

# WELCOME - HOUSEKEEPING

Thank you for joining us this evening.

This meeting is being recorded.

Please note, the chat function, camera, microphone, and reactions are disabled for this meeting.

To add closed captioning, please click the three dots found at the top right of the tool bar. In the dropdown menu, select turn on live captions.

To submit a question, use the **Q&A window** throughout the session.

Please only submit questions that are relevant to the presentation and topics being presented.



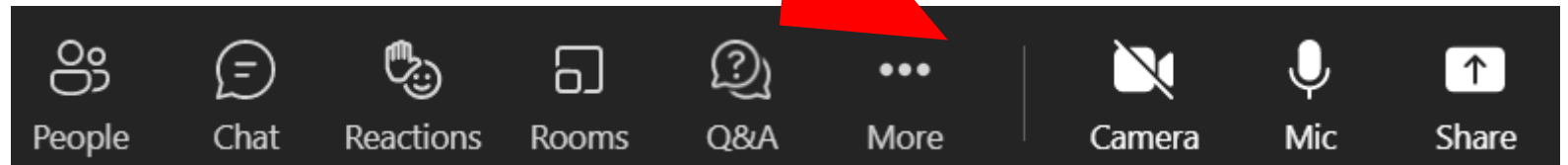
## **Our Commitment to California**

Keeping our communities safe from wildfires

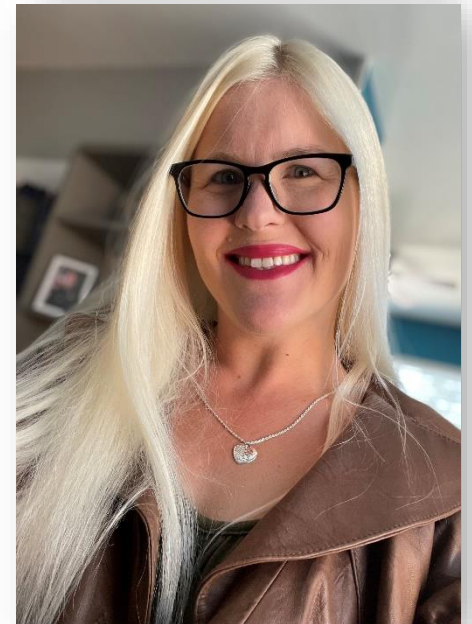
# HOW TO SUBMIT A QUESTION

You can submit a question using the **Q&A window** throughout the session.

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# PRESENTERS



**Patrick Maynard**  
Director  
Office of Emergency Services  
Ventura County Sheriff

**Andrew Thomas**  
Government Relations  
Manager  
Local Public Affairs

**Shinjini Menon**  
Vice President  
Asset Management &  
Wildfire Safety

**Cameron  
McPherson**  
Senior Manager  
Wildfire Safety

**Danielle Anderson**  
Senior Manager  
Customer Care

# AGENDA

- **2021 Wildfire Season**
- **SCE's Wildfire Mitigation Activities**
- **Public Safety Power Shutoffs**
- **Reducing the Need for PSPS**
- **PSPS Communications**
- **Customer Programs & Resources**
- **Q&A**

# BE PREPARED FOR POTENTIAL EMERGENCIES



**An emergency can happen at any time.**

## **Have a Plan & Make a Kit**

You can help your family be prepared for any emergency situation with a safety preparedness plan, an emergency kit with some basic supplies and advance planning. Whether a storm, an earthquake, a wildfire or a flood comes our way, preparedness will help everyone cope better and stay safer. Learn more at [sce.com/beprepared](https://sce.com/beprepared).

## **VC Alert**

Ventura County's mass notification system  
Register online - [VCAAlert.org](https://VCAAlert.org)

## **VCEmergency.com**

Ventura County's dedicated emergency information website.

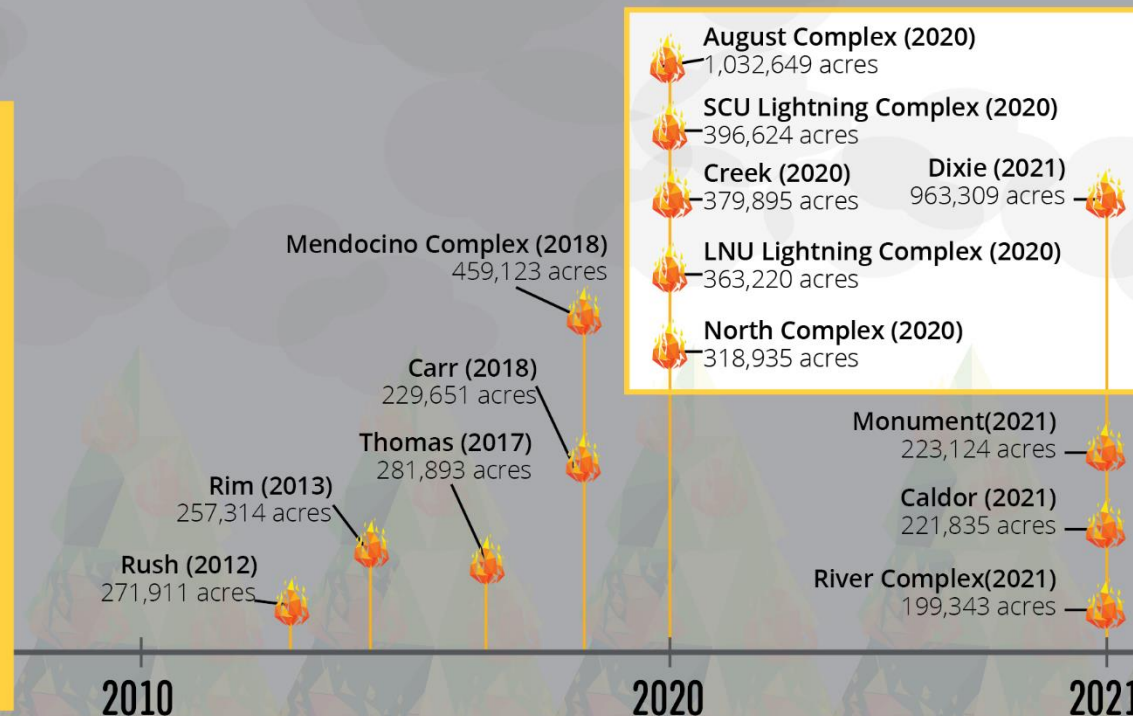
## **Wildfire Preparedness**

[VCFD.org](https://VCFD.org)

