and/or replacement of equipment is initiated by field personnel through detailed inspections, visual patrols, or other work activities, and is then evaluated by either the planning or engineering department, depending on equipment type. All repair timelines are in accordance with G.O. 95 and 128 standards.

All distribution and transmission equipment fall under a run-to-failure approach with one exception being substations and the equipment therein. Substation breakers are maintained and tested by the Substation Department.

Liberty CalPeco does not have an "enhanced inspection" program. However, with the implementation of iRestore, the company will be able to plan and prioritize inspections and maintenance efforts using risk-based decision-making.

5.3.4.1&2 Detailed inspections of distribution and transmission electric lines and equipment

Liberty CalPeco's inspection program meets the minimum requirements as outlined in G.O. 165. The detailed inspections are carried out by Liberty CalPeco personnel and involve careful examination of assets. When issues are found, they are then evaluated by the planning and engineering departments for a final decision or work plan for repair or replacement.

Program Timeline:

- **Current Program** – Continue with G.O. 165 inspections.
- **Before the next annual update –** Convert the G.O. 165 inspection program from a paper format to electronic. Perform system-wide inventory of system and G.O. 165 inspections of all overhead distribution assets.
- **Within the next 3-10 years** - Evaluate how new technologies such as LiDAR and drones can be incorporated to improve the efficiency and accuracy of distribution line inspection. Continue to evaluate new technologies that will improve how inspection data is collected and move to a more predictive maintenance program rather than reactive.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Asset Survey/GIS Update	2019 plan													
	2019 actual													
	2020	6,000,000	2,055	2,920	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	Conduct System-wide survey of all assets
	2021	-	-	-										
	2022	-	-	-										
	2020-2022 plan total	6,000,000												

5.3.4.3 Improvements of inspections

Liberty CalPeco's inspection program is done manually with paper maps and paper forms. However, Liberty CalPeco will modernize its inspection programs with the iRestore mobile asset inspection application. This new mobile solution, to be deployed on phones and tablets, will streamline inspections and data collection for all assets. It should also improve the tracking of repairs generated when facilities are identified to need them. A database will house all inspection information, which improve tracking and reporting of the inspection and subsequent repair cycles.

Program Timeline:

- **Before the upcoming wildfire season** - Begin development of new inspection application to be deployed on mobile devices.
- **Before the next annual update** - Complete testing of new inspection application, fully deploy app to operations work force.
- **Within the next 3 years** - Invest in mobile technology to support inspections such as more accurate GPS, up to date devices and software, etc. Also look to new technologies to improve inspections such as drones and LiDAR. Design programs for tracking emergency maintenance activities.
- **Within the next 10 years** - Continue to invest in technology that will support all manner of inspections. Evaluate overall staffing levels to ensure inspections do not fall out of compliance.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Improvement of inspections	2019 plan													
	2019 actual													
	2020	890,000	2,055	433.1	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	Roll out of iRestore application, hire 3 inspectors to comply with GO 165 requirements, 2 inspector trucks, 1 wildfire coordinator vehicle
	2021	360,000	2,055	175.2	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	Add 1 additional inspector truck
	2022	260,000	2,055	126.5	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	
	2020-2022 plan total	1,510,000												

5.3.4.4&5 Infrared inspections of distribution and transmission electric lines and equipment

Liberty CalPeco has not yet decided whether to incorporate infrared inspections of distribution lines. Liberty CalPeco will evaluate adding infrared inspections of distribution lines. If deemed beneficial, increase inspection program scheduling and/or inspection procedures.

5.3.4.6 Intrusive pole inspections

Liberty CalPeco's intrusive pole inspection program is on a 10-year inspection cycle and performed by contractors. Wood poles that have previously passed intrusive inspections are also on the 10-year inspection cycle, which exceed the G.O. 165 requirement of 20 years. At a minimum, all poles are visually inspected and, when intrusive inspections are needed, they are excavated around the base of the pole and may include a sound-and-bore test. Poles are also treated with preservative paste or liquid at this time. Weakened poles are either reinforced or replaced based on shell thickness measurements.

Program Timeline:

- **Before the upcoming wildfire season** - No changes to existing program.
- **Before the next annual update -** Liberty CalPeco will evaluate the benefit of performing intrusive inspections internally versus using contractors.
- **Within the next 3-10 years -** Liberty CalPeco will adapt its plan to new technology and/or new regulations.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Intrusive pole inspections	2019 plan													
	2019 actual	13,044	12	1,087	Unknown	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	Line miles to treated based on invoices from this program.
	2020	118,554	68	1,743	Unknown	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	Forecast based on number of poles planned to be treated
	2021	145,308	104	1,397	Unknown	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2022	80,887	98	825	Unknown	Unknown	Unknown	Unknown	Existing	GO165	N/A	In compliance	GO165	
	2020-2022 plan total	344,749												

5.3.4.7&8 LiDAR inspections of distribution and transmission electric lines and equipment

Liberty CalPeco does not utilize LiDAR for distribution line inspections at this time.

Program Timeline:

- **Before the upcoming wildfire season** - Develop criteria for LiDAR pilot project to evaluate how Liberty CalPeco will develop use cases for LiDAR inspections.
- **Before the next annual update** - Execute the LiDAR pilot and evaluate data collected.
- **Within the next 3 years** - If the LiDAR pilot project is proven to aid wildfire mitigation efforts, incorporate LiDAR into inspection programs.
- **Within the next 10 years** - Liberty CalPeco will evaluate developing an in-house program versus using contractors to perform LiDAR inspections.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
LiDAR inspections of distribution and transmission electric lines and equipment	2019 plan													Distribution and transmission LiDAR projects would be one project, not separate.
	2019 actual													
	2020	250,000	2,055	122	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	
	2021	300,000	2,055	146	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	
	2022	300,000	2,055	146	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	In compliance	GO165	
	2020-2022 plan total	850,000												

5.3.4.9&10 Other inspections on distribution and transmission electric lines and equipment

Liberty CalPeco does not have any other discretionary inspection programs for distribution electric lines at this time. After any outage, planned or otherwise, the impacted lines are patrolled and visually inspected. Any issues found will be corrected or reported as appropriate.

Program Timeline:

- **Before the upcoming wildfire season** - No changes
- **Before the next annual update -** Liberty CalPeco will have programs and enterprise business systems in place to track these type of non-routine inspections.
- **Within the next 3-10 years -** Liberty CalPeco will evaluate new inspection initiatives that might support or enhance existing inspection programs.

5.3.4.11&12 Patrol inspections of distribution and transmission electric lines and equipment

Liberty CalPeco performs annual patrols of all distribution lines in Tier 2 areas and every 6 months for those lines in Tier 3 by vehicle or helicopter as terrain allows.

Program Timeline:

- **Before the upcoming wildfire season** - No changes.
- **Before the next annual update -** No changes.
- **Within the next 3 years -** Evaluate the use of drone technology to enhance efficiency of patrol inspections.
- **Within the next 10 years** - Continue to evaluate technology that will assist with inspections.

5.3.4.13 Pole loading assessment program to determine safety factor

As part of the efforts outlined in 5.3.3.3 (Covered Conductor), Liberty CalPeco is performing pole loading calculations as well as pole health evaluation to determine the strength and weight baring ability to support covered wire.

See 5.3.3.13 Pole Loading Infrastructure Hardening and Replacement Program for estimated program costs.

Liberty CalPeco plans to integrate the iRestore software to improve efficiencies in getting the pole information found in the field into the pole loading analysis software for pole replacements for the covered conductor program.

5.3.4.14 Quality assurance / quality control of inspections

Liberty CalPeco personnel audit some inspection records, but there is no established program for tracking and recording them. See Section 5.3.5 for Vegetation Management Quality Assurance/Quality Control inspections.

Program Timeline:

- **Before the upcoming wildfire season** - Liberty CalPeco will establish a program for Quality Assurance/Quality Control of equipment inspections, contingent on ability to hire resource in time.
- **Before the next annual update -** Liberty CalPeco will implement a Quality Assurance/Quality Control for all types of line and substation inspections.

- **Within the next 3 years -** Liberty CalPeco will have new enterprise business systems in place that will enable more robust tracking mechanisms such as integrated workforce management systems with built in quality checks.
- **Within the next 10 years** - Liberty CalPeco will evaluate having independent or third-party audits of inspections to further validate inspection data and records.

5.3.4.15 Substation inspections

Liberty CalPeco performs substation inspections pursuant to its G.O. 174 plan. Substation inspections maintain public and worker safety, and regulatory compliance by staying in conformance with G.O. 174. It also identifies equipment needing maintenance and/or testing in accordance with prudent utility practice. Liberty CalPeco also maintains and tests relays in accordance with our protocols and in order to maintain compliance with NERC requirements.

Program Timeline:

- **Before the upcoming wildfire season** - Continue substation inspections in accordance with its G.O. 174 plan
- **Before the next annual update -** Continue substation inspections in accordance with its G.O. 174 plan
- **Within the next 3 years -** Evaluate current inspection program and inventory of substation equipment and evaluate risk/cost benefit of increased inspection program
- **Within the next 10 years** - If deemed beneficial, increase inspection program scheduling and/or inspection procedures

5.3.5 Vegetation management and inspections

1. **Address how the electrical corporation has collaborated with local land managers to leverage opportunities for fuel treatment activities and fire break creation, and compliance with other local, state, and federal forestry and timber regulations.**

   Liberty CalPeco is actively engaged with local land managers to explore opportunities for fuel treatment activities and fire break creation that will assist with mutual long-term management goals and will comply with state and federal forestry regulations. In 2019, Liberty CalPeco, along with its partners the California State Parks, the Lake Tahoe Basin Management Unit (LTBMU), the Tahoe National Forest, the California Tahoe Conservancy and the Tahoe Fire and Fuels Team applied for a California Climate Investment (CCI) grant to conduct comprehensive multi-jurisdictional forest resilience and fuel reduction treatments surrounding critical community infrastructure on the California side of the Lake Tahoe Basin (Basin). Ultimately, the grant was not funded, however, this Resilience Corridor Project represents a collaborative effort between federal, state and local agencies to conduct comprehensive multi-jurisdictional forest resiliency and fuels reduction treatments that aim to 1) create resilience corridors, 2) aid in resource surveys in support of future efforts, and 3) assist in conducting forest management research

along with investigating innovative technology opportunities. In October, the project was approved and granted a categorical exclusion from documentation in an Environmental Assessment or Environmental Impact Statement as it meets the criteria outlined in the Water Infrastructure Improvement for the Nation Act of 2016, streamlining vegetation management efforts in these areas. Liberty CalPeco plans to implement the first Forest Resilience Corridor project in 2020.

Also in 2020, Liberty CalPeco will host working groups with SME's, local and state agencies to understand the greatest needs in improving fuel reduction practices. Any further efforts developed in the working groups that reduce fire risk will be developed into a scope of work for the coming year and will become a part of a more comprehensive fuel reduction effort within the Vegetation Management Plan.

2. **Discuss how the electrical corporation identifies and determines which vegetation is at risk of ignition from utility electric lines and equipment.**

Liberty CalPeco identifies and determines which vegetation is at risk of ignition through the implementation of inspection and maintenance programs to ensure compliance with all applicable laws and regulations pertaining to vegetation and electrical conductors.

Liberty CalPeco performs Routine Vegetation Maintenance inspections of entire circuits to prescribe trimming and removal of vegetation as a safeguard against grow-ins or fall-ins and to conform to required laws and regulations. Liberty CalPeco intends to perform such maintenance inspections and subsequent tree work once every three years per circuit. In prescribing trimming or removal the following factors are considered: 1) The potential for vegetation to grow and/or encroach within the minimum allowed distances to the facilities within the cycle. 2) The potential for vegetation to structurally fail into the facilities within the cycle. Additional site conditions and factors are considered in prescribing tree work such as length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, species characteristics, vegetation growth rate, arboricultural practices, environmental characteristics of the site, local climate, and elevation.

In addition to routine cycle maintenance which is structured around a three year maintenance cycle, it has been determined necessary to perform additional inspections to help ensure electrical safety and reliability. Due to the nature of the increasing tree mortality within the service territory, Liberty CalPeco has implemented a program to inspect for dead and dying trees throughout its entire system by performing an accelerated inspection of the circuits under the Catastrophic Event Memorandum Account (CEMA).

Liberty CalPeco proposes to implement four additional program initiatives in its 2020 WMP that will enhance its wildfire mitigation efforts:

Tier 3 Inspections:

Liberty CalPeco operates approximately 50 miles of overhead conductor in Tier 3 in the High Fire-Threat District. Liberty CalPeco plans to inspect its overhead system within

Tier 3 of the High Fire-Threat District on an annual basis to prescribe any pruning or removals necessary to obtain compliance with regulation requirements.

Fuel Reduction/Wood Management Program:

In addition to planned Forest Resilience Corridor efforts, Liberty CalPeco recognizes the need for additional fuel reduction and wood management throughout the service territory. Vegetation left behind from clearing activities (i.e. logs, bole wood, and large branches), if left untreated, becomes an increasingly dry fuel source adjacent to power lines and an infestation risk to remaining trees by forest insects. Recently cut material, especially logs and large branches, provide ideal conditions for tree-damaging insects to breed and increase their populations. When the adult insects emerge from this material, they attack live trees in greater numbers. This can increase the number of dead trees, branches, and tops, amplifying the need for clearing activities and increasing long-term maintenance costs.

Cutting down hazardous trees and clearing limbs away from power lines ensures compliance and reduces ignition risk by eliminating strike and grow-in potential, but it does not address the fuel load that results from these activities. In the event of a fire, dead, dry fuel left behind by vegetation management activities will contribute to the intensity and rate of spread of the fire. There is also a risk of the fuel becoming ignited by power lines during wire-down, blown fuse, and other equipment failure events. Added benefits of reducing fuel load near powerlines is the protection of the powerlines from wildfire and increased effectiveness of suppression activities, regardless of the ignitions cause.

Liberty CalPeco's local and state agency partners (CAL Fire, Tahoe Regional Planning Agency, California Tahoe Conservancy, Tahoe Fire and Fuels Team, US Forest Service, and local fire agencies) have been highly supportive partners and have increased their emphasis on the need to reduce forest fuel load that results from power line vegetation management. Liberty CalPeco intends to work closely with these partners to develop best practices for an effective fuels management program that reduces both fire ignition risk and fire spread potential, while benefitting our local community and the environment.

Forest Resilience Corridor: See section 5.3.5.1 for details regarding this program.

Quality Assurance/Quality Control Program: Liberty CalPeco audits all vegetation inspection work as part of the review and permitting process for trees located on local, federal, and state agency land. Work quality is assessed for accuracy of the work order and for correct identification of tree work. Work corrections are made in the field and reviewed with the contractor. While Liberty CalPeco's existing process is able to identify issues and implement corrective action, it lacks the internal resources to implement an industry best practice Quality Assurance/Quality Control program. Liberty CalPeco has recognized the need and will develop a formal Quality Assurance/Quality Control audit program for vegetation management activities that use a third party contractor to ensure quality of work.

