

Personal and Organizational Wildfire Preparedness and Prevention

Thursday, June 23, 2022
10:30 am – 12:00 pm

THANK YOU FOR JOINING

Webinar Host & Moderator

Melissa Kuehne

Senior Program Manager
Institute for Local Government



TODAY'S AGENDA

Welcome, Logistics & Introductions

Presentations on Mitigation, Preparedness, Response and Recovery:

Rahim Nathoo, Manager, Business Resiliency, Southern California Edison

Nora O'Brien, CEO, Connect Consulting Services

Jorge Rodriguez, Community Alert and Warning Coordinator, Sonoma County

Q&A

Resources

Wrap Up

HOW TO ASK A QUESTION

- All webinar participants will be on MUTE during the entire call.
- Please TYPE any questions into the question box at any time during the webinar.
- The moderator will read your questions during the question period at the end of the webinar.



ILG IS NON-PROFIT, NON-PARTISAN & HERE TO HELP

- ILG is the non-profit training and education affiliate of three statewide local government associations
- Together with our affiliates, we serve over 2,500 local agencies – cities, counties and special districts
- We provide practical and easy-to-use resources so local agencies can effectively implement policies on the ground



**California Special
Districts Association**
Districts Stronger Together

OUR PROGRAMS AND SERVICES

Program Areas

Leadership & Governance

Civics Education & Workforce

Public Engagement

Sustainable & Resilient Communities



Services

Education & Training

Technical Assistance

Capacity Building

Convening

Our mission is to help local government leaders **navigate complexity**, **increase capacity & build trust** in their communities

TODAY'S PRESENTERS

Rahim Nathoo
Manager, Business
Resiliency
Southern California
Edison



Nora O'Brien
CEO
Connect Consulting
Services



Jorge Rodriguez
Community Alert and
Warning Coordinator
Sonoma County



MITIGATION

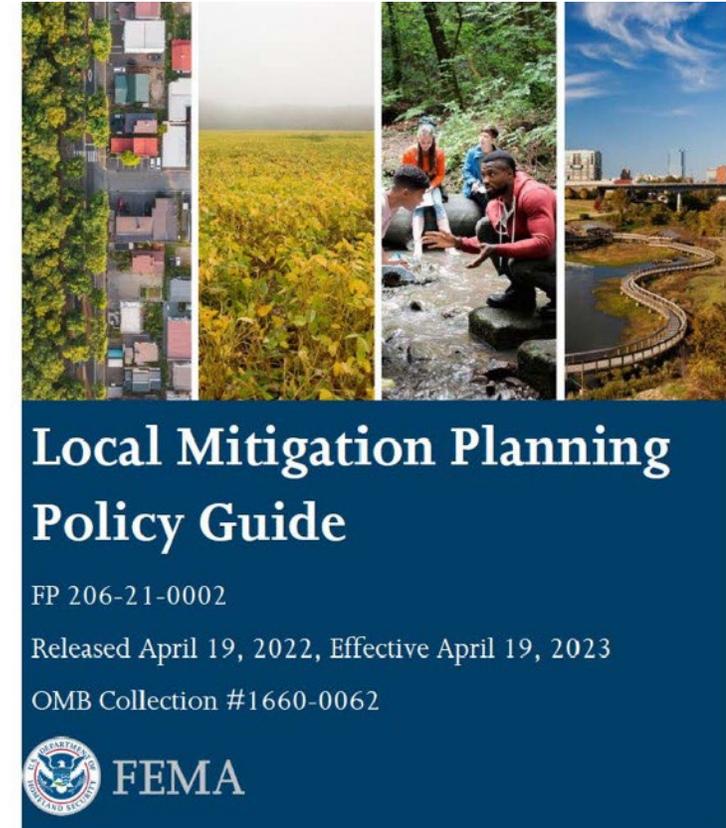
HAZARD VULNERABILITY ANALYSIS

- Knowing your risks help to know what to plan for.....

Alert Type	PROBABILITY Likelihood this will occur	ALERTS	ACTIVATIONS	SEVERITY = (MAGNITUDE - MITGATION)						RISK * Relative threat
				HUMAN IMPACT Possibility of death or injury	PROPERTY IMPACT Physical losses and damages	BUSINESS IMPACT Interruption of services	PREPARED-NESS Preplanning	INTERNAL RESPONSE Time, effectiveness, resources	EXTERNAL RESPONSE Community/Mutual Aid staff and supplies	
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	Number of Alerts	Number of Activations	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low	0 = N/A 1 = High 2 = Moderate 3 = Low	0 = N/A 1 = High 2 = Moderate 3 = Low	0 - 100%
Active Shooter										
Act of Terrorism										
Air Quality Issue										
Bomb Threat										
Building Move										
Chemical Exposure, External										
Chemical Exposure, Internal										
Chemical Spill										
Child Abduction										
Civil Unrest / Protesting										
Communication / Telephony Failure										
Dam Failure										
Drought										
Earthquake										
Epidemic										
Evacuation										
Explosion										
Fire, External										
Fire, Internal										
Flood, External										