# 2021 WILDFIRE SEASON

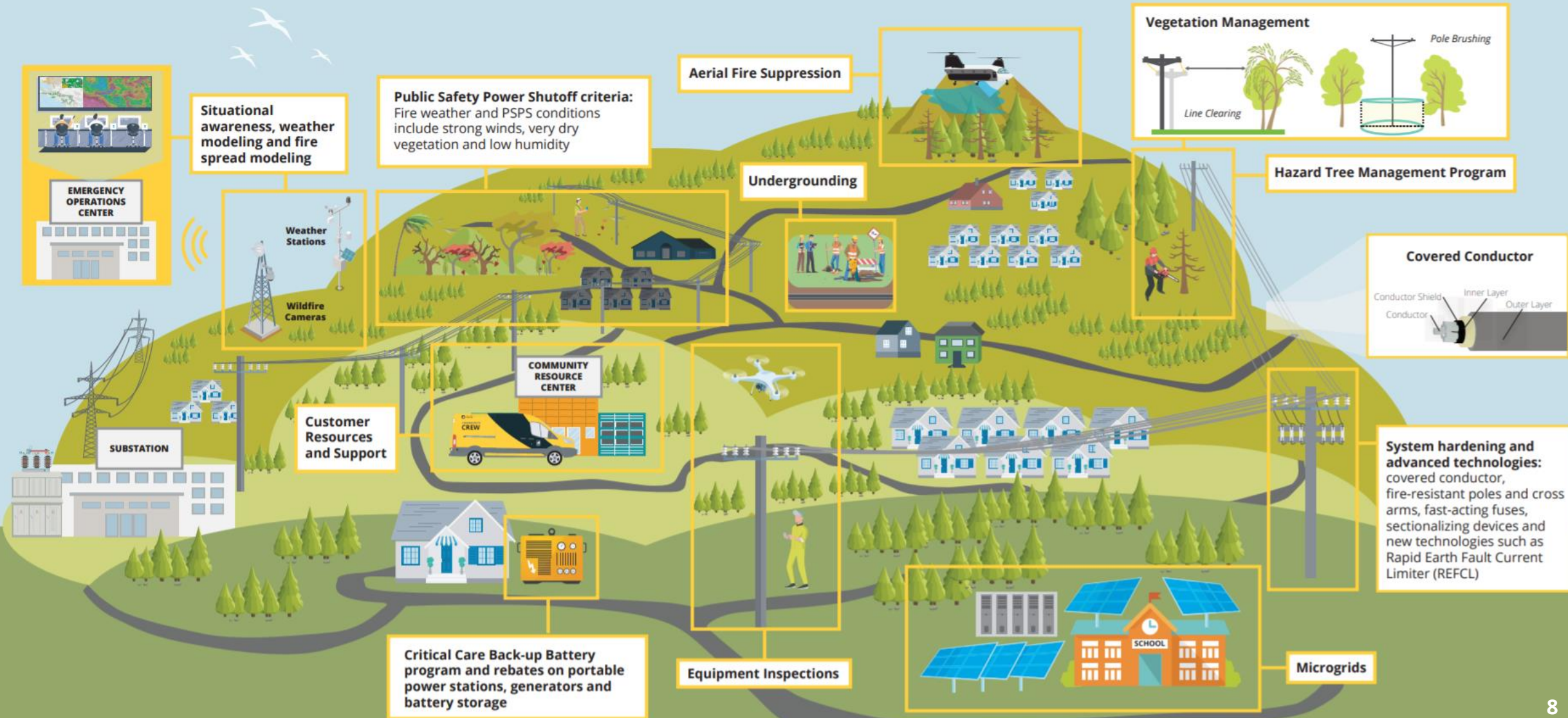
California experienced another year of extreme wildfire activity, exacerbated by intensifying drought. Dry vegetation and strong winds continue to threaten our communities during year-round fire season

**6 OF THE 7  
LARGEST CALIFORNIA  
WILDFIRES  
HAVE HAPPENED SINCE  
2020\***



\*Source: [https://www.fire.ca.gov/media/4jandlhh/top20\\_acres.pdf](https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf)

# REDUCING WILDFIRE RISK IN OUR COMMUNITIES





# INSULATED WIRE IS ONE OF THE MOST EFFECTIVE MEASURES TO REDUCE WILDFIRE & PSPS RISKS IN SCE'S SERVICE AREA

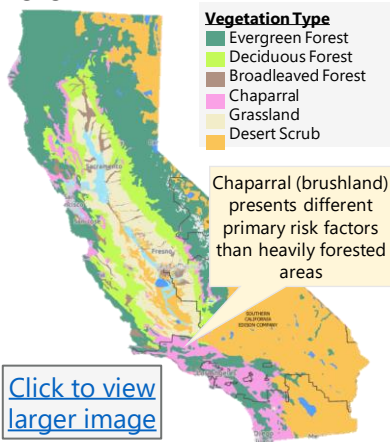
Insulated wire is a very valuable tool to expeditiously and cost-effectively reduce wildfire risk specific to SCE

## Undergrounding considered for certain locations based on risk profile

### Geography

Contact from vegetation and other objects is a key risk factor in much of SCE's area

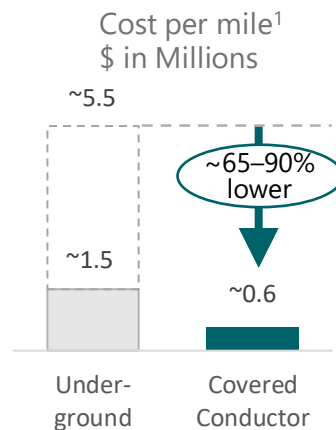
Insulated wire is very effective in mitigating these risks



### Cost to Implement

Insulated wire installation costs significantly lower than undergrounding

Undergrounding costs vary depending on construction methods, locational, and operational factors

