

# Community Wildfire Safety Program

Webinar

August 2019

Para ver subtítulos en español, oprima el botón CC en la esquina de su pantalla.

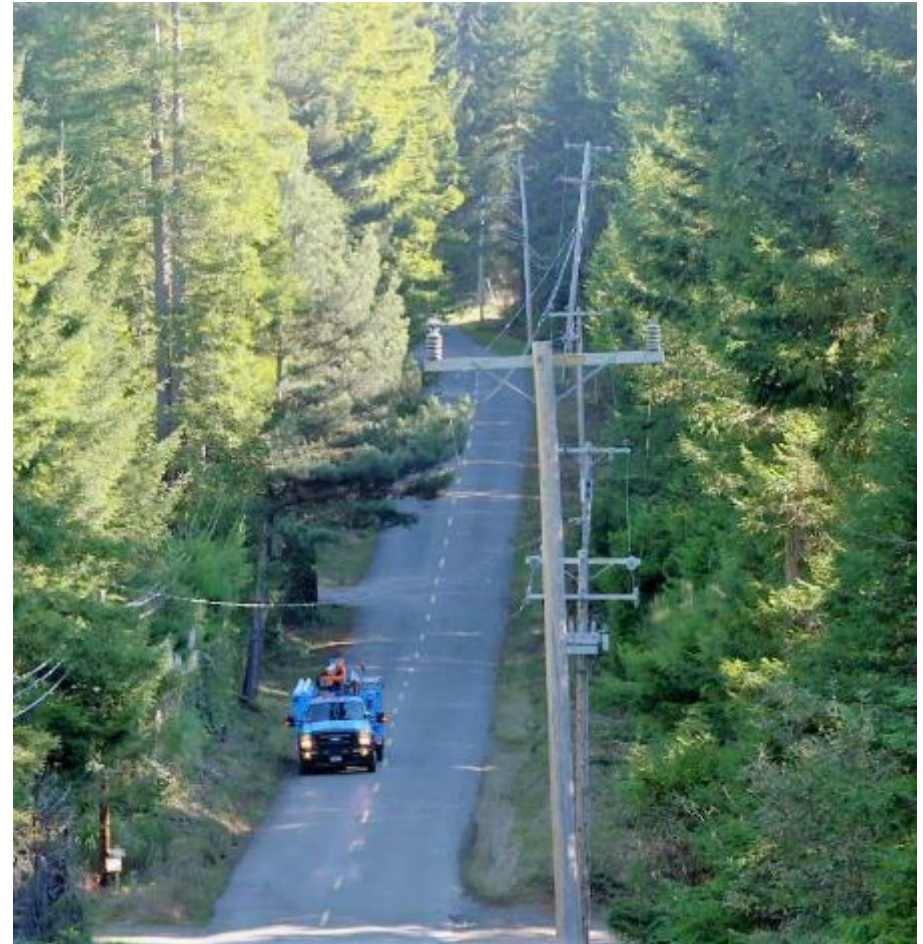
如需中文字幕，請以滑鼠按動電腦螢光幕上的CC鍵。





# What We'll Cover

- ✔ Safety Moment
- ✔ Introductions
- ✔ Community Wildfire Safety Program Overview
- ✔ Real-Time Monitoring and Intelligence
- ✔ Enhanced Vegetation Management
- ✔ Wildfire Safety Inspections
- ✔ System Hardening and Resiliency
- ✔ Public Safety Power Shutoff
- ✔ Q&A Session





# Community Wildfire Safety Program



## REAL-TIME MONITORING AND INTELLIGENCE

- Coordinating prevention and response efforts by monitoring wildfire risks in real time from our **Wildfire Safety Operations Center**
- **Expanding our network of PG&E weather stations** to enhance weather forecasting and modeling
- Supporting the **installation of new high-definition cameras** in high fire-threat areas