HAZARD MITIGATION PLANNING

- Hazard mitigation planning reduces loss of life and property by minimizing the impact of disasters. It begins with state, tribal and local governments identifying natural disaster risks and vulnerabilities that are common in their area.
- After identifying these risks, they develop long-term strategies for protecting people and property from similar events.
- Mitigation plans are key to breaking the cycle of disaster damage and reconstruction.
- Supports National Flood Insurance Program, Hazard Mitigation Assistance, Rehabilitation of High Hazard Potential Dams Program, and the FEMA Building Codes Strategy.
- [Download 2022 Local Hazard Mitigation Policy Guide](#)



PREPARE AHEAD FOR WILDFIRE

- Regularly clean roof and gutters of leaves and debris.
- It is recommended that you create defensible space around your home, at least a 50 to 100-foot safety zone around your home.
- Keep your lawn hydrated and maintained. If it is brown, cut it down to reduce fire intensity. Tall and dry grass and shrubs are fuel for wildfire.
- Stack firewood at least 100 feet away and uphill from your home.
- If warned of Red Flag Warning/Extreme Fire Danger or a potential Public Safety Power Shutoff (PSPS) event, fill car with gas ahead of time in case evacuation is needed.



PREPARE AHEAD FOR WILDFIRE

- Design and landscape your home/office with wildfire safety in mind. Select materials and plants that can help contain fire rather than fuel it.
- “Harden” your structures. Use fire-resistant, noncombustible, or materials treated with chemical fire retardant on the roof and exterior structure of the dwelling.
- Set aside household tools that can be used as fire tools such as rakes, axes, hand or chain saws, buckets, and shovels. You may need to fight small fires before emergency responders arrive.
- Clearly mark all driveway entrances and display your address so it can be seen from the road.
- Remove dry vegetation from around propane tanks.
- Know how to shut-off gas, power, and water to the home ahead of time.



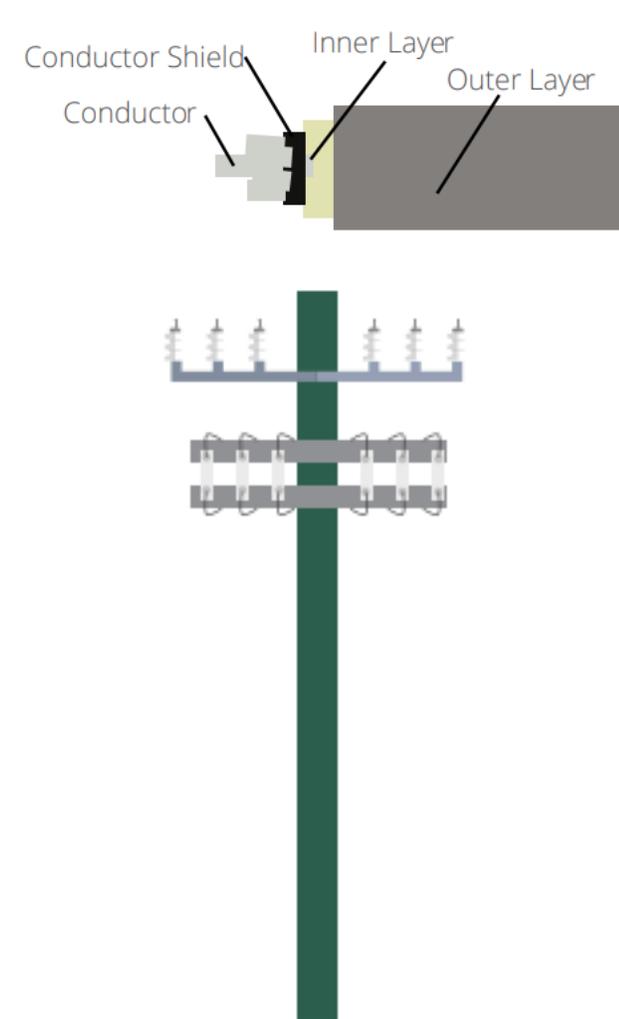
VEGETATION MANAGEMENT

- Inspect 1.5 million trees annually and prune nearly 900,000 of these trees.
- Assess hazard trees in high fire risk areas and mitigate them if deemed unsafe.
- In 2022, we plan to assess hazard trees on at least 330 circuits in high fire risk areas and mitigate them if deemed unsafe.



GRID HARDENING (AS OF MARCH 2022)

- Insulated Wire (Covered Conductor): 3,260 miles installed
- Fast Acting Fuses: 13,400+ fuses installed
- Fire-Resistant Poles



PREPAREDNESS

WILDFIRE STATISTICS: LEARN FROM HISTORY

- As many as **90% of wildfires** in the United States are human-caused. Some human-caused fires result from:
 - Campfires left unattended
 - Loss of control of burning of debris/burn piles
 - Negligently discarded cigarettes
 - Intentional acts of arson
 - Sparks from motor vehicles, such as dragging chains/parts, exposed rims, brake pads or driving into dry grass
 - Sparks from target shooting
 - Downed power lines
- The remaining 10% are started by lightning