3. **Describe how (i.e., criteria, data, protocols, studies, etc.) the utility made the determination to trim any vegetation beyond required clearances in G.O. 95.** Liberty CalPeco has adopted and incorporated General Order 95, Appendix E recommended clearances at time of trimming in its vegetation management plan. Minimum clearance, at time of trim, is 12 feet for distribution lines (up to 60kV) and is 30 feet for 120kV lines. Liberty CalPeco does not have power lines operating in the 72kV-110kV category. Liberty CalPeco considers more than just line operating voltage when determining appropriate clearance and will obtain greater clearances as needed to ensure compliance until the next scheduled maintenance. The consideration to obtain greater clearances will be based on multiple factors, including: length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, species characteristics, vegetation growth rate, arboricultural practices, local climate, and elevation.

4. **Describe utility plan to mitigate identified trees with strike potential, including information about how (i.e., criteria, protocols, data, statutes, etc.) the electrical corporation identifies and defines "hazard trees" and "trees with strike potential" based on height and feasible path to strike powerlines or equipment. Describe utility plan to identify reliability/at-risk tree species to trim or remove, where feasible, per location-specific criteria.**

   Liberty CalPeco complies with G.O. 95 Rule 35, by removing trees when "dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines." Additionally, Liberty CalPeco complies with Public Resources Code 4293 by removing "Dead tree, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line." Hazard trees are identified through vegetation inspection programs and are evaluated best practices derived from the *CalFire Power Line Fire Prevention Field Guide*, The *USFS Region 5 Hazard Tree Guidelines For Forest Service Facilities and Roads in the Pacific Southwest Region*, and *ANSI A300 Standards (Part 9) – Tree Risk Assessment.*

   "Trees with strike potential" are trees or parts of trees that have the potential to contact the electrical facilities if they were to fail. Assessing strike potential begins with determining if the tree is tall enough to reach the electrical facilities. Tree height is measured using forestry devices such as a line tape and clinometer, or laser rangefinder/hypsometer. If a tree, or part of a tree, is tall enough to reach an electrical facility, it must also have a path to the target. Direction of fall (slope, lean, etc.) and protection (trees or other objects blocking the path) are also considered when determining the strike potential of a tree.

   Liberty CalPeco's inspection process accounts for species growth and failure characteristics when determining if trees require remediation. Understanding species characteristics combined with local environmental conditions leads to the determination of whether a tree should be trimmed, removed, or left alone. Liberty CalPeco categorizes the growth potential of trees as slow, medium, and fast growing trees and are trimmed accordingly based on their growth potential. Trees with slow

to medium growth potential are trimmed a minimum of 12 feet from the power line, while trees with fast growth potential are trimmed 15 feet or greater. In addition to growth rate and grow-in potential, species failure potential is also considered when identifying at-risk species. All trees are susceptible to structural defects, disease, and environmental conditions, and one of the factors for determining failure potential is based on how individual species react to those conditions. A structural defect, like a forked top, may be considered moderate to high risk of failure in some species, while the same defect may be considered low risk in others. Liberty CalPeco is in the process of developing a tree failure database that will use tree related outage data to explore other opportunities for targeting reliability/at-risk species and how to treat them.

5. **Include a discussion of how the utility's overall vegetation management initiatives address risks that may arise from trimming or removing trees, including but not limited to erosion, wind, flooding, etc.**

   Vegetation management activities are necessary to protect the environment by ensuring that fires are not ignited by vegetation coming into contact with electrical equipment. Liberty CalPeco is committed to carrying out vegetation management in an environmentally responsible manner, while supporting the principles of ecologically sustainable development. Liberty CalPeco's vegetation management plan includes resource protection measures that are designed to comply with regulations adopted by State, Federal, and Local Government agencies. Implementing best practices for water quality, terrestrial wildlife, sensitive and rare plants, non-native invasive plant management, and hazardous spill control help to address environmental concerns that may arise from vegetation management activities.

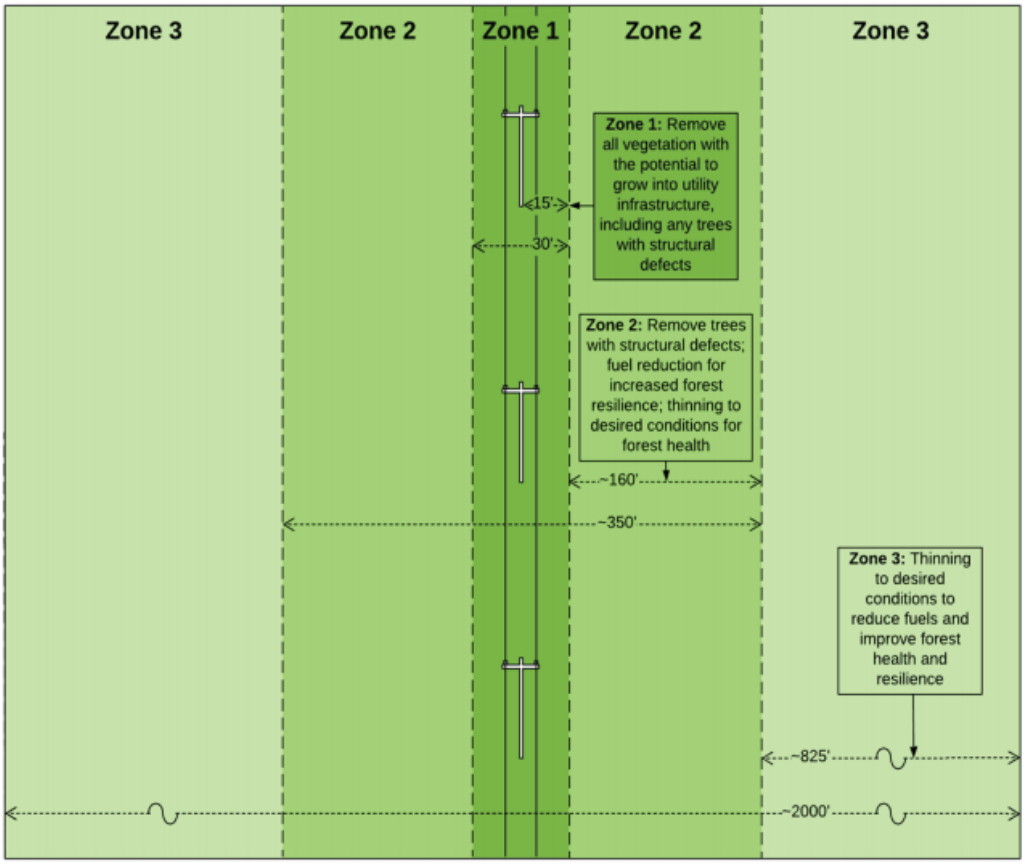
5.3.5.1 Additional efforts to manage community and environmental impacts

Liberty CalPeco is committed to carrying out vegetation management work in an environmentally responsible manner while supporting the principals of ecologically sustainable development. Liberty CalPeco strives to adhere to all regulations and policies as adopted by state, local, and federal agencies. Liberty CalPeco has not developed an initiative around additional efforts to manage community and environmental impacts.

The Forest Resilience Corridor Project is a comprehensive multi-jurisdictional effort in forest resiliency and fuels reduction surrounding critical community infrastructure. The proposed project area is on approximately (~) 7,600 acres of lands managed by the Lake Tahoe Basin Management Unit (LTBMU) and the Tahoe National Forest (Tahoe NF). The project comprises roughly 55 miles of Liberty CalPeco power lines, with ~54 miles on the LTBMU and one mile on the Tahoe NF. Liberty CalPeco plans to implement the first Forest Resilience Corridor project in 2020. Further information about the Forest Resilience Corridor Project can be found at: https://www.fs.usda.gov/nfs/11558/www/nepa/111291_FSPLT3_4880627.pdf.

Vegetation Treatment Zones:
There are three treatments zones that the Resilience Corridor Project will enact around the power lines (Figure 2):

- Zone 1 (up to 15’ each side of power line, ~200 acres): vegetation, including shrubs ≥ 18” high, with potential to grow into utility infrastructure will be removed, along with defect trees.
- Zone 2 (up to 175’ each side of power line, ~2,200 acres): trees with structural defects with the potential to strike utility infrastructure will be removed; fuels will be reduced to improve forest resilience to fire, insect, disease, and drought; and, thinning to desired conditions will improve forest health and resilience. The target average stand density is 60 BAF (basal area factor) with a range of 40-80 BAF. For trees less than 10” in diameter in the understory, a minimum of 10 tree per acre will be retained.
- Zone 3 (up to ~1000’ each side of power line, ~5,200 acres): reducing fuel loads and thinning the forest to desired conditions will improve forest health and resilience to disturbance. The target average stand density is 100 BAF, with a range of 80-120 BAF. For trees less than 10” in diameter in the understory, a minimum of 10 trees per acre will be retained. Liberty CalPeco will not perform work in zone 3.



Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Additional efforts to manage community and environmental impacts	2019 plan													
	2019 actual													
	2020	660,000	14	47,143	Vegetation Contact	Unknown	Unknown	Unknown	Existing	WMP Approval		Exceeding	N/A	
	2021	660,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	Existing	WMP Approval		Exceeding	N/A	
	2022	660,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	Existing	WMP Approval		Exceeding	N/A	
	2020-2022 plan total	1,980,000												

- **Before the upcoming wildfire season** – Develop plan with USFS for implementation of first Forest Resilience Corridor project along Liberty CalPeco's 625 (60kV) power line.
- **Before the next annual update** – Complete 625 FRC project and describe effectiveness of the program in the next annual update.
- **Within the next 3 years** – Coordinate with stakeholders to implement plan and determine schedule for upcoming projects.

5.3.5.2&3 Detailed inspections of vegetation around distribution and transmission electric lines and equipment

Liberty CalPeco performs Routine Vegetation Maintenance through detailed inspections of entire circuits to prescribe trimming and removal of vegetation as a safeguard against grow-ins or fall-ins and to conform to required laws and regulations. Liberty CalPeco intends to perform such inspections and work once every three years per circuit. In prescribing trimming or removal, the following factors are considered: 1) The potential for vegetation to grow and/or encroach within the minimum allowed distances to the facilities within the cycle. 2) The potential for vegetation to structurally fail into the facilities within the cycle. Additional site conditions and factors are considered in prescribing tree work such as length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, species characteristics, vegetation growth rate, arboricultural practices, environmental characteristics of the site, local climate, and elevation.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Detailed inspections of vegetation around distribution electric lines and equipment	2019 plan	500,000	200	2,500/mile	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC		Exceeding	GO 95 Rule 35; PRC 4293	
	2019 actual	450,000	170	2,647/mile	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC		Exceeding	GO 95 Rule 35; PRC 4294	
	2020	610,000	230	2,652/mile	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC		Exceeding	GO 95 Rule 35; PRC 4295	
	2021	556,000	210	2,650/mile	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC		Exceeding	GO 95 Rule 35; PRC 4296	
	2022	570,000	215	2,651/mile	Vegetation Contact	Unknown	Unknown	Unknown				Exceeding	GO 95 Rule 35; PRC 4297	
	2020-2022 plan total	1,736,000												

Detailed inspections and Routine Vegetation Maintenance is continuous and ongoing.

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

Liberty CalPeco responds to vegetation management emergencies as they are discovered by field reports from personnel, first responders, and reports from the general public. During red flag warnings or other urgent conditions, tree crews are available to respond to emergency situations as they arise. For the upcoming fire season and the years that follow, Liberty CalPeco will examine best practices established by other utilities to determine whether there is a need for enhanced emergency vegetation management response during red flag warnings.

Before the upcoming wildfire season – Liberty CalPeco's 2019 Fire Prevention Plan has established new operating guidelines and work restrictions depending on the forecasted fire danger using a proprietary Fire Potential Index (FPI). The FPI is in development, and will be ready for implementation for the upcoming wildfire season. By restricting work activities during extreme weather events and increasing patrols, there will be more field observations and potential for additional vegetation management work.
Before the next annual update – Liberty CalPeco will compare its current practices with the best practices established by other utilities and determine if there is a need to enhance the approach to emergency vegetation management during red flag warnings. If a need for greater response is identified, Liberty CalPeco will incorporate this approach in the 2021 WMP.
Before the next 3 to 10 Years – Implement emergency response plans that mitigate fire risk.

5.3.5.5 Fuel management and reduction of "slash" from vegetation management activities

Liberty CalPeco's current practice for slash and debris removal are based on historic industry practices. Only slash measuring less than 4" diameter is treated as follows:

- Residential Areas Accessible by Roads – Slash will be chipped. Chips may be hauled off site to a different location or may be broadcasted back onto the site.
- Rural or Forested Areas not Accessible by Roads – Slash will be lopped and scattered in a non-continuous manner outside of the utility right-of-way; or slash will be lopped and scattered as to ensure that the vertical height is not more than 18" above the ground.

Wood greater than 4" diameter is not removed from the work location unless required under certain government authorizations. Slash treatment is the responsibility of Liberty CalPeco's contractors and is included in the costs of performing tree work, and costs for slash treatment are not tracked separately. As described at the beginning of section 5.3.5, Liberty CalPeco has recognized the need to evaluate the current fuel management approach and develop a new methodology for fuels treatment that aligns more closely with joint goals of agency partners and the local community to ensure that vegetation management fuel load is treated in a manner that reduces both fire ignition risk and the potential for increased fire intensity.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Fuel management and reduction of "slash" from vegetation management activities	2019 plan													
	2019 actual													
	2020	2,000,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account	Exceeding		
	2021	2,500,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account	Exceeding		
	2022	2,500,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account	Exceeding		
	2020-2022 plan total	7,000,000												

Before the upcoming wildfire season – Liberty CalPeco plans to continue to work with the local and state agency land managers, as well as the local community to develop new standards for fuel reduction and slash treatment. Liberty CalPeco will host workshops with subject matter experts from these agencies to assist in the development of a fuel reduction and wood removal program that will reduce fire risk and benefit the local community and surrounding forest.

Before the next annual update – Liberty CalPeco intends to complete the program scope of work and justification and will begin to implement the new fuel reduction practices prior to the 2021 annual WMP update.

Within the next 3 years – Monitor program success and continue to work with stakeholders to update best practices. Continue to improve efficiency of the program.

5.3.5.6 Improvement of inspections

Liberty CalPeco frequently reviews inspection protocols and procedures with its contractors and make adjustments accordingly. Every three years Liberty CalPeco has a third party assessment of the vegetation management program which analyzes vegetation management protocols, production, resource allocation, cycle length, workload, compliance, and other aspects of the program. The report validates aspects of the program and provides recommendations for improvements to align with industry best practice. By having work load, production, and cycle length examined, Liberty CalPeco can determine the need for improvements in its inspection protocols.

Before the upcoming wildfire season – Liberty CalPeco will work to select a qualified third party to perform the vegetation management system assessment which will be completed in the fall of 2020.
Before the next annual update – Liberty CalPeco will evaluate the results of the system assessment and detail any inspection improvements and will describe any improvements in the next annual update.
Between 3 and 10 years – Continue to evaluate inspection programs and examine results of the next system assessment.

5.3.5.7&8 LiDAR inspections of vegetation management

Liberty CalPeco has not used LiDAR to perform vegetation inspections along electric lines. As described in section 5.3.4.7, Liberty CalPeco is exploring use cases for LiDAR inspections and will develop pilot projects that help to determine if LiDAR is more efficient and cost effective than traditional inspection methods.

