

Community Wildfire Safety Program

Nevada County Board of Supervisors

August 6, 2024



Safety

Tips to Keep You Cool During a Heat Wave

Find air conditioning. If you don't have air conditioning in your home, stay cool by visiting your local library or community center.

Stay hydrated by drinking plenty of fluids.

Stay indoors. If you must be outside, find shade and take frequent breaks.

Visit **safetyactioncenter.pge.com** to find additional tips.



Topics For Discussion

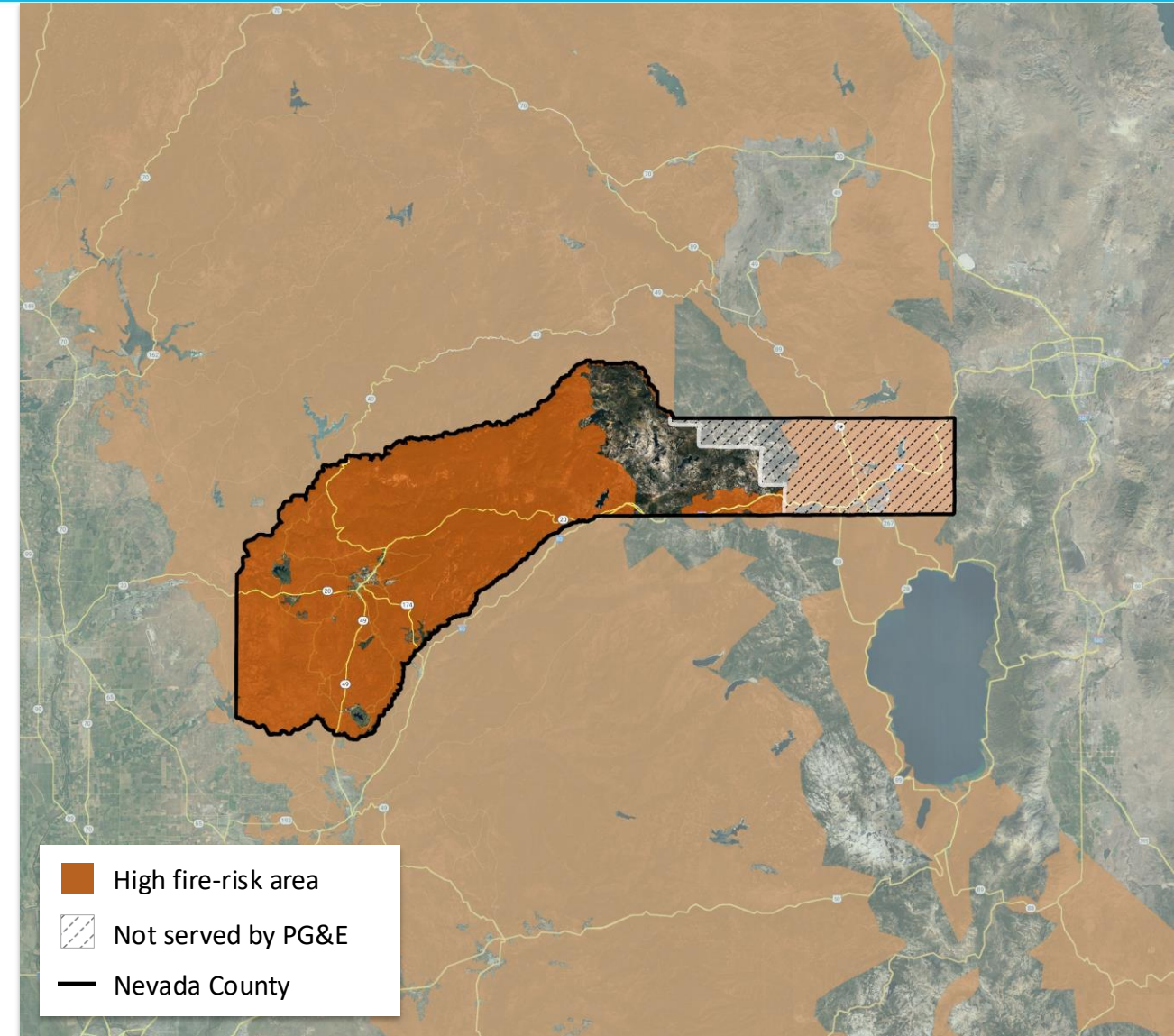
- 1 Identifying and Reducing Wildfire Risk
- 2 Undergrounding, Overhead System Hardening and Line Removal
- 3 Rule 20 Undergrounding Program
- 4 Vegetation Management
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Identifying and Reducing Wildfire Risk



PG&E's high fire-risk area map helps us target wildfire mitigation efforts in the areas and communities at highest risk.



Layers of Wildfire Protection



Situational Awareness

- A New Tools and Technology:** Installed over 2,000 weather stations and high-definition cameras with AI to better predict, monitor and respond to wildfires and severe weather



Operational Mitigations

- B Enhanced Powerline Safety Settings:** Installed on 44,000+ line miles in and around high fire-risk areas. These settings automatically shut off power within one-tenth of a second if a hazard is detected
- C Public Safety Power Shutoff:** Turning off power for safety as a last resort during severe weather



Resiliency Work

- D New, Strengthened Equipment:** Installing strong poles and covered powerlines on 1,700+ miles of overhead powerlines
- E Undergrounding Powerlines:** Completing 10,000 miles of undergrounding in the highest wildfire risk areas
- F Vegetation Management:** Removing or pruning 1 million+ trees per year to ensure they are a safe distance from powerlines

