

Community Wildfire Safety Program

GLENN COUNTY

June 2021



Meeting Purpose and Discussion Topics

MEETING PURPOSE

- Share progress on important work to prevent wildfires and reduce PSPS impacts
- Collaborate on community-specific solutions
- Partner to prepare for fire season and PSPS events in 2021

DISCUSSION TOPICS:



COMMUNITY WILDFIRE SAFETY PROGRAM OVERVIEW



PUBLIC SAFETY POWER SHUTOFF (PSPS) GOALS AND IMPROVEMENTS



LOCAL PROJECTS



CUSTOMER AND COMMUNITY SUPPORT



PSPS PREPAREDNESS AND PLANNING



How We Are Implementing Customer and Agency Feedback and Lessons Learned

We continue to evolve our wildfire safety and PSPS programs based on lessons learned, new data and feedback received from our customers and communities.

	What We Heard	What We're Doing
Agency/Tribal	PSPS Portal: provide more consistent, timely and accurate info on the PSPS Portal and other channels	Adjusting the layout so files and updates are easier to find and standing up a PSPS Portal Working Group to solicit feedback
	Customer Resources and Support: additional opportunities to partner with community-based organizations	Tracking suggestions and feedback from agency partners and conducting outreach to new community-based organizations
	Community Resource Centers: continued coordination around locations, offerings and signage	Providing quarterly updates on status of CRC locations and soliciting further input from agency partners
	Coordination with Telecom Providers: additional preparedness efforts regarding continued phone service during outages	Hosting telecom workshops to facilitate PSPS preparedness and expanding on notification databases for increased coordination
Customer	PSPS Notifications: experienced inaccurate or inconsistent information in some cases	Enhancing data quality, accuracy and reporting capabilities
	PSPS Restoration Time: customers requested more accurate restoration times	Further refining event notification content and timing
	Customer Resources and Support: build on partnerships with CBOs and explore other resource offerings	Increasing resources to help customers and communities before, during and after PSPS events
	Medical Baseline: customers want additional support and information	Driving greater participation in battery programs to help vulnerable and frequently impacted customers

Local Projects/ Electric Grid Overview



Targeting Wildfire Safety Work in High-Risk Areas

We have implemented a **new wildfire risk model** that allows us to better target our work in the areas of highest risk.

Key Improvements

- ✓ Using **advanced technology and field expertise** to incorporate wildfire conditions as they develop from one season to the next
- ✓ New model accounts for **fast-burning fuels and potential “ladder” effects**
- ✓ New models place increased importance on the **consequence of wildfires**

What this means in your community:



More precisely pinpointing our system hardening, vegetation management and other wildfire risk reduction work



Customers and communities may see **a shift in where we are prioritizing** work



We are focusing our efforts closer **to the wildland urban interface**



The shift will help to **reduce wildfire risks in communities**

Our prioritization model will continue to evolve as we learn more about wildfires, the impacts to PG&E infrastructure, and the consequences to the customers and communities we serve.

Key Wildfire Safety Progress in Glenn County

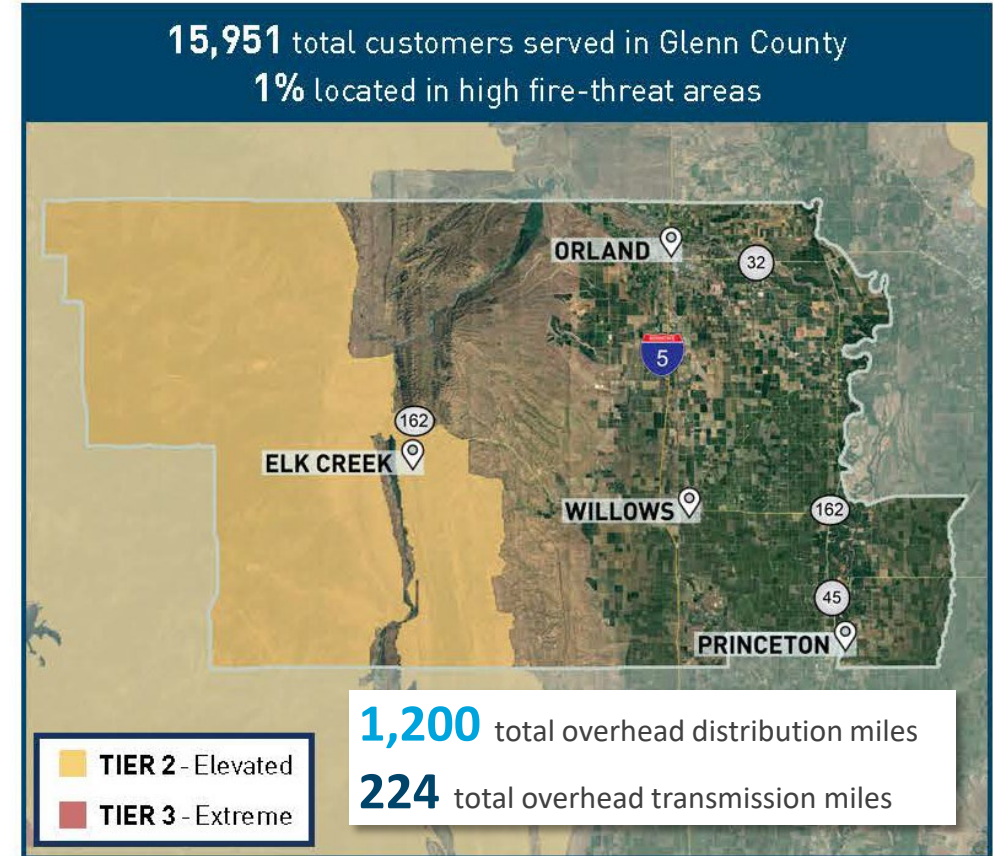
	PROGRAM TOTAL THROUGH 2020		2021 PLANNED
SYSTEM HARDENING*	0 LINE MILES		0 LINE MILES
SECTIONALIZING DEVICES	1 DEVICE		0 DEVICES
TRANSMISSION LINE SWITCHES	0 SWITCHES		0 SWITCHES
ENHANCED VEGETATION MANAGEMENT*	0 LINE MILES		0 LINE MILES
WEATHER STATIONS	6 STATIONS		ONGOING**
HIGH-DEFINITION CAMERAS	6 CAMERAS		ONGOING**
COMMUNITY RESOURCE CENTERS (INDOOR + OUTDOOR)	0 INDOOR	5 OUTDOOR	ONGOING†

*Work plans subject to change

**Identified on a monthly basis

†CRC planning for 2021 is conducted in coordination with local agencies/tribes and is ongoing