## NEW AND ENHANCED SAFETY MEASURES

- Further enhancing vegetation management efforts to **increase focus on vegetation that poses a higher potential for wildfire risk**
- **Conducting accelerated safety inspections** of electric infrastructure in high fire-threat areas
- **Disabling automatic reclosing of circuit breakers and reclosers** in high fire-risk areas during wildfire season
- **Proactively turning off electric power for safety (Public Safety Power Shutoff)** when gusty winds and dry conditions combine with a heightened fire risk



## SYSTEM HARDENING AND RESILIENCY

- Installing **stronger and more resilient poles and covered power lines**, along with **targeted undergrounding**
- **Upgrading and replacing electric equipment and infrastructure** to further reduce wildfire risks
- **Working with communities to develop new resilience zones** to provide electricity to central community resources during a Public Safety Power Shutoff event



# Real-Time Monitoring and Intelligence

**MONITORING** wildfire risks in real time from our  
**24/7 Wildfire Safety Operations Center**  
and coordinating **prevention and response efforts**

.....  
**INSTALLING**

**~1,300** new weather stations by **2022**

Data available at [mesowest.utah.edu](http://mesowest.utah.edu)

.....  
**SUPPORTING** the installation of

**~600** high-definition cameras by **2022**

Images available at [alertwildfire.org](http://alertwildfire.org)

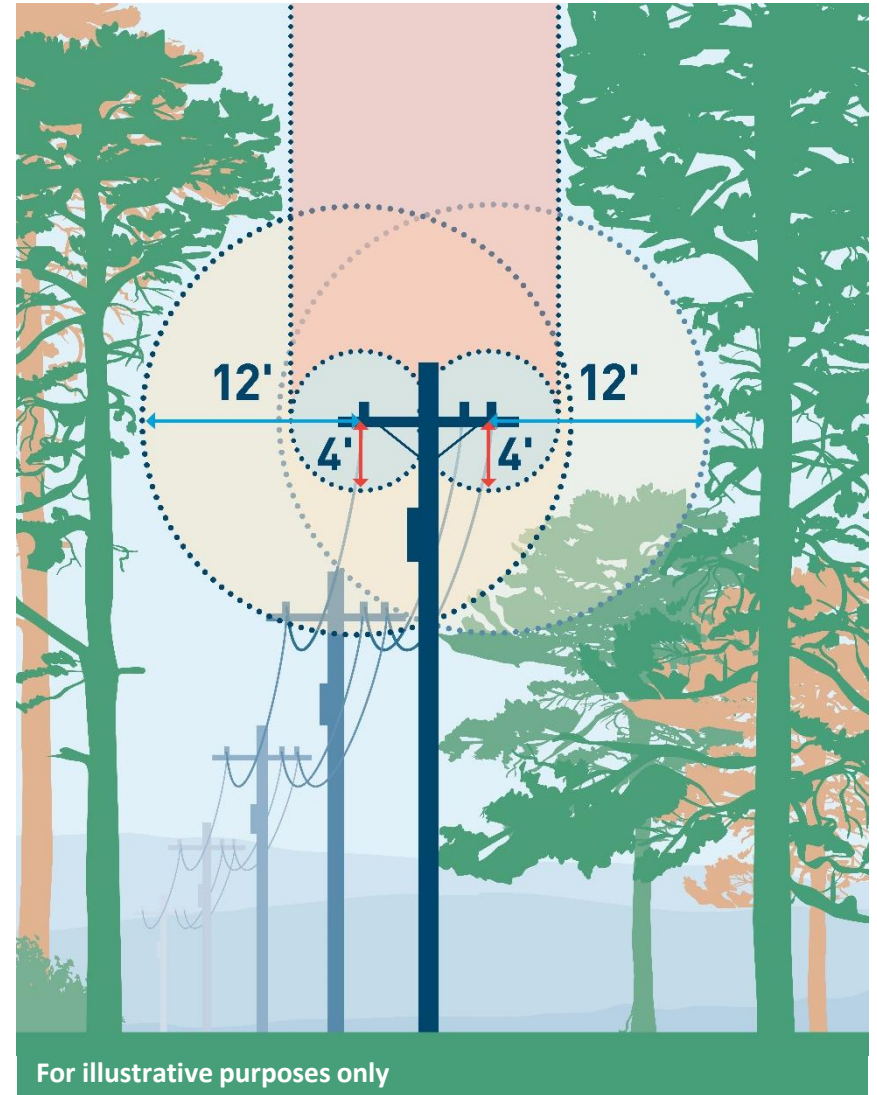




# Enhanced Vegetation Management

We are **expanding and enhancing our Vegetation Management program** to further reduce wildfire risk