5.3.5.9&10 Other vegetation management

Liberty CalPeco operates approximately 50 miles of overhead distribution and transmission in Tier 3 in the High Fire-Threat District. Liberty CalPeco plans to implement annual vegetation inspections for the overhead distribution system within Tier 3 of the High Fire-Threat District to prescribe any pruning or removals necessary to obtain compliance with regulation requirements.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Other Vegetation Management	2019 plan													
	2019 actual													
	2020	400,000	50	8,000	Vegetation Contact	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account		GO 95 Rule 35; PRC 4293	
	2021	400,000	50	8,000	Vegetation Contact	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account		GO 95 Rule 35; PRC 4293	
	2022	400,000	50	8,000	Vegetation Contact	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account		GO 95 Rule 35; PRC 4293	
	2020-2022 plan total	1,200,000												

Before the upcoming wildfire season – Liberty CalPeco will work to draft the Tier 3 Inspections to align with the already established inspection programs (Routine Maintenance & CEMA) to be able to begin inspections in 2020.

Before the next annual update – Liberty CalPeco will have completed the first cycle inspection of the Tier 3 Inspections and will have data to report on.

Within the next 3 years – Continue to implement enhanced inspections on an as needed basis and look for opportunities to implement additional enhanced inspections.

Within the next 10 years – Continue to implement enhanced inspections on an as needed basis and look for opportunities to implement additional enhanced inspections.

5.3.5.11&12 Patrol inspections of vegetation

Liberty CalPeco's current Vegetation Management Plan is structured around a three-year maintenance cycle. Due to the nature of the increasing tree mortality within the service territory, Liberty CalPeco has identified the need to inspect for dead and

dying trees throughout its entire system by performing an accelerated inspection of the circuits under the Catastrophic Event Memorandum Account (CEMA). Liberty CalPeco's electric distribution facilities are surveyed consisting of a Level 1 inspection, involving a basic visual ground inspection of trees or populations of trees to identify dead and dying trees. Additionally, contractor shall inspect for imminent hazards, G.O. 95 Rule 35 or PRC 4293 compliance infractions.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Patrol inspections of vegetation around distribution electric lines and equipment	2019 plan													
	2019 actual	260,000	132	1,970	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC				
	2020	300,000	150	2,000	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC				
	2021	300,000	150	2,000	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC				
	2022	300,000	150	2,000	Vegetation Contact	Unknown	Unknown	Unknown						
	2020-2022 plan total	900,000												

CEMA patrol inspections are continuous and ongoing.

5.3.5.13 Quality assurance/quality control of inspections

Liberty CalPeco audits all vegetation inspection work as part of the review and permitting process for trees located on local, federal, and state agency land. Work quality is assessed for accuracy of the work order and for correct identification of tree work. Work corrections are made in the field and reviewed with the contractor. While Liberty CalPeco's existing process is able to identify issues and implement corrective action, it lacks the internal resources to implement an industry best practice Quality Assurance/Quality Control program. Liberty CalPeco has recognized the need and will develop a formal Quality Assurance/Quality Control audit program for vegetation management activities that use a third party contractor to ensure quality of work.

Before the upcoming wildfire season: Begin to draft framework for Quality Assurance/Quality Control formal program Issue Requests for Proposals.

Before the next annual update: Implement formal third party Quality Assurance/Quality Control program and report on progress for next annual update.

Between 3 and 10 years: Evaluate findings and program results to determine if changes are needed for vegetation management program.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
QA/QC of Inspections	2019 plan													
	2019 actual													
	2020	250,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account			
	2021	250,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account			
	2022	250,000	Unknown	Unknown	Vegetation Contact	Unknown	Unknown	Unknown	New		WMP memorandum account			
	2020-2022 plan total	750,000												

5.3.5.14 Recruiting and training of vegetation management personnel

Liberty CalPeco contracts with a third party company that specializes in utility arboriculture and provides utility arborists or pre-inspectors to conduct vegetation inspections along CalPeco powerlines. Under direction from the Vegetation Program Manager, it is the contract pre-inspection company's responsibility to recruit, train and provide qualified personnel to meet contractual requirements and to perform the scope of work agreed upon. Additionally, Liberty CalPeco contracts qualified line clearance tree crews to perform work prescribed by the pre-inspection company on the Liberty CalPeco system. It is the contract tree company's responsibility to recruit, train and provide qualified personnel to meet contractual requirements and to perform the scope of work agreed upon. Liberty CalPeco employs vegetation management staff under supervision to the Vegetation Program Management to assist in management of the contractors, workload and the program as a whole.

5.3.5.15 Remediation of at-risk species

Liberty CalPeco's inspection process accounts for species growth and failure characteristics when determining if trees require remediation. Understanding species characteristics combined with local environmental conditions leads to the determination of whether a tree should be trimmed, removed, or left alone. Liberty CalPeco categorizes the growth potential of trees as slow, medium, and fast growing trees and are trimmed accordingly for their growth potential. In addition to growth rate and grow-in potential, species failure potential is also considered when identifying at-risk species. All trees are susceptible to structural defects, disease, and environmental conditions, and one of the factors for determining failure potential is based on how individual species react to those conditions. A structural defect, like a forked top, may be considered moderate to high risk of failure in some species, while the same defect may be considered low risk in others. Liberty CalPeco is in the process of developing a tree failure database that will use tree related outage data to explore other opportunities for targeting reliability/at-risk species and how to treat them.

Before the upcoming wildfire season: Begin to develop a tree failure database to track system reliability and species failure characteristics.

Before the next annual update: Implement outage investigations and tree failure database to be able to compile data for system reliability and identifying at-risk-species.

Within the next 3 years: Begin implementing remediation tactics based off gathered data. Ongoing research, database development and reliability/species failure analysis.

Within the next 10 years: Ongoing research, database development and reliability/species failure analysis. Further develop and adjust remediation tactics for at-risk-species and areas.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	If new: What proceeding has Existing: account Memorandum	In / exceeding compliance with	Cite associated rule	Comments
Remediation of at-risk-species	2019 plan												
	2019 actual	4,504,905	268	16,809	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC	GO 95 Rule 35; PRC 4293		
	2020	4,500,000	380	11,842	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC	GO 95 Rule 35; PRC 4293		
	2021	4,500,000	360	12,500	Vegetation Contact	Unknown	Unknown	Unknown	Existing	2019 GRC	GO 95 Rule 35; PRC 4293		
	2022	5,000,000	365	13,699	Vegetation Contact	Unknown	Unknown	Unknown	Existing		GO 95 Rule 35; PRC 4293		
	2020-2022 plan total	14,000,000											

5.3.5.16 Removal and remediation of trees with strike potential

Liberty CalPeco complies with G.O. 95 Rule 35, by removing trees when "dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines." Additionally, Liberty CalPeco complies with Public Resources Code 4293 by removing "Dead tree, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line." Hazard trees are identified through vegetation inspection programs and are evaluated by best practices derived from the CalFire Power Line Fire Prevention Field Guide, The USFS Region 5 Hazard Tree Guidelines For Forest Service Facilities and Roads in the Pacific Southwest Region, and ANSI A300 Standards (Part 9) – Tree Risk Assessment.

"Trees with strike potential" are trees or parts of trees that have the potential to contact the electrical facilities if they were to fail. Assessing strike potential begins with determining if the tree is tall enough to reach the electrical facilities. Tree height is measured using forestry devices such as a line tape and clinometer, or laser rangefinder/hypsometer. If a tree, or part of a tree, is tall enough to reach an electrical facility, it must also have a path to the target. Direction of fall (slope, lean, etc.) and protection (trees or other objects blocking the path) are also considered when determining the strike potential of a tree. Costs summarized in the table below include all tree work performed under Liberty CalPeco's routine, off-cycle, and CEMA programs. There is no way to separate costs between trees that were removed for strike potential from trees that were pruned for line clearance.

> **Before the upcoming wildfire season:** Removal and remediation of trees with strike potential is continuous and ongoing through Routine Vegetation Maintenance and CEMA programs in accordance with required laws and regulations.

5.3.5.17 Substation inspections

See discussion on Substation Inspections in Section 5.3.4.15.

5.3.5.18 Substation vegetation management

Within the substation footprint, the ground is kept clear from vegetation on an as-needed basis using herbicide, pre-emergent and hand treatment.

5.3.5.19 Vegetation inventory system

Liberty CalPeco manages tree work inventories and workloads through the Vegetation Management System (VMS) database. The VMS tracks circuit inspections, notification and tree work progress, provides work orders, notification letters and report generating functions, retains historical inspection and tree work data, and also has a variety of query options to specify select tree inventories as needed (i.e. routine circuit work on Federal lands for a specific inspection year or a random sample for quality control or assurance audits). Trees are inventoried if that specific tree is requiring remediation for the current inspection, therefore a new tree is only added to the inventory in VMS if it is being listed for tree work. Every tree inventoried on the system is assigned its own Tree Identification Number. If a tree that has been worked in the past requires work again,

that specific tree record is updated to create a new work order and inspection record for the current inspection taking place but the unique Tree ID Number for that tree does not change. The past work orders and inspection records for that tree are retained. During the inspection process, trees not requiring work are not inventoried and/or updated. Photographs, Tree Work Authorization Forms and other documents associated with specific trees can be linked to the tree records through local network drives. Each individual tree is also assigned a status drop down in order to track notifications, project progress, and tree work completion. Upon receipt of a signed and completed work requests, an individual tree records status is changed to a completed status.

Before the upcoming wildfire season: Liberty CalPeco vegetation management plans to continue discussing improvements in tracking overall circuit work. Liberty CalPeco plans to continue discussions to implement dashboard screen to better track overall circuit progress and status.

Liberty CalPeco will continue to make improvements to the vegetation inventory system as needed to improve process efficiencies and meet reporting requirements

5.3.5.20 Vegetation management to achieve clearances

Liberty CalPeco has adopted and incorporated General Order 95, Appendix E recommended clearances at time of trimming in its vegetation management plan. Minimum clearance, at time of trim, is 12 feet for distribution lines (up to 60kV) and is 30 feet for 120kV lines. Liberty CalPeco does not have power lines operating in the 72kV-110kV category. Liberty CalPeco considers more than just line operating voltage when determining appropriate clearance and will obtain greater clearances as needed to ensure compliance until the next scheduled maintenance. The consideration to obtain greater clearances will be based on multiple factors, including: length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, species characteristics, vegetation growth rate, arboricultural practices, local climate, and elevation. Costs associated with pruning to achieve appropriate clearance are combined in the table under section 5.3.5.16. Liberty CalPeco does not have a way of separating costs between these initiatives across multiple programs.

Before the upcoming wildfire season: Liberty CalPeco has adopted and incorporated General Order 95, Appendix E recommended clearances at time of trimming in its vegetation management plan. Liberty CalPeco plans to continue to develop a formalized Quality Control and Quality Assurance auditing system to ensure proper clearances are being achieved and compliance is met.

Before the next annual update: Implement a formalized Quality Control and Quality Assurance auditing system to ensure proper clearances are being achieved at time of trimming.

Within the next 3 years: Continue to monitor Quality Assurance and Quality Control results. Determine effectiveness of clearances achieved on successive cycle patrols. Establish more accurate circuit forecasting.

Within the next 10 years: Continue to monitor Quality Assurance and Quality Control results. Determine effectiveness of clearances achieved on successive cycle patrols. Establish more accurate circuit forecasting.

5.3.6 Grid operations and protocols

Liberty CalPeco's efforts toward Grid Operations and Protocols include various programs included in this section and focus on an effort for a flexible system in the event of an emergency. Improved and emerging technology (as discussed in the Situational Awareness and Collaborative Research sections) will greatly enhance the ability to detect, but especially to predictively anticipate ignition events before an event actually happens. Grid hardening efforts and automatic recloser installations and enhancements should minimize the impact of PSPS events and allow for more rapid restoration after these events. See below for a summary of the current inspection and maintenance and/or replacement programs initiated by G.O. 165 and G.O. 174 and the new WMP initiatives related to strengthening Liberty CalPeco's electric grid. Liberty CalPeco is also working toward better training for field personnel during elevated fire risk and evaluating the cost/benefit of added resources to accompany crews during high fire threat conditions as defined in our Fire Prevention Plan.

5.3.6.1 Automatic recloser operations

Liberty CalPeco plans to continue replacing older reclosers and line air switches with new recloser technology. The reclosers will be placed strategically to allow for better sectionalizing of overhead lines during switching and PSPS events, but also in an effort to bring Distribution Automation Control into play within the next 3 years. In addition, fire season settings are implemented on all line reclosers in the area. Priority work efforts are focused on the more populated areas in Liberty CalPeco's territory for the recloser planned installs and also to devices with notorious issues (e.g. Form 6 recloser controls). The benefit to customers comes with better reliability, smaller PSPS zones affecting less customers, and distribution automation control reducing outage times.

Liberty CalPeco is focused on replacing many older recloser types at existing locations for improved reliability and adding SCADA control. Also, many older air switches/motor operated switches are being targeted for replacement.

Program Timeline:

- **Before the upcoming wildfire season** – Continue with recloser installs already in progress.
- **Before the next annual update** – Continue with recloser installs already in progress
- **Within the next 3 years** – Install reclosers at a rate of 4 per year, implement Distribution Automation Control system.
- **Within the next 10 years** – Continue replacements/new installs as deemed necessary. Distribution Automation Control system in operation

5.3.6.2 Crew-accompanying ignition prevention and suppression resources and services

Liberty CalPeco does not have dedicated fire suppression personnel on staff. On elevated fire risk days, a member from each working crew is assigned as the Fire Safety Monitor to ensure fire prevention operational protocols are being followed. During extreme fire

risk days, work activities are extremely limited. If work must be performed, a dedicated Fire Safety Leader is assigned to the crew and assumes responsibility for Fire Prevention activities. See Fire Prevention Plan for more details.

Program Timeline:

- **Before the upcoming wildfire season**: Continue with resources in place.
- **Before the next annual update**: Perform cost/benefit analysis to determine the potential risk mitigated by using contracted fire prevention resources during fire season.
- **Within the next 3 years**: Evaluate effectiveness of resources/services and continue or discontinue as appropriate.
- **Within the next 10 years**: Evaluate effectiveness of resources/services and continue or discontinue as appropriate.

5.3.6.3 Personnel work procedures and training in conditions of elevated fire risk

See the attached Liberty CalPeco FPP.

5.3.6.4 Protocols for PSPS re-energization

Liberty CalPeco plans to re-energize customers as quickly and efficiently as possible once deemed safe to do so based on current and future predicted weather forecasts. In PSPS zones, crews will energize mainline first, with lateral fuses and devices open. All overhead line will be inspected prior to re-energization, be it by foot, vehicle, or air. Essentially whatever resources are available and deemed an efficient method to patrol and ensure public and worker safety.

Program Timeline:

- **Before the upcoming wildfire season**: PSPS re-energization plan in place as part of WMP.
- **Before the next annual update**: PSPS re-energization plan in place as part of WMP.
- **Within the next 3 years**: Evaluate effectiveness of re-energization plan and make continuous improvement.
- **Within the next 10 years**: Evaluate effectiveness of re-energization plan and make continuous improvement

5.3.6.5 PSPS events and mitigation of PSPS impacts

Efforts to mitigate impacts of PSPS events are underway and include covered conductor, resiliency corridors of covered conductor, undergrounding of overhead conductor, public outreach and education, coordination with emergency partners to limit impact to customers, and efforts to notify early and minimize outages to our medical baseline customers. These initiatives are all accounted for in various sections of the WMP.