WILDFIRE STATISTICS: LEARN FROM HISTORY

- The **2020 California Wildfire Season:**

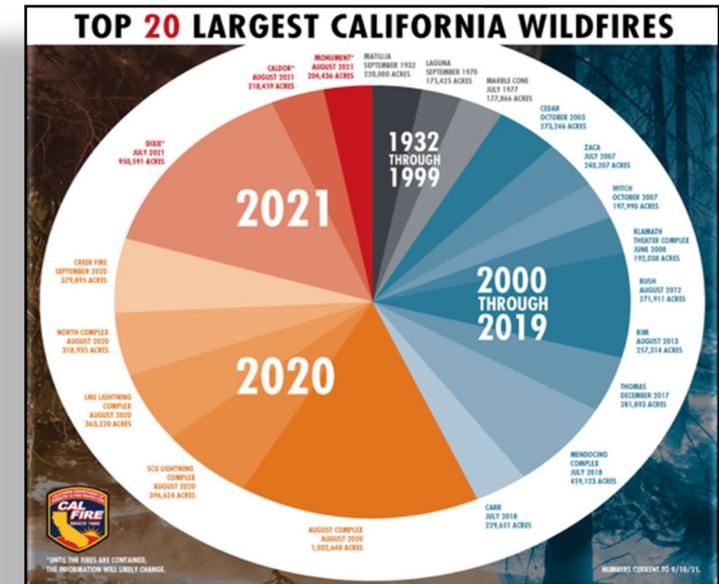
- 9,917 total fires
- 4,397,809 acres burned
- 10,488 buildings destroyed
- 37 injuries
- 33 fatalities



- The **2021 California Wildfire Season:**

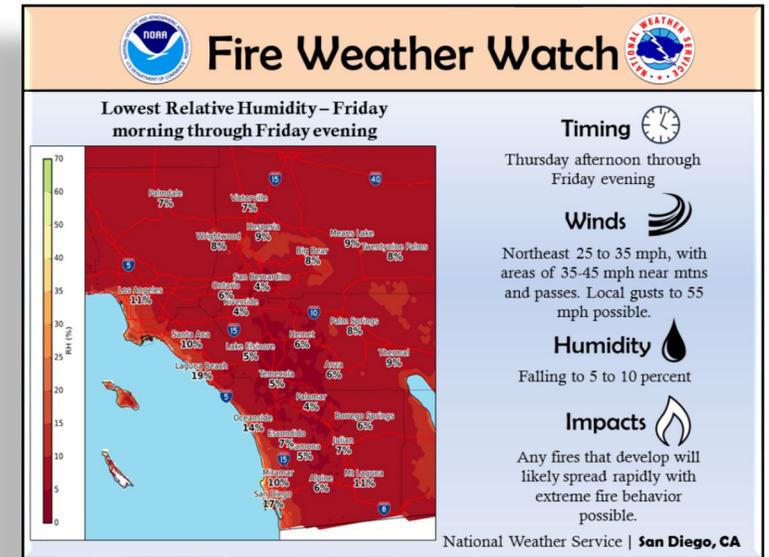
- 8,367 total fires
- 3,083,507 acres burned
- 3,629 buildings destroyed
- 22 injuries
- 2 fatalities

- [Cal Fire- Fire Hazard Severity Zones Maps](#)



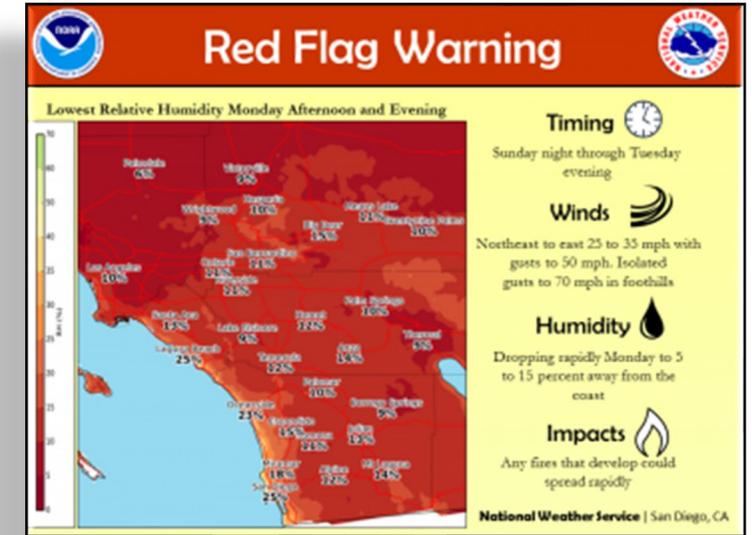
KEY DEFINITIONS FOR WILDFIRES

- **Fire Weather Watch:** The National Weather Service (NWS) issues a fire weather watch when upcoming weather conditions could result in extensive wildland fire occurrence or extreme fire behavior. A watch means critical fire weather conditions are possible within the next 12 – 72 hours.
- **Critical Fire Weather:** Weather patterns that can quickly increase fire danger and trigger rapid fire spread.



KEY DEFINITIONS FOR WILDFIRES

- **Red Flag Warning:** NWS issues a Red Flag Warning, the highest level of alert, anytime there is an ongoing wildfire, or critical weather conditions will occur within the next 24 hours. During these times extreme caution is urged by all residents, because a simple spark can cause a major wildfire. These conditions are:
 - Sustained winds averaging 15 mph or greater
 - Relative low humidity 25% or less
 - Temperatures 75° F or greater
 - Dry fuels
 - Chance of lightning strikes



PREPARE AHEAD FOR WILDFIRE

To ensure you will be able to act quickly should you need to evacuate, the following actions will assist you in planning ahead:

- Know your community's local evacuation plan and identify several escape routes for your location in case roads are blocked
- In your **Emergency Plan** include how to evacuate people with disabilities and others with access or functional needs, as well as pets and service animals.
- If you will evacuate by car, keep your car fueled and in good condition
- Keep a car sized **Emergency Kit** and a change of clothes in each car
- Create **Go-Bags** for each family member
- Plan ahead on how to communicate in case you are not together when authorities issue a fire weather watch or fire weather/red flag warning. Practice how you will communicate with each other. Remember that sending texts uses less bandwidth and is often faster than making a phone call.
- Keep important phone numbers written down in a wallet or purse, not just stored in a phone.
- If you have children, provide them **Emergency Communication Cards** and instruct them on how to use them, such as finding Law Enforcement, if they are lost or separated from you in an incident. This can empower them and help them feel safe. These can be kept in wallets, purses and backpacks

PREPARE AHEAD FOR WILDFIRE



Duffel Bag:

- Winter cap
- Lightweight visor cap
- Work gloves
- Survival sleeping bag
- Drinking water
- Dehydrated food
- Clothes in storage bag:
 - Jeans
 - Cotton socks
 - Wool socks
 - Undergarments
 - Shirts
 - Shoes
 - Monocular/Binocular

PREPARE AHEAD FOR WILDFIRE



Backpack (and Sleeping Bag):

- Water Filter
- Snack foods (ration/cereal bars, etc.)
- Dehydrated foods
- Solar/hand crank radio/flashlight
- Multi-tool (knife, hammer, wire cutter, screw drivers, saw, file, pliers, etc.)
- 100 feet of parachute cord
- Waterproof matches
- Poncho
- Emergency Blanket
- Hygiene items:
 - TP
 - Toothbrushes & toothpaste
 - Soap
 - Baby wipes

PREPARE AHEAD FOR WILDFIRE



“Dollar Store” Emergency Kit:

- Drinking water 99c
- 4 pack TP 99c
- Bright orange plastic sheet 99c
- Duct tape (bright yellow) 99c
- Insect repellent 99c
- Hand sanitizer 99c
- 6 pack of toothbrushes 99c
- Curad adhesive bandages 99c
- Roller gauze 99c
- Elastic bandage 99c
- Triangular bandage 99c
- Acetaminophen tablets 99c
- Antiseptic ointment 99c
- 22 pack Zip-lock plastic bags 99c
- 8 pack Large trash bags 99c
- Parachute cord 100' 99c
- 3-pack Sharpie markers 99c
- 4-pack note pads 99c
- Eyeglass repair kit 99c
- Non-perishable foods/snacks 99c
- Strike Anywhere matches 99c

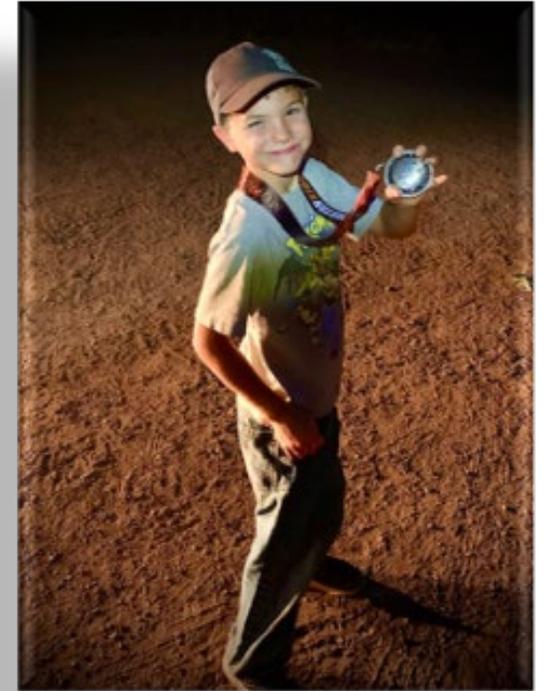
PREPARE AHEAD FOR WILDFIRE

FREE items for your kit(s):

Item	Purpose	Source
Clothing, coats, hats, shoes	Protection and comfort	The back of your own closets
Soap, shampoo, lotions	Hygiene	Hotel/motel guest rooms
Note pads, pens, pencils	Communication	Hotel/motel guest rooms
Sewing kit	Repair clothing	Hotel/motel guest room or front desk
Emergency rations	Nutrition	Give-away item at a preparedness event
Cases of drinking water	Hydration & washing	Surplus from athletic event, offered to volunteers
Spare eyeglasses & case	Vision & protection	The pair you last replaced
Playing cards	Entertainment	Give-away at casinos and attached hotels
Coffee, tea, sugar packets	Caffeine and comfort	Hotel/motel guest rooms; restaurants

PREPARE AHEAD FOR WILDFIRE

- **Ensure you have the following:**
 - Emergency Plan (including communications, pre-designated meeting sites, and more)
 - Emergency Kits (including first aid, basic tools, special or unique needs, and hygiene supplies)
 - Emergency Food/Water (enough for 3 days per person minimum)
- **Plan for *ALL* members of your immediate family (including pets or livestock if applicable).**
- **PRACTICE!!!**
- **More information on home and building wildfire mitigation and preparedness can be obtained from Cal Fire at:**
 - www.readyforwildfire.org/prepare-for-wildfire/



PSPS PUBLIC SAFETY PARTNER PORTAL

Overview

PSPS planning

PSPS events

User Guide

User Access

- SCE's Public Safety Partner Portal is a **single destination** to find PSPS information not available to the public on SCE.com.