County-level quarterly progress updates are available at pge.com/wildfiresafety

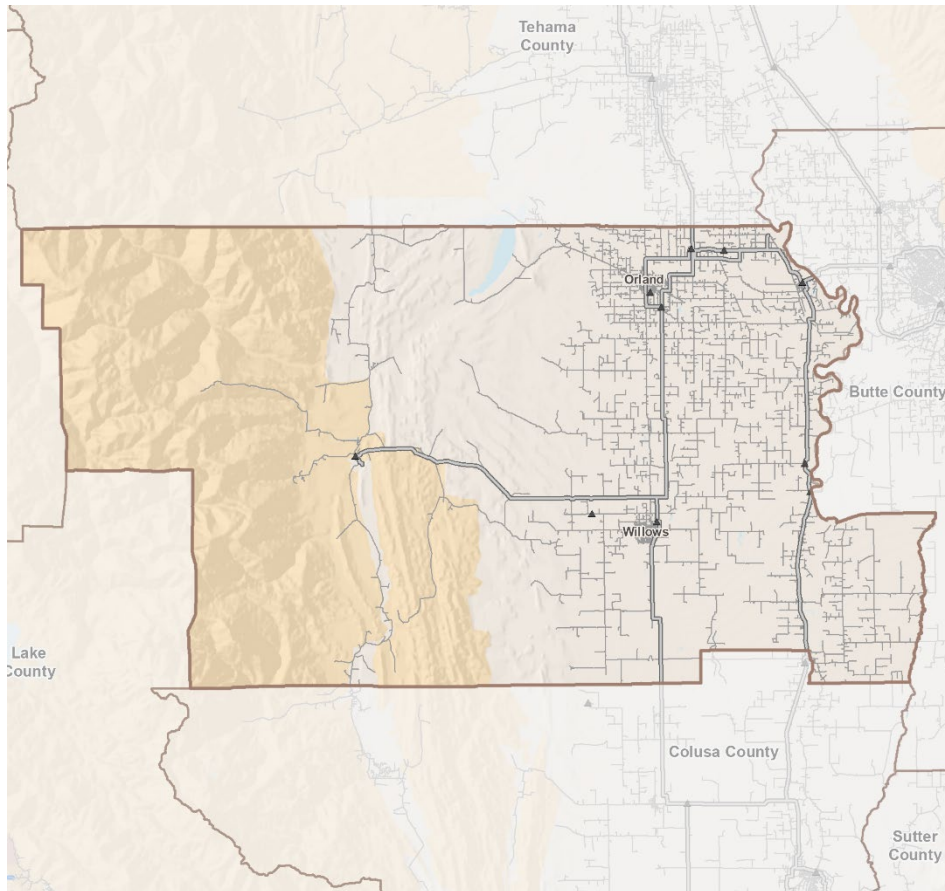


Map source: California Public Utilities Commission (CPUC)


System Hardening and Sectionalizing in Glenn County

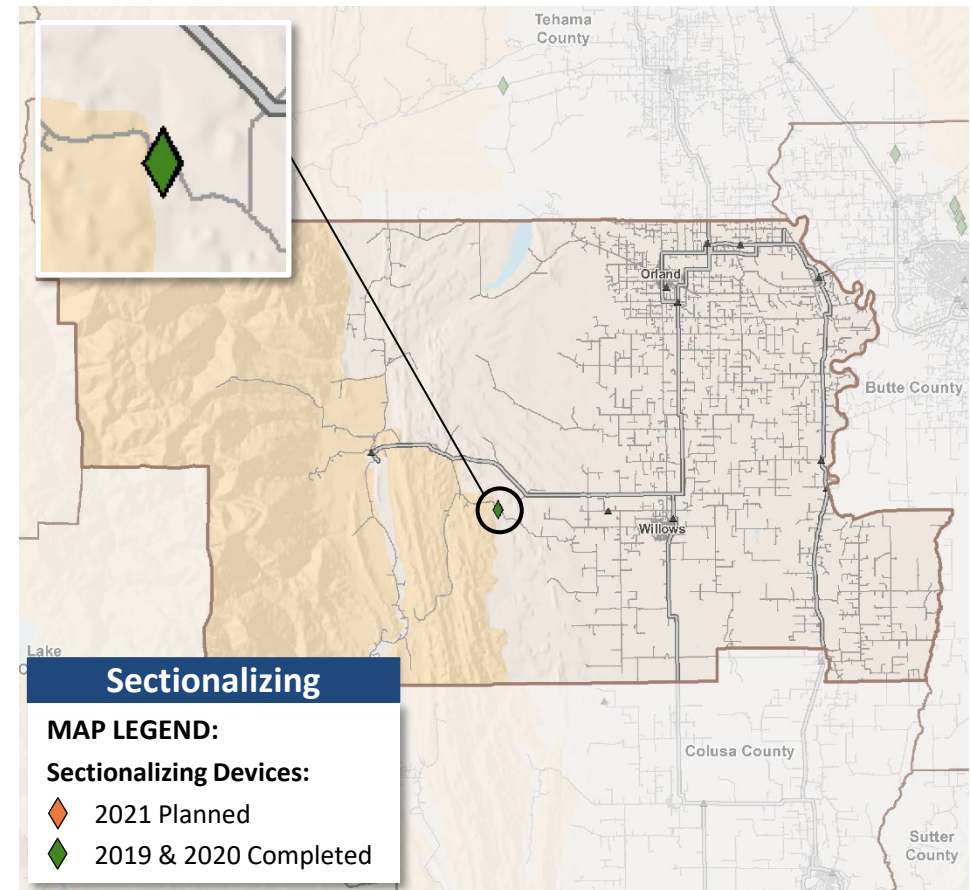
We are installing more resilient infrastructure and replacing equipment where possible. We are also installing new sectionalizing devices to reduce the number of customers impacted during an outage.

 **2021 TARGET** **0 LINE MILES**



Local work plans are subject to change. Locations are approximate.

 **COMPLETE TO-DATE** **1 DEVICE**

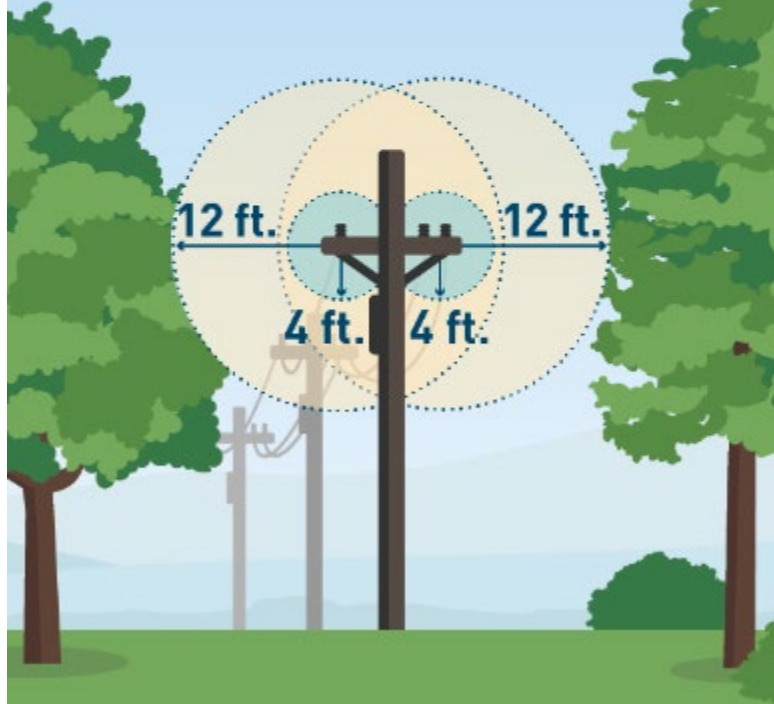


Local work plans are subject to change. Locations are approximate and may overlap.

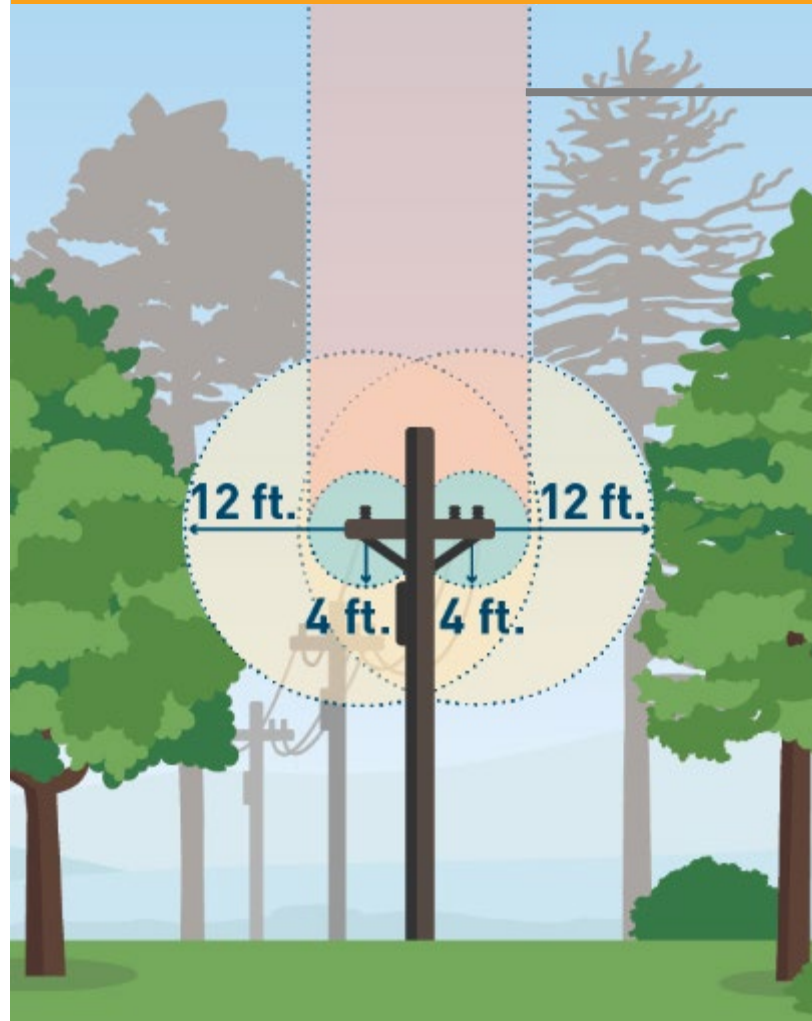
Systemwide Routine and Enhanced Vegetation Management Protocols