- Our enhanced vegetation management work includes the following:
  - ✓ **Meeting state standards** for minimum clearances around the power line
  - ✓ **Addressing overhanging limbs and branches** directly above and around the lines
  - ✓ **Removing hazardous vegetation such as dead or dying trees** that pose a potential risk to the lines
  - ✓ **Evaluating the condition of trees that may need to be addressed** if they are tall enough to strike the lines
- We are working to complete this important safety work **in high fire-threat areas** over the next several years



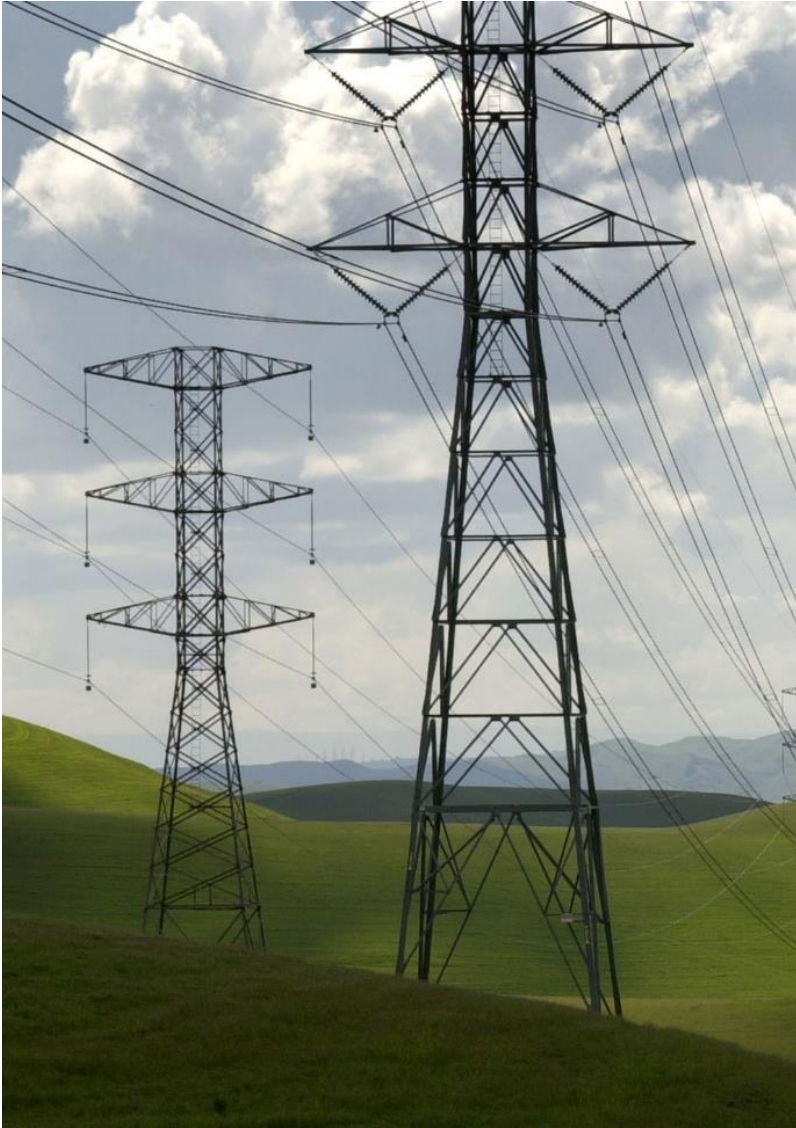


# Wildfire Safety Inspections

We are conducting accelerated safety inspections of electric infrastructure in areas of higher wildfire risk (Tier 2 and Tier 3).