Reducing Wildfire Risk in Your Community

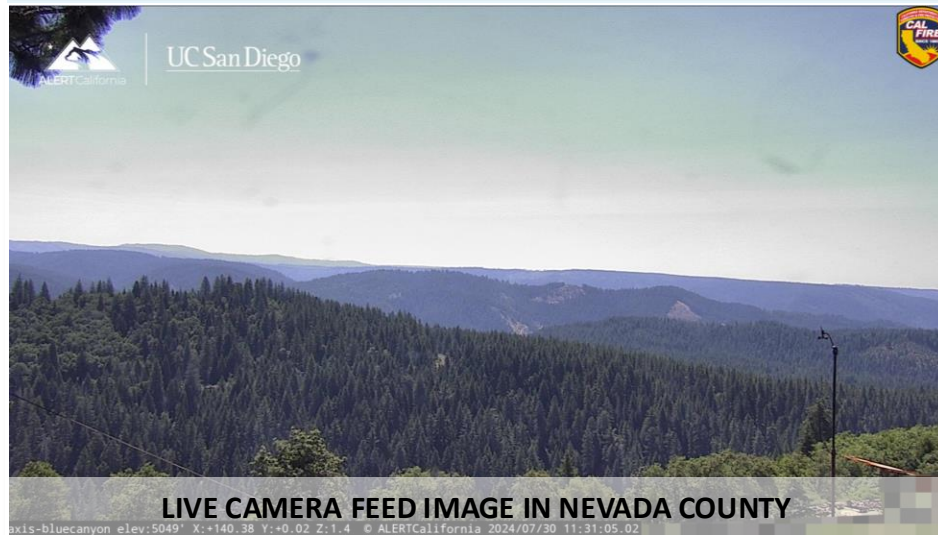


Advanced Situational Awareness Tools

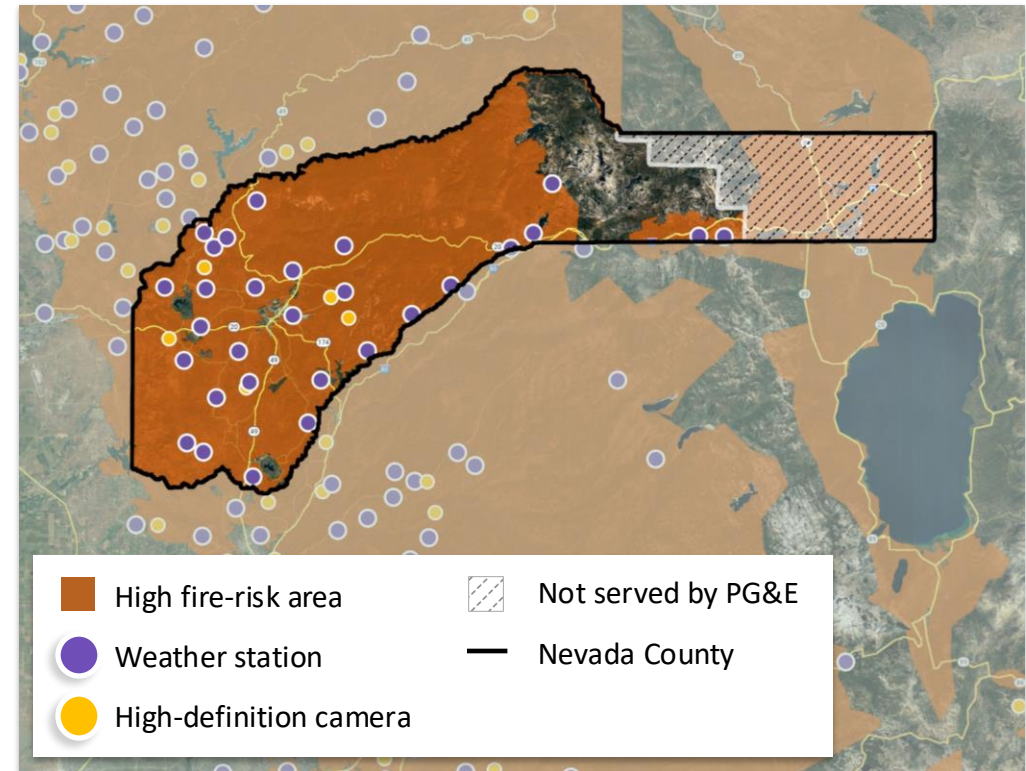
High-definition cameras and weather stations installed in your community allow us to better predict and respond to wildfire risks and severe weather around the clock.

28 Weather stations installed through 2023

9 High-definition cameras installed through 2023



i Customers can see camera outputs and locations at alertcalifornia.org.



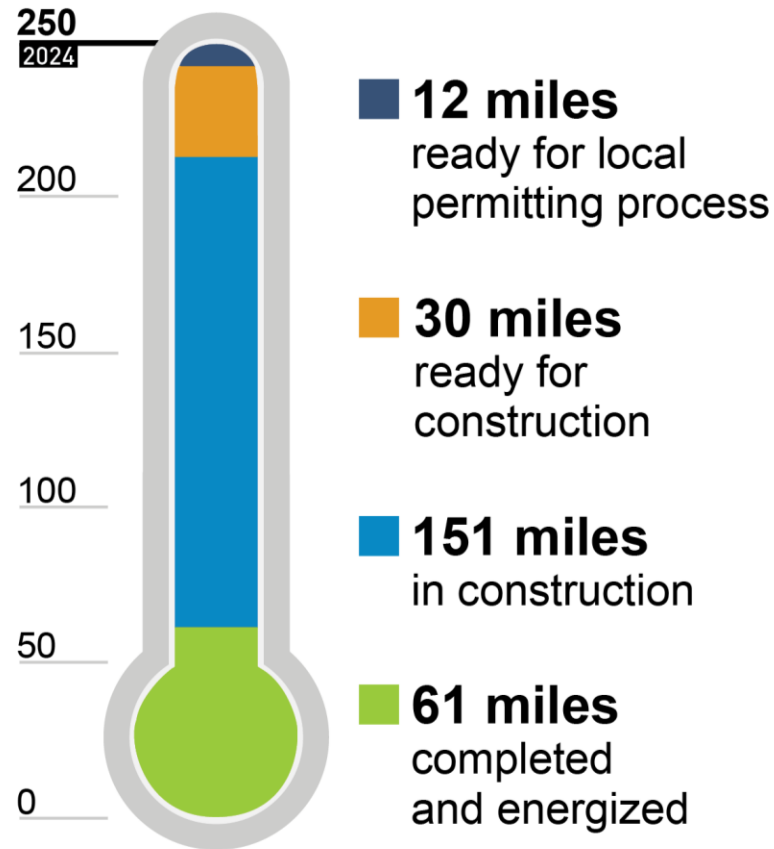
Data as of 12/31/2022. Locations are approximate and may overlap.

i Customers can view our interactive weather map at pge.com/weather.

Undergrounding, Overhead System Hardening and Line Removal



2024 Undergrounding Progress



Data as of 6/30/2024.

We have already made significant progress toward our annual goal of undergrounding **250 miles** in 2024.



The 2024 thermometer will be published on the website in the coming weeks and updated monthly at pge.com/undergrounding.

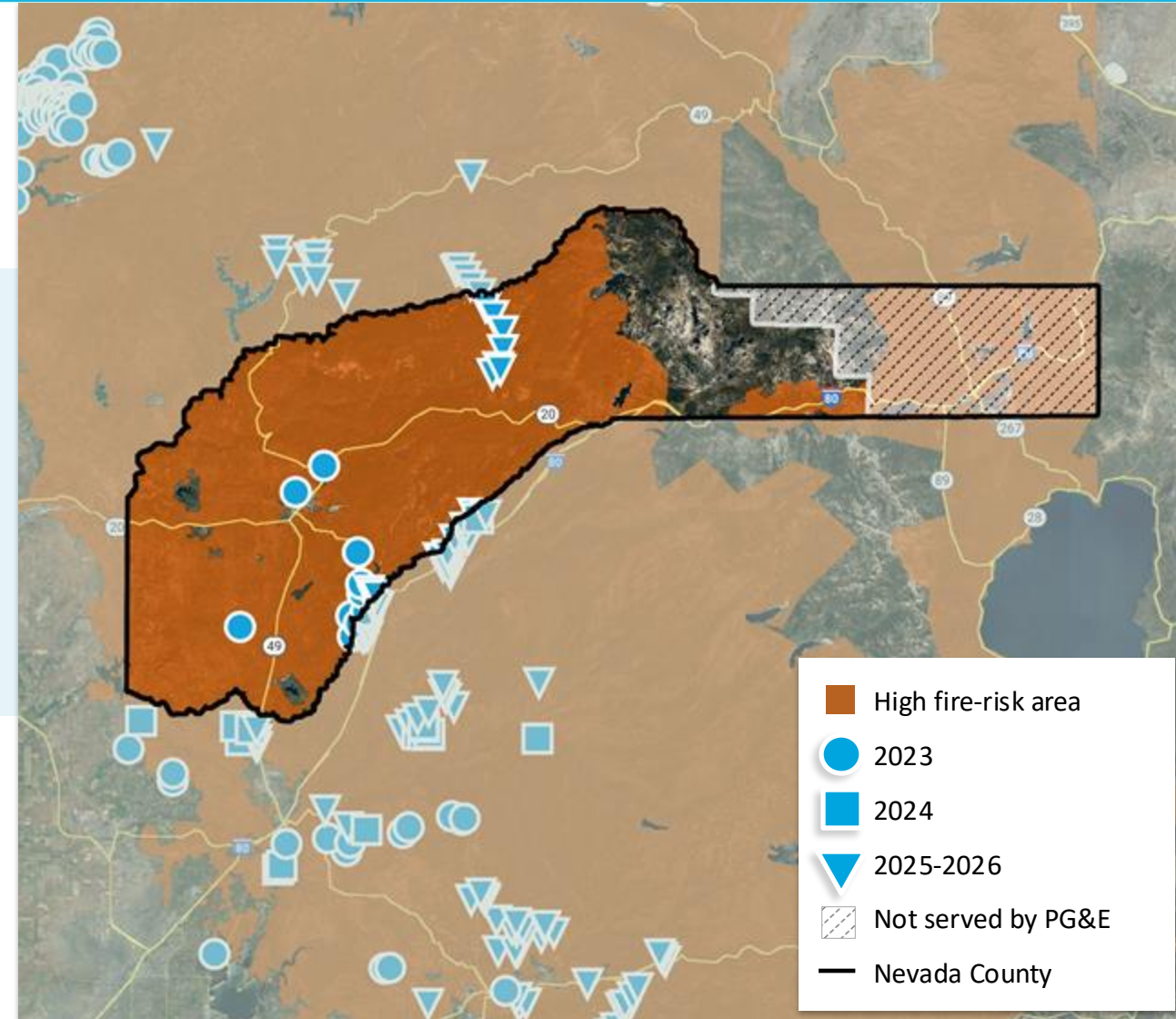
Undergrounding in Your Community

<1 Mile completed
through 2023

28 Miles forecast
in 2025-2026



Customers can learn more at
pge.com/undergrounding.