ROUTINE Vegetation Management

Meeting state standards that require **4-feet of clearances around distribution power lines** in high fire-threat areas, with recommended **minimum clearances of 12 feet at time of trim** to ensure year-round compliance.



ENHANCED Vegetation Management



Establishing **increased safety clearances between power lines and surrounding vegetation** in high fire-threat areas. This includes **assessing trees with the potential risk to strike lines or equipment** if they are tall enough.

4,300 miles completed through 2020 

2021 GOAL: 1,800 high-risk miles

VEGETATION INSPECTIONS:

- All ~100,000 miles of overhead power lines are inspected annually, with some locations patrolled multiple times a year.
- Enhanced Vegetation Management involves additional inspections beyond routine patrols to identify vegetation that poses a higher potential for wildfire risk in high fire-threat areas.

Using Temporary Power to Support Customers and Communities

PG&E is preparing microgrids to utilize temporary generation as one of the ways to reduce PSPS impacts in our communities.

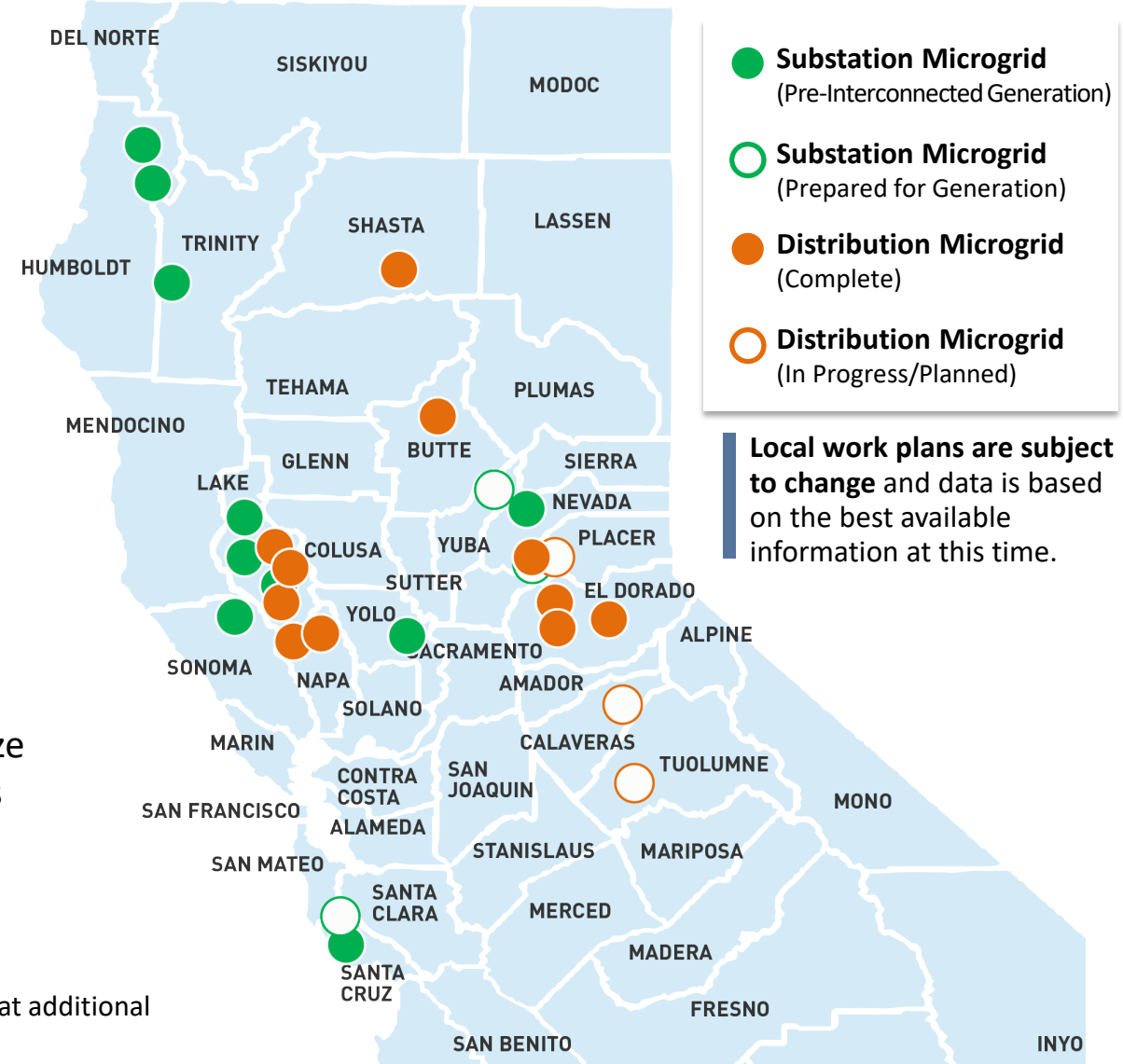
Substation Microgrids

- Temporary generation at substations to support safe-to-energize customers impacted by transmission-level PSPS events
- Pre-interconnecting and testing generation at **10** substation microgrids systemwide
- Interconnecting generation at **3** additional substation microgrids with generation set aside

Distribution Microgrids

- Keep power on during severe weather in safe-to-energize “main street” corridors with shared community services
- **11** distribution microgrids completed systemwide
- **3*** additional distribution microgrids planned this year

*Represents 3 new distribution microgrids to be completed in 2021; note that additional sites are also in development





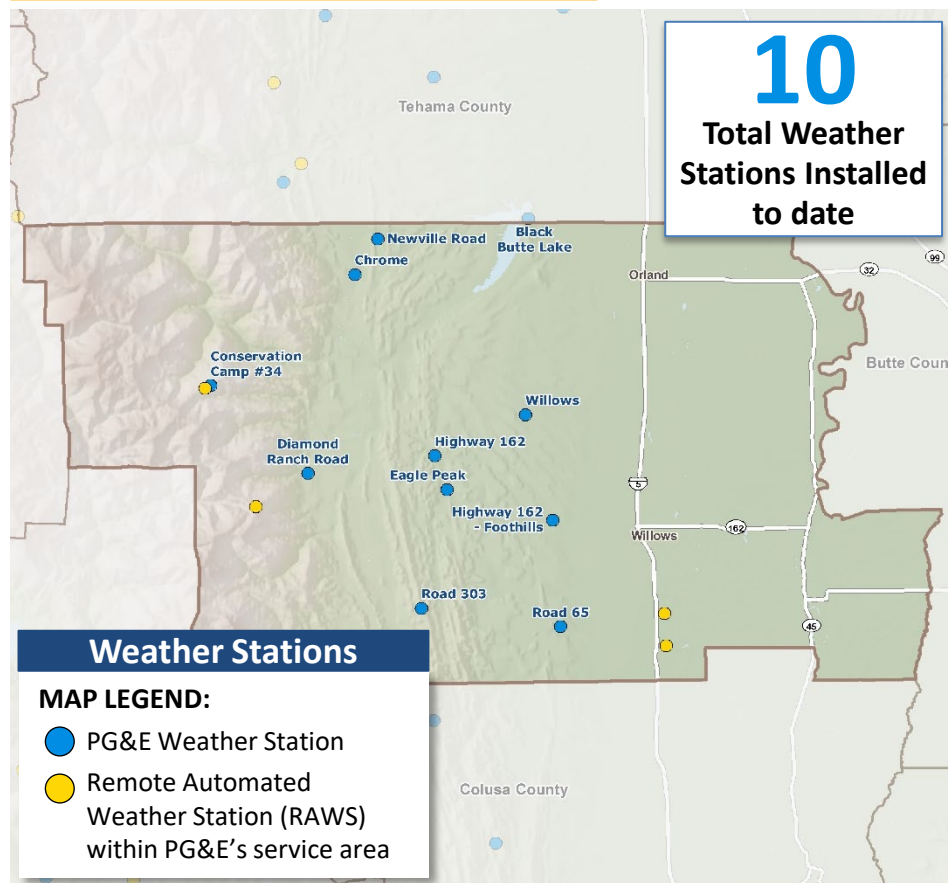
Weather Stations and Cameras in Your Community



Local partnership request:
additional locations for consideration?