5.3.6.6 Stationed and on-call ignition prevention and suppression resources and services

Liberty CalPeco is evaluating the cost/risk/benefit of stationing additional resources strategically during fire threat days. There is not any additional resources used for this

purpose beyond what crews have on the jobsite. No current program beyond what crews have with them on the jobsite ('Indian cans' and fire extinguishers).

Program Timeline:

- **Before the upcoming wildfire season**: Evaluate cost/risk/benefit of having additional resources on hand.
- **Before the next annual update**: Evaluate cost/risk/benefit of having additional resources on hand.
- **Within the next 3 years**: Continue evaluation and add necessary resources if deemed appropriate.
- **Within the next 10 years**: Continue evaluation and add necessary resources if deemed appropriate.

5.3.7. Data governance

5.3.7.1 Centralized repository for data

Liberty CalPeco will have a dedicated location to wildfire risk in its SharePoint platform which will allow storage, processing, and utilization of data. The wildfire risk SharePoint location is a large subset of the overall RBDM SharePoint dedicated location. The data repository initiative is already underway, and will be useful by this upcoming fire season. Going forward the data repository will be organized, managed, and maintained effectively.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Data Governance	2019 plan													
	2019 actual													
	2020	465,000	2,055	226.3	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Data Requirements for WMP Delivery, Risk Analysis/Data Management, Operations Analyst
	2021	415,000	2,055	201.9	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Data Requirements for WMP Delivery, Risk Analysis/Data Management, Operations Analyst
	2022	365,000	2,055	177.6	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Data Requirements for WMP Delivery, Risk Analysis/Data Management, Operations Analyst
	2020-2022 plan total	1,245,000												

5.3.7.2 Collaborative research on utility ignition and/or wildfire

Liberty CalPeco collaborates or plans to collaborate with several academic and professional institutions on wildfire research. The collaborative programs are as follows:

ALERTWildfire: Liberty CalPeco is proposing to work with ALERTWildfire to support the local ALERTTahoe wildfire camera network. ALERTWildfire deploys pan-tilt-zoom (PTZ) cameras monitoring high fire risk areas to allow for discovery of ignition events and support fire resources throughout a wildfire event. ALERTWidlfire's first project, ALERTTahoe provided camera coverage for the majority of Liberty CalPeco's service territory. Liberty CalPeco plans to partner with ALERTWildfire to update the cameras in the Lake Tahoe area to provide camera control to Liberty CalPeco. See alertwildfire.org/about for more information. Projected costs for ALERTWildfire are represented in Section 5.3.2.2.

University of Nevada Reno (UNR), High Impedance Fault Detection: Liberty CalPeco is proposing to partner with the University of Nevada Reno to study high impedance faults in Liberty CalPeco's service territory. From UNR's proposal: "In order to reduce the risk of fire and public safety hazard resulting from protection system failure to accurately identify and clear

high impedance faults (HIF) in the Tahoe area, a modern HIF detection system must be designed and implemented in the Tahoe area. A sponsored collaborative study with the University of Nevada, Reno (UNR) will assess state-of-the-art relay technologies in a simulated environment and produce a suite of new protection system options for the Tahoe area."

Texas A&M Distribution Fault Anticipation: – Developed by Texas A&M and presented at the Wildfire Technology Innovation Summit, Distribution Fault Anticipation (DFA) is a technology that anticipates potential line failure events that have the potential to ignite wildfires. Liberty CalPeco plans to deploy DFA on 10 distribution feeders originating in HFTD Tier 2 and Tier 3 areas. Projected costs for DFA are represented in Section 5.3.2.2.

Program Timeline:

- **Before the upcoming wildfire season**, partner with ALERTWildfire and UNR.
- **Before the next annual update**, finalize studies / programs with ALERTWildfire and UNR.
- **Within the next 3 years**, Deploy Texas A&M DFA and continue to evaluate partnerships with academic and professional institutions.
- **Within the next 10 years**, continue to evaluate partnerships with academic and professional institutions.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Collaborative Research- HIFD	2019 plan													
	2019 actual													
	2020	200,000	157	1,274	All types of contact, all types of equipment failure	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	Exceeding	N/A	Relays capable of HIFD to be installed along Tahoe City 7300 circuit.
	2021													
	2022													
	2020-2022 plan total	200,000												

5.3.7.3 Documentation and disclosure of wildfire-related data and algorithms

Liberty CalPeco will document and disclose in entirety its process to evaluate wildfire risk in its service territory. Through a combination of its internal resources and external consultants, wildfire risk will be addressed comprehensively as a large subset of Liberty CalPeco's overall risk profile in its RBDM framework. An additional data expert position will be added to Liberty CalPeco's team to bolster its analytical capability before the next annual report. Forecasting and stress testing are features of the wildfire risk evaluation models. In the next three years, Liberty CalPeco expects to dedicate more resources towards its enterprise risk program as needed, and take advantage of new information and analytical technology as it becomes available

5.3.7.4 Tracking and analysis of near miss data

Near miss tracking data is being tracked in the company's outage management system, Responder. Additionally, Liberty CalPeco utilizes its Smart M.Apps tool which allows the company to track its reported incidents by location, date, time duration, equipment in question, and outage cause, overlaid on a variety of maps such as HFTD areas. Before the next annual filing, Liberty CalPeco expects its wildfire-related data and mapping overlays to increase in quality. Within the next three years, the company will take advantage of all available technologies and capabilities which would improve or build upon its current Smart M.Apps tool.

5.3.8 Resource allocation methodology

As defined in the Commission's Decision D.19-04-020 Voluntary Agreement, Liberty CalPeco is required to file its risk-based decision-making ("RBDM") framework in its upcoming General Rate Case ("GRC") filing. Liberty CalPeco expects its GRC to be filed in the early part of 2021. Additionally, the company continues to improve its data collection methods, analytical capability, and robustness of its enterprise risk management ("ERM") program to satisfy the requirements as stated in the Voluntary Agreement for Small and Multi-Jurisdictional Utilities ("SMJU's").

The threat of a wildfire in the Liberty CalPeco service territory is a risk the company and its parent companies take very seriously. Providing its customers safe and reliable service are paramount objectives of the company. The devastating consequences of wildfires include loss of service, property, and in some cases, life. The wildfire risk mitigation programs discussed within the Liberty CalPeco WMP are explicitly designed to keep its customers and surrounding populations safe.

In order to objectively compare and evaluate wildfire risk mitigation strategies, the company utilizes its current ERM methodology to identify inherent risk, residual risk, existing controls, and future mitigation efforts after determining the likelihood and impact of wildfire risk in the Liberty CalPeco service territory. The company is diligently working towards a RBDM framework which incorporates elements of the IOU S-MAP/RAMP proceedings, as well as adopting the Commission's recommendations towards a probabilistic modeling methodology with Multi-Attribute Risk Score ("MARS")/Multi-Attribute Value Function ("MAVF") scoring.

The company's ERM methodology at a high-level resembled many of its other peer utility ERM methodologies before their submittal of the enhanced RBDM frameworks contained in their GRC filings. As ordered by the Commission, Liberty CalPeco will have its enhanced RBDM framework completed and used to evaluate, compare, and make risk-informed investment decisions by its next GRC filing.

Current Method	Planned Method
Qualitative, detailed descriptions of risk analysis.	Introduction of bow-tie analysis of drivers-event-consequences.
Likelihood Score SME-reliant.	Introduction of data-driven probabilistic calculations from internal, peer utility, national, and academic data sources.
Utilization of Heat Map with Linear Scaling.	Introduction of MARS/MVAP quantitative scoring based on calculations introduced in IOU S-MAP/RAMP proceedings; Assumptions are rarely linear.
Linear Likelihood vs. Impact product calculations	Introduction of scenario-based modeling techniques for high & low-impact analysis.
Existing Controls and Planned Mitigations.	Include two alternative proposals for mitigations.

In order to best implement these enhancements into its planned RBDM framework, Liberty CalPeco will leverage its technical internal resources supplemented by outside consultants in order to achieve its goals of meeting and striving to exceed Commission requirements.

5.3.9 Emergency planning and preparedness

1. The emergency preparedness and response plans described in the WMP comply with Public Utilities Code Section 768.6 and 8386.[7,8] Specifically, the WMP complies with the following mandates:

    - Sharing elements of vested interest of the WMP and emergency response plan with relevant cities and counties to provide input and feedback.
    - Direction to routinely update and improve the WMP.
    - Accounting of responsibilities of persons responsible for executing the WMP.
    - Appropriate and feasible procedures for notifying customers that may be impacted.
    - Plans to prepare for and restore service, including workforce mobilization.
    - Plans for community outreach and public awareness before, during, and after a wildfire.

[7] FindLaw, California Code – PUC 768.6, https://codes.findlaw.com/ca/public-utilities-code/puc-sect-768-6.html.

[8] FindLaw, California Code – PUC 8386, https://codes.findlaw.com/ca/public-utilities-code/puc-sect-8386.html.

- Emergency communications that include plans to translate messages into the top three languages in California, based on census data.
- Protocols for compliance with Commission reporting guidelines.

5.3.9.a Plans to prepare for and restore service, including workforce mobilization (including mutual aid and contractors) and prepositioning equipment and employees

5.3.9.a Narrative:

Workforce Mobilization

Liberty CalPeco has addressed limitations in resource sufficiency through mutual aid agreements. Mutual assistance entities include NV Energy, Western Energy Institute Mutual Assistance Roster, and the California Utilities Emergency Association.

The Incident Commander has responsibility for mobilizing resources, contracting for additional assistance and supplies, and calling for assistance from neighboring utilities through Mutual Aid Agreements. The Incident Commander will also direct the requests for additional internal and external resources. The Incident Commander must approve the use of Mutual Aid.

Depending upon the timeline in preparing for, and responding to, a particular emergency event, Liberty CalPeco's EOC members will determine immediate needs if they require additional support outside of utility personnel. The type, size, and duration of an emergency event will determine, in varying degrees, the amount of resources required to respond to the event. Resource requests may include trade and non-trade personnel to assist in safety stand-by, damage assessment, planning or liaison activities, or materials and equipment necessary to facilitate restoration of utilities.

Activation levels for emergency/disaster response designated as such based on a five-level scale. For Level 1 events, considered to be catastrophic in impact, emergency support will be required from external resources and public safety partners.

Level		Description	Action
5	Small Impact Event (Localized Response Condition)	Minor disruption of operating systems, business systems, or electric service that can be managed with existing resources at the local or department level.	Normal activity, daily internal crew assignments
4	Moderate Impact Event (Heightened Alert)	An event that maximizes the resources and management capability of the local region and may require additional resources and support.	Possible crew transfer between areas; utility contractor crews (overhead line and tree) limited to normal daily complement.
3	Serious Impact Event (Enhanced Support)	A disaster or major emergency that may affect several areas of our electric system and may require the services of all operations personnel.	Regional or System ICS may be initiated and Regional EOC's may be opened. All available operations personnel are utilized. Utility contractor, mutual aid Assistance, tree crews, and support functions such as logistics will be used as needed.
2	Major Impact Event (Comprehensive Support)	A disaster or major emergency that affects several areas of our electric system and requires the services of all operations personnel.	Regional or System ICS will be initiated. All available operations personnel are utilized. Utility contractor, mutual aid assistance, tree crews, and support functions such as logistics will be used as needed.
1	Catastrophic Impact Event (Emergency Support)	A disaster or major emergency requiring a corporate response to minimize corporate risk. This level requires policy guidance, strategic planning, and coordination of internal and external resources, internal communication and coordination, dissemination of public information.	Regional and/or system ICS will be initiated. All available operations personnel are utilized. Utility contractor, mutual aid assistance, tree crews, and support functions such as logistics will be used as needed.

Response Coordination

Liberty CalPeco will respond to immediate life safety concerns as the top priority. Once a hazardous situation is reported, immediate response will be provided by line crews, trouble man, inspectors or other trained personnel to assess and mitigate risk.

i. All field response employees shall undergo safety training aligned with their respective roles.
ii. All electrical switching and reporting shall be managed by the appropriate controlling parties to enhance employee and public safety.
iii. Liberty CalPeco will provide regular public information, typically in the form of media messages or alerts, regarding unsafe or hazardous areas or conditions that the public should be informed about.
iv. In the event of an area emergency that is life or property threatening, the Emergency Alert System ("EAS") shall be enabled through the local or county Emergency Management or Public Safety office. Liberty CalPeco will advise the emergency management agencies when such alert is essential.
v. Public safety agencies will be utilized, as necessary, for traffic control and perimeter safety until qualified personnel arrive to clear the hazard situation. Agencies will be used, if necessary, to control public disturbances and establish safety controls for the public.
vi. Employees will be monitored for appropriate meal breaks, hours worked, and safety compliance; when emergencies are expected to last more than 24 hours. Shifts will be established to cover work, and employees will be given appropriate rest periods.
vii. Weather and road conditions will be are monitored for worsening conditions so that workers are not stranded at remote work locations.
viii. Work may be curtailed until safe work conditions prevail.

Damage Assessment

During an emergency, company crews, linemen, troublemen, electric inspectors, utility designers and/or engineers will be first called for damage assessment. All damage will be recorded by the teams on circuit maps using standardized symbols. To the extent practicable, downed or damaged facilities shall be isolated, secured, and warnings applied utilizing cones, warning tape, or other barriers or warnings. Restoration of service will occur upon addressing the results of any damage and remediation needs.

Restoration

Service restoration is unique to each emergency and restoration prioritization is influenced by a number of factors including safety, accessibility, availability of repair parts, availability of personnel, etc. This element of the plan identifies general restoration prioritization guidelines but allows for the Incident Commander, or designee, to alter priorities according to the circumstances of the emergency and in coordination with essential load customers and government agencies.

Restoration Guidelines include:

i. Restore radial transmission and substations;

ii. Restore distribution circuits with essential customers such as health care facilities, utilities, public safety, governmental facilities, and lifeline customers;
iii. Restore circuits with the greatest number of customers;
iv. Restore primary taps, followed by secondary lines;
v. Restore individual services which are accessible and serviceable;
vi. Restore essential customers.

Below is the priority list of essential customers. Priority assumes circuits, equipment, and services are accessible and repairable.

1. Health Care Facilities
    a. Primary Care Hospitals
2. Utility Services/Districts
    a. Public Utility Districts
    b. Telecommunications
    c. Water/Water Treatment
    d. Pipeline
3. Public safety agencies
    a. Public Safety Dispatch Centers
    b. Law enforcement facilities/holding facilities
    c. Fire operations facilities
    d. Transportation equipment and facilities
4. Government facilities
5. Green Cross/Life Line

5.3.9.b Emergency communications, including community outreach, public awareness, and communications efforts before, during, and after a wildfire in English, Spanish, and the top three primary languages used in California other than English or Spanish, as determined by United States Census data.

Liberty CalPeco provides available notification and communications material in English and will do so in Spanish in 2020. Liberty CalPeco does not translate to additional languages but welcomes community engagement to ensure a standard scheme of notifications are provided to Chinese, Tagalog, and Vietnamese speaking populations as necessary.

5.3.9.c Showing that the utility has an adequate and trained workforce to promptly restore service after a major event, taking into account mutual aid and contractors.