Data as of 7/1/2024. Locations are approximate and may overlap. Work plans are subject to change due to weather, access and permitting. Annual mileage forecasts exceed annual targets.

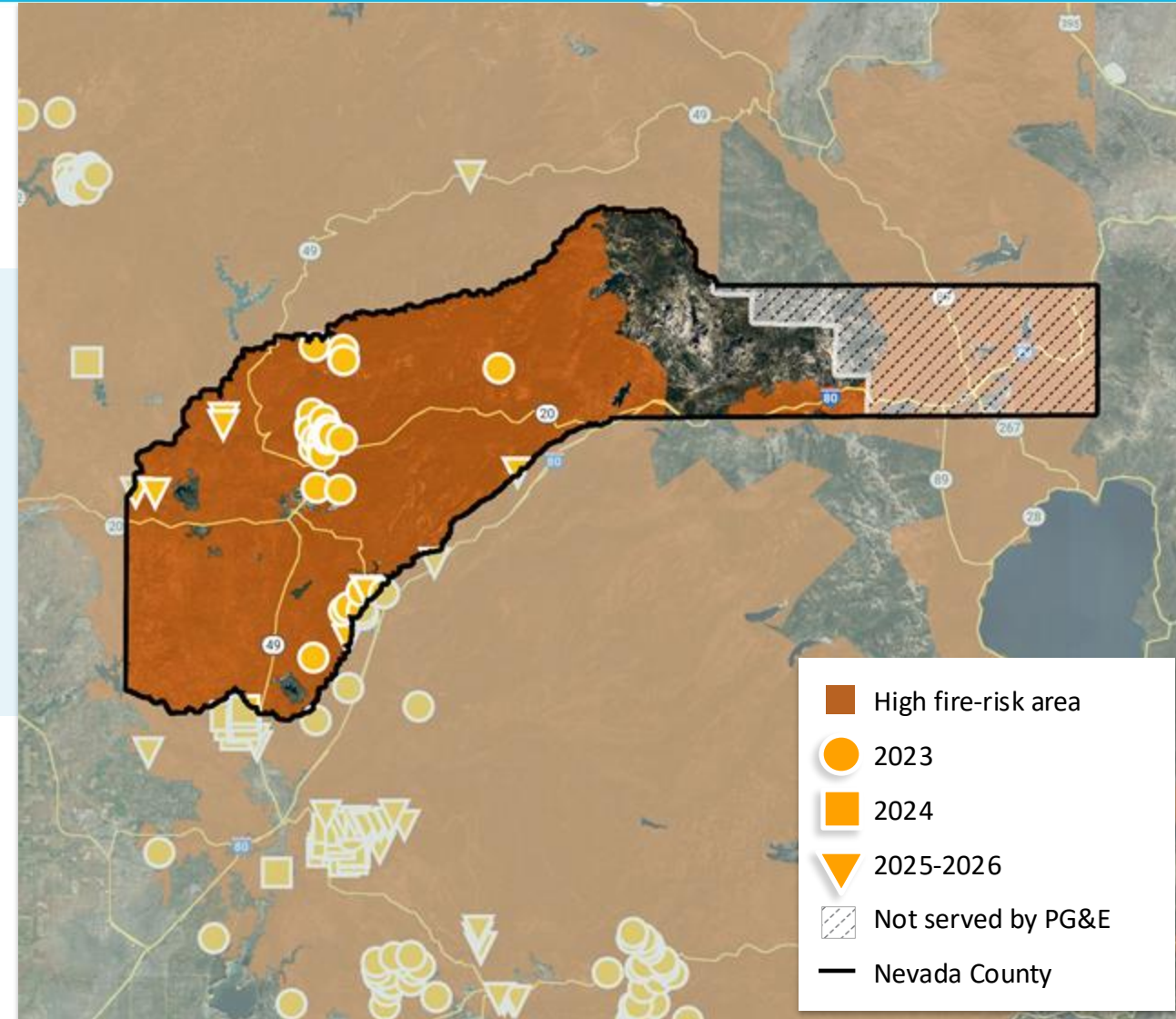
Overhead Hardening in Your Community

53 Miles completed
through 2023

14 Miles forecast
in 2025-2026



Customers can learn more at
pge.com/systemhardening.



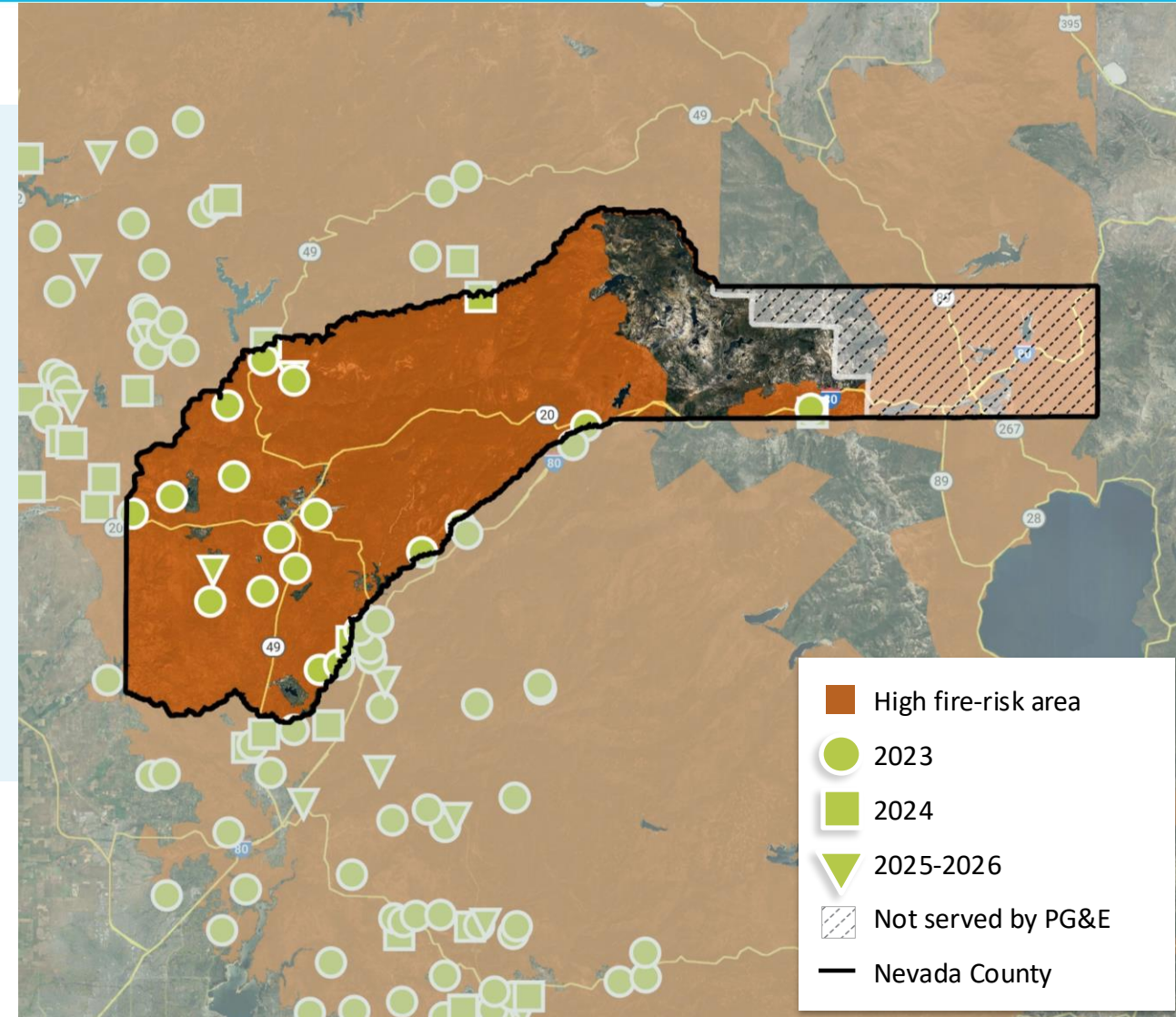
Data as of 7/1/2024. Locations are approximate and may overlap. Work plans are subject to change due to weather, access and permitting. Annual mileage forecasts exceed annual targets.