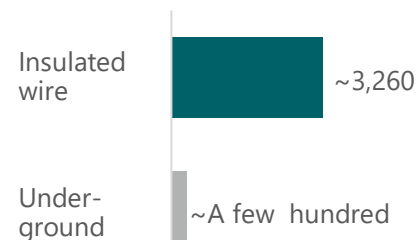


### Execution Speed

Insulated wire can be deployed within 16-24+ months, and sometimes faster

Undergrounding generally takes 25-48+ months

Actual installed miles of insulated wire<sup>2</sup> vs. hypothetical undergrounded miles<sup>3</sup>



### Unique Factors

Undergrounding is considered where there is:

- High burn frequency
- Limited egress
- Wind speeds exceeding insulated wire PSPS thresholds
- Exceptionally high potential consequence (>10,000 acres)

*Several hundred miles currently under consideration for additional enhanced mitigation, including undergrounding*

1. Based on data provided in SCE's 2022 WMP Update

2. Through March 31, 2022

3. Undergrounded miles is a hypothetical approximation of underground lines that could have been constructed through March 31, 2022, based on SCE's assumptions and experience with planning and executing undergrounding projects

# REDUCING WILDFIRE RISK & PSPS IMPACTS – BY THE NUMBERS

SCE estimates its wildfire mitigation and PSPS measures have reduced the risk of damage from catastrophic<sup>1</sup> wildfires by **65% to 70%**, relative to pre-2018 levels.



## ONGOING WILDFIRE MITIGATION EFFORTS

~**34%** of overhead wire in high fire risk areas replaced with insulated wire<sup>2</sup>

**Suite of mitigations** include system hardening, annual equipment inspections, vegetation management and situational awareness measures



## IMPROVED PSPS EXECUTION & CUSTOMER SUPPORT

**73% reduction** in PSPS outage time in 2021 on frequently impacted circuits<sup>3</sup>

**81,000 customers** removed from scope from exceptions and switching protocols

**64 Community Resource Centers** available



## AERIAL FIRE SUPPRESSION SUPPORT

**Contributed \$18 million** for the creation of the quick reaction force of the world's largest helitankers

**Used on more than 50 fires in 2021**, helping to suppress fires in its early stages

1. A wildfire directly causing one or more deaths, damaging or destroying more than 500 structures, or burning more than 140,000 acres of land

2. Through March 31, 2022

3. Based on 2021 weather and fuel conditions

# PUBLIC SAFETY POWER SHUTOFFS

- A tool of last resort used during dangerous fire conditions (weather and fuels)
- De-energizing lines to prevent a spark from our equipment starting a significant wildfire
- Primarily impacts circuits in high fire risk areas
- Use of multiple methods to notify customers and partners in affected areas before, during and after a PSPS event
- In 2021, continued PSPS improvements and reduced frequency, scope and duration of PSPS

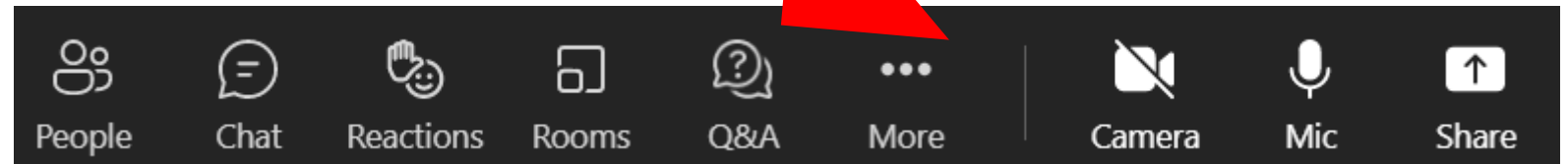


Damage/hazards found after strong winds during PSPS

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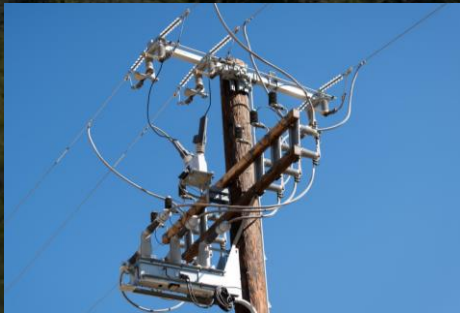
# REDUCING THE NEED FOR PSPS

## 2021 ACHIEVEMENTS AND 2022 PLANS



### Insulated Wire

Replaced an additional **1,500** miles of bare wire with insulated wire; **700** miles of expedited grid hardening to raise PSPS threshold prior to peak wind season. Plan to replace **1,100** miles in 2022; **270** miles of expedited grid hardening



### Segmentation

Installed **23** additional remote-controlled sectionalizing devices to segment and isolate circuits during PSPS. Plan to add **15** devices in 2022.



### Weather Stations

Installed **400** additional weather stations for improved forecasting and accuracy of PSPS operations. Plan to add **150** weather stations in 2022.



### Switching Protocols

Removed **81,000** customers from PSPS scope through exceptions and switching protocols



### Operational Protocols

Utilized up-to-date information on ground conditions (e.g., lack of vegetation) to assess wildfire threat and the need for PSPS

# 2021 PSPS EVENTS

## Service Area Compared to 2020

Statistics	Customers Interrupted	Circuit Interruptions	Customer Minutes of Interruption
2020 Fire Season	~348K	~584	~388M
2021 Fire Season	~85K	~124	~105M
Delta	↓76%	↓79%	↓73%

## Ventura County Compared to 2020

Statistics	Customers Interrupted	Circuit Interruptions	Customer Minutes of Interruption
2020 Fire Season	~99k	~131	~136M
2021 Fire Season	~15k	~25	~27M
Delta	↓84%	↓81%	↓80%