Liberty CalPeco employees participate in Emergency Management Plan training annually. They are trained and refreshed on the roles and responsibilities of each functional area in support of the ICS at the company level or the Incident Commander at the regional level. In addition, emergency response exercises are designed so employees can practice using the WMP as a test of its effectiveness. The utility participates in regional exercises to train employees and exercise the Emergency Management Plan. Liberty CalPeco plans to engage identified stakeholders in a coordinated effort to cohesively develop individual communication and emergency response plans between potentially affected jurisdictions and public safety partners in 2020. Part of this effort will include acquiring a list of available resources to participate in mutual aid agreements

for emergency response. As part of its resource adequacy plan, Liberty CalPeco expects to hire an Emergency Manager in 2020 to oversee all related emergency response activities and public safety partnership engagements.

2. Customer support in emergencies
   The protocols listed below reflect Liberty CalPeco's customer protection measures during and after a wildfire incident or PSPS event.[9]
   a. Outage Reporting: Administrative staff personnel will work to create an internal code within the Outage Management System to identify outages related to wildfires.
   b. Support for Low Income Customers: Low-income, or CARE, customers will be offered Special Payment Arrangements resulting from a fire-related outage, if necessary.
   c. Billing Adjustments: Billing will be suspended until power is restored to the customer.
   d. Deposit Waivers: Liberty CalPeco will waive deposits for customers who need to rebuild due to a wildfire.
   e. Extended Payment Plans: In the event the customer has suffered a tremendous loss (e.g., property or home) due to wildfires, special consideration would be granted for payment extension.
   f. Suspension of Disconnection and Nonpayment Fees: Collection activities due to nonpayment will be suspended for wildfire-impacted neighborhoods.
   g. Repair Processing and Timing: Timing for repair procedures will be determined based upon the severity of wildfire impact. During emergencies, Liberty CalPeco will expedite repair processing as incidents are recorded and resources are available. Mutual aid programs will be engaged, if necessary, in conjunction with the Corporate Emergency Response Plan. Liberty CalPeco will follow up with electrical contractors regarding execution of remediation efforts. Estimated restoration and repair times will be communicated to the affected customer group and when activities are completed.
   • h. Access to utility representatives: If Liberty CalPeco's offices are not impacted by fire, operations will resume, and customer service representatives and managers will be available to assist with customer concerns. However, if offices are affected by fire, nearby offices as well as corporate support will be available to customers. Liberty CalPeco also proposes to address concerns and common questions through an "open house" with the public.

3. Liberty CalPeco is in close coordination with Cal OES, county OES, and local public safety partners ("PSP"), including but not limited to: fire departments, Sheriff's offices, police, and highway patrol. All PSP are on our early notification list and will be communicated with as early as possible in the event of an impending PSPS or other power related emergency. However, due to the fact that we are a small utility with low

[9] Resolutions M-4833 and M-4835 guide utilities to implement procedures to protect customers in the event of pronounced states of emergency. Liberty CalPeco will adhere to decisions finalized in R.18-03-011. The Commission has established requirements that guide electric utilities to develop response efforts to wildfire-impacted communities.

staffing levels we would not likely be able to staff a utility employee in each county OES office during an event. As an alternative we would invite county OES participation in our EOC.

It is well known and understood that we have a significant population of Spanish speakers throughout our service territory. We follow the same best practices as our local school districts with regards to language accommodations and preferences. School districts routinely communicate in English and Spanish only in their public communications and outreach.

5.3.9.1 Adequate and trained workforce for service restoration

Liberty CalPeco has identified the need to hire additional in-house staff to better prepare the company and community in the event of an emergency.
Fire Prevention Coordinator – Oversees fire prevention initiatives and will serve as company liaison for first responders and public safety partners. Ensures training and preparedness is provided to employees and contractors. Oversees compliance of fire prevention policies and regulations. This position will be related to most initiatives but can be mentioned in under coordination with fire suppression agencies, emergency response, and stakeholder engagement/outreach.
Fire Operations Specialist – Will assist Fire Prevention Coordinator by providing training and implementation of fire prevention policies. Will conduct safety audits on field crews and ensure daily fire conditions are communicated within the organization. Will assist with community outreach related to wildfire mitigation initiatives and assist with emergency preparedness and PSPS training.

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Adequate Workforce	2019 plan													
	2019 actual													
	2020	240,000	2,055	117	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Hire Fire Prevention Coordinator and Fire Operations Specialist
	2021	240,000	2,055	117	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Hire Fire Prevention Coordinator and Fire Operations Specialist
	2022	240,000	2,055	117	Unknown	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	Hire Fire Prevention Coordinator and Fire Operations Specialist
	2020-2022 plan total	720,000												

5.3.9.2 Community outreach, public awareness, and communications efforts

Efforts include:

- Community workshops – Spring and early summer annually in the following communities: Coleville/Walker, Markleeville, South Lake Tahoe, North Lake Tahoe, Truckee/Glenshire, Loyalton, and Portola. Workshops would be annual events.
- Public Safety Partner workshops – Liberty CalPeco hosts and participates in public safety partner workshops, meetings and strategy sessions year round. Topics ranging from primary emergency contacts, protocols, and operations are discussed to promote seamless cooperation and communication.
- Website information – The Wildfire Mitigation section of the website provides information about the Liberty CalPeco's wildfire mitigation program, PSPS, etc. Information is available year round on the website
- Direct Customer Emails – Emails are sent to our customer data base in the spring through the end of fire season on various wildfire mitigation and PSPS topics. Email topics are designed to inform, educate, and engage customers around our mitigation efforts and PSPS program.

- Informational videos – Videos have been created on various wildfire mitigation and PSPS topics. Video topics are designed to inform, educate, and engage customers around our mitigation efforts and PSPS program. These videos are used on social media, websites, and customer emails in the spring and through fire season
- Social media posts - Social media posts are made in the spring and through the end of fire season on various wildfire mitigation and PSPS topics. Social media topics are designed to inform, educate, and engage customers around our mitigation efforts and PSPS program.
- Collateral distribution – Brochures on wildfire mitigation and PSPS have been created and are available year round in our customer lobbies, public events, and through public safety partners.
- Community service group presentations – primarily during the spring and through fire season staff provides presentations covering the wildfire mitigation and PSPS program
- Government and chamber of commerce presentations – primarily during the spring and through fire season staff provides presentations covering the wildfire mitigation and PSPS program
- Community guest speaking engagements – primarily during the spring and through fire season staff provides presentations covering the wildfire mitigation and PSPS program
- Trained frontline staff to engage and educate on customer calls – Front line staff is trained to respond to questions about the wildfire mitigation and PSPS program year round.

5.3.9.3 Customer support in emergencies

First Liberty CalPeco continues to improve its information distribution to keep public safety partners, customers, and visitors well informed during any emergency involving electric service. Information is the most important resource enabling quality decision making and situational understanding during an emergency.

Secondly, we continue to work with regional partners such as city governments, public utility districts, fire departments, and county emergency services to identify locations that are available for cooling/warming/charging services, central information locations and more.

Third, Liberty is prepared to staff its call center 24/7 during significant emergencies to provide information and help direct customers to services and facilities.

5.3.9.4 Disaster and emergency preparedness plan

In accordance with G.O. 166, Liberty CalPeco has a Company Emergency Management Plan (CEMP) that outlines the policies and procedures for disaster and emergency events. The CEMP is undergoing an internal review for improvement, and an Emergency Manager position is being created to oversee the plan going forward. In addition to

annual reviews, Liberty CalPeco will continuously look for opportunities to improve the plan, collaborate with local agencies, communities and other stakeholders to maintain protocols and satisfy requirements.

5.3.9.5 Preparedness and planning for service restoration

As outlined in the CEMP pursuant to G.O. 166, Liberty CalPeco is developing a PSPS plan that will supplement and enhance those protocols for preparedness and service restoration in the event of a disaster or emergency. Liberty CalPeco will review the plan annually to bolster its preparedness plan to meet compliance standards for service restoration.

5.3.9.6 Protocols in place to learn from wildfire events

Any major wildfire event caused by Liberty CalPeco would be considered an emergency situation, and activation of the CEMP would be in place. Post-incident lessons learned meetings and documentation would be generated and circulated, and any emergency preparedness improvements would be shared in training sessions with key personnel in the company.

5.3.10 Stakeholder cooperation and community engagement

5.3.10.1 Community engagement

Liberty CalPeco is plans to collaborate with community stakeholders such critical services providers, telecommunication companies, and government agencies, in a two-phase stakeholder engagement initiative focusing on its WMP. The outreach is proposed in two phases:

Phase 1 – Engage Expert Working Group During Plan Development. Phase 1 includes outreach to a portfolio of experts that participated a series of three Expert Working Group meetings to inform future actions related to the WMP to assure input and future coordination from those with insight related to critical and key services. The Expert Working Group can identify gaps in any key areas of the WMP, further develop key objectives of the plan, and advise on additional details of plan sections for inclusion in future WMP and suggest content for public outreach.

Phase 2 – Public Outreach for Plan Review. Phase 2 includes a series of public outreach sessions to be held at key locations based on population densities and areas identified with infrastructure that could potentially be impacted by wildfires. Experts may participate to orient and inform the public, gather and respond to specific questions, and generally opine on key areas of the WMP.

The outreach initiative will facilitate more informed implementation of WMP targets and will develop outward-facing partnerships for continued activities. Formalized outreach enhances expert and community collaboration in support of the WMP in an open discussion forum. Structured outreach reflects the community-based touchpoint based on

Liberty CalPeco's desire to formalize collaboration and coordination activities to enhance WMP effectiveness and promote public safety.

In 2020, Liberty CalPeco plans to host community workshops in the following locations:

- Portola
- Loyalton
- Truckee/Glenshire
- Kings Beach
- Tahoe City
- South Lake Tahoe
- Coleville/Walker
- Markleeville Community Speaking Engagements
- Tahoe City/North Tahoe Breakfast Club keynote speaker
- Others TBD

Initiative activity	Year	Total per-initiative spend	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
Community Engagement	2019 plan													
	2019 actual													
	2020	75,000	2,055	36	N/A	Unknown	Unknown	Unknown	New	N/A	WMP memorandum account	N/A	N/A	
	2021													
	2022													
	2020-2022 plan total	75,000												

5.3.10.2 Cooperation and best practice sharing with agencies outside CA

Liberty CalPeco continues to cooperate and share best practices with agencies outside California. Because of Liberty CalPeco's proximity to Nevada, there are several collaborative efforts between NV Energy and Liberty CalPeco. For example, Liberty CalPeco and NV Energy share weather data and fuel sampling resources in order to reduce costs of these respective programs to customers. Further, NV Energy and Liberty CalPeco hold recurring meetings to share updates to system hardening programs and to discuss local staffing and resources and other wildfire mitigation-related activities.

Additionally, Liberty CalPeco is a member of the Western Energy Institute's (WEI) Western Region Mutual Assistance Group (WRMAG), which is a collaboration of western utilities that provide mutual assistance for emergency relief.

5.3.10.3 Cooperation with suppression agencies

Cooperation with suppression agencies in the Liberty CalPeco territory is covered in the CEMP. Annual tabletop exercises are held to discuss coordination with these agencies, and lessons learned are documented and dispersed.

5.3.10.4 Forest service and fuel reduction cooperation and joint roadmap

See Vegetation Management discussion in Section 5.3.5.

5.4 Methodology for enterprise-wide safety risk and wildfire-related risk assessment

Starting with its next GRC application,[10] Liberty CalPeco will begin using the risk-based decision-making ("RBDM") framework authorized by the Commission in D.19-04-020. Additionally, the company continues to improve its data collection methods, analytical capability, and robustness of its enterprise risk management ("ERM") program to satisfy the requirements included in D.19-04-020.

In order to objectively compare and evaluate wildfire risk mitigation strategies, Liberty CalPeco utilizes its current ERM methodology to identify inherent risk, residual risk, existing controls, and future mitigation efforts after determining the likelihood and impact of wildfire risk in the Liberty CalPeco service territory. Liberty CalPeco is diligently working towards a RBDM framework that incorporates elements of the IOU S-MAP/RAMP proceedings, as well as adopting the Commission's recommendations towards a probabilistic modeling methodology with MARS/MAVF scoring.

Liberty CalPeco's current ERM methodology resembles many of the ERM methodologies utilized by peer utilities prior to their submittal of enhanced RBDM frameworks in recent GRC filings. As ordered by the Commission, Liberty CalPeco's RBDM framework will be completed and used to evaluate, compare, and make risk-informed investment decisions going forward.

Current Method	Planned Method
Qualitative, detailed descriptions of risk analysis.	Introduction of bow-tie analysis of drivers-event-consequences.
Likelihood Score SME-reliant.	Introduction of data-driven probabilistic calculations from internal, peer utility, national, and academic data sources.
Utilization of Heat Map with Linear Scaling.	Introduction of MARS/MVAP quantitative scoring based on calculations introduced in IOU S-MAP/RAMP proceedings; Assumptions are rarely linear.
Linear Likelihood vs. Impact product calculations	Introduction of scenario-based modeling techniques for high & low-impact analysis.
Existing Controls and Planned Mitigations.	Include two alternative proposals for mitigations.

The table above compares Liberty CalPeco's current and future methodologies for identifying and mitigating risk. Liberty CalPeco will leverage its technical internal resources, supplemented by outside consultants, to meet Commission requirements for RBDM.

5.5 Planning for workforce and other limited resources

Liberty CalPeco requires adequate staffing in order to fully implement its WMP. As stated previously in Section 5.1, retaining and attracting new employees has been a challenge because of the high cost of living in Lake Tahoe. Nevertheless, Liberty CalPeco plans to hire ten additional employees this year to create a wildfire mitigation team. This new team includes three inspectors, two fire operations personnel, one project manager, an

[10] Scheduled to be submitted in the first quarter of 2021.

environmental specialist, and three support staff. Below is a brief description of Liberty CalPeco's staffing needs:

- Inspectors – Inspects overhead lines and equipment to comply with G.O. 165 requirements.
- Fire Prevention Coordinator – Oversees fire prevention initiatives and will serve as company liaison for first responders and public safety partners. Ensures training and preparedness is provided to employees and contractors. Oversees compliance of fire prevention policies and regulations. This position will be related to most initiatives but can be mentioned in under coordination with fire suppression agencies, emergency response, stakeholder engagement/outreach.
- Fire Operations Specialist – Assists Fire Prevention Coordinator by providing training and implementation of fire prevention policies. Will conduct safety audits on field crews and ensure daily fire conditions are communicated within the organization. Will assist with community outreach related to wildfire mitigation initiatives and assist with emergency preparedness and PSPS training.
- Project Manager – Manages schedule and progress of WMP project implementation.
- Sr. Accountant – Tracks costs and sets up jobs to account for WMP initiatives.
- Capital Administrator – Takes the lead on tracking WMP capital job progress. Helps schedule jobs, ensure appropriate inventory, and closes jobs when complete.

5.6 Expected outcomes of 3-year plan

5.6.1 Planned utility infrastructure construction and upgrades

Liberty CalPeco is in the process of fully assessing the potential outcomes of current risk drivers on its system. Once an RBDM framework has been implemented, Liberty CalPeco will also be able to forecast the impact of planned capital replacements and upgrades.

