



**KENSINGTON FIRE PROTECTION DISTRICT**  
**MEETING OF THE EMERGENCY PREPAREDNESS COMMITTEE**  
**MINUTES**  
Thursday, March 17, 2022 1:00pm-3:00pm  
Via Zoom Teleconference

**1. CALL TO ORDER/ROLL CALL**

Directors: Larry Nagel and Kevin Padian

Public Members: Lisa Caronna, Katie Gluck, Peter Guerrero, Peter Liddell,  
Danielle Madugo, Paul Moss, David Spath

Staff: General Manager Bill Hansell

Consultant: Emergency Preparedness Coordinator Johnny Valenzuela

Guest: Joe Grupalo, Zonehaven

**2. PUBLIC COMMENT**

This place on the agenda is reserved for comments and inquiries concerning matters that do not otherwise appear on the agenda.

**3. ADOPTION OF CONSENT ITEMS**

Items listed below are consent items, which are considered routine and will be enacted by one motion. Reports and recommendations prior to assigning consent item designations to the various items have been received and considered. Copies of the reports are on file in the Fire Protection District Administrative Office at 217 Arlington Avenue and are available to the public. The disposition of the item is indicated. There will be no separate discussion of consent items. If discussion is requested for an item, that item will be removed from the list of consent items and considered separately on the agenda.  
(Supporting material)

**a. Approval of Minutes** of the regular meeting of February 24, 2022 (Approve)

**MOTION:** Spath/Nagel to accept the minutes as corrected.

Motion passed unanimously

**4. OLD BUSINESS**

None

## 5. NEW BUSINESS

### a. Emergency Public Address (EPA) Systems and Zonehaven

Discussion of the deployment and coordination of EPA devices with Zonehaven's Joe Grupalo, former battalion chief of EC-K Fire Department (see attached report from Joe Grupalo, plus updated Q&A submitted by Board Members)

Kevin introduced the topic by saying the discussion would cover how EPAs work, and how they are activated. Kevin mentioned that Meredith, Lorraine, and Heather have left CWS and Julie Cavallero will now head up the CWS effort.

Danielle Madugo asked if the Berkeley EPAs are installed yet and when can we see them. Joe said the Berkeley EPA system has been ordered but it is not yet installed.

Lisa Caronna asked when and how the EPAs would be activated. Specifically, who would create the messages. Joe stated the Fire Department and Police Department would be responsible for

Bill Hansell noted that when there was a fire in Lucas Valley he had no problem hearing the EPA system even though it was a very windy night.

David Spath asked about how the EPA systems address overlap. Joe noted that the speakers are spaced according to topology, not zones. In talking with Berkeley Fire Department Chief May, the systems can be interconnected to allow communities to share systems.

Kevin noted that Mike Shanks had told him that we needed an open bidding process so that we are talking to other EPA vendors as well

Paul Moss asked which public properties would we use for placing EPAs.

Kevin asked Robert Rogers (John Gioia's office) about what precedents are set about placing EPAs on

Danielle Madugo asked about which areas have conducted drills using an EPA system. Joe mentioned that the speakers are tested every month.

Peter Liddell asked about placement of the siren. Peter stated that the county has an easement of eight feet from every road.

Peter mentioned that the EPAs system would be useful for an earthquake for informing the public of evacuation routes that are still viable.

Dave Spath asked about the vulnerability of the devices to wildfire. Joe mentioned that as long as the vegetation management is good, the devices should survive.

Dave Spath asked about satellite speakers and what service they use. Joe mentioned

Dave asked about coordination between CWS and Genasys EPAs. The LRAD system was used as a secondary system, with CWS being used as the primary. Joe responded that Zonehaven does directly send messages out to the public. This is illustrated on the slides Joe provided (see attached).

Lisa Caronna asked about the cost. Joe stated that that Berkeley contract \$2M comes to \$130K per speaker (except installation). Maintenance is a few thousand per year per speaker.