# 80%

**REDUCTION IN  
CUSTOMER MINUTES  
OF INTERRUPTION IN  
VENTURA COUNTY**

# EXPEDITED GRID HARDENING

## ON CIRCUITS IMPACTED BY PSPS IN VENTURA COUNTY



### Completed in 2021

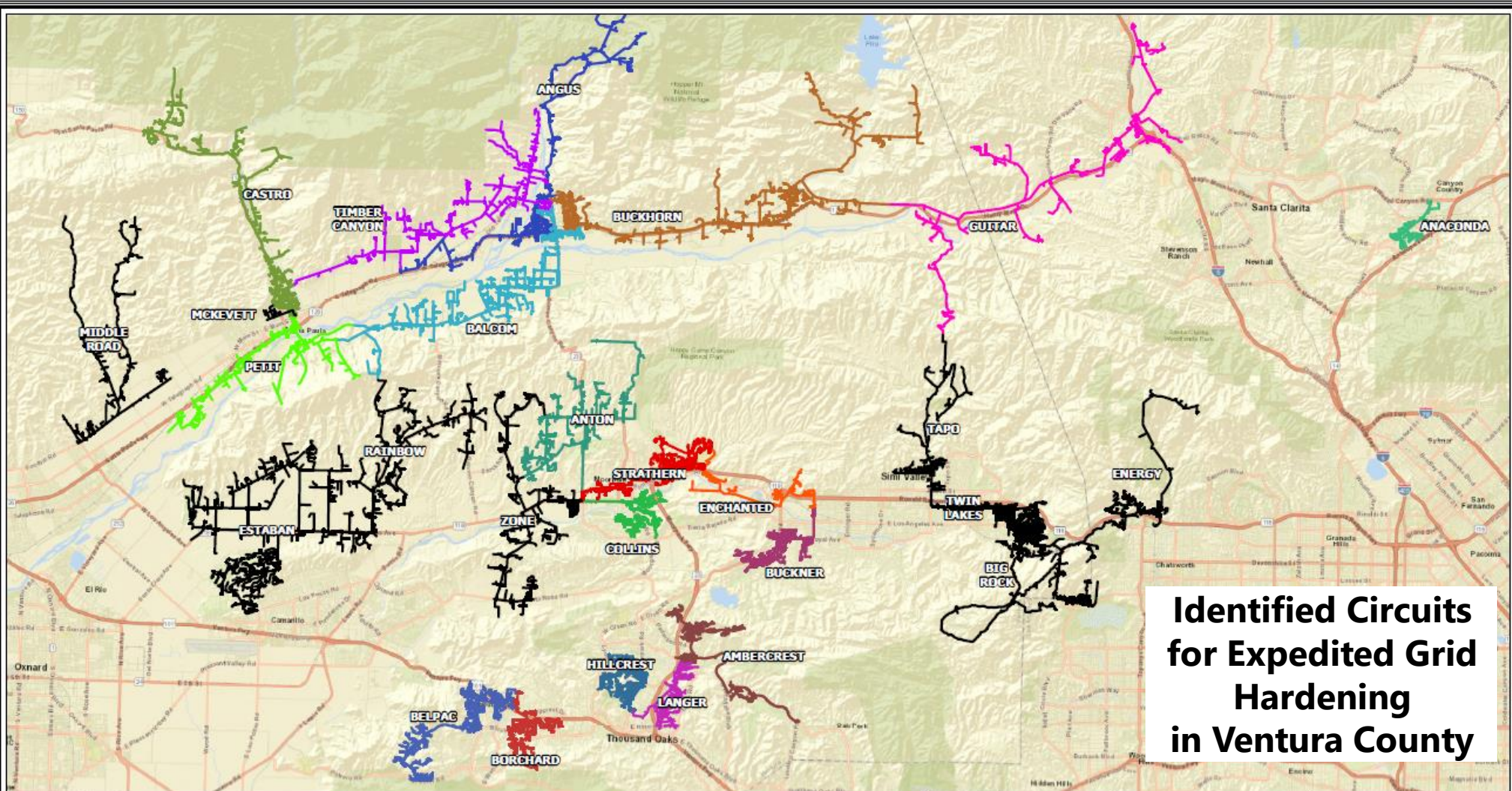
- Expedited installation of\*:
  - **139** miles of insulated wire
  - **5** sectionalizing devices
  - **4** weather stations
- Removed **12** circuits and **4** circuit segments from PSPS consideration
- Raised PSPS wind threshold on **6** circuits

\*Note: Number of total installed on all circuits in the county may be higher

### Plans for 2022

- Expedite installation of:
  - **64** miles of insulated wire
  - **4** sectionalizing devices
  - **7** weather stations
- Raise PSPS wind threshold on **2** circuits

**Target Completion Date:  
Oct. 1, 2022**



## Identified Circuits for Expedited Grid Hardening in Ventura County

### VENTURA COUNTY

#### CIRCUITS TARGETED FOR 2022 COMPLETION:

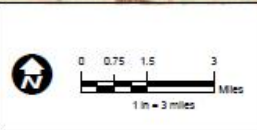
- |                      |              |          |            |             |             |                 |
|----------------------|--------------|----------|------------|-------------|-------------|-----------------|
| — COMPLETED CIRCUITS | — AMBERCREST | — ANTON  | — BORCHARD | — CASTRO    | — GUITAR    | — PETIT         |
|                      | — ANACONDA   | — BALCOM | — BUCKHORN | — COLLINS   | — HILLCREST | — STRATHERN     |
|                      | — ANGUS      | — BELPAC | — BUCKNER  | — ENCHANTED | — LANGER    | — TIMBER CANYON |



Date: 5/9/2022  
 File Name: VENTURA.mxd  
 Version #: 1  
 Created By: Geospatial Analysis, Geomatics | Central Field Services