Planning (Pre-event)

Active PSPS events

Archive of past PSPS events

- Available to **CPUC defined Public Safety Partners** and **Critical Infrastructure Customers** (with different levels of access)

PUBLIC SAFETY PARTNERS*

- **First/emergency responders at the local, state and federal level**
- **Water, wastewater and communication service providers**
- **Community choice aggregators (CCAs)**
- **Affected publicly-owned utilities (POUs)/electrical cooperatives**
- **CPUC**
- **CalOES**
- **CAL FIRE**

CRITICAL INFRASTRUCTURE CUSTOMERS

- **Emergency Services Sector**
- **Government Facilities Sector**
- **Healthcare and Public Health Sector**
- **Energy Sector**
- **Water and Wastewater Systems Sector**
- **Communications Sector**
- **Chemical Sector**

POLICY – IT STARTS WITH YOU

No matter the level of government...

- What is your community's expectation?
- How is internal communication handled?
- Do you have assigned staffing?
- Is your organization investing in alert and warning?

PROCEDURES – KEY STEPS AND AUTHORITIES

Formalize procedures ahead of time...

- Who is responsible for initiating the notifications
- How are the systems used
- What type of training and maintenance is done

FUNDING – INVESTING NOT SPENDING

Support from your Senior Executives...

- Makes alert and warning program a priority
- Helps bridge gap between your systems and public expectations
- Provides for the annual costs of a program “as a whole”
 - More to follow on this

RESPONSE

KEY DEFINITIONS FOR WILDFIRES

- **Shelter in Place:** This is a precautionary notice that goes out if there are external hazards. Go indoors, shut and lock doors and windows. Prepare to self-sustain until further notice and/or contacted by emergency personnel for additional direction.
- **Evacuation Advisory/Warning:** This is a precautionary notice designed to give residents time to prepare for a possible evacuation due to potential threat to life and property.
- **Evacuation Order/Mandatory Evacuation:** This notice requires the immediate movement of residents out of an affected area due to an immediate threat to life and health. If you choose to remain, you may be on your own as emergency personnel likely will not be able to help you.



RESPONSE DURING A WILDFIRE

- If a wildfire happens while you are at work, follow your company's emergency response procedures.
- Be ready to leave at a moment's notice if threatened by a wildfire. If potential for evacuation or **Evacuation Advisory/Warning** is issued, gather your **Emergency Preparedness Kit** and supplies and load them in vehicle early in case evacuation is needed. You should **NEVER IGNORE** an evacuation order.
- If do not feel safe during this time period and a wildfire threatens your area, **evacuate early** to avoid being trapped. By leaving early, you give your family not only the best chance of survival in a wildfire, but also help the firefighters and emergency responders safe by keeping roads cleared.
- Listen to local area radio and television stations, NOAA Weather Radio, utilize Social Media or Emergency Apps for updated emergency information or other critical information.

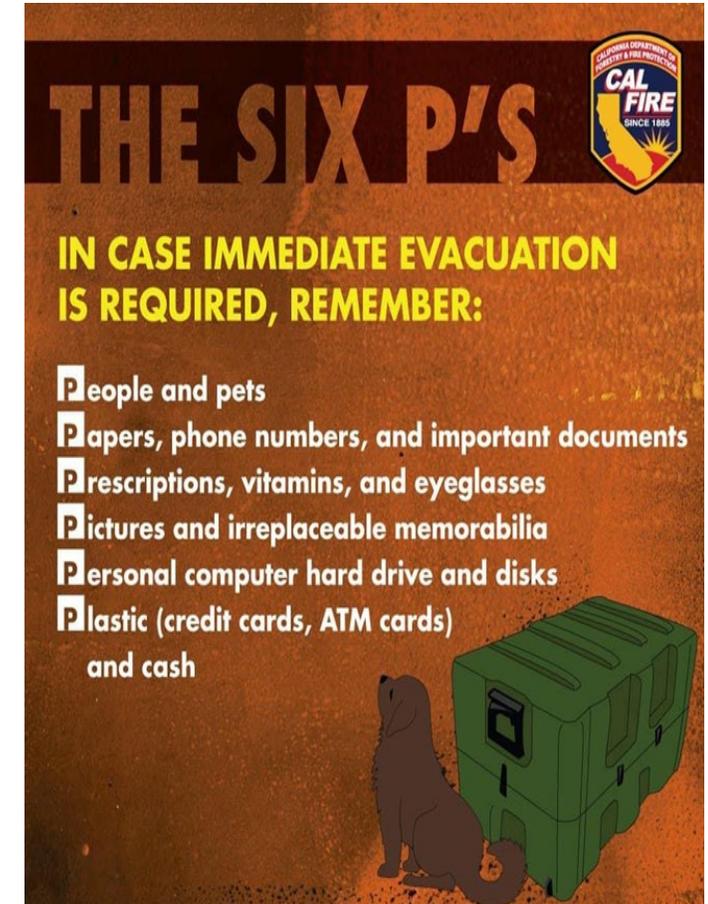
RESPONSE DURING A WILDFIRE

- Always back your car into the garage or park it in an open space facing the direction of escape, especially during Red Flag Warnings. Know how to place the garage door in unlocked, manual opening mode in case power goes out.
- If a wildfire is occurring nearby, confine pets to one room, if possible, so that you can find them if you need to evacuate quickly.
- Listen and watch for air quality reports and health warnings about smoke. Keep indoor air clean by closing windows and doors to prevent outside smoke from getting in.
- Arrange ahead of time for temporary housing at a friend or relative's home outside the threatened area in your **Emergency Plan**.
- If you have livestock, coordinate a place to have them transported outside of the threatened area or listen to local radio and television stations or use apps to transport to an evacuation staging site for the livestock managed by the county.