Danielle Madugo noted that there is a parking lot behind the school that belongs to Richmond.

Danielle Madugo asked about Everbridge. Joe answered that Everbridge does the alerting software and partners with Genasys. Everbridge also owns Nixle. Other alerting vendors include CodeRed and Blackberry.

Kevin noted that he promised Chief Pigoni that he would ask how important it is to “know your zone.” Joe stated that

Public comment from Katya de Neergaard. She asked how tall the poles are, and the answer is 40 feet. She also asked if people not signed up for Zonehaven can use the Zonehaven software. The answer is yes. She also asked if Zonehaven has any other software.

Public comment from Linnea Due who asked if the systems provide both a warning sound and a voice message. Joe Grupalo answered that indeed they do.

Danielle Madugo asked if Genasys speakers could be used for earthquake warning systems.

Bill Hansell noted that he has checked into the Laguna Beach RFP and that state has. It's not clear that we can sole source like Berkeley did.

**b. EPAs: Information about acquisition and deployment in Mill Valley, Laguna Beach, Berkeley, etc.**

See attached information from Brendan Manning (Laguna Beach), two reports

from Berkeley, and refer to previous Q&As on Mill Valley)

Kevin spoke about the Laguna Beach experience.

Paul Moss asked about how Laguna Beach determined that their experience with the EPA system was a success.

Dave Spath noted that Laguna Beach will followup on the experience.

**MOTION:** Nagel/Spath to recommend to the board that the district create an RFP for the design of an EPA system for Kensington.

Motion adopted by consensus without objection

**c. EPAs: Plan to educate and survey residents**

Proposal to finalize and distribute an educational document and survey to residents

Kevin started the discussion of the need for a survey to determine public opinion on the need for an installation of a EPA system. It turns out the survey was inadvertently omitted from the agenda packet, but it was included in the agenda packet for the last meeting.

Peter Guerrero suggested that a public meeting would be more effective than a survey or, at the very least, should precede the survey.

Paul Moss noted that the survey is not just research but it also is a way of publicizing EPA systems and gaining community response.

**d. Proposal to reboot and expand KFPD “replanting” grant program**

Initial consideration (action to be postponed to next meeting) of keeping pace with other communities, State, and insurance companies on incentives for clearing hazardous brush and other plants (draft proposal attached)

Kevin explained the replanting grant program and noted that he wanted to “reboot” the program and increase the funding level of the program. Kevin suggested that we instruct Bill Hansell to put forward an agenda item to ask the KFPD Board to reconstitute the program.

**MOTION:** Nagel/Caronna to ask General Manager Bill Hansell to reboot the replanting program

Motion adopted by consensus without objection

**6. EMERGENCY PREPAREDNESS COORDINATOR'S REPORT**

No further report

**7. REPORTS FROM COMMITTEE MEMBERS**

None

**8. CALL FOR FUTURE AGENDA ITEMS**

None

**9. ADJOURNMENT**

The next regular meeting of the Emergency Preparedness Committee of the Kensington Fire Protection District will be held on April 28, 2022 at 3:00pm via Zoom Conference.

The meeting was adjourned at 3:24 PM by Kevin Padian.

MINUTES PREPARED BY: Larry Nagel

These minutes were approved at the Emergency Preparedness Committee Meeting of the Kensington Fire Protection District on April 28, 2022.