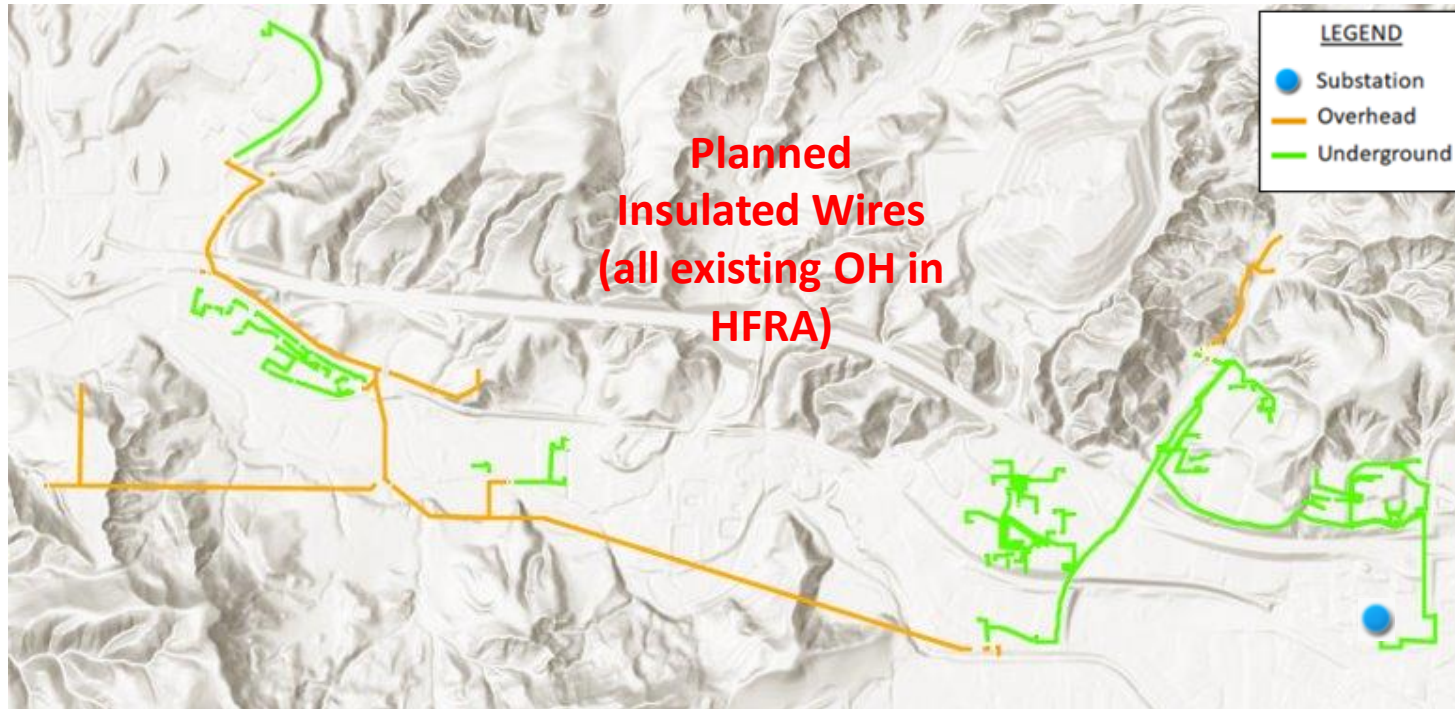
Features depicted herein are planning level drawings and intended for informational purposes only. Distances and locations may be distorted at this scale. Always consult with the proper legal documents or agencies regarding such features.  
 Central Field Services

Service Layer Credits: Source: Esri, HERE, Garmin, USGS, Imagery, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Swire, Esri Korea, Esri (Thailand), NGIS, (c) OpenStreetMap contributors, and the GIS User Community  
 Source: Esri, HERE, Garmin, Intermap, Inverness P, Corp., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, Swisshem, ISIA, IGN, Intermap, Inc., Swire, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS





# EXAMPLE OF REDUCING THE NEED FOR PSPS



**Circuit:** Enchanted

**Community:** Moorpark, Simi Valley

**Planned Work:**

- Replace 6.3 miles of existing overhead wire with new insulated wire

**Expected Completion Date:**

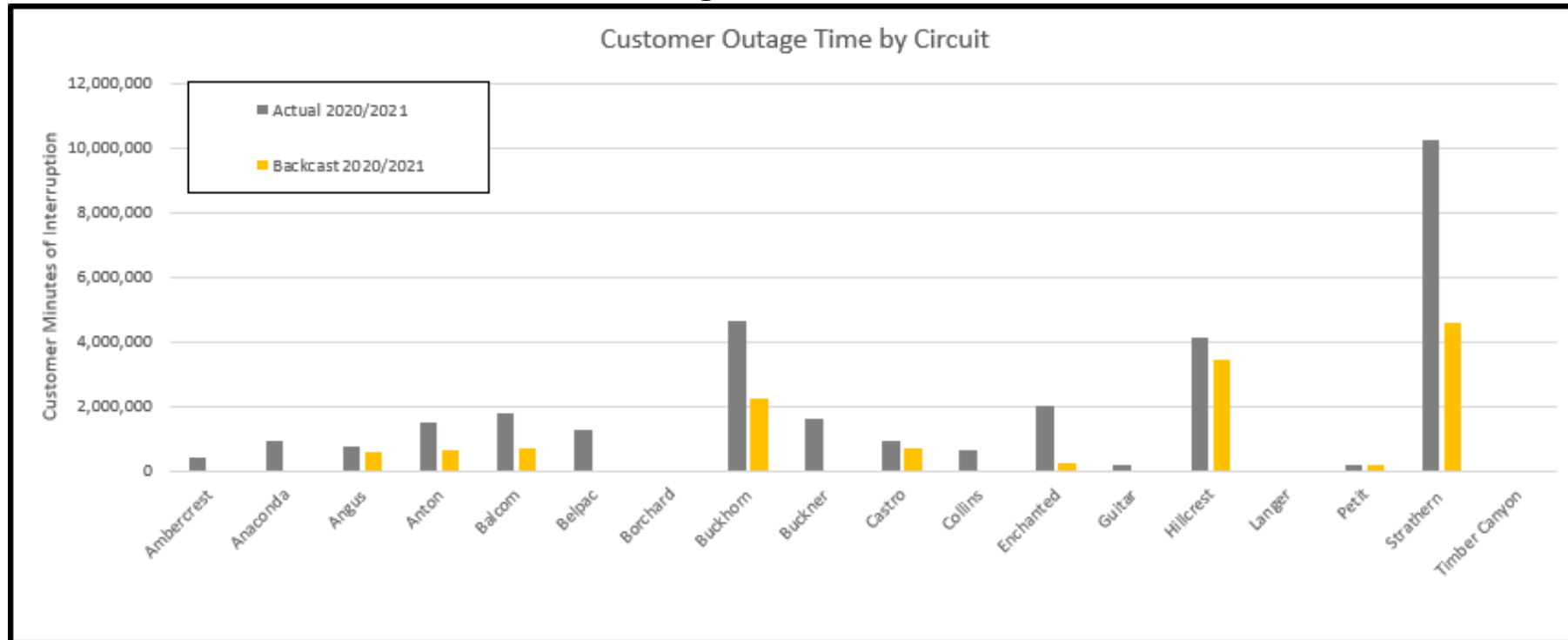
- 10/1/2022

**Expected Improvements:**

- **88% reduction** in customer outage time, assuming the same weather conditions in 2020 and 2021