Line Removal in Your Community

- 1 Mile completed through 2023
- <1 Mile forecast in 2024
- <1 Mile forecast in 2025-2026



Customers can learn more at pge.com/systemhardening.



Data as of 7/1/2024. Locations are approximate and may overlap. Work plans are subject to change due to weather, access and permitting. Annual mileage forecasts exceed annual targets.

Preparing a 10-Year Electric Undergrounding Plan

- We are developing a 10-Year Electric Undergrounding Plan that we will submit to the California Office of Energy Infrastructure Safety (OEIS) with additional details on our work for 2027 and beyond.
- Once the plan is submitted to and approved by OEIS, we will then submit a cost application to the California Public Utilities Commission (CPUC) for their review and approval.
- We are working closely with both of our regulators to determine exact timing of our submissions.

What will be included in the plan:

- ✓ Project selection criteria, locations, targets and timelines
- ✓ Risk reduction and cost benefit comparisons to other wildfire mitigation efforts
- ✓ Cost containment strategies, workforce development plan & external funding plan

What the long-term plan will help do:

- ✓ Improve coordination with agencies, vendors, customers and other stakeholders
- ✓ Reduce costs

Upcoming milestones:

Phase 1: PG&E files the 10-year plan with OEIS. Phase 1 focuses on focus on risk reduction, site selection and safety.

Phase 2: PG&E files the 10-year plan cost application with the CPUC. Phase 2 focuses on financial elements of the plan.

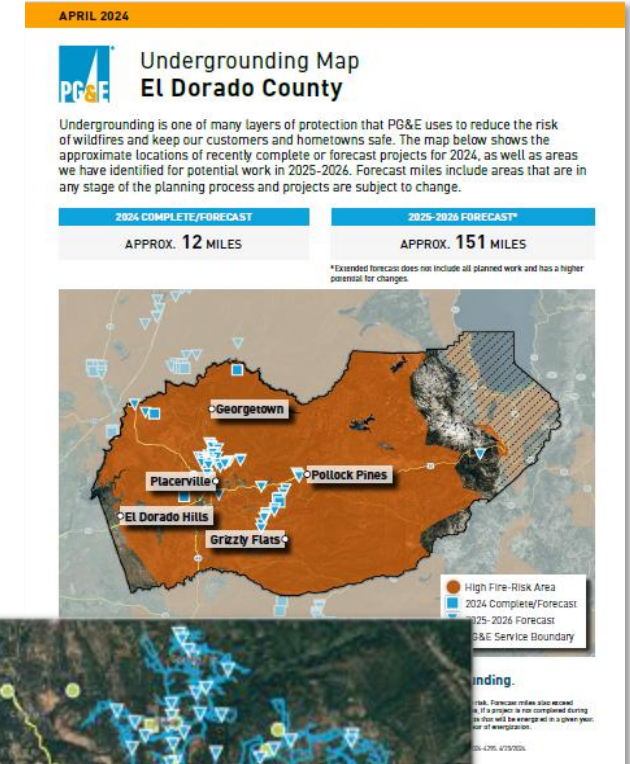
The Data Sharing Portal holds our latest undergrounding and wildfire safety system upgrades (overhead hardening and line removal) workplan updates.

The portal is updated quarterly and includes:

- Individual PDF city/county maps (undergrounding)
- An interactive KMZ map and key (undergrounding, overhead hardening and line removal)
- A workplan spreadsheet with project-specific details (undergrounding, overhead hardening and line removal)



If you would like access to the portal, please email undergrounding@pge.com



PDF map and KMZ screenshot
Data as of 04/01/2024

Rule 20 Undergrounding Program



Rule 20A Updates

The CPUC Rule 20 tariff is a program that was created to help implement undergrounding projects not related to wildfire safety. The program is divided into three levels - A, B and C.

Rule 20A projects are fully funded by PG&E customers and require a resolution by the city or county. To move forward with a project, there must be sufficient work credits or a combination of work credits and payment from the city or county.

The Rule 20A program is sunseting at the end of 2033. **Communities with active Rule 20A projects can use work credits until the end of the program, when all work credits will automatically expire, on December 31, 2033.**



Vegetation Management



Keeping Trees Away from Powerlines

When trees are too close to overhead powerlines, they can cause a power outage or a wildfire.

That's why each year we:

- ✓ Inspect ~100,000 miles of powerlines
- ✓ Perform additional inspections in areas with increased wildfire risk
- ✓ Trim or cut down more than 1 million trees that pose a safety concern
- ✓ Address dead, dying or hazardous trees



Additional Vegetation Work to Keep Your Community Safe

We also reduce wildfire risk through additional vegetation work.

This year, across our service area, we are:

- ✓ Reviewing and cutting down trees that pose a safety concern
- ✓ Conducting additional inspections in high fire-risk areas near circuits with an increased risk for vegetation-caused outages
- ✓ Trimming additional trees near circuits that have experienced a high volume of vegetation-caused power outages



What Customers Can Expect During This Work

- ① **Notifying in advance** if their property will be impacted before work begins
- ② **Inspecting** for potential powerline safety concerns
- ③ **Trimming or cutting down trees** as needed for safety
- ④ **Chipping and hauling away** small debris where possible, and placing larger wood in a safe location on site
- ⑤ **Conducting safety and quality checks** through follow-up inspections



Right Tree, Right Place Overview

Planting the right tree in the right place can help reduce power outages, prevent wildfires and maintain reliable service.

You can help by:

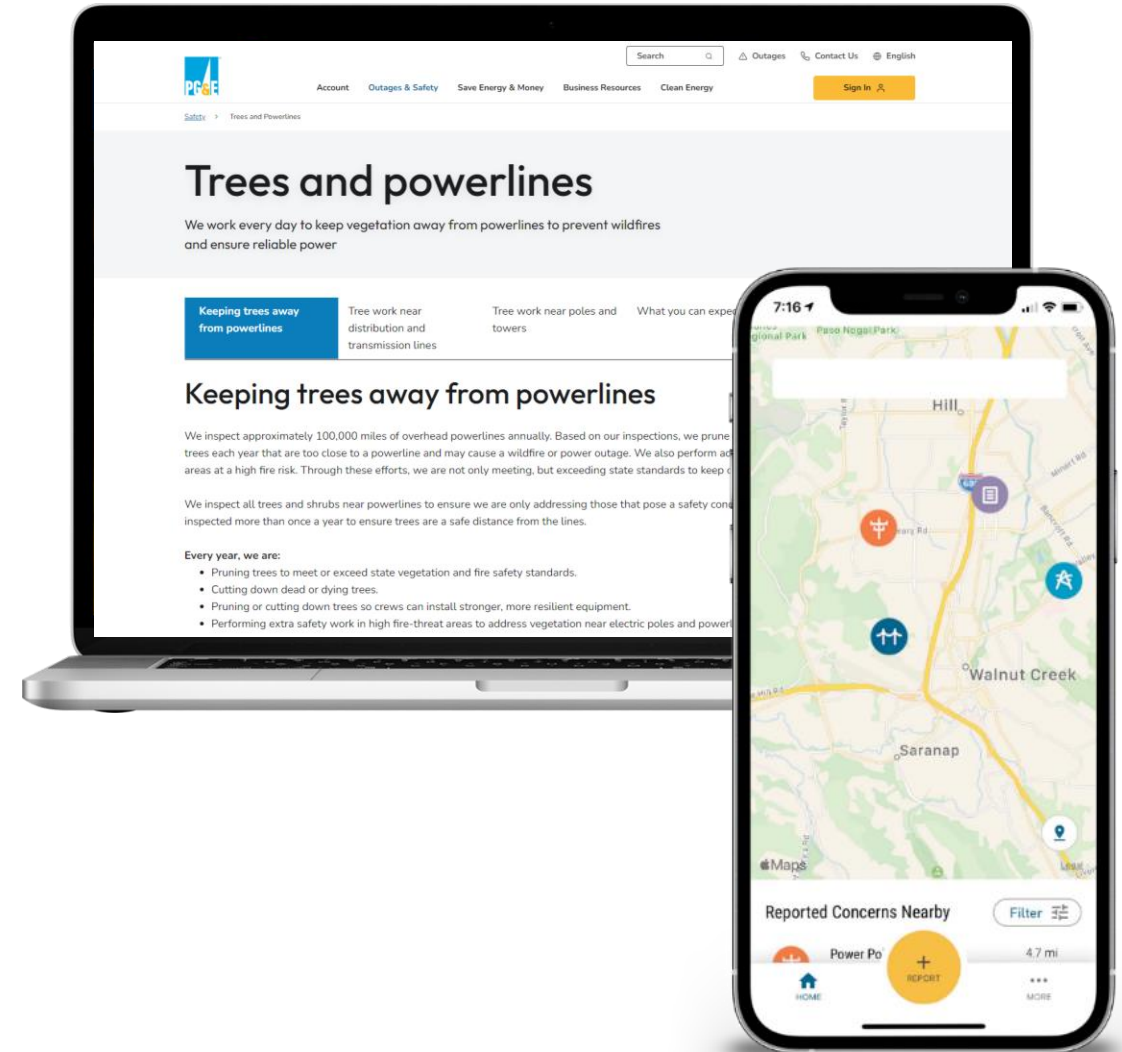
- ✓ Practicing safe planting near overhead and underground utilities
- ✓ Calling 811 two days before digging or planting to have crews mark underground utilities for free
- ✓ Leaving vegetation work near powerlines to a qualified line specialist
- ✓ Sharing PG&E's safe planting guides on your website



Customers can learn more at pge.com/righttreerightplace.

Customers can learn more about our efforts to keep trees away from powerlines by:

- ✓ Visiting us online at pge.com/trees
- ✓ Downloading the “PG&E Report It” Safety App at pge.com/reportit
 - Customers can submit photos of non-emergency safety concerns
- ✓ Contacting us via **1-800-564-5080** or **treesafety@pge.com**



Enhanced Powerline Safety Settings





Enhanced Powerline Safety Settings: A Technology to Prevent Wildfires

How It Works

Turning off power within one-tenth of a second if a tree branch or other object strikes the line.

Why We Do It

Stopping wildfires before they have a chance to start.

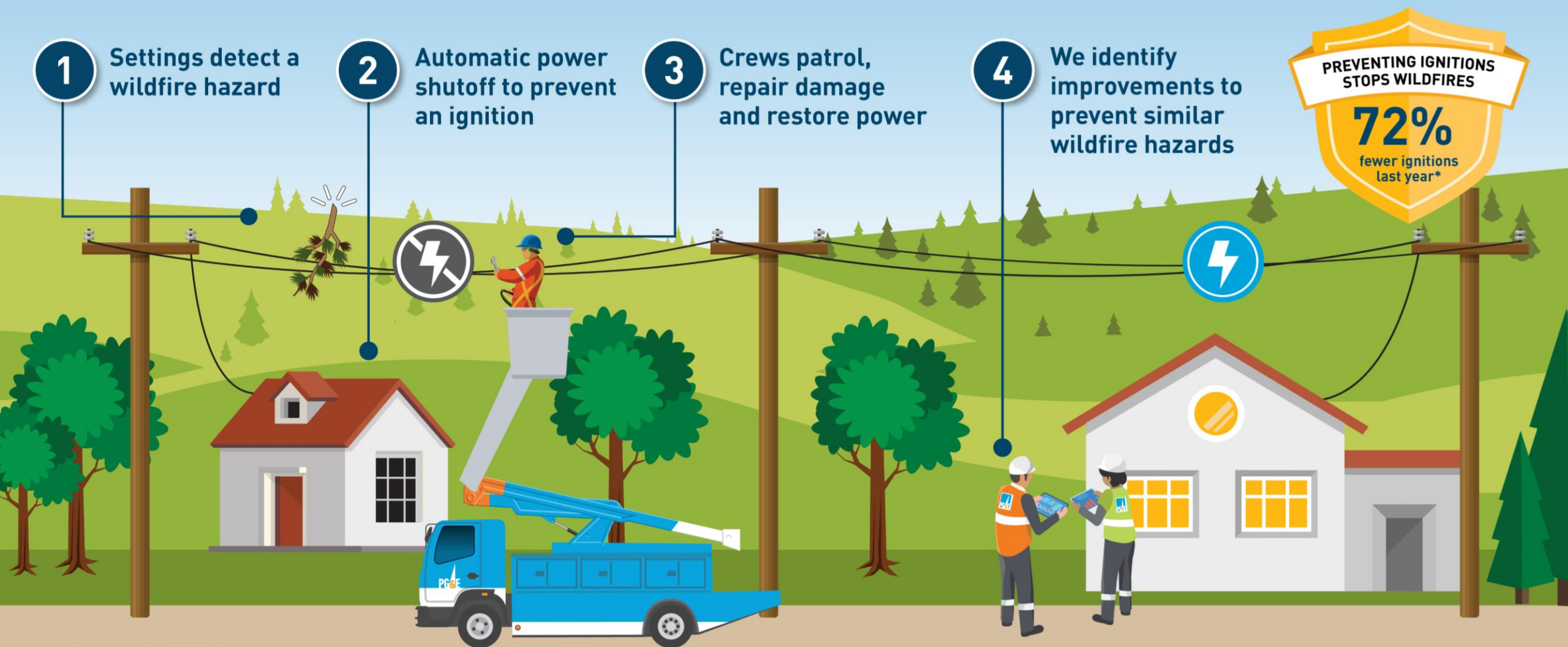
72%
reduction in
ignitions*



**Safety Settings Prevented a
Possible Ignition in Napa County**

*Data is approximate; based on PG&E's weather-normalized analysis of California Public Utility Commission reportable fire ignitions compared to the 2018-2020 average.
Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