Attest:



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**Emergency Preparedness Committee Member**

Town of Kensington

# Zonehaven

Evacuation Management  
Software

**Wildfire Threat - Tilden Park & Diablo Wind Events**

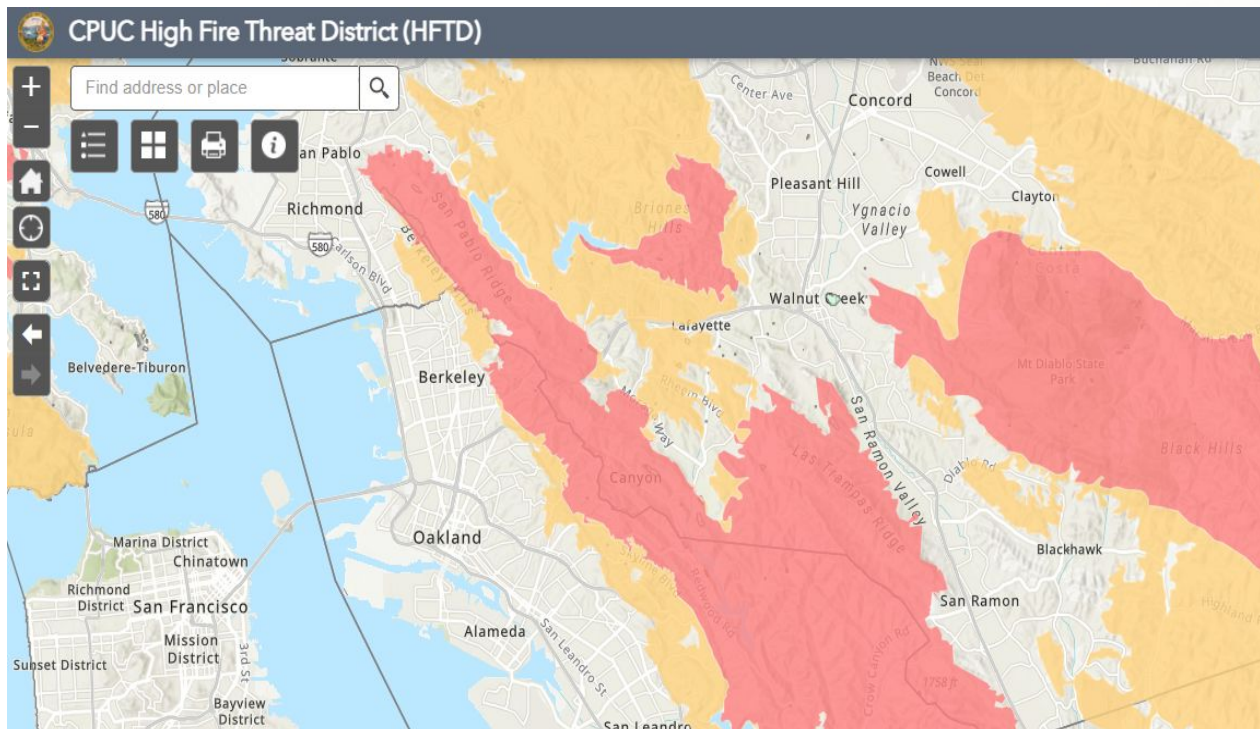




# Wildfire Threat to Kensington

## Combination of:

- **Weather**
- **Location**

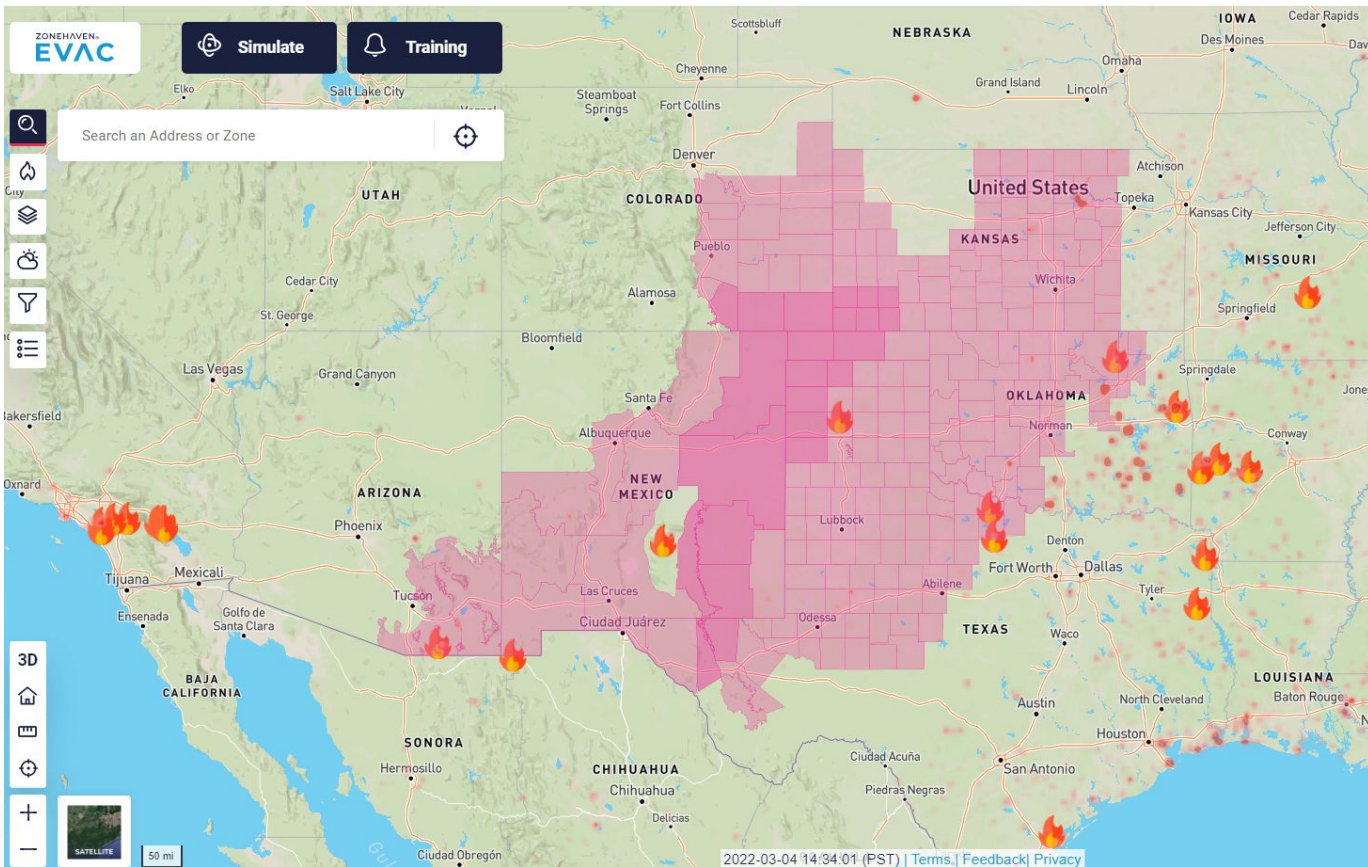


Worst Case Scenario:  
Ignition start in Tilden  
Park/Orinda (to the east)  
during a bad fire weather  
day.





# National Weather Service - Red Flag Warnings







# Red Flag Warning (RFW) - NWSBayArea

Red Flag Weather Matrix		Sustained Winds				
		<6 mph	6--11 mph	12-20 mph	21-29 mph	30+ mph
Humidity	Daytime Min <29-42% and/or Night Max 60-80%	Low	Medium	High	Very High	RFW
	Daytime Min <19-28% and/or Night Max 46-60%	Low	Medium	High	RFW	RFW
	Daytime Min <9-18% and/or Night Max 31-45%	Medium	High	RFW	RFW	RFW
	Daytime Min <9% and/or Night Max <31%	High	RFW	RFW	RFW	PDS RFW
		Low	Medium	High	Very High	Extreme



# Weather: Non-RFW Day

Valley Fire 2018



Fire Crews Stop Progress and Contain

Size



# Weather - Non-Red Flag Warnings

Valley Fire 2018

Fire Stopped  
and Contained







# Extreme Fire Weather - Diablo Wind Events

## Diablo and Santa Ana Winds at a Glance

This is how the hot, powerful Santa Ana winds in Southern California and Diablo winds in Northern California increase the regions' fire risk.