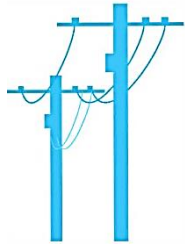
As of June 30, 2019, through the Wildfire Safety Inspection Program (WSIP) inspections, we have completed:

- Inspections of **99.99%** of nearly 700,000 **distribution poles** in, or adjacent to, high fire-threat areas.
- Inspections of **97%** of nearly 50,000 **transmission structures** in, or adjacent to, high-fire threat areas.
- Inspections of **100%** of 222 **substations** in high fire-threat areas.





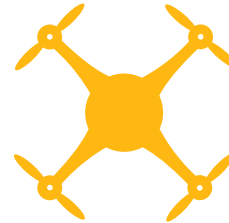
# Inspections Overview



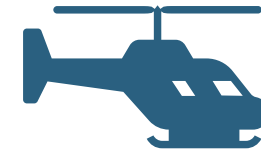
**Accelerated inspections of transmission and distribution poles and towers as well as substations** in high fire-threat areas



**Visual inspections (ground and/or climbing)** performed by crews of up to four people



**Aerial inspections by drones** to complement and further enhance inspections



**Helicopters** for inspections and to deliver crews to remote locations

*All inspection findings are documented with photographs and reviewed by a dedicated and experienced team to evaluate conditions for necessary repairs and timing.*



# Electric System Maintenance and Repairs

We are **evaluating inspection results to determine repair needs and associated timing**. For any issues found during the accelerated inspections that pose an immediate risk to public safety, **we are taking action right away to address the issue**.



- When inspections determine that repairs are needed, but **there is not an immediate safety risk, we are following our preventative maintenance procedures, consistent with state guidelines for high fire-threat areas.**
- **Repairs will depend on what we observe in the field but could range** from installing new signs or electrical components to replacing poles or towers.
- Where possible, **we will bundle work to minimize customer impact,** particularly if we need to de-energize the line to safely complete the repairs.





# System Hardening and Resiliency

**Installing stronger and more resilient poles and covered power lines** across approximately 7,100 line miles of highest fire-risk areas

.....

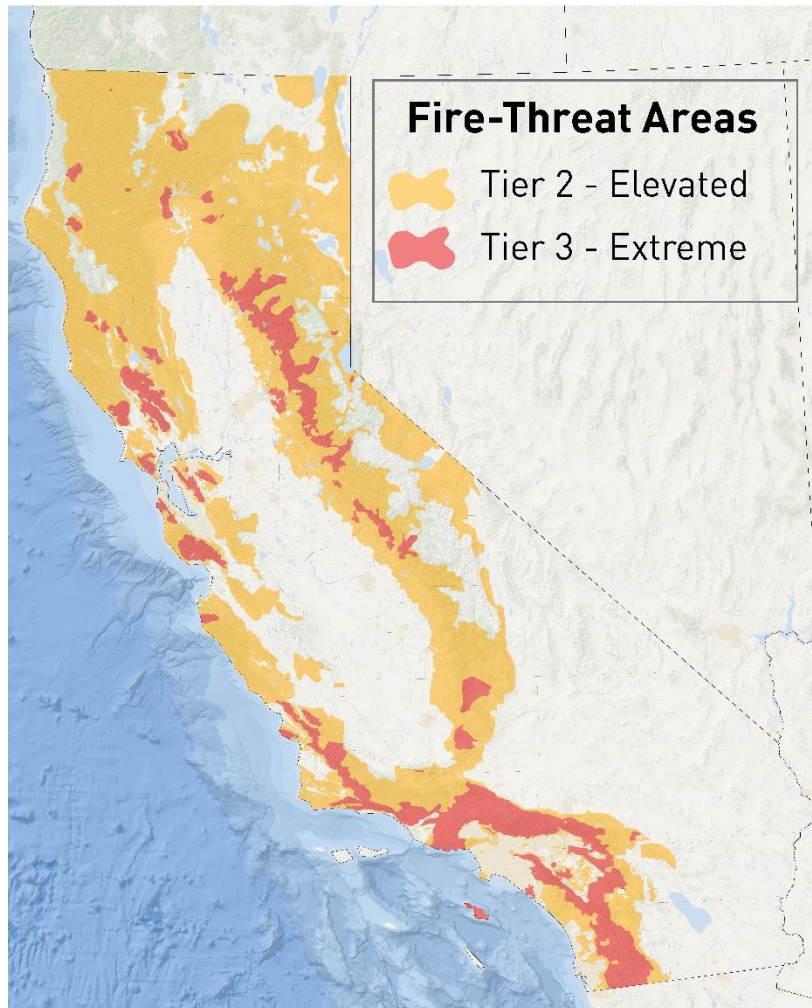
**Replacing equipment to further reduce risk to our system** and tailoring upgrades based on terrain and weather conditions using more granular analysis of fire-prone regions