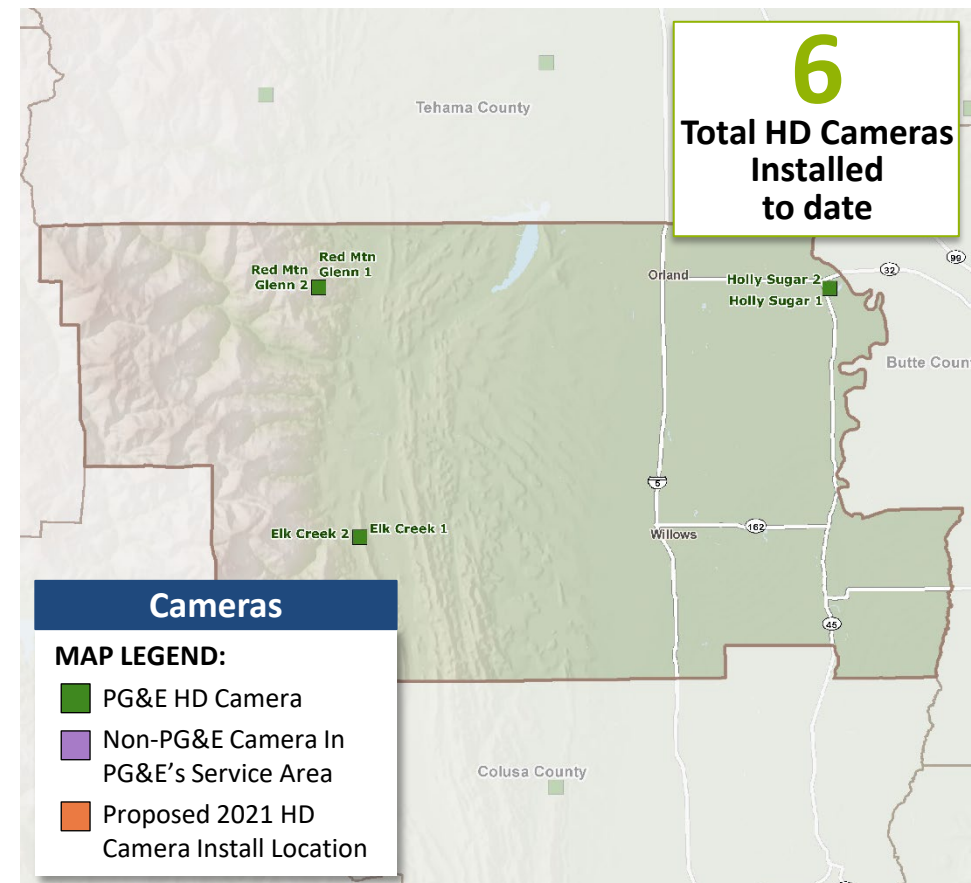
We are adding weather stations and supporting the installation of cameras to better monitor severe weather that can impact our system so we can proactively respond to potential threats.

✓ **2021 COMPLETE** 4 STATIONS



Local work plans are subject to change. Locations are approximate and may overlap.

✓ **2021 COMPLETE** 0 CAMERAS



Local work plans are subject to change. Locations are approximate and may overlap.

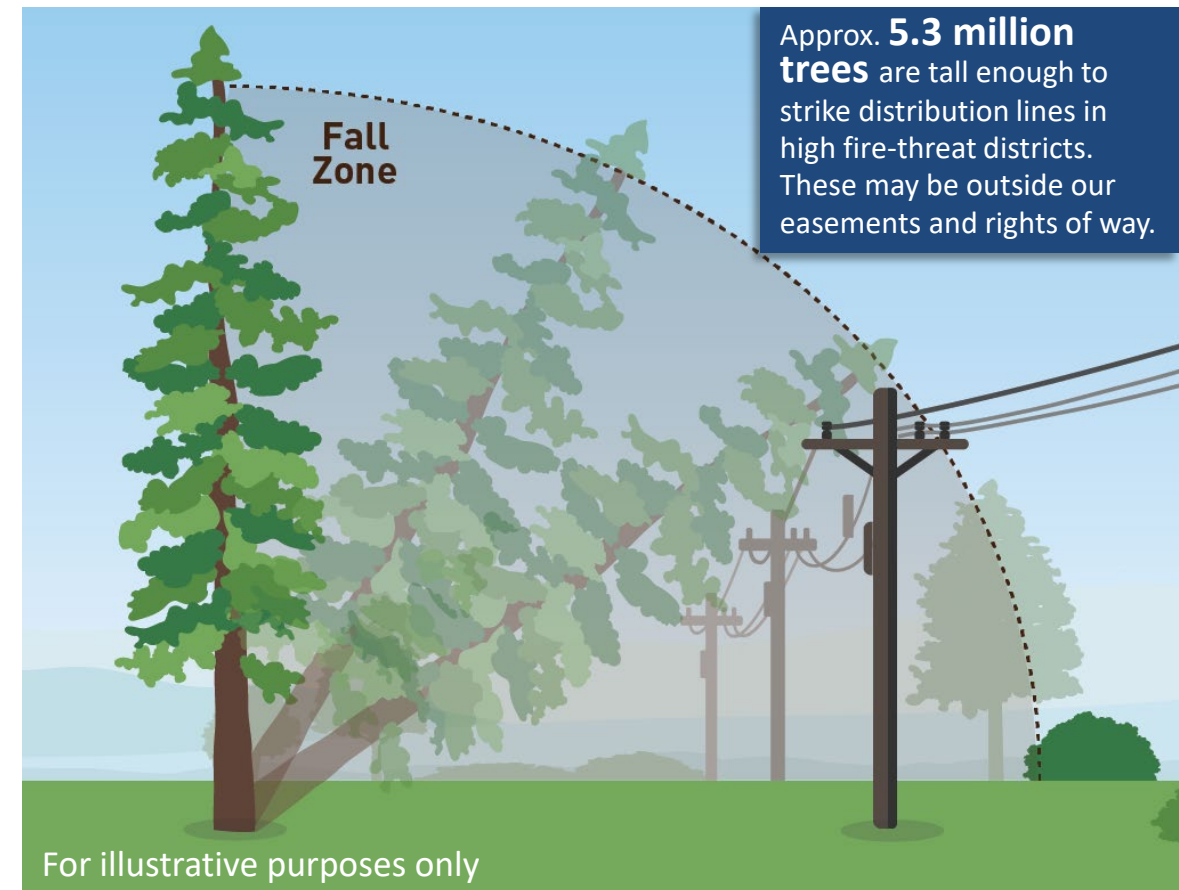
Tree Overstrike Exposure and Potential PSPS Decision-Making

The safety of our customers and communities is our most important responsibility. After last year's wildfire season and the drier than average weather we are experiencing, we have developed additional criteria for our PSPS program, consistent with the recommended conditions of the federal court.