### HOW SANTA ANA AND DIABLO WINDS OCCUR

- 1** A high-pressure system in the Great Basin generates clockwise desert winds.
- 2** These winds flow over the Sierras and desert ranges, compressing and warming, losing humidity. As a result, the relative humidity drops and dries out vegetation.
- 3** Winds squeeze through canyons like water through a hose, gusting up to 60 mph.
- 4** These strong, hot winds fan fires and create turbulence and unpredictable conditions for firefighters.

SOURCES: Natl. Weather Service; InsideClimate News research

PAUL HORN / InsideClimate News





# Particularly Dangerous Situation (PDS RFW)



Red Flag Weather Matrix		Sustained Winds				
		<6 mph	6-11 mph	12-20 mph	21-29 mph	30+ mph
H u m i d i t y	Daytime Min <29-42% and/or Night Max 60-80%	Green	Green	Yellow	Orange	Red (RFW)
	Daytime Min <19-28% and/or Night Max 46-60%	Green	Yellow	Orange	Red (RFW)	Red (RFW)
	Daytime Min <9-18% and/or Night Max 31-45%	Yellow	Orange	Red (RFW)	Red (RFW)	Red (RFW)
	Daytime Min <9% and/or Night Max <31%	Orange	Red (RFW)	Red (RFW)	Red (RFW)	Purple (PDS RFW)

Green	Yellow	Orange	Red	Purple
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## Particularly Dangerous Situation Explanation