RESPONSE DURING A WILDFIRE

- If you need to evacuate, store supplies and important documents securely but easily accessible and know what to take. Be sure to remember the ***Six P's of Evacuation***:
 - People (and pets!)
 - Papers (including CASH), phone numbers (written down) and important documents
 - Prescriptions, vitamins and glasses
 - Priceless and irreplicable items (IF TIME)
 - Personal computer/laptop and external drives/disks
 - Plastic (credit cards, ATM cards)



RESPONSE DURING A WILDFIRE

- If do have to evacuate, ***DRIVE SAFELY***. Some tips include:
 - Roll up windows and close air vents because smoke from a fire can irritate your eyes and respiratory system
 - Drive slowly with your headlights on because smoke can reduce visibility
 - Watch out for other vehicles, pedestrians, and fleeing animals (wild animals and livestock)
 - Avoid driving through heavy smoke, if possible
 - Avoid unknown “short-cuts” that can lead to devastating consequences



ALERTING SYSTEMS

ALERT AND WARNING SYSTEMS

Integrated Public Alert and Warning System (IPAWS)

- Emergency Alert System (EAS)
- Wireless Emergency Alert (WEA)
- Non-Weather Emergency Message (NWEM)

Mass Notification Platforms

- Phone Call/Voice Message
- SMS Text
- Email
- RSS feeds
- Social Media
- Secondary language voice message option

ALERT AND WARNING SYSTEMS

Mass Notification Contact Data

- Internal call groups
- Resident opt-in
- Utility customer data

ALERT AND WARNING SYSTEMS

Each system has pros and cons...

Each platform has pros and cons...

... but there is no silver bullet, no one size fits all.

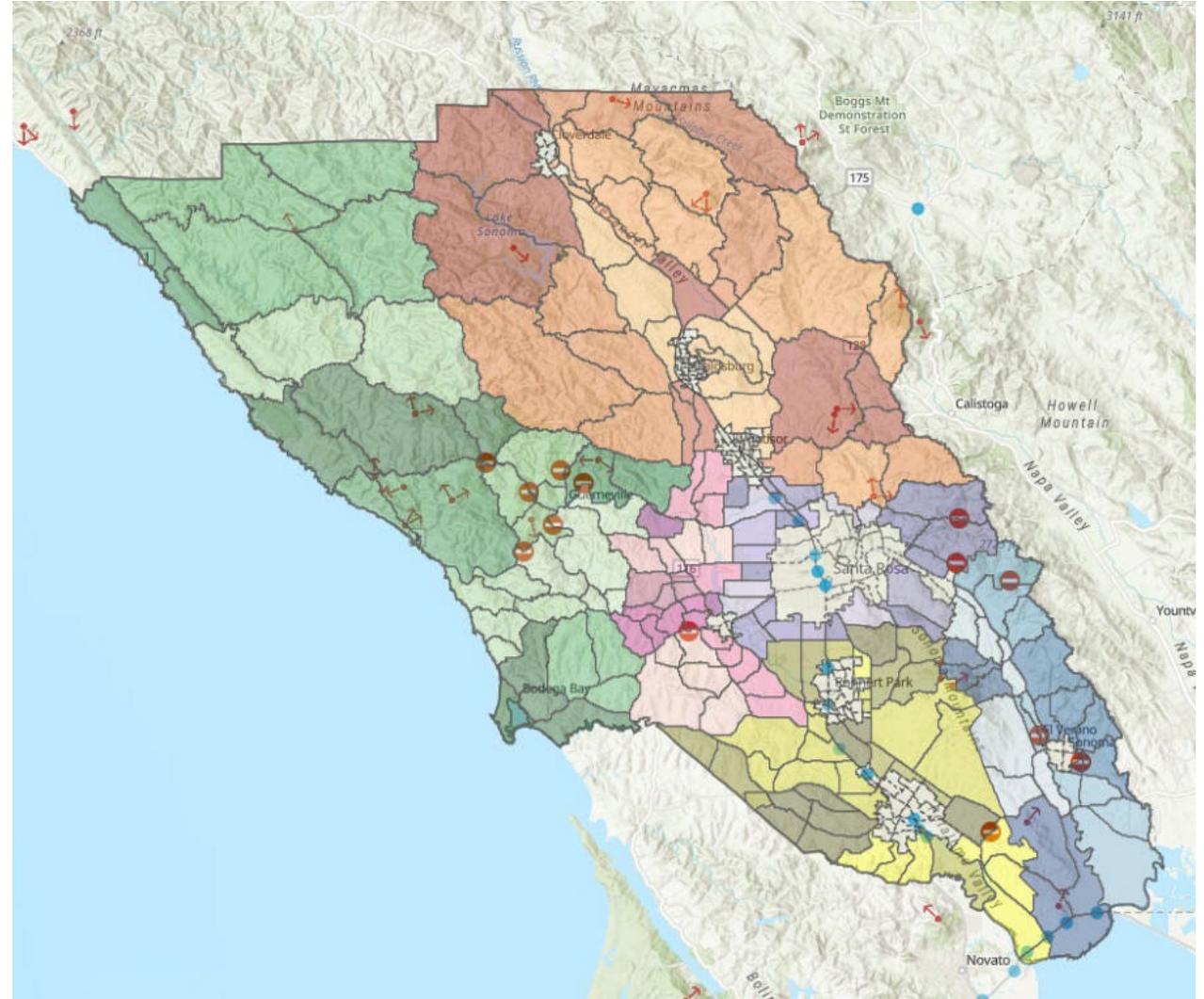
Whatever you have, make it yours.