To reduce the risk of major wildfires, PG&E may turn off power on distribution lines* where there are large amounts of trees tall enough to fall into electric lines during severe weather.

- ✓ Customers who live in areas of the highest wildfire risk may experience more frequent **PSPS events** compared to last year's weather conditions.
- ✓ We are sharing **community-specific information** regarding these potential impacts with customers, cities, counties and tribes.

*Does not include transmission lines (which are considered to be ≥ 60 kV)







Identifying Potential Impacts from Updated Criteria – Glenn County

PG&E studied 10 years of weather data from 2010 to 2019 to analyze the potential impact of the updated criteria. The study found:

- ✓ **Reduced risk** of catastrophic wildfires
- ✓ **Additional PSPS events**, increased customers impacted and increased event duration

We do not expect a return to the largescale PSPS events of 2019.

Potential Customer Impacts	BASELINE	WITH UPDATED CRITERIA
 Event Frequency	~0.4 events per year	~0.4 events per year
 Average Event Duration (excludes restoration time)	~20.2 hours	~20.2 hours
 Average Event Customer Count*	~225 customers	~225 customers
 Largest Event Customer Count*	~225 customers	~225 customers

**Averages were calculated using all events from the 10-year historical baseline and the same number of events using the new criteria. This excludes a portion of smaller-scale events using the new criteria. All data is for planning purposes only and additional analysis is ongoing. The size and scope of actual PSPS events is dependent on weather.*

Customer and Community Support



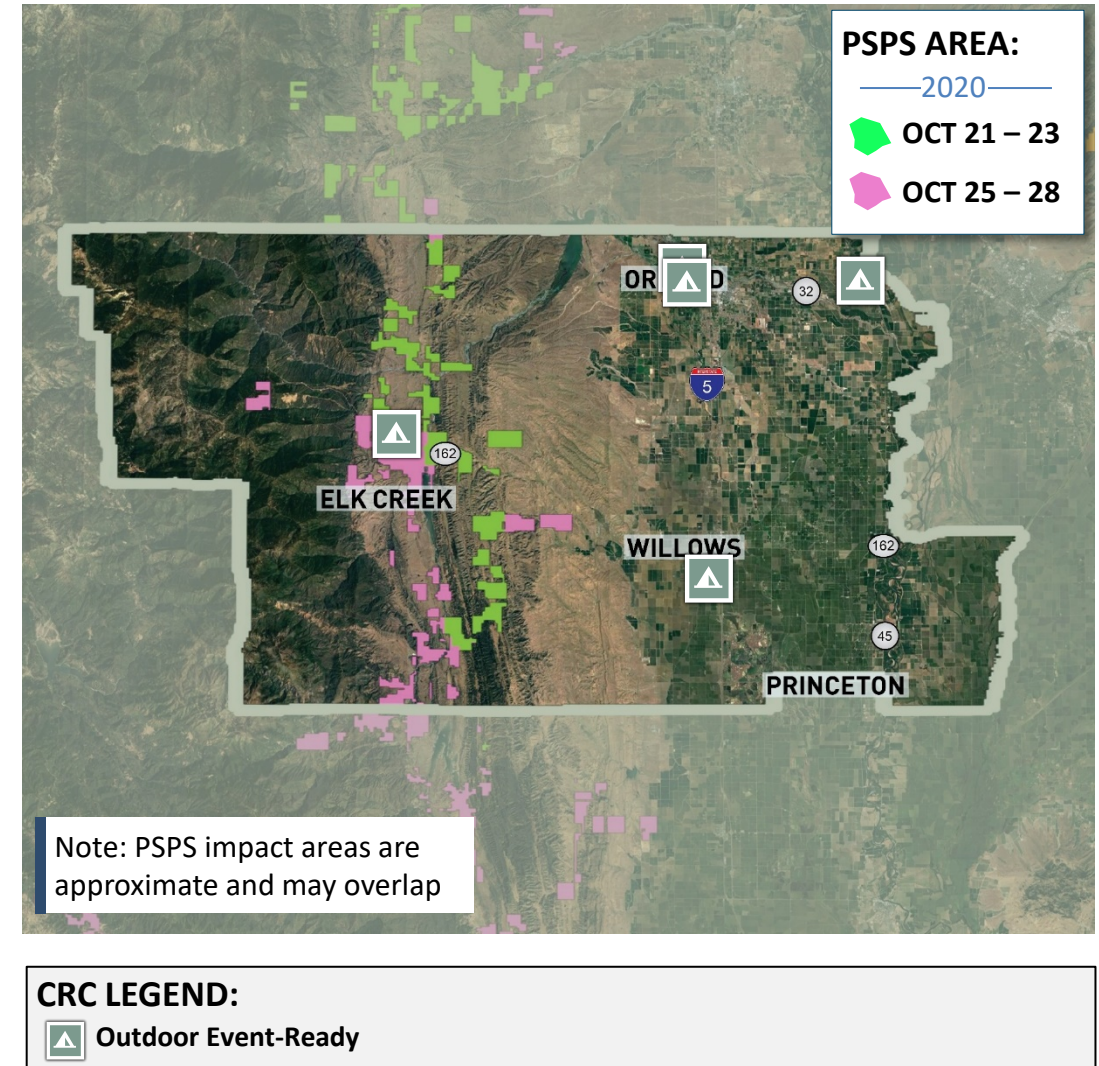
Planning for Community Resource Centers in Glenn County

2021 CRC LOCATIONS*

Outdoor Event-Ready

1	Elk Creek	Elk Creek Junior Senior High School
2	Hamilton City	Hamilton High School
3	Orland	Orland Shopping Center
4	Orland	Subway Restaurant
5	Willows	Open Gate Christian Fellowship

*CRC locations may change without notice. Sites in progress or proposed may fall out of the process for any number of reasons. Proposed locations are subject to finding a suitable site.





We are increasing resources to help customers and communities before, during and after PSPS events:

	Partnerships with 250+ Community-Based Organizations (CBOs) to provide emergency preparedness information and PSPS event assistance
	Sponsored food replacement through partner food banks and Meals on Wheels organizations
	California Foundation for Independent Living Centers (CFILC) providing emergency planning, portable backup power, accessible transportation, hotel stays and food stipends
	Providing portable backup batteries for low-income Medical Baseline customers in high fire-threat areas
	Generator rebate programs offered to customers who depend on well water pumps and live in high-fire threat areas
	Providing better information about when power will be turned off and back on in 16 languages