5.6.2 Protocols on public safety power shut-off

5.6.2.1 Strategy to minimize public safety risk during high wildfire risk conditions

Liberty CalPeco is developing best practices to establish safeguards for customers, and the public, during PSPS events. In addition, Liberty CalPeco is investigating potential opportunities to provide mobile generation, enhanced communication devices, charging stations, battery storage for medical baseline customers, and other necessary customer facilities for PSPS events.

Liberty CalPeco's strategies to improve public safety during high wildfire risk conditions include:

ix. Providing all field response employees with safety training aligned with their respective roles.
x. Managing all electrical switching and reporting with appropriate controlling parties to enhance employee and public safety.
xi. Providing regular public information, typically in the form of media messages or alerts, regarding unsafe or hazardous areas or conditions.
xii. Utilizing the Emergency Alert System ("EAS") through the local or county Emergency Management or Public Safety office in the event of an area

emergency that is life or property threatening. Liberty CalPeco will advise the emergency management agencies when such alert is necessary.

xiii. Partnering with public safety agencies, as necessary, for traffic control and perimeter safety until qualified personnel arrive to clear the hazard situation.

5.6.2.2 Outline of tactical and strategic decision-making protocol for initiating a PSPS

Liberty CalPeco utilizes weather stations throughout its service territory and collaborates with a fire and weather scientific consultant, the National Weather Service ("NWS") in Reno, Nevada, and local fire officials, to monitor local weather conditions and evaluate when a PSPS should be initiated. The initiation of PSPS events are influenced by the following factors:

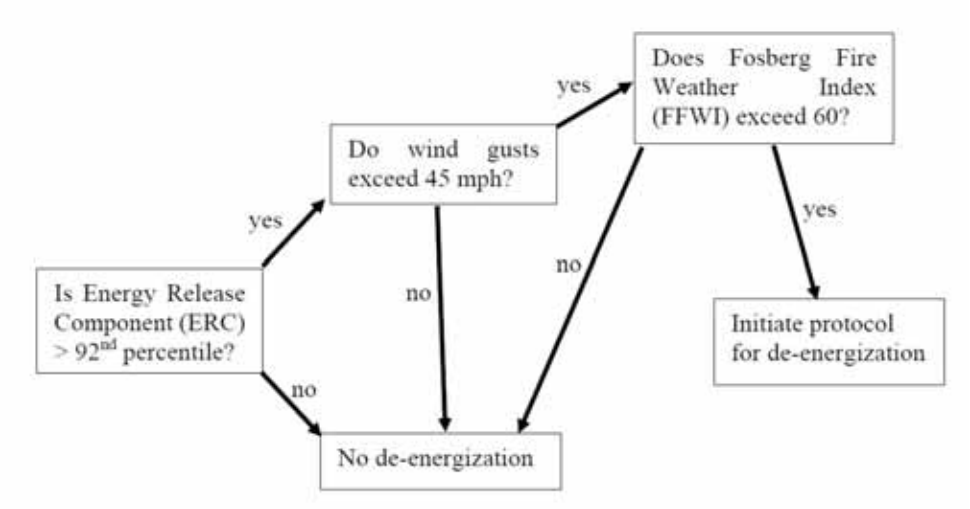
- Red Flag Warnings – Issued by the NWS to alert of the onset, or possible onset, of critical weather or dry conditions that would lead to swift increases in wildfire activity.
- Low Humidity Levels – Potential fuels are more likely to ignite when water vapor levels are low.
- Forecast Sustained Winds & Gusts – High winds can strengthen fuel embers causing fires to ignite. Winds also can blow embers from lower fire risk areas into high risk areas, increasing the potential of wildfires.
- Dry Fuel Conditions – Trees and other vegetation act as fuel for wildfires. Fuels with low moisture levels easily ignite and can spread rapidly.

In a case where the NWS reports three-second gusts greater than 50 mph, Liberty CalPeco will check the location of those speeds, and areas where those speeds would peak, for the proximity of service equipment. If the gusts are near service equipment, the equipment is assessed to see if it is scheduled for repair. Liberty CalPeco then monitors humidity and temperature levels to evaluate fuel conditions and forest susceptibility to fire for those areas. If an area is identified to be at risk of causing a wildfire, Liberty CalPeco will first attempt to de-energize that line so that load at the end of the line can continue to be served. In the event that load has to be dropped, Liberty CalPeco will attempt to minimize the lost load and customer disruption.

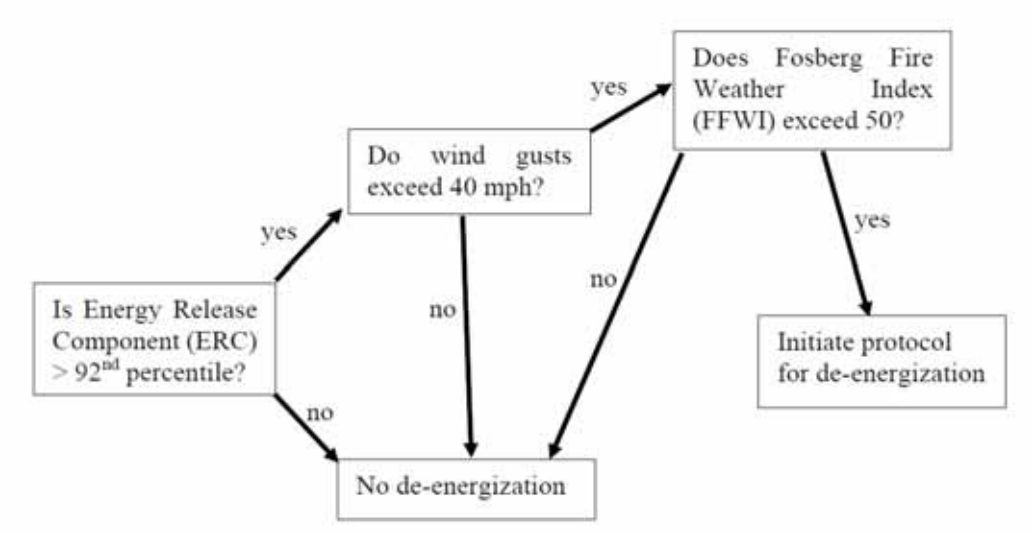
Liberty CalPeco employs two de-energization decision trees, one for the Topaz and Muller 1296 r3 PSPS zones, and another for all other zones. In each case, the following three criteria are evaluated simultaneously to test whether any exceed the defined threshold. The three criteria include:

- Observed Energy Release Component ("ERC")
- Observed wind gust
- Observed Fosberg Fire Weather Index ("FFWI")

The figure below represents the de-energization decision tree for Topaz and Muller 1296 r3 PSPS zones.



The figure below represents the de-energization decision tree for all other zones.



5.6.2.3 Strategy to provide for safe and effective re-energization of any area that was de-energized due to PSPS protocol.

Once Liberty CalPeco has confirmed that conditions have subsided to the point that an energized grid does not pose a wildfire threat, the utility will begin the process of re-energizing power lines.

Once a decision to re-energize has been made, Liberty CalPeco will:

- Patrol affected circuits prior to re-energization.
- Inform all media and partners of the successful conclusion of the de-energization event and provide an update when power has been restored.
- Inform all customers impacted by the de-energization event that power has been restored via Everbridge (email, voice, and/or text).
- Post the time of power restoration(s) on the Liberty CalPeco website and social media at the conclusion of the de-energization event.

- Follow up with media and partners to facilitate effective communication and to determine if additional steps or efforts would be beneficial in the future.
- Provide a report to the Director of the Safety and Enforcement Division no later than 10 business days after the conclusion of the PSPS event that includes (i) an explanation of the decision to shut off power; (ii) all factors considered in the decision to shut off power, including wind speed, temperature, humidity, and moisture in the vicinity of the de-energized circuits; (iii) the time, place, and duration of the shut-off event; (iv) the number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other; (v) any wind-related damage to overhead power-line facilities in the areas where power is shut off; (vi) a description of the notice to customers and any other mitigation provided; and (vii) any other matters the utility believes are relevant to the Commission's assessment of the reasonableness of Liberty CalPeco's decision to shut off power.

Prior to re-energization, Liberty CalPeco will inspect all de-energized circuits to facilitate safe operation when energized and that identified corrective actions are addressed and hazards are cleared. Once the de-energized circuits have been patrolled, immediate corrections implemented, and the fire threat has subsided, Liberty CalPeco will re-energize the line.

The process used to re-energize lines will be updated to conform to changes mandated in Commission proceeding R.18-12-005.

5.6.2.4 Company standards relative to customer communications

Advanced Notice

Liberty CalPeco will work to provide as much advanced notification as prudent to customers that may be affected by a PSPS event, and Liberty CalPeco plans to provide even more advanced warning of a PSPS event to public safety partners, local utilities, and critical infrastructure, before a PSPS event is imminent. In order to avoid desensitization of the public, advanced notice to customers will be provided in a shorter timeframe and only when a PSPS event is likely. Under these considerations, Liberty CalPeco has developed the following notification guidelines:

- Up to eight days in advance – cities, counties, emergency services (public safety partners), regional utilities, cell tower operators, and critical facilities.
- Up to 72 hours in advance – medical baseline or medically sensitive patients, and cities, counties, emergency services (public safety partners), regional utilities, cell tower operators, and critical facilities.
- Up to 48 hours in advance – all affected or potentially affected customers, public safety partners, CPUC, and the media.
- Up to 24 hours in advance – all affected or potentially affected customers, public safety partners, CPUC and the media.
- Immediately before de-energization – all affected or potentially affected customers, public safety partners, CPUC and the media.
- During the PSPS Event – all affected or potentially affected customers, public safety partners, CPUC, and the media.
- At the conclusion of the PSPS Event – all affected or potentially affected customers, public safety partners, CPUC, and the media.

List of Priority Entities / Critical Facilities

1. Health Care Facilities
    a) Primary Care Hospitals
2. Utility Services/Districts
    a) Public Utility Districts
    b) Telecommunications
    c) Water/Water Treatment
    d) Pipeline
3. Public safety agencies
    a) Public Safety Dispatch Centers
    b) Law enforcement facilities/holding facilities
    c) Fire operations facilities
    d) Transportation equipment and facilities
4. Government facilities
5. Green Cross/Life Line

Notification Responsibility

Liberty CalPeco will lead the communication effort and outreach of PSPS events. Liberty CalPeco will be clear with its public safety partners when the information is intended to be public. When notifications are intended to be public, Liberty CalPeco will provide clear messaging and request that each partner and media outlet assist in the distribution of the same information and messaging. To this point, Liberty CalPeco has embarked on a system-wide outreach and awareness campaign to help customers and partners understand and prepare for a PSPS event.

Stakeholder Group	Description
Customers	· Any person, organization, or critical facility receiving electricity from Liberty CalPeco
Local Government / Critical Agencies	· Primary Care Hospitals · Public Utility Districts (Truckee Donner, South Tahoe) · Counties (Alpine, El Dorado, Mono, Nevada, Placer, Plumas, Sierra) · Cities/Towns (Portola, South Lake Tahoe, Truckee) · Telecommunications Water/Water Treatment Public Safety Dispatch Centers · Law enforcement/holding facilities · Local tribal governmental agencies · Fire operations facilities · Transportation equipment and facilities · Local Emergency Planning Committees · CAL FIRE · California Department of Transportation · USFS · Sierra Front Wildfire Cooperators · CPUC SED
Mutual Assistance Agreements	· NV Energy · Western Energy Institute Mutual Assistance Roster · California Utilities Emergency Association
Commission	· Utility Safety Branch · Energy Branch · Energy Division · Office of Emergency Services Warning Center · Others, as requested

5.6.2.5 Protocols for mitigating the public safety impacts of these protocols

Liberty CalPeco provides ongoing public electric safety courses and information so that the public will be prepared when an emergency event occurs. These programs are provided year-round to all levels of schools, business, service clubs and also trade shows and expositions. Additionally, Liberty CalPeco routinely provides electric safety training to local and regional law enforcement, fire, county and state transportation, and other emergency response agencies. Public Safety Training is the responsibility of all.

During an emergency event, Liberty CalPeco may utilize stand-by personnel, trained in general electrical safety, to observe and report hazardous conditions and assist in perimeter safety around identified hazards due to unsafe conditions until qualified electric personnel arrive.

Personnel safety is identified as a key element within Liberty CalPeco's Emergency Response Plan. Electric trade personnel, including ground person, helpers, apprentices, journeyman lineman, trouble men, and inspectors are provided the highest level of safety and skills training to perform in both daily and emergency situations. Only trained personnel may perform safety sensitive functions including switching, de-energizing, overhead and underground operations, repairing and assessing damage.

To improve employee and public safety, the design, installation and operation of equipment and automatic protection schemes for transmission and substation equipment must remain in place. Employees follow procedures in accordance with OSHA 1910.269 regulations. Non-trade personnel that are mobilized to assist with emergency repair (metering, meter reading, construction, etc.) are trained in general electric safety before assisting in emergency field response.

Liberty CalPeco will respond to immediate life safety concerns as its top priority. Once a hazardous situation is reported, immediate response will be provided by line crews, trouble men, inspectors or other trained personnel to assess and mitigate risk.

i. All field response employees shall undergo safety training aligned with their respective roles.
ii. All electrical switching and reporting shall be managed by the appropriate controlling parties to enhance employee and public safety.
iii. Liberty CalPeco will provide regular public information, typically in the form of media messages or alerts, regarding unsafe or hazardous areas or conditions that the public should be informed about.
iv. In the event of an area emergency that is life or property threatening, the EAS shall be enabled through the local or county Emergency Management or Public Safety office. Liberty CalPeco will advise the emergency management agencies when such alert is essential.
v. Public safety agencies will be utilized, as necessary, for traffic control and perimeter safety until qualified personnel arrive to clear the hazard situation. Agencies will be used, if necessary, to control public disturbances and establish safety controls for the public.
vi. Employees will be monitored for appropriate meal breaks, hours worked, and safety compliance; when emergencies are expected to last more than 24 hours. Shifts will be established to cover work, and employees will be given appropriate rest periods.
vii. Weather and road conditions will be are monitored for worsening conditions so that workers are not stranded at remote work locations.
viii. Work may be curtailed until safe work conditions prevail.

Ongoing Emergency Response Planning

Leaning on the experienced of other utilities and PSPS reports, Liberty CalPeco is working to align its emergency response and operational protocols to those of first responders and public safety partners in its service territory. As part of its ongoing emergency response planning activities, Liberty CalPeco will conduct stakeholder outreach sessions to gain feedback on the WMP and related activities. The outreach is proposed in two phases:

- Phase 1 – Engage Expert Working Group During Plan Development. Phase 1 includes outreach to a group of experts to participate in a series of three Expert Working Group meetings to inform future actions related to the WMP to assure input and future coordination from those with insight related to critical and key services. The Expert Working Group can identify gaps in any key areas of the plan, further develop key objectives of the plan, and suggest additional content for inclusion in future WMPs and suggest content for public outreach.
- Phase 2 – Public Outreach for Plan Review. Phase 2 includes a series of Public Outreach sessions held at key locations, based on population densities and areas identified with infrastructure, which could potentially be impacted by wildfires. Experts may participate to orient and inform the public, gather and respond to specific questions, and generally opine on key areas of the plan.