# EXPECTED IMPROVEMENTS

With the implementation of our plans this year, we expect to see a **43% reduction in customer outage time** across these PSPS impacted circuits in Ventura County communities compared to 2020 and 2021, assuming the same weather conditions



Updated: 05-16-2022

- 1) PPS impacted circuits are circuits that have experienced one or more PPS related outages in 2019-2021
- 2) Customer outage time is measured as total Customer Minutes of Interruption (CMI)
- 3) Timber Canyon calculations are in progress, so an estimated 75% improvement is shown (based on completed circuit calculation average improvement)
- 4) The Borchard and Langer planned work is only a weather station for which benefits cannot be calculated

# PSPS COMMUNICATIONS

## Notifications

- SCE provides PSPS notifications through various communication channels
  - SCE Account Holders (email, text, and voice call)
  - Address Level Alerts
- Sign up to stay informed before, during and after a PSPS event

## SCE Outage Map

- Consolidated outage map that incorporates PSPS outages

**Power Outages**

Search by address, city, county or ZIP

[Click here to enter the outage number and check the status](#)

**Current Outages** ▼  
28 Outages | 1,065 Customers Impacted

**Upcoming Scheduled Outages** ▼  
1,531 Outages Scheduled | 68,293 Customers Possibly Impacted

**Public Safety Power Shutoff (PSPS)**  
Search for an address to see specific PSPS details or see county-level details [below](#).

Not Seeing Your Outage? Report

Last Updated: 5/2/2022 - 6:02 PM PST

**Outage Alerts**  
Stay informed about unplanned repair and planned maintenance outages. Get Alerts >

**Community Support**

Resource Centers Crew Vehicles Further Assistance

**SCE Community Resource Centers** are available to support customers during a Public Safety Power Shutoffs... [More](#) ▼

# SCE CUSTOMER PROGRAMS & RESOURCES



## CUSTOMER RESOURCE CENTERS & COMMUNITY CREW VEHICLES

- Services offered: information, charging of mobile devices, assistive technology/medical devices, PSPS outage alert enrollment support, access to water, light snacks, ice and ice vouchers, restrooms, and small insulated bags to keep medication cool
- Translations services for over 120 languages including American Sign Language (ASL)



## CUSTOMER PROGRAMS

- Partnered with 211 to help customers with Access and Functional Needs (AFN) develop a resiliency plan and enroll in eligible assistance programs
- 211 provides specialized referrals for customers with AFN experiencing PSPS. Services include connecting customers to shelf-stable food, hot meal delivery, transportation and/or temporary shelter
- SCE will improve communication methods, including videos utilizing ASL for marketing and PSPS notifications



## CUSTOMER RESILIENCY EQUIPMENT

- Critical Care Backup Battery program and the In-Event Battery Loan pilot provide eligible customers with a portable backup battery to power assistive technology/medical devices during a PSPS event
- Rebates on portable batteries and generators for customers residing in high fire risk areas on [marketplace.sce.com](https://marketplace.sce.com)

Website: [sce.com/wildfire](https://www.sce.com/wildfire)  
Energized by Edison Stories & Videos: [edison.com/wildfire-safety](https://www.edison.com/wildfire-safety)

Email: [wildfireoutreach@sce.com](mailto:wildfireoutreach@sce.com)  
Social Media: @SCE on Twitter & Facebook  
SCE Customer Support: 1-800-655-4555

## LEARN MORE



- Visit our website to learn more about our wildfire safety efforts and Public Safety Power Shutoffs (PSPS)
- Provide feedback through the survey

## SIGN UP



- PSPS alerts
- SCE's Medical Baseline program
- SCE programs and rebates

## BE PREPARED

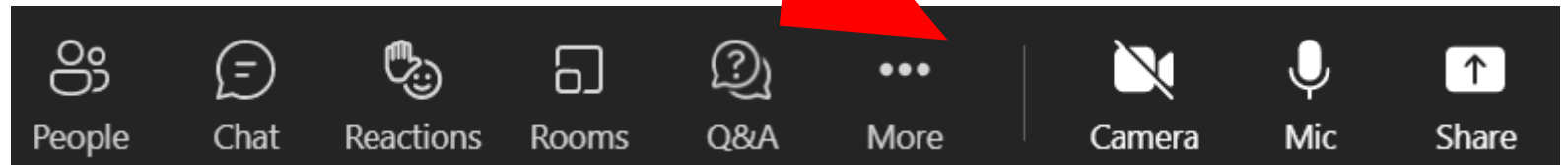


- Be prepared with a safety preparedness plan, some basic supplies and advance planning
- Power outage tips

# HOW TO SUBMIT A QUESTION

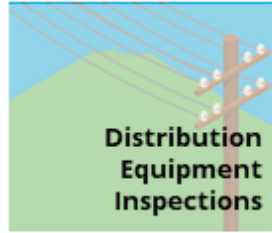
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# ADDITIONAL RESOURCES





2021  
Completed/Target  
**179,600/163,000**  
inspections

 **110%**  
completed

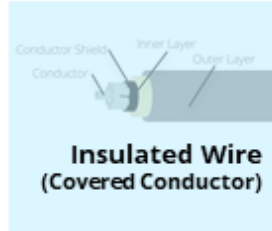
Completed  
Since 2018  
**764,000+**  
inspections



2021  
Completed/Target  
**20,800/16,800**  
inspections

 **124%**  
completed

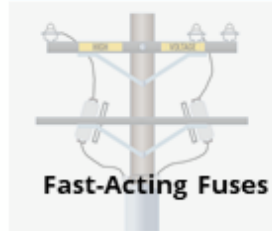
Completed  
Since 2018  
**106,900+**  
inspections