Glenn County Community-Based Organizations

CFILC

- Disability Action Center

Meals on Wheels

- Glenn County Senior Center

Food Bank

- Community Action Agency of Butte County

In-Language Media

- ABS-CNB
- Alianza News
- KBTU-Crossings TV
- Russian American Media

Other

- California Council of the Blind

PSPS Preparedness and Planning



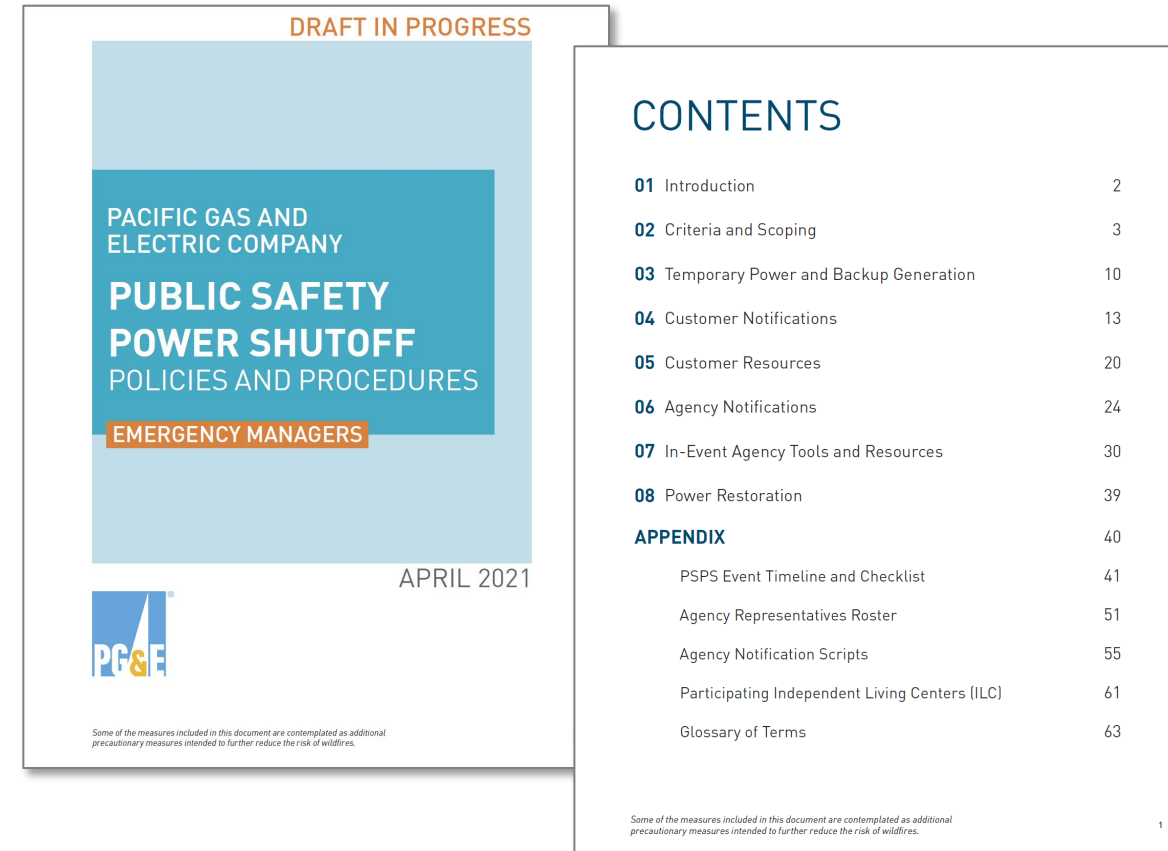
PSPS Policies and Procedures for Emergency Managers

To work more collaboratively with city, county and tribal emergency managers in advance of and during PSPS events, PG&E has a **Policies and Procedures** guide.

This document provides a comprehensive look into PG&E's PSPS:

- ✓ Criteria and decision making
- ✓ Operational and coordination improvements
- ✓ Event notification timeline and process
- ✓ Customer engagement and resources

The 2020 PSPS Policies and Procedures is available at pge.com/pspsplanningmaps



The PSPS Policies and Procedures is also available through the PSPS Portal and is being updated for 2021. Copies are also available upon request from your local agency representative.



Opportunities for Customers and Agency Partners to Learn More

Additional learning opportunities for Public Safety Partners based on your feedback.

Trainings and Resources	Date
Public Safety Partners	
Wildfire Tabletop	April 21
PSPS Tabletop Workshop - South/Central Area	May 12
PSPS Full-Scale Exercise - South/Central Area	May 24
PSPS Tabletop Workshop - North Area	July 14
PSPS Full-Scale Exercise - North Area	July 26
PSPS Portal Trainings	Q3
Public Information Officer Webinars	Q3
Customers	
Safety Town Hall	March 31
Customer Webinar	June 10

To view the presentation materials from past events or watch a recording, visit pge.com/firesafetywebinars

PSPS Customer Resource Links

PG&E's Wildfire Safety Website

pge.com/wildfiresafety

Update contact info to receive notifications

pge.com/pspsalerts

Weather and PSPS Forecasting

pge.com/weather

Backup Power

pge.com/backupper

Safety Action Center

safetyactioncenter.pge.com

Medical Baseline Program

pge.com/medicalbaseline

For translated support in over 200 additional languages, contact PG&E at: 1-866-743-6589

Thank You

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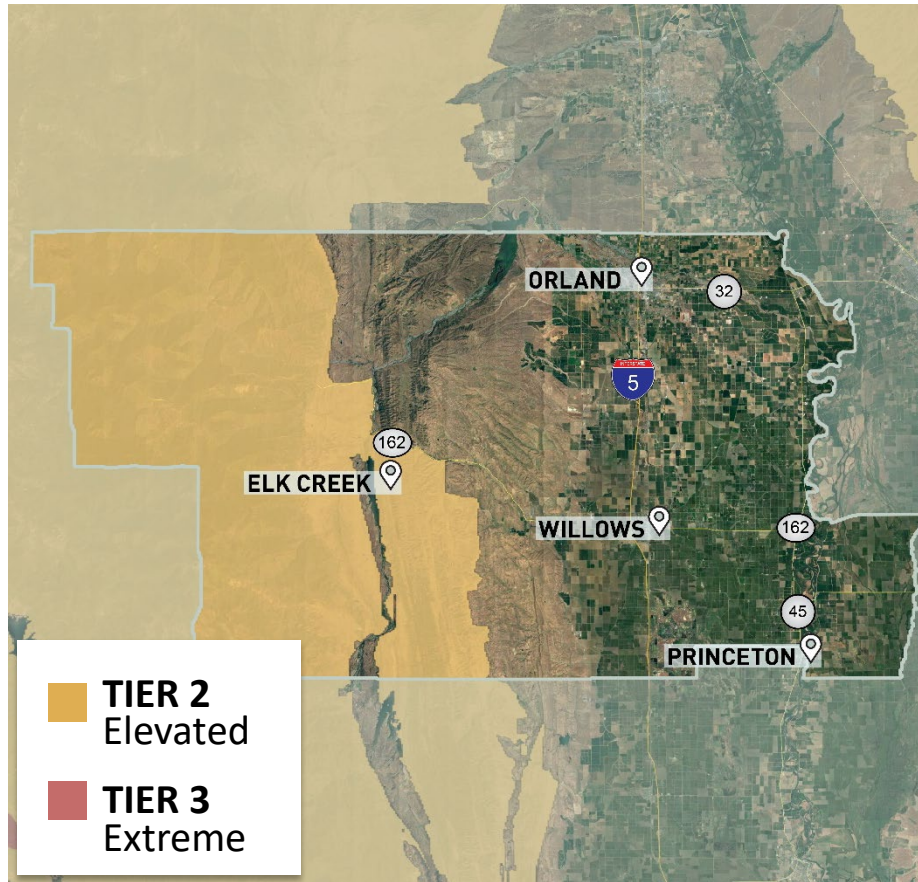
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Electric System and Wildfire Risks in Glenn County

CPUC High Fire-Threat District Map Glenn County



1,182 total overhead distribution miles
68 in Tier 2 | 0 in Tier 3 | **(6%)** in HFTD



224 total overhead transmission miles
4 in Tier 2 | 0 in Tier 3 | **(2%)** in HFTD