This outreach activity will aid in the implementation of plan targets and development of outward-facing partnerships for continued activities. The formalized outreach will enhance expert and community collaboration in support of the WMP in an open discussion forum. A structured outreach reflects the community-based touchpoint based on Liberty CalPeco's desire to formalize collaboration and coordination activities to enhance WMP effectiveness and promote public safety.

Attachment

Liberty CalPeco's Fire Prevention Plan for Overhead Electric Facilities

Fire Prevention Plan for Overhead Electric Facilities

REVISION HISTORY

The Liberty Utilities (CalPeco Electric), LLC (U 933-E) (Liberty CalPeco) Wildfire Prevention Department (Department) updated the Fire Prevention Plan (FPP or Plan) October 2019.[1] The Department will oversee the execution of required training for Liberty CalPeco personnel and contractors prior to the 2020 fire season.

PURPOSE

In 2017 and 2018, California experienced some of the most destructive wildfires in its history. The combination of drought, extreme winds and build-up of dry vegetation contributed to increased wildland fires. The wildfire season and associated forest fire risk factors have increased due to warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt, leading to higher levels of dry fuels. Liberty CalPeco recognizes that the operations, maintenance and construction on the electric grid, and characteristics of associated equipment may present an ignition risk. Our goal is to develop reasonable and actionable plans to mitigate ignition risks, be prepared to suppress small fires, keep our employees safe while working in wildland areas and provide general fire safety precautions for field operations.

Liberty CalPeco developed this Plan in compliance with Ordering Paragraph 3 of California Public Utilities Commission (CPUC) Decision (D.) 12-01-032 and the revisions of D.17-12-024 pursuant to General Order (GO) 166 Standard 11 and information specified in GO 166 Standard 1, Part E as applicable to Liberty CalPeco's service territory (See Attachment 1). The FPP identifies operational protocols for Liberty CalPeco overhead facilities that lie within Tiers 2 and 3 of the High Fire-Threat District (HFTD) Map adopted by the CPUC on January 19, 2018. The Plan delineates operational pathways in working with electrical assets and overhead facilities that may pose a fire ignition threat under notification of rated fire watch conditions.

The FPP establishes procedures to be followed by the utility for facilities in Tier 2 or 3 of the HFTD or during the Fire Precautionary Period, which is considered to be sustained by the Department of Forestry and Fire Protection (CAL FIRE). Due to the high alpine climate of Liberty CalPeco's electric service territory, late fall and winter months present a seasonal swing of reduced risk due to snow conditions as compared to spring and summer months. Liberty CalPeco personnel operate with consideration of stringent fire safety requirements for high risk areas and conditions. Currently, a combination of Red Flag Warning (RFW) notifications, interpretations from the Reax predictive tool, and information gathered from Liberty CalPeco weather stations will help determine avenues and countermeasures to mitigate the threat of utility-caused fire ignitions during

[1] Navigant Consulting, Inc., a Guidehouse company (Navigant) assisted Liberty CalPeco in preparing this report for filing, based on the information the utility provided. The information presented in this report represents Navigant's professional judgment based on the information available at the time this report was prepared with Liberty CalPeco's overall decision-making. Navigant is not responsible for the reader's use of, or reliance upon, the Plan, or any decisions based on the Plan. NAVIGANT MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED. Readers of this Plan are advised that they assume all liabilities incurred by them, or third parties, as a result of their reliance on the Plan, or the data, information, recommendations, and opinions contained in the report.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

periods of "Normal," "Elevated," and "Extreme" fire ratings. (*See* Fire Potential Index.) These procedures include practices for field operations and maintenance (O&M) activities in applicable areas and conditions.

The FPP establishes procedures and routine operational practices that:

1) Provide employees and contractors an understanding of the enacted processes and procedures that will improve reliable and safe operation of overhead electric facilities in high-risk areas or under fire weather conditions;
2) Establish Liberty CalPeco standards of equipment and vehicle use and operations during fire risk seasons and work near potential ignition sources;
3) Determine work restrictions during cautionary periods issued by internal meteorological and predictive tools and RFWs, as designated by the National Weather Service (NWS);
4) Outline the operational and communication procedures when working adjacent to or immediately after a fire ignition within the service territory;
5) Present the future use of the Fire Potential Index (FPI) as it relates to additional risk measurements that may be warranted and discerning the appropriate operational procedures for field activities; and
6) Introduce general fire safety considerations and precautions for performing work in high risk areas and/or during high risk weather periods.

DEFINITIONS

Activity: Specific operation of a piece of equipment, such as a chainsaw or tractor.

Baseline Fire Tools: Items available to field personnel to prevent and quickly suppress small ignitions for a designated worksite. These tools include but are not limited to:

Fire Box: Container available at the worksite containing fire suppression equipment and additional as deemed appropriate for the performed activity.
Indian Can: Canister containing fire suppressant material.
Shovel: Rounded tip with a length of approximately 48 inches.
Wildland McLeod tool: Fire hand tool used for raking and scraping.

Fire Potential Index: Ranking system that aligns predetermined operational practices with elevated risks restrictions due to the threat of potential ignition. Liberty CalPeco has identified three tiers of risk: normal fire risk, elevated fire risk, and extreme fire risk. The Fire Potential Index tool is currently being developed and will be updated in the next revision cycle of the FPP.

Fire Safety Leader: Designated field supervisor or crew member who has a dedicated role for fire safety requirement oversight during extreme fire risk working conditions.

Fire Safety Monitor: Designated field supervisor or crew member responsible for fire safety requirement oversight during Elevated Fire Risk working conditions.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Manager in Charge: Non-represented employee designated by Liberty CalPeco to implement this policy during normal hours of operation.

Mechanical Operations: Any activity that requires the use of motorized power equipment.

On-call Supervisor: Employee designated by Liberty CalPeco to implement this policy in the absence of the Manager in Charge.

Operating Area: Property on which active operations, including transportation, are to be conducted. The area within 100 feet of the traveled surface of roads is generally considered part of the Operating Area, whether or not it is included in the rights-of-way or easements.

Red Flag Warning (RFW): The National Weather Service will typically declare a RFW within a zone when wind gusts exceed 30 miles per hour (mph), and the relative humidity is less than 20 percent for more than three hours. Other factors considered include timber conditions and forecasts for weather elements, such as dry lightning. Typically, the RFW is issued for a specified period.

ASSESSMENT METHODOLOGY

Liberty CalPeco pursued a structured approach to determining whether an FPP was required for Liberty CalPeco facilities under the Rulemaking (R.) 08-11-005, as described in the final decision. The approach utilized the information collected to identify specific facilities that meet the Plan criteria for inclusion in the FPP. This Plan is sufficient for most routine work activities. In the event a project-specific fire plan is deemed necessary, the Project Manager, or Project Manager's designee, will coordinate with field crew to frame additional criteria. The assessment methodology for the FPP is described below.

1) Liberty/Reax Fire Forecast: Reax is a predictive tool that captures three main methods of fire weather condition measurement: Energy Release Component (ERC), wind gusts, and the Fosberg Fire Weather Index (FFWI). Liberty CalPeco will issue proactive patrols and inspection procedures during applicable work if a triggered scenario is revealed through the predictive software tool. When the Reax tool predicts potential fire weather conditions, the Manager in Charge or designee will refer to the tiered risk categories in this Plan and initiate operational protocols based on the determined rating.

2) Red Flag Warnings: Fire Weather Zone Boundaries were compared to Liberty CalPeco's service territory, and it was identified that the territory spans portions of three different zones. Liberty CalPeco will monitor the applicable zones 271, Zone 272, and Zone 273. Historical data for the past 10 years' RFWs within each of these zones was collected for each occurrence, so that wind data could be collected and evaluated for each identified RFW.[2]

[2] Alerts may be monitored using the links below and Liberty CalPeco will make best efforts to subscribe to automatic alert notifications: http://inws.wrh.noaa.gov/page/faq and https://inws.wrh.noaa.gov/alerts.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
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Fax: 530-581-0341

During Red Flag Events, Liberty CalPeco will monitor wind gusts at the peak elevation located at Bliss State Park using the link below or other available data.[3]

Liberty CalPeco has identified 46 Public Safety Power Shut-off (PSPS) zones that are based on isolation points within certain circuits or areas. If Reax forecasts for these zones that the ERC, wind, and FFWI will come within 80%, 90%, or 100% of the thresholds for de-energization, Liberty CalPeco will enact a PSPS upon or just before reaching 100%. During a PSPS event, Liberty CalPeco will suspend noncritical operational work to focus efforts on current conditions and proactive patrols after de-energizing and when restoring power. Liberty CalPeco adheres to the guidelines provided in R. 18-12-005, an open proceeding that prescribes utilities' PSPS processes, among other issues. Liberty CalPeco will provide updated protocols for internal PSPS practices in the 2020 version of its Wildfire Mitigation Plan.

3) Liberty CalPeco Design Standards: An engineer examined the Liberty CalPeco facilities design standards to evaluate the minimum standard for wind loading design. The design standard utilizes the criteria specified in GO 95 Section IV. However, this is a minimum design standard, and facilities are often oversized for a variety of reasons. Liberty CalPeco will review applicable wind loading design standards, monitor regulatory changes to standard design requirements, and update standards for minimum wind loading design criteria as deemed prudent.

4) Wind Data: NWS Remote Automatic Weather Stations were mapped for the area within 25 miles of the Liberty CalPeco service territory. Wind gust data from the NWS site is monitored for each RFQ. The station automatically records the maximum instantaneous gust over the past hour, while wind speed averages are recorded by the stations over 10-minute periods. Because it is not possible to discern if gusts lasted three seconds or more, it is assumed that all maximum gusts meet the three-second criteria to guard against underestimating a fire threat.

   In addition to fire weather and fuels data from the NWS and United States Department of Agriculture National Fire Danger Rating System, Liberty CalPeco tracks instantaneous meteorological conditions received from the 10 weather stations in the service territory. Liberty CalPeco also proposes to install 20 additional weather stations during 2020. The server data capturing meteorological conditions will serve as a principle variable underlying the development of the FPI. Until the FPI is developed and adopted by Liberty CalPeco, operational designations for fire ratings will be derived from the meteorological data expressed above.

5) Mapping: Tiers 2 and 3 of the HFTD are overlaid on the Liberty CalPeco service territory map. All Liberty CalPeco facilities are mapped without underground facilities, which are not subject to the Plan requirements. Operational work within Tier 2 and 3 of the HFTD or in response to issued RFWs are subject to more stringent fire safety requirements, as described in this Plan. The

[3] Bliss State Park: https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCDLB

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
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attached map complies with GO 95 Rule 21.2-D.

6) Fire Potential Index (FPI): The FPI is used as means to develop guidelines for utility and contractor operations and maintenance crews to follow under Liberty CalPeco's defined categories of wildfire risk. The Wildfire Prevention Department is responsible for determining and communicating the FPI on a daily basis. The current status of the FPI will be posted on the Liberty CalPeco intranet and will communicate the status to the Manager in Charge. The FPI rating framework is currently in development.

FIRE POTENTIAL INDEX

Liberty CalPeco is currently developing a FPI methodology that comprehensively assesses the fire risk utilizing several data points to influence operation and maintenance decisions related field work. The FPI forecasting application is anticipated to capture data from situational awareness tools and seven-day projections and will then present a fire ranking that aligns with a "Normal," "Elevated," and "Extreme" fire potential. The FPI is scheduled for completion in 2020 and will be included in the FPP for the next filing cycle.

The three FPI Risk conditions are defined as follows:

Extreme Fire Risk: As determined by the Wildfire Prevention Department, Extreme Fire Risk is defined as periods of significant risk of wildfires and the associated ignition risks within Tier 2 or 3 of the HFTD. All O&M activities have stipulations, and significant fire mitigation activities are required. The Extreme Fire Risk status is indicated as "red."

Elevated Fire Risk: As determined by the Wildfire Prevention Department, High Fire Risk is defined as periods of increasing risk of wildfires and associated ignition risks within Tier 2 or 3 of the HFTD. Many O&M activities have stipulations and additional fire mitigation activities are required. The Elevated Fire Risk status is indicated as "yellow."

Normal Fire Risk: As determined by the Wildfire Prevention Department, Normal Fire Risk is defined as periods where the potential for wildfires and associated ignition risks are not elevated but still exist within Tier 2 or 3 of the HFTD. Some O&M activities may have stipulations and additional fire mitigation activities may be required. The Normal Fire Risk status is the default operational state and the FPI is indicated as "green."

PROCEDURE

General Safety Instructions for Utility and Contractor Crews

- **General Fire Awareness:** During the execution of work activities and use of company equipment and

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

vehicles, all operating personnel must be actively aware and consider actions that may reduce fire risks and personal exposure.

- Activities such as idling a vehicle near brush, grassland, or at-risk vegetation is prohibited, and drivers should always perform a perimeter check after exiting the vehicle and inspect underneath for potential fuel risk.
- The Fire Safety Monitor/Leader should remain alert of crew vehicles traveling over low vegetation or brush.
- Smoking is only permitted in site-specific designated areas or within a 10' clearance of any vegetation or grass.
- When possible during days with high temperatures and low humidity, wet down adjacent vegetation when performing work with equipment that may spark or has an exposed exhaust system.
- Consider the need to disable reclosers on potentially impacted equipment or de-energize circuits within the operating area to prevent potential sparks.

- **Safety Briefings:** When assigned to work within wildland areas, the tailboard safety briefing shall include review of the following:
  - 1. The current daily FPI Rating;
  - 2. Job site-specific fire risks;
  - 3. Elimination of tasks that pose an elevated fire risk;
  - 4. Actions to reduce personal exposure; and
  - 5. Any other possible fire risk mitigation actions.
- **Fire Safety Tools Responsibility:** The crew leader must check the availability and condition of the baseline fire tools during the daily truck safety inspection and make fire suppression equipment readily accessible near operating areas.
- **Tailboard Fire Briefings**: If, during the execution of work, the job site-specific fire risks are elevated, the crew leader shall stop work and hold a tailboard meeting to discuss revised actions. If warranted by elevated jobsite risk conditions, the crew leader may elect to declare the next highest level of Fire Potential Index Rating for the job site.
- **Fire Reporting and Actions:**
  - All fires must be reported to dispatch and follow appropriate incident reporting requirements to the CPUC Safety Enforcement Division (SED).
  - If the work crew cannot quickly extinguish a minor fire or rapidly accelerating fire conditions are encountered, the crew leader shall immediately report the situation to dispatch and relocate the crew, equipment, and materials to a safe location.

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Safety Instructions for Working Under Extreme Risk Index Conditions

When working under Extreme Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Leader. The Fire Safety Leader will not be assigned any job site tasks and will be assigned the specific duties of fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew. Liberty CalPeco will utilize alerts from Reax to determine if a proactive patrol of electrical equipment and vegetation clearances is warranted. Liberty CalPeco will activate proactive fire patrols if it receives a 90% or 100% alert from Reax.