Brian Garcia - NWS BayArea



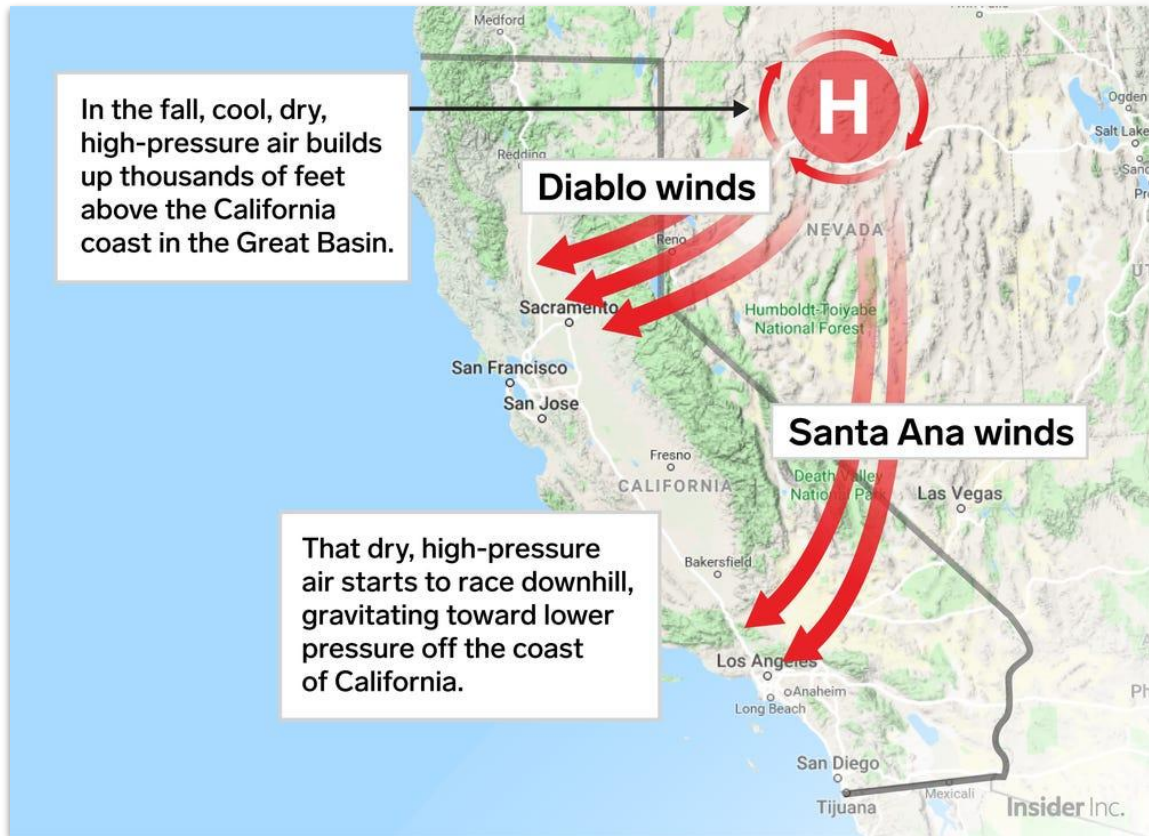


# PDS - Particularly Dangerous Situation

- NWS: PDS RFW Warning
- PG&E: PSPS Warning



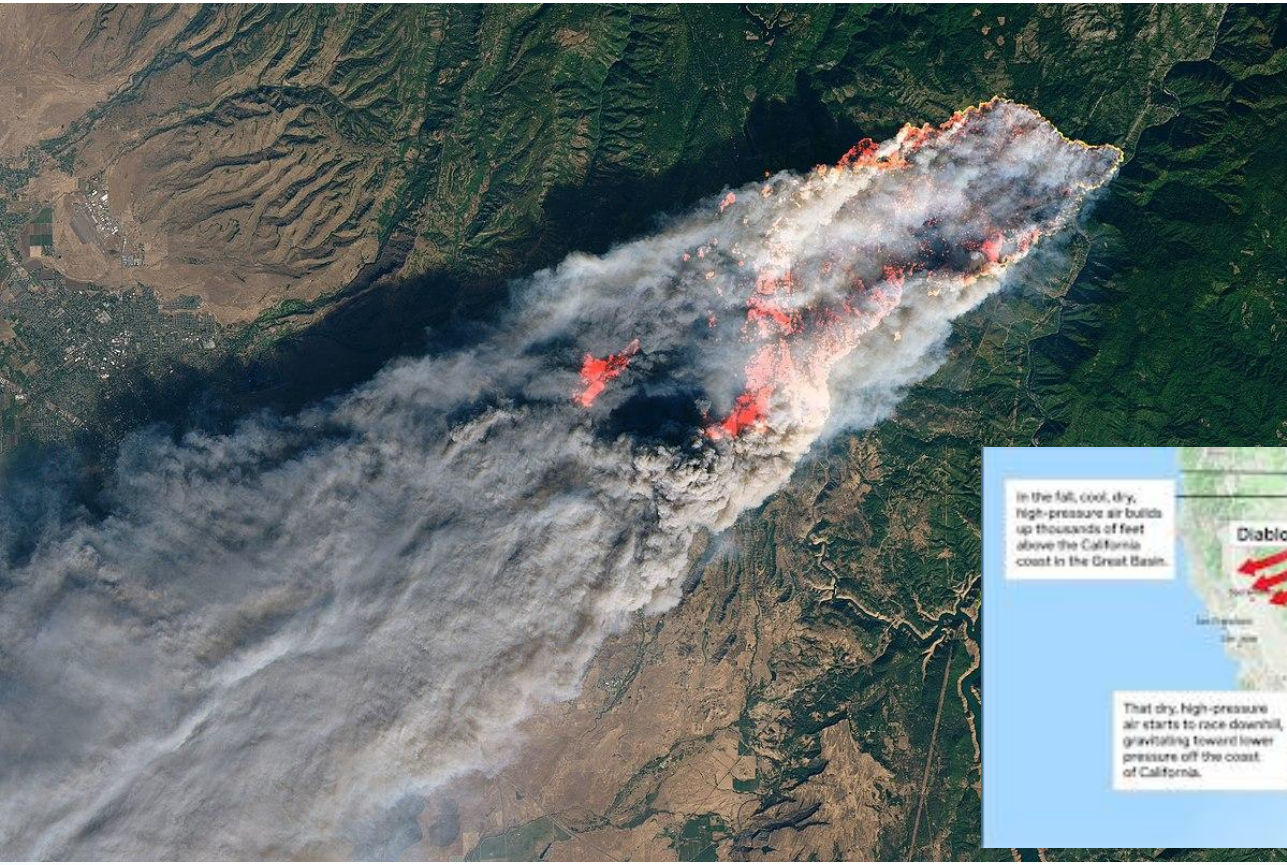
**PUBLIC SAFETY  
POWER SHUTOFF**