.....

**Piloting new resilience zones** to allow PG&E to provide electricity to central community resources serving local customers during a Public Safety Power Shutoff (PSPS) event



# Public Safety Power Shutoff (PSPS)



Source: California Public Utilities Commission

- Beginning with the 2019 wildfire season, we are expanding our Public Safety Power Shutoff program to include **all electric lines that pass through high fire-threat areas – both distribution and transmission.**
- The most likely electric lines to be considered for shutting off for safety will be those that pass through **areas that have been designated by the CPUC as at elevated (Tier 2) or extreme (Tier 3) risk for wildfire.**

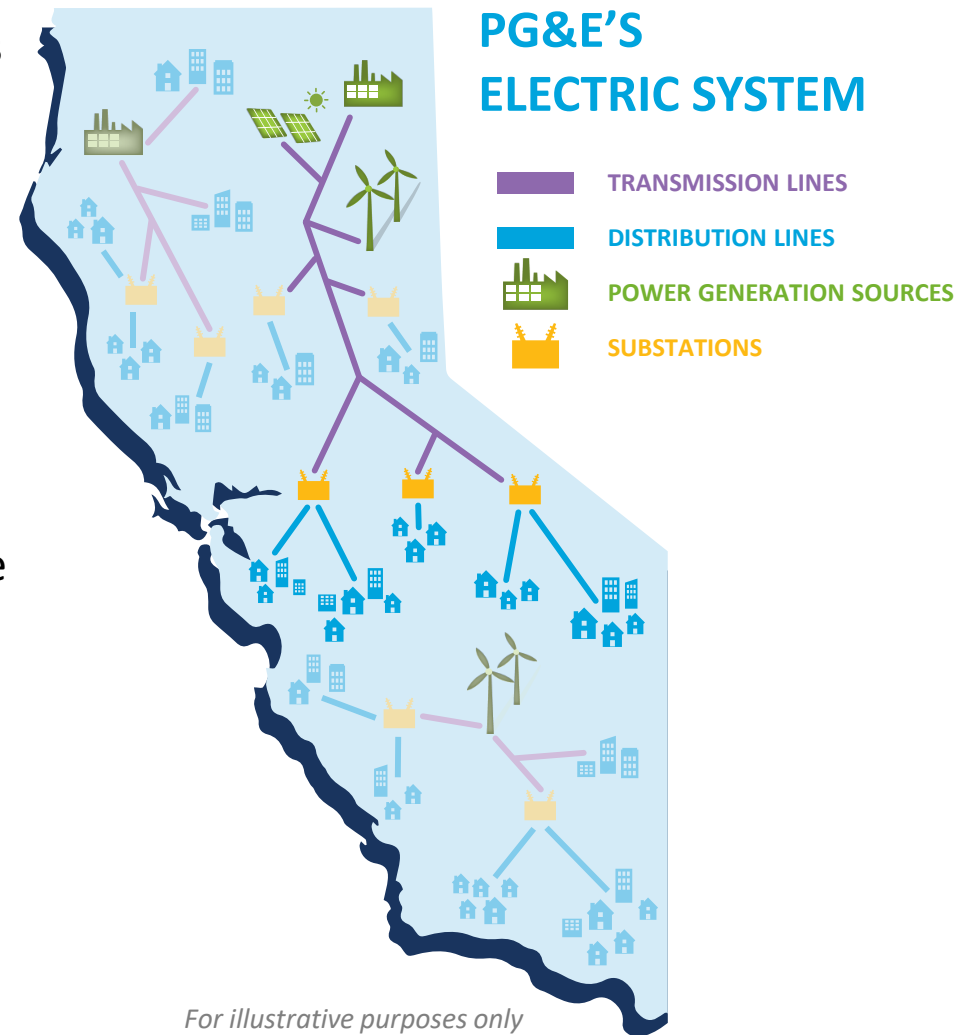


# Why Everyone Should Be Prepared

**PG&E's energy system relies on power lines working together to provide electricity across cities, counties and regions.**

**This means power may be shut off, even if you do not live or work in an area experiencing extreme weather conditions.**

**While the most likely electric lines to be considered for shutting off for safety will be those that pass through high fire-threat areas, any of PG&E's more than 5 million electric customers could be impacted and should be prepared.**





# Public Safety Power Shutoff Criteria

We will call a Public Safety Power Shutoff when gusty winds combine with a heightened fire risk. We monitor conditions across our system and evaluate whether to proactively turn off electric lines.

While no single factor will drive a Public Safety Power Shutoff, some factors include:



## A RED FLAG WARNING

declared by the National Weather Service



## LOW HUMIDITY LEVELS

generally 20% and below



## FORECASTED SUSTAINED WINDS GENERALLY ABOVE 25 MPH AND WIND GUSTS IN EXCESS OF APPROXIMATELY 45 MPH,

depending on location and site-specific conditions such as temperature, terrain and local climate



## CONDITION OF DRY FUEL

on the ground and live vegetation (moisture content)



## ON-THE-GROUND, REAL-TIME OBSERVATIONS

from PG&E's Wildfire Safety Operations Center and field observations from PG&E crews