Operating Procedures – Extreme Risk Index Conditions

As a general rule, all work should be suspended during Extreme Risk Index conditions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	**Paved roads or bare improved roads**	**Allowed**
	Off-road and unimproved roads	**Permitted for performance of only those activities that reduce wildfire risks and/or restore customer outages**
Facility Inspections and Patrols	**Driving and climbing inspections of poles, equipment, vegetation and security**	**Assign a Fire Safety Leader**
Overhead Line Corrective Maintenance and Repairs	**Replacement and/or installation of splices, fuses, lightning arrestors, and insulators**	**Perform only those activities that reduce wildfire risks and/or restore customer outages; assign a Fire Safety Leader**
Pole Setting and Removal	**Paved roads or bare improved roads**	**Not allowed**
	Off-road and unimproved roads	**Not allowed**
Replacing and Stringing Conductor	**Paved roads or bare improved roads**	**Not allowed**
	Off-road and unimproved roads	**Not allowed**
Vegetation Management Near Poles and Towers	**Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control**	**Not allowed**
T&D Overhead Line Vegetation Management	**Minor maintenance tree trimming and associated branch removals using buckets and/or hand tools to maintain company clearance standards**	**Perform only those activities that reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Leader**
	Cycle trimming using buckets and/or hand tools to maintain company clearance standards	**Not allowed**
Reciprocating Construction Equipment	**Truck mounted compressors and/or generators**	**Assign a Fire Safety Leader**
	Non-truck mounted compressors and/or generators	**Not allowed**
	Welders and grinders	**Not allowed**
Blasting	**Blasting of rock with explosives**	**Not allowed**

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Safety Instructions for Working Under Elevated Risk Index Conditions

When working under Elevated Risk Index conditions, the crew leader shall designate a crew member as a Fire Safety Monitor. In addition to the assigned work duties at the job site, the Fire Safety Monitor is responsible for fire risk awareness and prevention, detecting and extinguishing minor fires, and placing the baseline fire tools in a location that is easily accessible by the work crew.

Operating Procedures - Elevated Risk Index Conditions

As a general rule, work may be limited during Elevated Risk Index conditions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	**Paved roads or bare improved roads**	**Allowed**
	Off-road and unimproved roads	**Permitted for performance of only those activities allowed under High Risk Conditions**
Facility Inspections and Patrols	**Driving and climbing inspections of poles, equipment, vegetation and security**	**Assign a Fire Safety Monitor**
Overhead Line Corrective Maintenance and Repairs	**Replacement and/or installation of splices, fuses, lightning arrestors and insulators**	**Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor**
Pole Setting and Removal	**Paved roads or bare improved roads**	**Assign a Fire Safety Monitor**
	Off-road and unimproved roads	**Not allowed**
Replacing and Stringing Conductor	**Paved roads or bare improved roads**	**Assign a Fire Safety Monitor**
	Off-road and unimproved roads	**Not allowed**
Vegetation Management Near Poles and Towers	**Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control**	**Not allowed**
T&D Overhead Line Vegetation Management	**Minor maintenance tree trimming using buckets and/or hand tools to maintain company clearance standards**	**Perform only those activities which reduce wildfire risks and/or restore Customer outages; assign a Fire Safety Monitor**
	Cycle trimming and associated tree/branch removals using buckets and/or hand tools to maintain company clearance standards	**Not allowed**
Reciprocating Construction Equip.	**Truck-mounted compressors and/or generators**	**Assign a Fire Safety Monitor**
	Non-truck-mounted compressors and/or generators	**Not allowed**
	Welders and grinders	**Not allowed**
Blasting	**Blasting of rock with explosives**	**Not allowed**

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

Safety Instructions for Working Under Normal Risk Index Conditions

When working under Normal Risk Fire Index conditions, workers should still maintain high awareness of the fire risk and safety hazards within the operating area.

Operating Procedures - Normal Risk Index Rating

As a general rule, work can proceed during Normal Risk Index conditions following General Safety Instructions		
Activity	**Description**	**Stipulations**
Travel with Company Trucks and Vehicles	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Facility Inspections and Patrols	**Driving and climbing inspections of poles, equipment, vegetation and security**	**No restrictions**
Overhead Line Corrective Maintenance and Repairs	**Replacement and/or installation of splices, fuses, lightning arrestors and insulators**	**No restrictions**
Pole Setting and Removal	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Replacing and Stringing Conductor	**Paved roads or bare improved roads**	**No restrictions**
	Off-road and unimproved roads	**No restrictions**
Vegetation Management Near Poles and Towers	**Use of powered hand tools (chainsaws and weed eaters) to clear low-lying vegetation and noxious and invasive plant control**	**Follow safety instructions for working under High Risk Index conditions**
T&D Overhead Line Vegetation Management	**Minor maintenance tree trimming using buckets and/or hand tools to maintain company clearance standards**	**No restrictions**
	Cycle trimming and associated tree/branch removals using buckets and/or hand tools to maintain company clearance standards	**No restrictions**
Reciprocating Construction Equipment	**Truck mounted compressors and/or generators**	**No restrictions**
	Non-truck mounted compressors and/or generators	**Assign a Fire Safety Monitor**
	Welders and grinders	**Assign a Fire Safety Monitor**
Blasting	**Blasting of rock with explosives**	**Truck must have permit with restrictions; assign a Fire Safety Monitor**

933 Eloise Avenue
South Lake Tahoe, CA 96105
Phone: 800-782-2506
Fax: 530-544-4811

P.O. Box 107
Tahoe Vista, CA 96148
Phone: 800-782-2506
Fax: 530-581-0341

ACTIVE FIRE SAFETY PRECAUTIONS

Liberty CalPeco values safety as a core competency of field and hot work performed in high risk areas. For all contractors and utility personnel, these precautions exist for critical work performed within Tiers 2 and 3 of the HTFD under threat of wildland fire. If a small fire ignites and rapid suppression is not achieved by field personnel, field crew are directed to stop work, retreat to a safe area adjacent to the work site, immediately call upon dispatch services, and alert nearby fire and impacted agencies and entities.

All contractors and utility personnel working adjacent to active wildland fires should consider the following:

- Use Personal Protective Equipment (P.P.E.) when working within or adjacent to and uncontrolled fire perimeter if required at the determination of the Fire Safety Leader or designee.
- Maintain communication lines through operational protocols when a fire ignites,. This includes correspondence made with office and dispatch centers, local law and fire agencies, customers, and impacted jurisdictions, if any.[4] The Incident Commander (IC), once designated, should coordinate and effectuate these activities.
- Take increased precaution when driving near flames or in smoky conditions. Road obstructions may pose a risk, and drivers and crew should have a general awareness of nearby access and evacuation routes.
- Determine if de-energizing any potentially impacted electrical assets or those that pose a risk to spreading the active wildland fire is necessary. Field crew should adhere to Liberty CalPeco PSPS procedures where applicable.
- Designate an Emergency Operations Center and adhere to the Incident Command Structure led by an IC to oversee response, fire exhaustion, and recovery efforts.
- Perform any routine investigations after fire suppression. Report incident data to SED and execute necessary reporting procedures as part of Liberty CalPeco business practices.

ATTACHMENTS

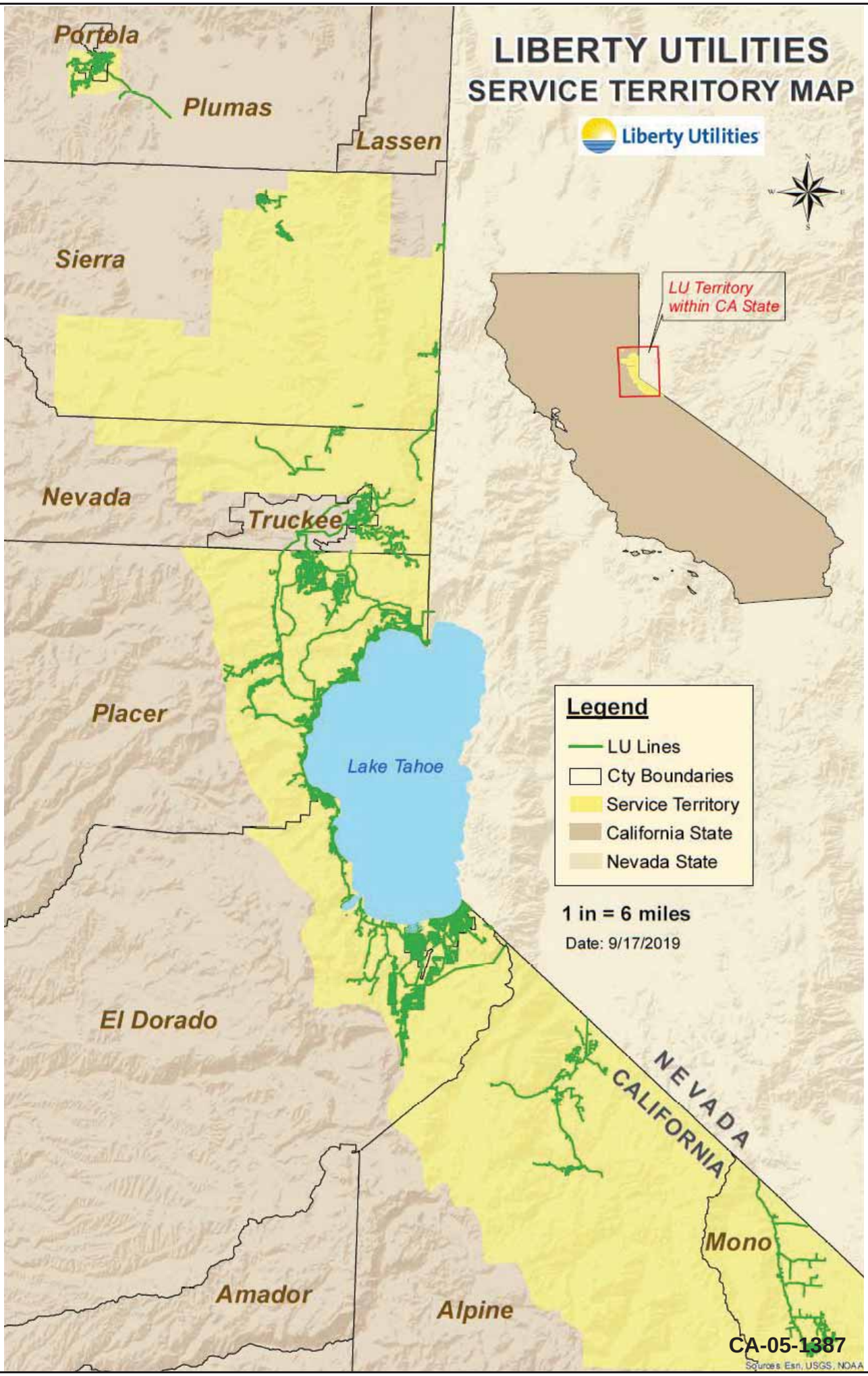
1) Attachment 1- Liberty CalPeco service territory map

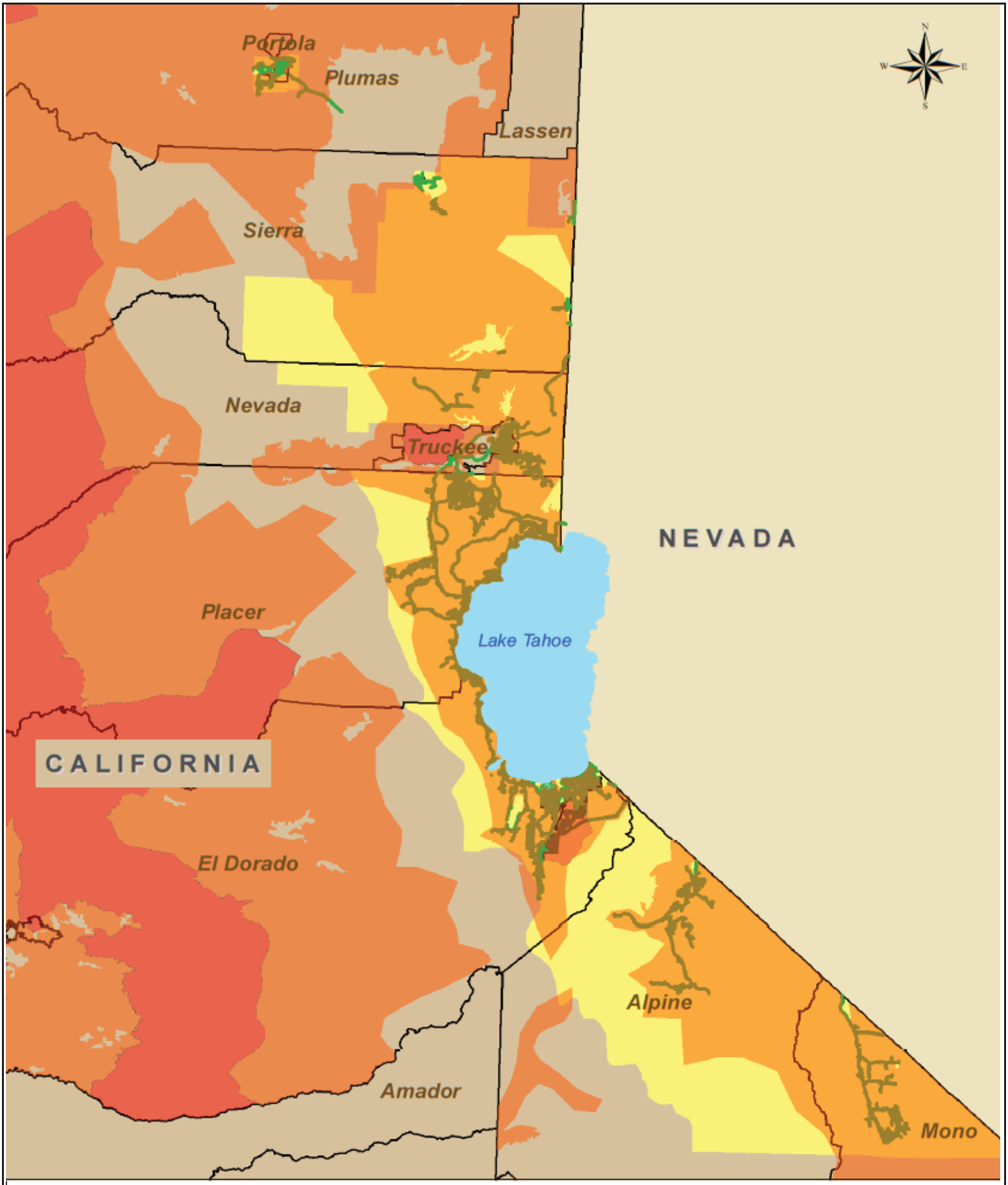
2) Attachment 2- Liberty CalPeco service territory overlaid with the HFTD

[4] Notifications to customers during and post-fire suppression should occur in English and Spanish.

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LIBERTY UTILITIES
SERVICE TERRITORY MAP
Liberty Utilities
Portola
Plumas
Lassen
Sierra
Nevada
Truckee
Placer
Lake Tahoe
El Dorado
Amador
Alpine
Mono
NEVADA
CALIFORNIA
LU Territory within CA State
Legend
LU Lines
Cty Boundaries
Service Territory
California State
Nevada State
1 in = 6 miles
Date: 9/17/2019
CA-05-1387
Sources: Esri, USGS, NOAA



Legend

- LU Lines
- California
- Nevada
- Service Territory
- Tier 2 Fire Threat
- Tier 3 Fire Threat

HIGH FIRE THREAT WITHIN LIBERTY UTILITIES SERVICE TERRITORY

Date: 6/27/2019

1 in = 11 miles

Liberty Utilities
701 National Ave
Tahoe [illegible] CA 96148

CA-05-1388