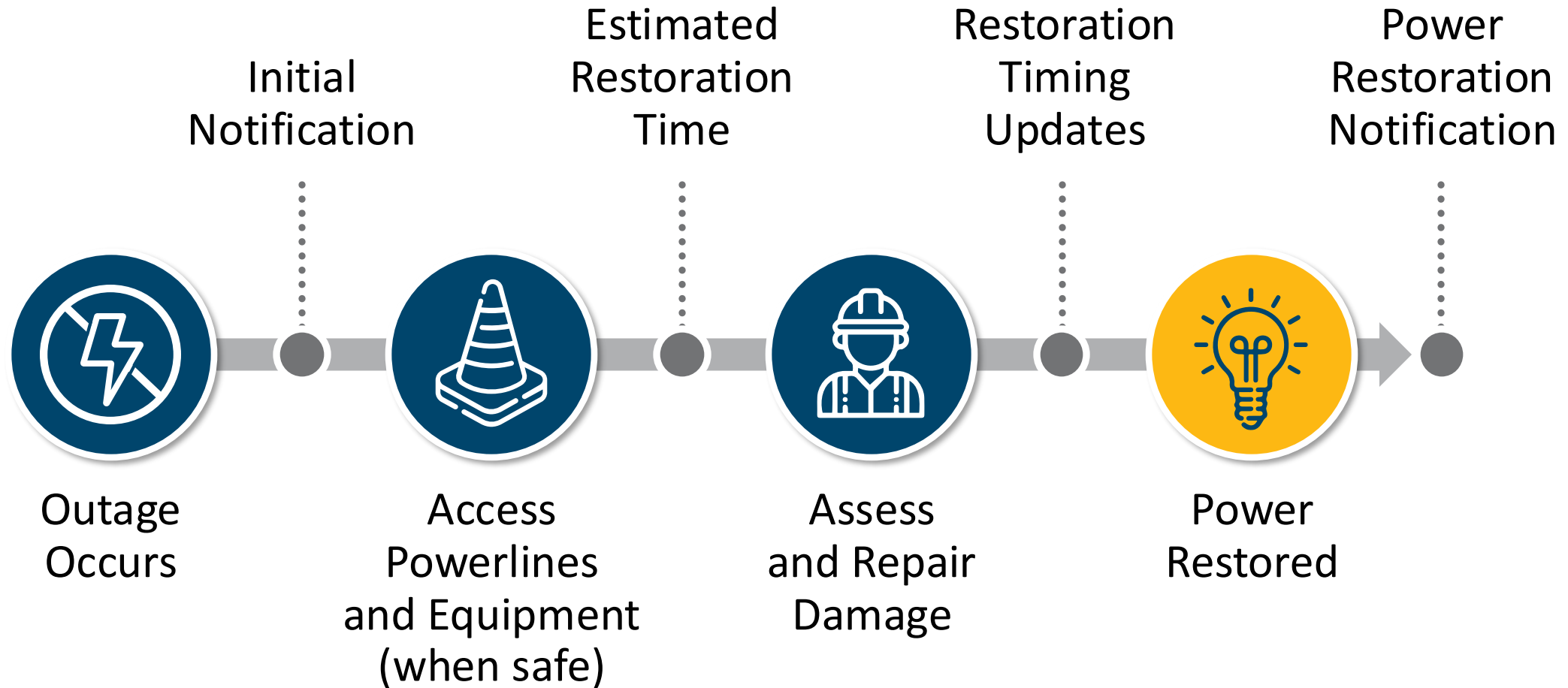
Enhanced Powerline Safety Settings Help Keep You Safe From Wildfires



For illustrative purposes only.

*Based on PG&E's weather-normalized analysis of California Public Utility Commission reportable fire ignitions while EPSS is enabled, compared to the 2018 – 2020 average prior to the establishment of EPSS.

What Customers Can Expect



Customers can learn more about the status of an outage and the restoration process at [pge.com/outages](https://www.pge.com/outages).

Safety Settings in Action Example

On July 19, 2023, vegetation contacted a powerline in Butte County.

This powerline was protected by EPSS and power was quickly and automatically shut off.

This stopped a potential wildfire before it had a chance to start.

What if EPSS had not been in place?

Using fire spread simulations, we can determine what a wildfire might have looked like from this vegetation contact.

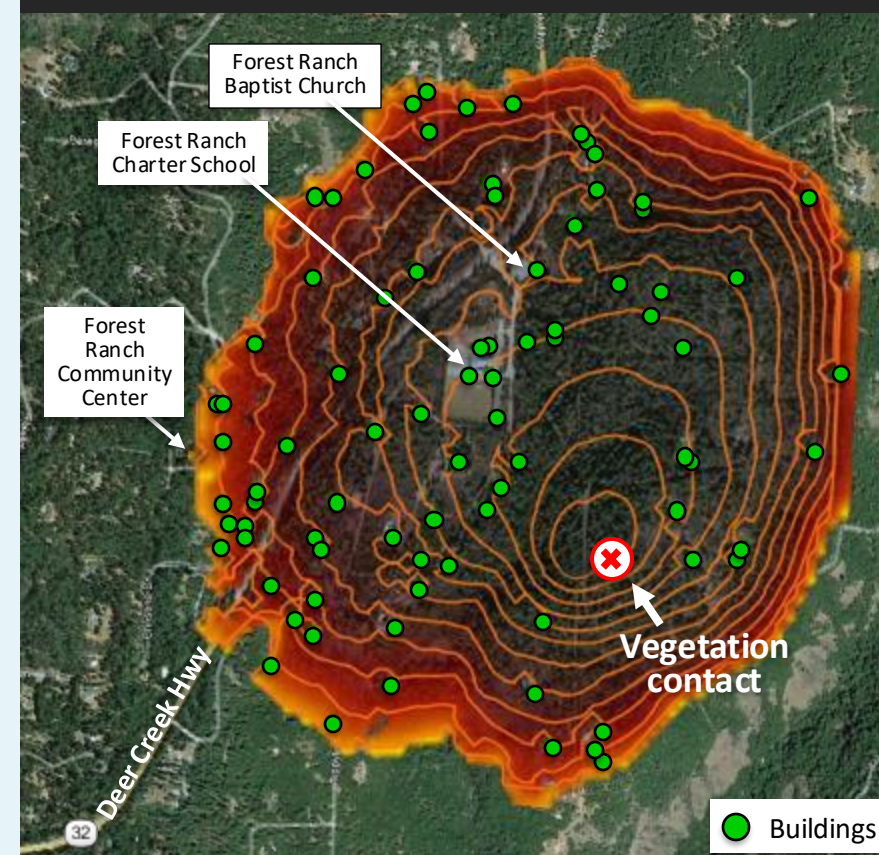
Fire Potential Index > **R4**

Prevented Acres from Burning > **487**

Prevented Buildings from Being Destroyed > **31**

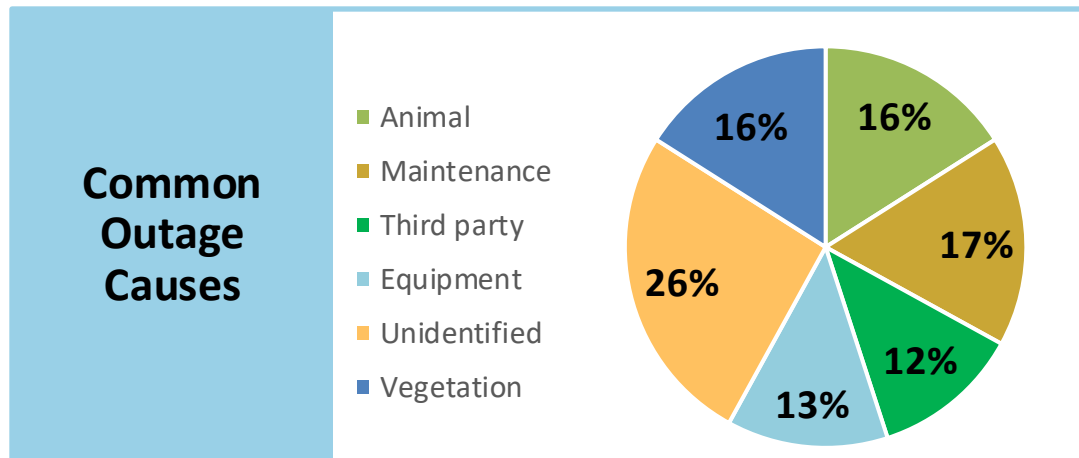
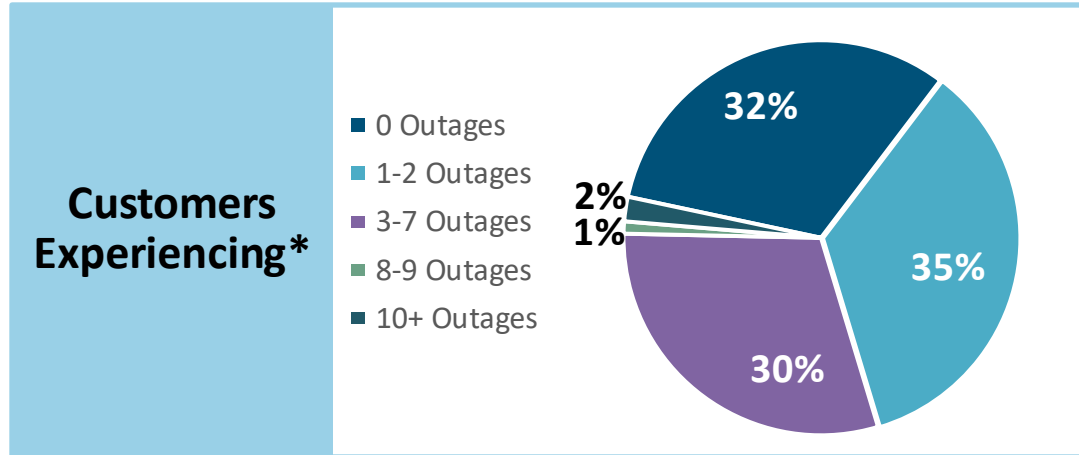
Prevented Impacts to Residents > **49**

July 19 Vegetation Contact Fire Spread Simulation



Protecting Customers in Your Community

2023 Performance on EPSS-Protected Powerlines



We are continuously working to improve reliability and minimize customer impacts

	2022	2023	2023 vs. 2022 Comparison	2024 YTD**
Number of Outages	120	105	13% decrease	41
Avg. Outage Length	2.9 hours	2.1 hours	28% decrease	2.3 hours
Avg. Customers Impacted per Outage	927 customers	1,001 customers	8% increase	1,070 customers

Data is approximate and as of 7/30/2024.