# PSPS Event Notifications

Extreme weather threats can change quickly. **Our goal, dependent on weather, is to provide customers with advance notice prior to turning off power.** We will also provide updates until power is restored.

## Timing of Notifications (when possible)

- **~48 HOURS** before electricity is turned off
- **~24 HOURS** before electricity is turned off
- **JUST BEFORE** electricity is turned off
- **DURING THE PUBLIC SAFETY OUTAGE**
- **ONCE POWER HAS BEEN RESTORED**



### City/County/Agency Notifications

We will make every attempt to provide notice in advance of notifying customers through:

- **Phone calls/emails** to primary contacts
- **Automated notifications** to send alerts through multiple channels
- **Provide customer alerts** to share via channels, such as city or county website, Nixle, Nextdoor and Reverse 911

### Customer Notifications

We will attempt to reach customers through **calls, texts and emails**. We will also use **social media** and keep **local news** and **radio outlets** informed and updated.



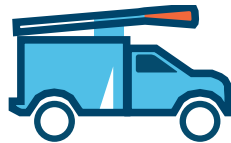
# Working to Restore Power

**We will only restore power when we are certain it is safe to do so. We expect to be able to visually inspect for damage and restore power to most of our customers within 24 to 48 hours after extreme weather has passed.**



## WEATHER ALL CLEAR

After the weather has passed and it's safe to do so, our crews begin **patrols and inspections**.



## PATROL & INSPECT

Crews **visually inspect** our electric system to **look for potential weather-related damage to the lines, poles and towers**. This is done by vehicle, foot and air during daylight hours.



## ISOLATE & REPAIR DAMAGE

Where damage is found, **crews work to isolate the area** so other parts of the system can be restored. Crews work **safely and as quickly as possible** to make repairs.



## RESTORE POWER

Once it is safe to energize, **a call is made to the PG&E Control Center** to complete the energization process. **Power is then restored to customers**.