Learn. Train. Use.

EVACUATION ROUTES

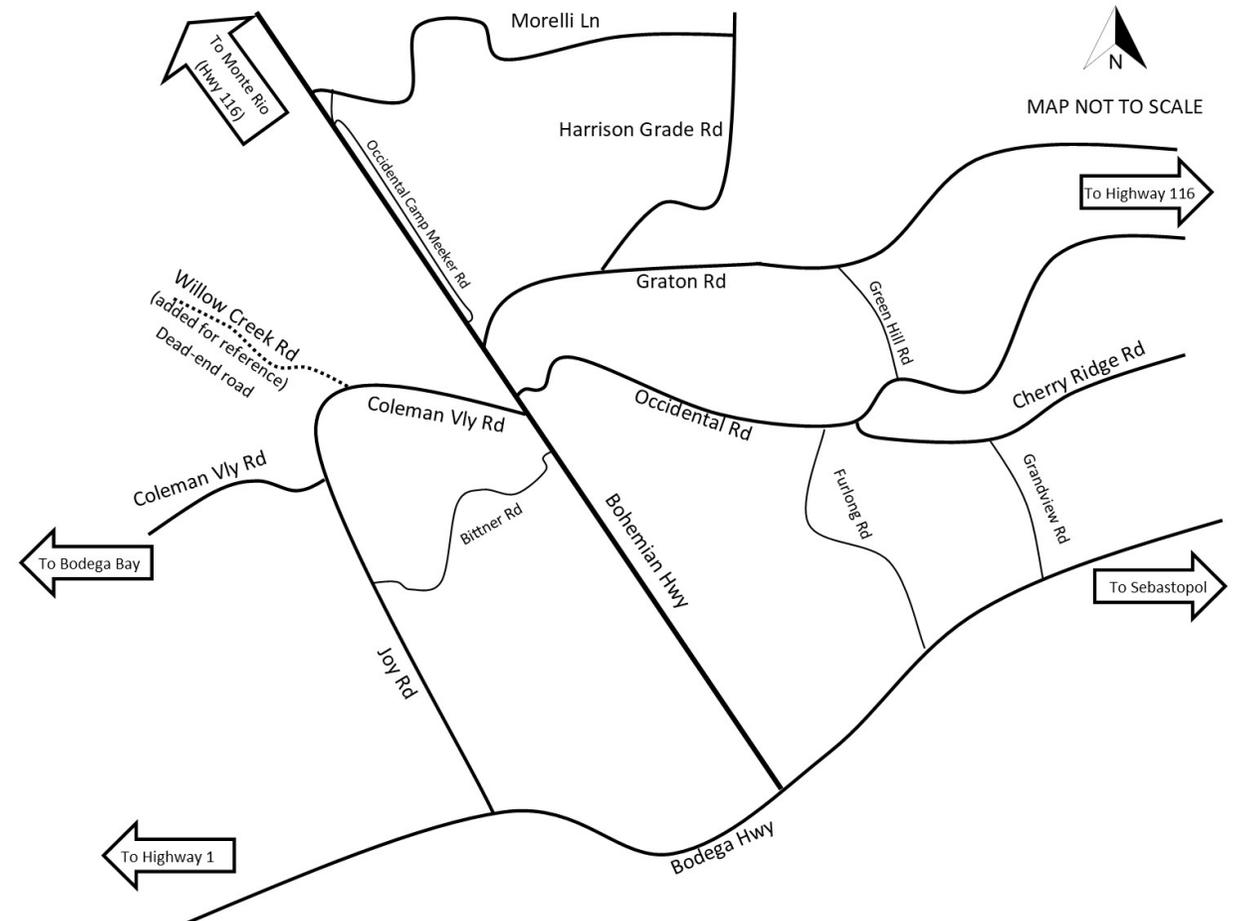
EVACUATION ROUTING

- The new trend of Evacuation Zone mapping
- Breaking down your jurisdiction into smaller sections
- Evacuation planning includes many entities:
 - Local community
 - Local fire
 - Local law
 - EM types



EVACUATION ROUTING

- **General rule: not having pre-designated evacuation routes**
 - Incident
 - Traffic
- **Identifying potential roads to use / potential egress challenges**
 - One road in/out
 - Single lane roads
- **Evacuation Exercise**
 - Provide opportunity for community to practice



COMMUNICATION SYSTEMS

TECHNOLOGIES

Typical Systems

- Cellular
- Telephone (landline, VoIP)
- Radio/Television
- Government/Public Safety Radio
- HAM Radio

New-ish Systems

- NOAA Weather Radio (NWEM)
 - Partial County Alerting
- GMRS (general mobile radio svc)
- Satellite relay of radio signal (NWR)

ACCESSIBILITY TO ALERTING RESIDENTS

Sonoma County

- Messages in English & Spanish
- at the same time
- with consistent information
- **Website & Mapping**
 - Dual website with updates
 - SoCoEmergency.org &
 - SoCoEmergencia.org
- **Braille capability**
 - Purchased for preparedness information

Projects:

- NWR with attachments
- Farmworker/Housing Outreach

Think about your jurisdiction: what more can we do?