*Customer counts are approximate as of 7/30/2024 and may change based on ongoing program updates and enhancements.

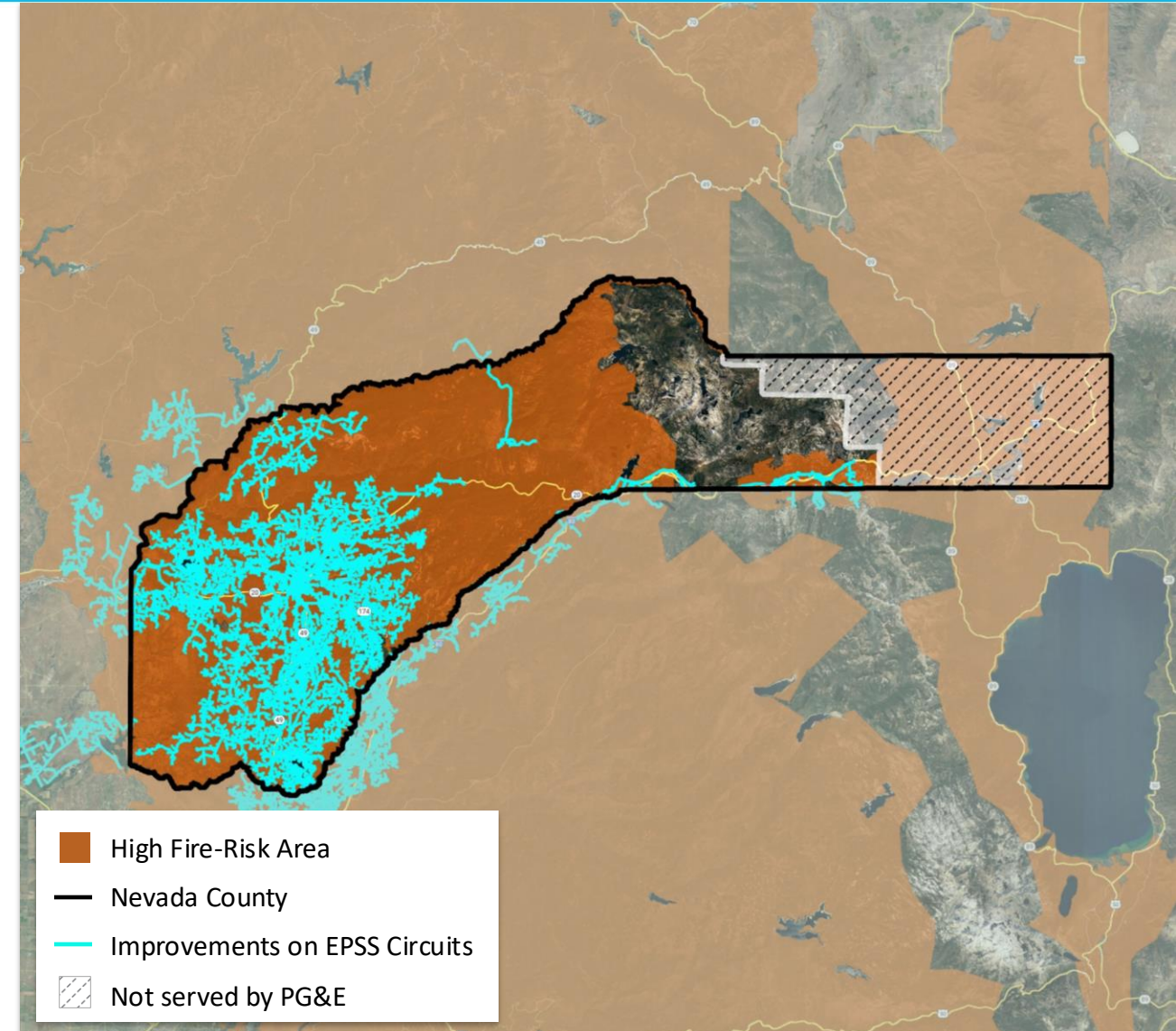
**Data is approximate and as of 7/30/2024.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

Improving Reliability in Your Community

We have and continue to take steps to improve reliability on circuits protected by EPSS in your community.

- ✓ Installing fault indicators to precisely identify outage locations and speed up restoration
- ✓ Trimming trees to reduce future vegetation-caused outages
- ✓ Adding animal guards to prevent future animal-caused outages
- 📢 Customers can learn more at pge.com/epss.



Data as of 7/31/2024. Locations are approximate and may overlap. Work plans are subject to change.

Public Safety Power Shutoffs



Public Safety Power Shutoffs Overview

High winds can cause tree branches and debris to contact energized electric lines, damage our equipment and cause a wildfire. **To prevent wildfires, we may need to turn off power as a last resort.**

Conditions that may lead to a Public Safety Power Shutoff



Low humidity levels of 30% and below



Forecasted high winds above 19 mph and gusts above 30-40 mph



A Red Flag Warning issued by the National Weather Service



Condition of dry material on the ground and low moisture content of vegetation



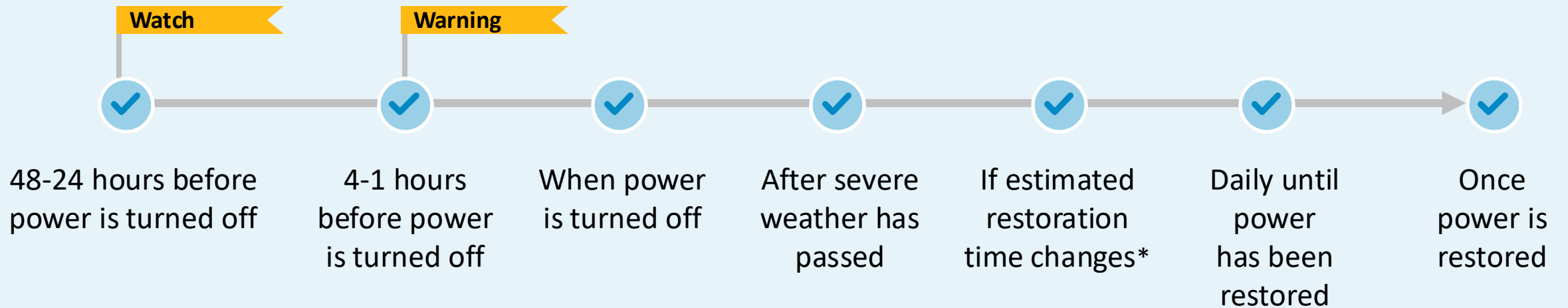
On-the-ground, real-time observations



PSPS Customer Notifications

We will reach out to customers through automated calls, texts and emails and provide updates on pge.com, social media and to local news and radio. Notifications are available in 16 languages.

When We'll Share Notifications



*Estimated Time of Restoration is also provided to customers throughout the notification process

 Customers can sign up for address alerts to receive PSPS notifications for any location by enrolling at [**pge.com/addressalerts**](http://pge.com/addressalerts).

Annual registration is required.

Some of the measures included in this presentation are contemplated as additional precautionary measures intended to further reduce the risk of wildfires.