## NOTIFY CUSTOMERS

Customers are **notified that power has been restored**.

Because weather can last several hours or days, for planning purposes, we suggest **customers prepare for outages that could last longer than 48 hours**.



# Working With Our Customers to Prepare



**Reaching out to approximately 5 million customers** and asking them to update their contact info at [pge.com/mywildfirealerts](https://www.pge.com/mywildfirealerts)



**Holding answer centers and open houses** (as needed) in advance of and during wildfire season



**Mailing postcards to customers that do not have contact information on file**



**Providing tenant education kits** to Master Meter customers



**Conducting additional outreach to customers in high fire-threat areas** through direct mail, preparedness checklist and email campaign



**Placing calls and doing additional outreach to Medical Baseline and Medical Baseline-eligible customers** in high fire-threat areas



**Launching broad public safety advertising campaign**



**Continuing to share information** through [pge.com/wildfiresafety](https://www.pge.com/wildfiresafety)



**Partnering with community leaders, first responders and public safety authorities** around PSPS preparedness and coordination



**Engaging with organizations for our customers who have specific needs** to explore ways we can partner



# Preparing for Public Safety Power Shutoffs

The threat of extreme weather and wildfires continues to grow. Start preparing your plan using the checklist below:

## PLANNING BASICS:

- ✓ **Update your contact information**  
Visit [pge.com/mywildfirealerts](https://www.pge.com/mywildfirealerts) or call us at 1-866-743-6589.
- ✓ **Keep a hard copy of emergency phone numbers on hand**
- ✓ **Build or restock your emergency supply kit**  
Stock supplies to last a week — include flashlights, fresh batteries, first aid supplies, food, water and cash.
- ✓ **Designate an emergency meeting location**
- ✓ **Practice manually opening your garage door**





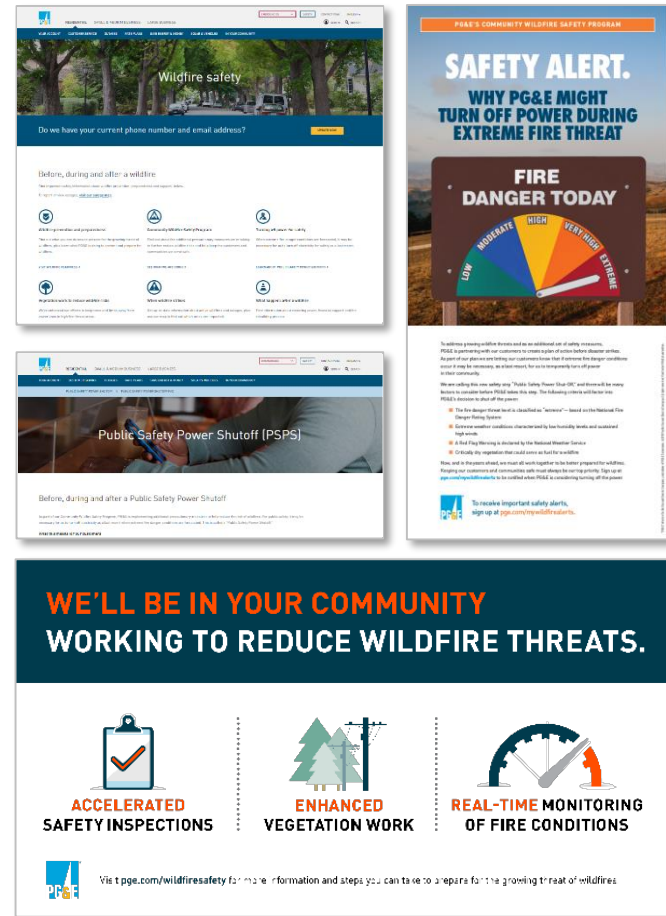


# Learn More

## We welcome your feedback and input

For questions regarding PG&E's Community Wildfire Safety Program, please direct customers with questions to:

- Call us at **1-866-743-6589**
- Email us at **wildfiresafety@pge.com**
- Visit **pge.com/wildfiresafety**



# Q&A