15,951 total customers served
223 **(1%)** Customers in HFTD

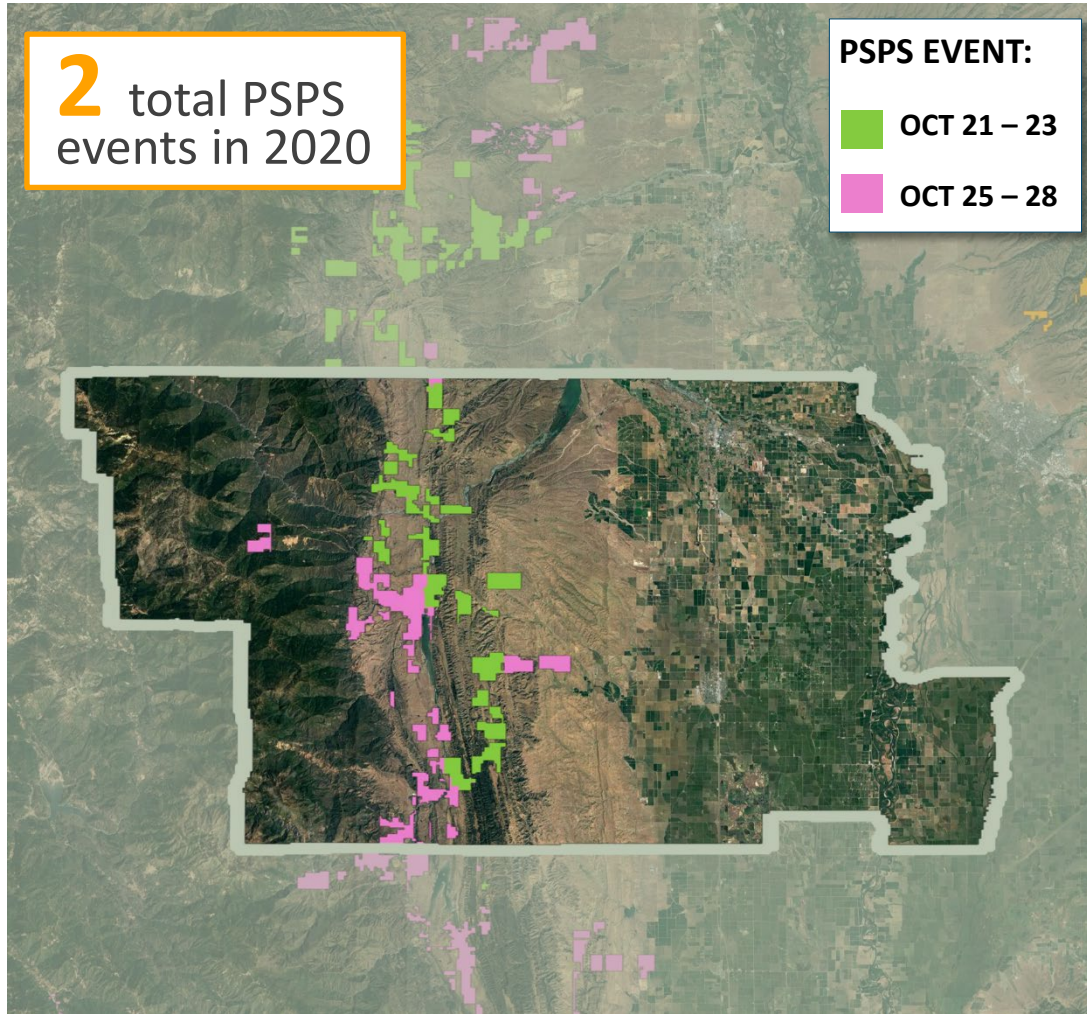


799 total Medical Baseline Customers









116 total critical facilities

2020 PSPS Event Overview – Glenn County

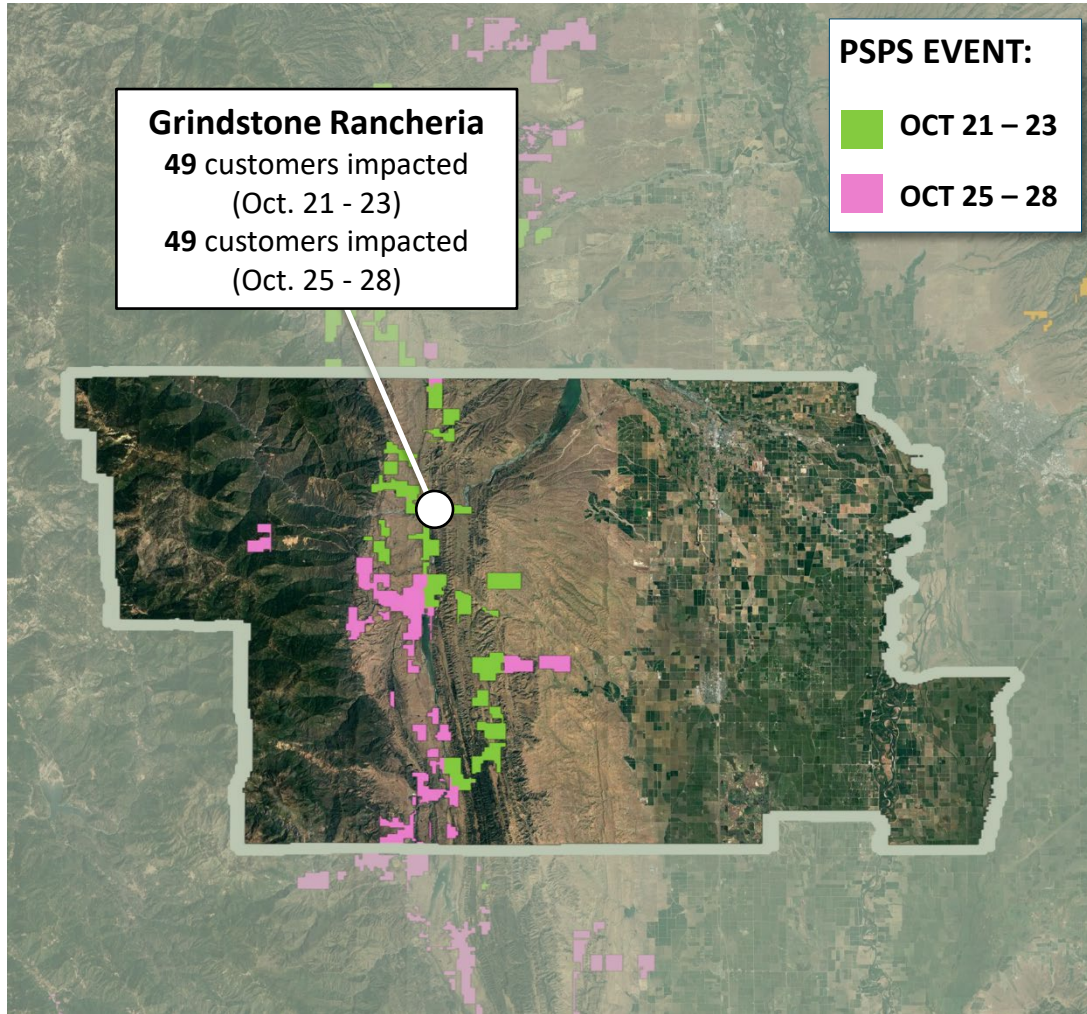


Note: PSPS impact areas are approximate and may overlap

Event Details







	OCT 21 – 23	OCT 25 – 28
 CUSTOMERS IMPACTED	162	368
 COMMUNITY RESOURCE CENTERS OPEN	1	1
 PEAK WIND GUSTS	39 MPH	43 MPH
 DAMAGE/HAZARDS	0	0
 AVG. OUTAGE DURATION AFTER ALL CLEAR	5 HRS	3 HRS
 TOTAL AVG. OUTAGE DURATION	11 HRS	28 HRS

2020 PSPS Event Overview – Tribal Lands



Note: PSPS impact areas are approximate and may overlap;
 icon represents approximate location of tribe

Event Details

	OCT 21 – 23	OCT 25 – 28
 CUSTOMERS IMPACTED	162	368
 COMMUNITY RESOURCE CENTERS OPEN	1	1
 PEAK WIND GUSTS	39 MPH	43 MPH
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PSPS Event Overview – Systemwide

	2018	2019	2020	EVENT DETAILS	2020						2021
					SEPT 7 – 10	SEPT 27 – 29	OCT 14 – 17	OCT 21 – 23	OCT 25 – 28	DEC 2 – 3	JAN 19 – 21
NUMBER OF PSPS EVENTS	1	9	6	CUSTOMERS IMPACTED	171,947	64,297	40,574	30,154	345,470	617	5,099
AVERAGE NUMBER OF CUSTOMERS IMPACTED	60,000	226,000	109,000	COUNTIES IN SCOPE	22	15	19	7	35	1	7
LARGEST CUSTOMER IMPACT EVENT	60,000	968,000	345,470	TRIBES IN SCOPE	8	0	1	2	14	0	0
AVERAGE RESTORATION TIME	15 HRS	17 HRS	10 HRS	COMMUNITY RESOURCE CENTERS OPEN	50	29	40	19	106	1	7+
				PEAK WIND GUSTS	66 MPH	72 MPH	73 MPH	56 MPH	89 MPH	72 MPH	83 MPH
				DAMAGE/HAZARDS	83	11	28	8	126	1	423
				CUSTOMER IMPACT REDUCTION VS. 2019 SCOPE	55%	61%	80%	47%	47%	19%	N/A