Differences Between Safety Settings and PSPS

Enhanced Powerline Safety Settings (EPSS)

vs.

Public Safety Power Shutoffs (PSPS)



WHY

Automatically turning off power within one-tenth of a second if a problem is detected on the line

Proactively turning off power to prevent tree branches and debris from contacting energized lines



WHEN

Elevated wildfire risk is present, most likely from May to November, but can occur year-round

During times of high winds, low humidity and dry vegetation



NOTIFICATIONS

Regular updates after the outage occurs, provided until power is restored

In advance through automated calls, texts, and emails with updates provided until power is restored



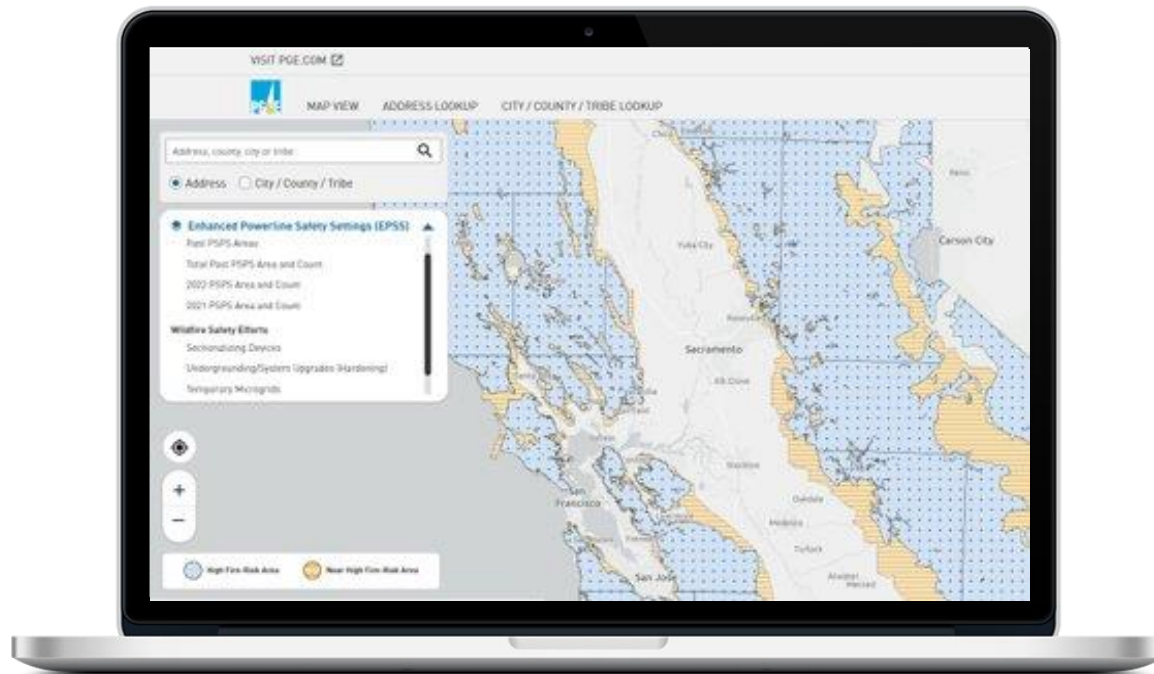
Customers can find updates and information for both planned and unplanned outages at [pge.com/outages](https://www.pge.com/outages).

Customer Resources



Wildfire Safety Progress Map

The Wildfire Safety Progress Map is a comprehensive, interactive map of PG&E wildfire safety work and progress for customers.



Visit pge.com/progressmap to learn more

The map includes data related to:

- System Upgrades (Hardening)
 - Installing Strong Poles and Covered Powerlines
 - Undergrounding
 - Line Removal
- Sectionalizing Devices
- Temporary Microgrids
- Enhanced Powerline Safety Settings (EPSS)
- Public Safety Power Shutoffs (PSPS)
- Customer Assistance Programs
 - Self-Generation Incentive Program
 - Permanent Battery Storage Rebate



Customer Resources and Support for Wildfire Safety Outages

Portable Battery Program

Supporting eligible customers with fully subsidized portable battery solutions



pge.com/portablebattery

Generator and Battery Rebate Program

Rebates for eligible customers to purchase a qualified generator or battery



pge.com/backupper

Self-Generation Incentive Program

Rebates to help customers save on energy storage systems for their business



pge.com/sgip

Disability Disaster Access and Resources

Emergency preparedness planning, portable batteries, and support for customers requiring additional accommodations



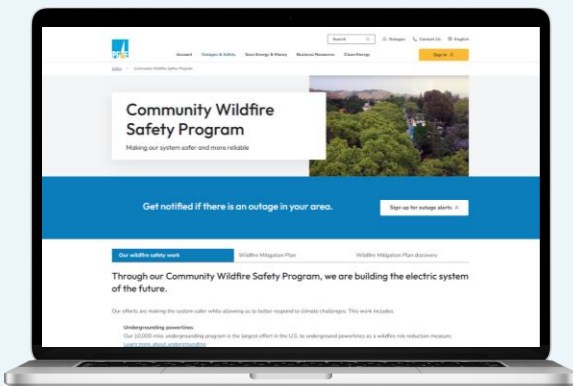
pge.com/ddar

Residential Storage Initiative

Permanent, long-term backup power solutions for the most impacted customers



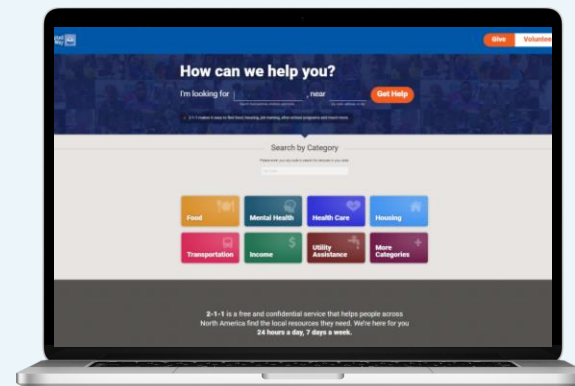
pge.com/residentialstorageinitiative



Wildfire Safety


Information on wildfire prevention efforts

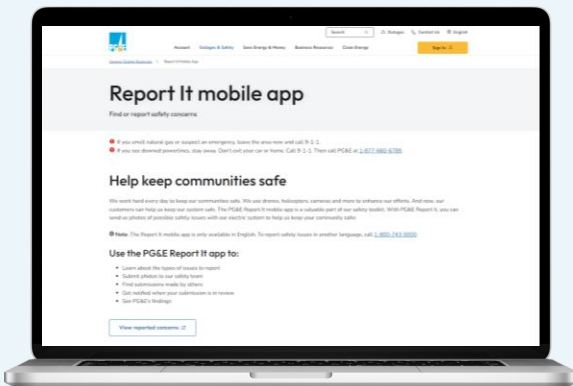
 pge.com/wildfiresafety



California 211 Providers Network

Free and confidential support and resources via calls or texts to 211

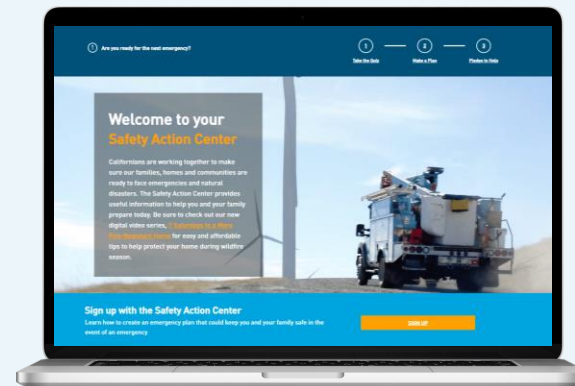
 211ca.org



Report It App

Submit photos of non-emergency potential safety concerns

 pge.com/reportit



Safety Action Center

Create an emergency safety plan to keep you and your family safe

 safetyactioncenter.pge.com

Dedicated wildfire safety contacts: Hotline: 1-866-743-6589 | Email: wildfiresafety@pge.com

Open Discussion



Thank You