2021  
Completed/Target  
**1,500/1,000**  
circuit miles installed

 **150%**  
completed

Completed  
Since 2018  
**2,900+**  
circuit miles installed




2021  
Completed/Target  
**350/330**  
fuses installed or  
replaced

 **106%**  
completed

Completed  
Since 2018  
**13,300+**  
fuses installed or  
replaced




2021  
Completed/Target  
**131,400/120,000**  
trees assessed

 **110%**  
completed

Completed  
Since 2018  
**359,900+**  
trees assessed



2021  
Completed/Target  
**400/375**  
weather stations  
installed

 **107%**  
completed

Completed  
Since 2018  
**1,460+**  
weather stations  
installed



Cameras currently provide  
visibility to about 90% of our  
high fire risk areas (HFRA) and  
the planned additional cameras  
in 2022 and beyond will increase  
coverage to nearly all of HFRA

Completed  
Since 2018  
**166**  
cameras installed



SCE contributed \$18 million to support the creation of  
a quick reaction force of aerial firefighting assets  
across counties in SCE's service area to coordinate  
and reach wildfires in their early stages. These unique  
water and fire retardant dropping helitankers have  
the capability to operate day and night.



2021  
Completed  
**6,000/3,600**  
batteries provided  
to eligible customers

 **167%**  
completed

Completed Since  
July 2020  
**6,740+**  
batteries provided  
to eligible customers



**64**  
sites  
available

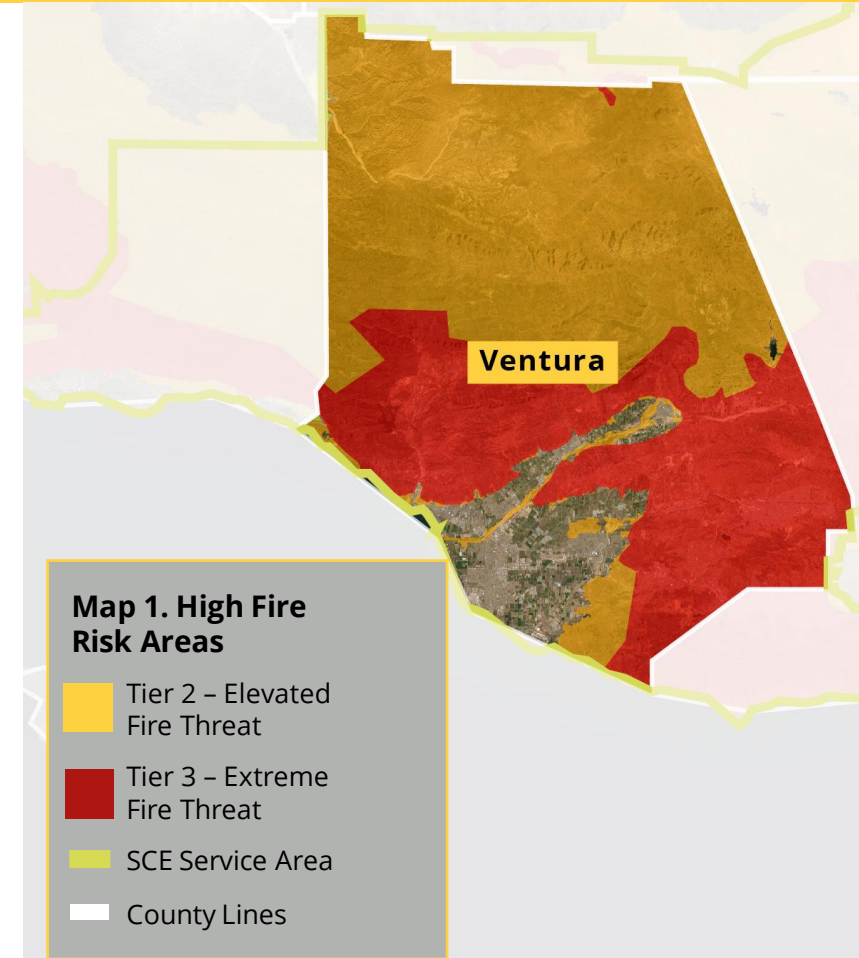


**8**  
vehicles  
available



### Completed

	2021	SINCE 2018
DISTRIBUTION EQUIPMENT INSPECTIONS	22,926 inspections	106,820 inspections
TRANSMISSION EQUIPMENT INSPECTIONS	2,263 inspections	11,796 inspections
COVERED CONDUCTOR	253 circuit miles installed	432 circuit miles installed
FAST-ACTING FUSES	27 fuses installed or replaced	1,426 fuses installed or replaced
SECTIONALIZING DEVICES	5 devices installed	14 devices installed
HAZARD TREE MANAGEMENT	9,854 trees assessed	20,054 trees assessed
WEATHER STATIONS	60 weather stations installed	170 weather stations installed
HIGH-DEFINITION WILDFIRE CAMERAS	30 cameras installed	
COMMUNITY RESOURCE CENTERS	14 sites available	
COMMUNITY CREW VEHICLES	8 vehicles available throughout SCE's service area	