COMMUNITY RESOURCES



Community Resource Centers (CRCs)

Community Crew Vehicles (CCVs)



Portable backup battery solutions

RECOVERY

RECOVERY FROM A WILDFIRE

- Return to the area and home **ONLY** when officials have declared the area safe.
- Text or use social media to check in with your family to let them know you are safe. Telephones and mobile phone systems are usually overwhelmed following a disaster, so use phones only for emergency texts/calls.
- Continue to monitor local radio, television stations, or internet news for detailed information on the fire in case the situation changes or occurs again.
- Use caution when entering burned areas as hazards may still exist, including hot spots and “ash pits”, which can flare up without warning.
- Inspect the roof and gutters immediately and extinguish any sparks or embers. Wildfires may have left embers that could reignite for several days or even weeks after a wildfire.
- Inspect your home for any obvious structural damage before entering. Do not rush this process. Be patient and be safe. If you are uncertain if your home is structurally sound, have the home inspected by a professional before returning.



RECOVERY FROM A WILDFIRE

- **DO NOT** smoke or attempt to light anything, such as a lighter or match, if you need to see something during an inspection. Leaking flammable gas could be present. If you smell gas, leave the area immediately and contact 911.
- Avoid damaged or fallen power lines, poles, and downed wires. Stay away from downed power lines and report them to 911 or the power company's emergency number. **ALWAYS** assume that the lines may be energized. If a person is trapped by downed power lines, DO NOT attempt to free them.
- Watch your animals closely and keep them under your direct control. They can easily panic, and hidden embers, hot spots, or "ash pits" could burn their paws.
- Resupply your Emergency Preparedness Kit with supplies as needed.
- Help any neighbors and others who require special assistance, such as infants, children, seniors, and individuals with disabilities.



RECOVERY FROM A WILDFIRE

- Discard food exposed to heat, smoke, or soot. When in doubt, throw it out.
- Do not drink, brush teeth, prepare food, or wash/bathe in water until officials indicate the water source is safe.
- Recognize signs of disaster related stress such as difficulty sleeping, limited attention span, headaches or stomach problems, disorientation or confusion, depression, feelings of guilt, sadness, or feelings of hopelessness. Seek help from local mental health providers if you detect these signs in yourself or others.
- Children are of special concern in the aftermath of disasters as they may not process what is occurring. Disasters can leave children feeling frightened, confused, and insecure. Children are primarily concerned that:
 - The disaster will happen again
 - They will be left alone or separated from family
 - A member of their family may be hurt or killed due to the disaster



DISASTER REIMBURSEMENT BEST PRACTICES

Once wildfire happens that deeply impacts a community(ies), there are state and federal share of costs that can help your community and agency recover

Closely tracking the costs of the wildfire response and recovery efforts will mean faster reimbursement from state, federal, and insurance agencies

Having a Financial Recovery Annex to your Emergency Operations Plan will aid in faster in state and local reimbursement

Involve your financial key staff in planning and disaster exercises so they are clear on their disaster roles and responsibilities

CCS AFTER ACTION ASSESSMENT



Just as every organization is unique, every emergency is unique. And while you can't predict exactly what an event will look like or the effects it will have, you can plan for how to react, and ensure essential functions continue, when faced with the unexpected.

The best way to improve on your organization's emergency response plan is with an After-Action Report.

Use this self-assessment tool to help you determine your organization's readiness and response for emergency planning.

[Download CCS After Action Assessment](#)

Please follow the steps below to complete the After Action Report Self-Assessment Tool.

STEP #1: Please answer each question with a **"Yes"** or **"No"** response.

STEP #2: Please assign a value between **0 - 3** to determine where you rate your organization on the following scale:

0 = No; 1=Minimal; 2=Partial; 3=Yes, Fully.

STEP #3: Scoring: Please add up all sections and see where you rank on the **After-Action Self-Assessment Tool** to determine how well your organization has prepared for managing an incident.

QUESTIONS & DISCUSSION



RESOURCES

[SCE Wildfire Fact Sheets](#)

[SCE Customer Resources and Support](#)

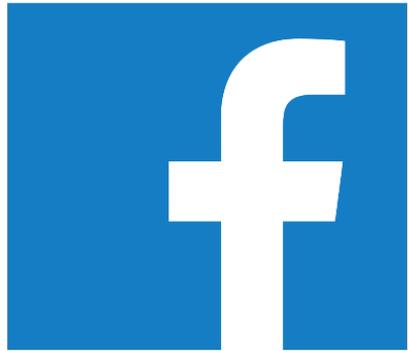
[CCS After Action Assessment](#)

[Cal Fire- Fire Hazard Severity Zones Maps](#)

[2022 Local Hazard Mitigation Policy Guide](#)

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Newsletter



Sign up for our e-newsletter

www.ca-ilg.org/news

THANK YOU!

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**Thank you
for joining us!**