†Does not include resource centers activated for wind event

2020 PSPS Improvements



55%

Fewer customers were impacted in 2020 compared to similar weather events from 2019



Reduced the time to restore power after the severe weather by:





41%

Identifying Potential Impacts from Updated Criteria – Systemwide

PG&E studied 10 years of weather data from 2010 to 2019 to analyze the potential impact of the updated criteria. The study found:

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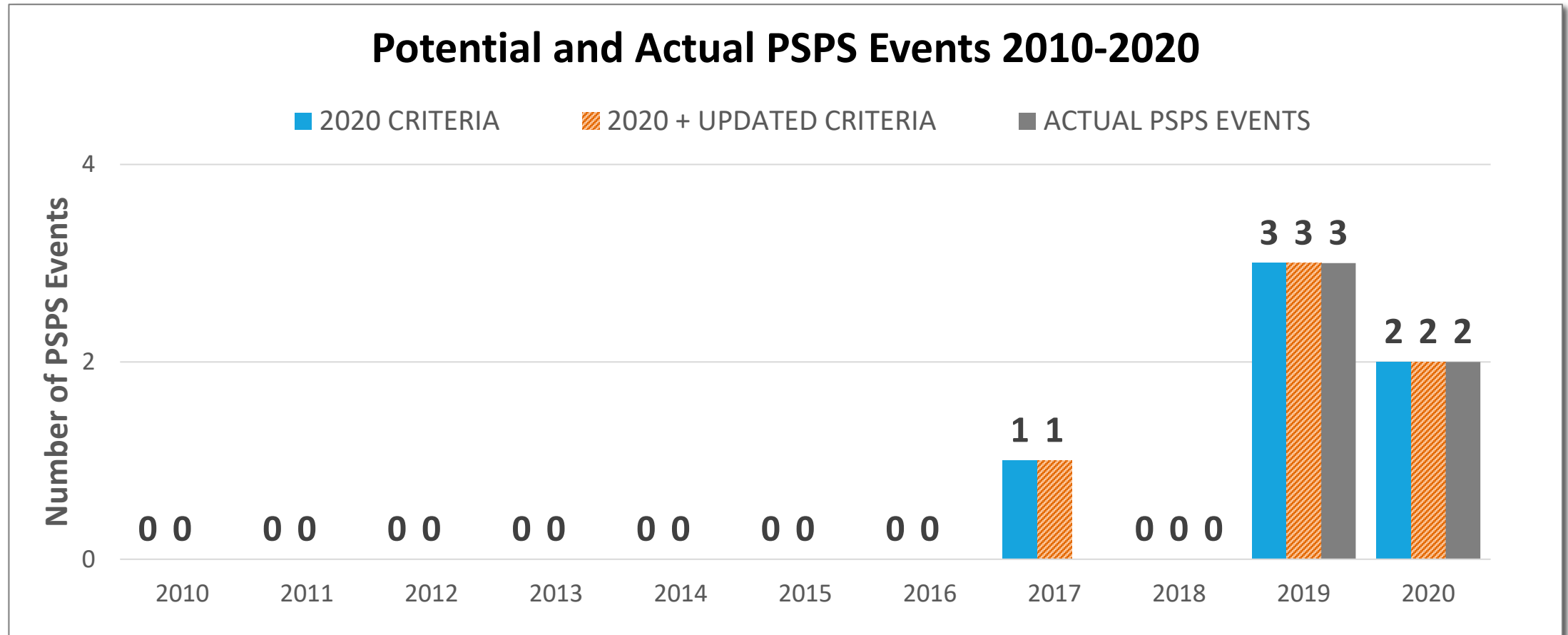
We do not expect a return to the largescale PSPS events of 2019.

Potential Customer Impacts	BASELINE	WITH UPDATED CRITERIA
 Event Frequency	~3 events per year	~5 events per year
 Average Event Duration (excludes restoration time)	~24 hours	~29 hours
 Average Event Customer Count*	~98K customers	~125K customers
 Largest Event Customer Count*	~345K customers	~368K customers

**Averages were calculated using all events from the 10-year historical baseline and the same number of events using the new criteria. This excludes a portion of smaller-scale events using the new criteria. All data is for planning purposes only and additional analysis is ongoing. The size and scope of actual PSPS events is dependent on weather.*

What These Criteria Could Mean for Glenn County

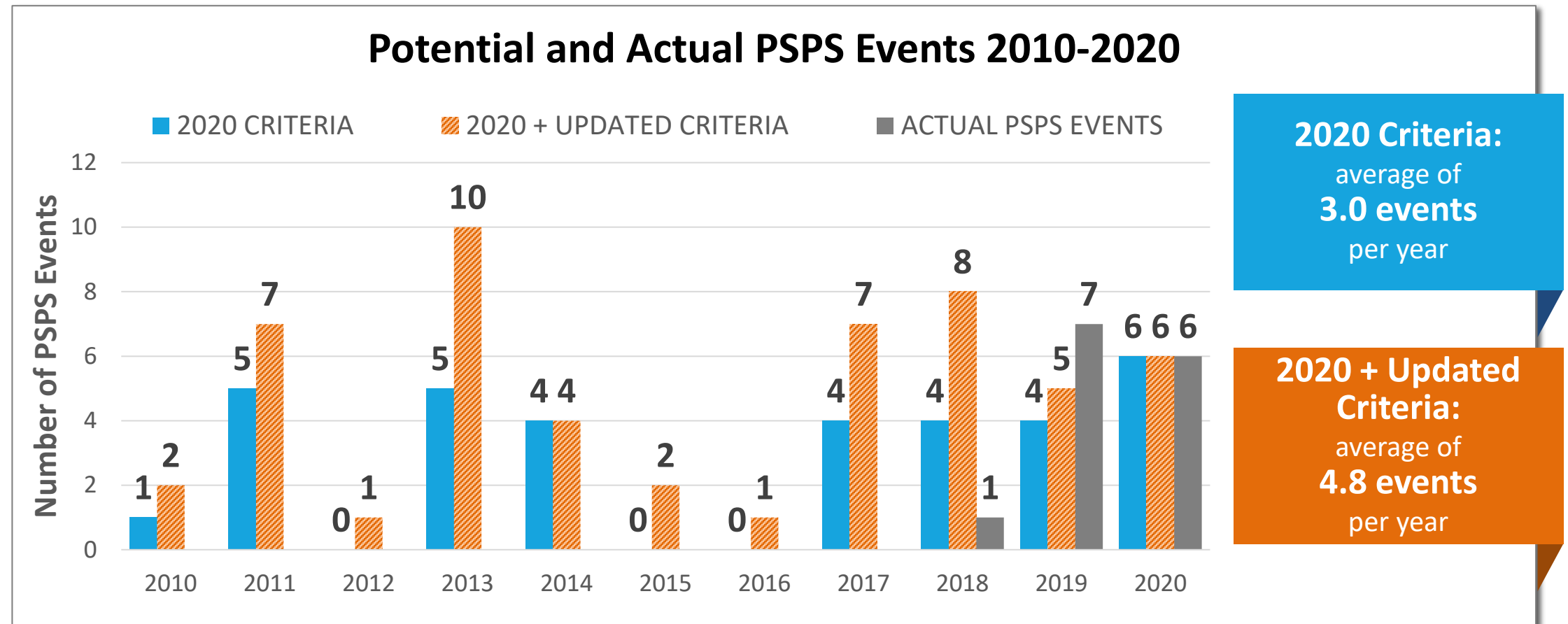
The chart below uses 11 years of weather data to show the number of potential PSPS events based on 2020 PSPS criteria compared to the updated criteria for this year.



Note: This information is for planning purposes only and additional data analysis is underway. Future events will be dependent on weather conditions.

PSPS Lookback Utilizing Updated Criteria – Systemwide

The chart below uses 11 years of weather data to show the number of potential PSPS events based on 2020 PSPS criteria compared to the updated criteria for this year.



Note: This information is for planning purposes only and additional data analysis is underway. Future events will be dependent on weather conditions.