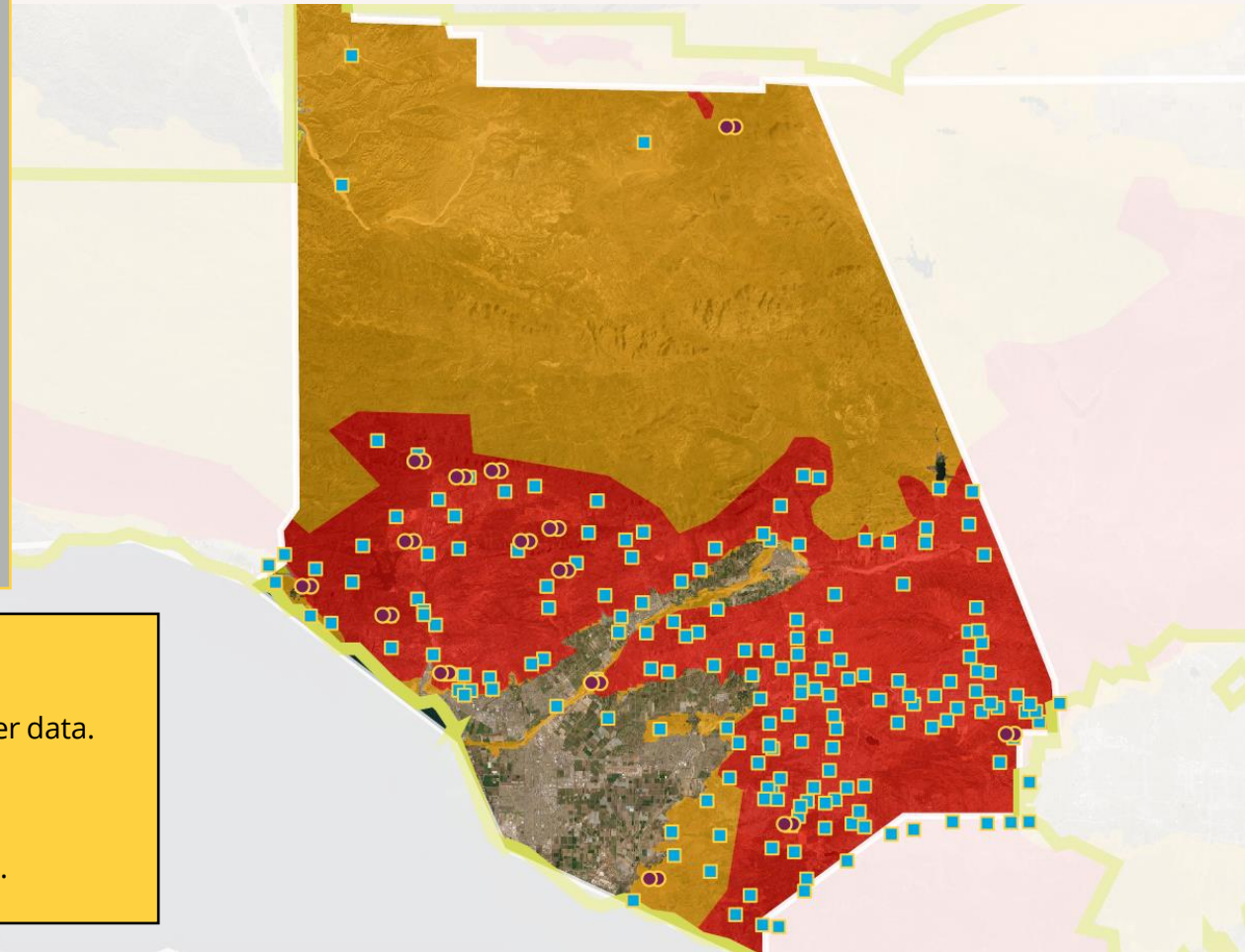


SCE tracks wildfire initiative progress by SCE districts and extrapolates to the county level as a reasonable approximation. There may be additional circuit miles of covered conductor installed due to fire restoration work.

SCE's service area covers about **100%** of Ventura County. About **196,700** customer accounts are served by circuits in high fire risk areas.

### Map 2. Situational Awareness

-  Weather Stations
-  HD Wildfire Cameras
-  Tier 2 – Elevated Fire Threat
-  Tier 3 – Extreme Fire Threat
-  SCE Service Area
-  County Lines



#### **Weather Stations:**

170 weather stations installed.  
Visit [sce.com/weatherstations](https://sce.com/weatherstations) for real-time weather data.

#### **HD Wildfire Cameras:**

30 high-definition wildfire cameras installed.  
Visit [alertwildfire.org](https://alertwildfire.org) to view the live camera feeds.

# HELPFUL INFORMATION & RESOURCES

## SCE Wildfire Webpage – [sce.com/wildfire](https://sce.com/wildfire)

### SCE Notifications

- Sign up for PSPS alerts – [sce.com/pspsalerts](https://sce.com/pspsalerts)
- Sign up for the Energized by Edison Wildfire Mitigation Newsletter – [energized.edison.com/newsletter](https://energized.edison.com/newsletter)

### Situational Awareness

PSPS maps and information – [sce.com/psps](https://sce.com/psps)

- PSPS decision making – [sce.com/pspsdecisionmaking](https://sce.com/pspsdecisionmaking)
- Role of weather in PSPS – [sce.com/fireweather](https://sce.com/fireweather)
- CPUC wildfire maps – [ia.cpuc.ca.gov/firemap/](https://ia.cpuc.ca.gov/firemap/)
- Wildfire cameras – [alertwildfire.org](https://alertwildfire.org)
- Weather stations – [sce.com/weatherstations](https://sce.com/weatherstations)

### Preparedness

- SCE emergency preparedness – [sce.com/beprepared](https://sce.com/beprepared)
- CAL FIRE preparedness – [readyforwildfire.org](https://readyforwildfire.org)

### Vegetation Management

- Vegetation Management – [sce.com/safety/power-lines](https://sce.com/safety/power-lines); contact 1-800-655-4555 or [safetrees@sce.com](mailto:safetrees@sce.com)

### Customer Programs & Rebates

- SCE Customer Programs & Resources – [sce.com/customerresources](https://sce.com/customerresources)
- SCE Marketplace (rebates and programs) – [marketplace.sce.com](https://marketplace.sce.com)
- SCE Medical Baseline Program – [sce.com/medicalbaseline](https://sce.com/medicalbaseline)
- Self Generation Incentive Program (SGIP) – [sce.com/sgip](https://sce.com/sgip) or [selfgenca.com](https://selfgenca.com)
- SCE Customer Support: 1-800-655-4555

### Community Meetings

- Join SCE's wildfire safety community meetings – [sce.com/wildfiresafetymeetings](https://sce.com/wildfiresafetymeetings)

### Energized by Edison

- Stories and videos on SCE's wildfire mitigation efforts and PSPS – [edison.com/wildfire-safety](https://edison.com/wildfire-safety)

# VIDEO: INSTALLING INSULATED WIRE AERIALLY



SOUTHERN CALIFORNIA  
**EDISON**<sup>®</sup>