# PDS - Particularly Dangerous Situation



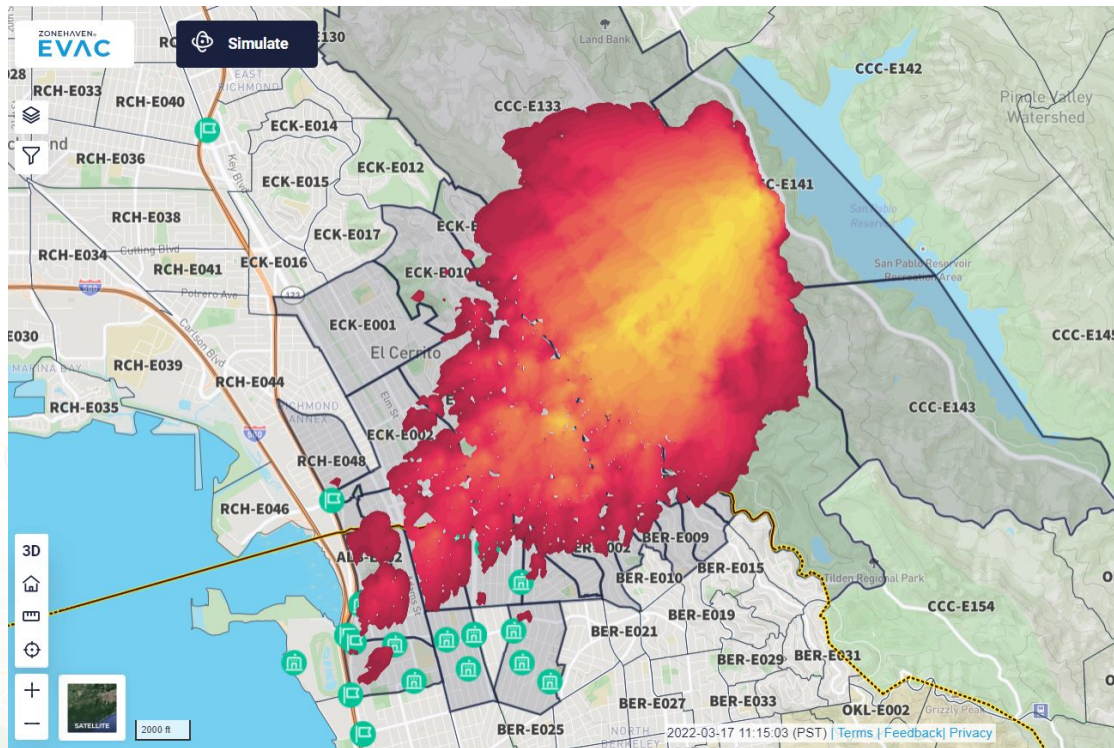
Paradise Fire





# Worst Case Scenario - PDS RFW

## Ignition Start in Tilden Park/Orinda region during a PDS RFW



### San Pablo Reservoir PDS RFW 24 hr

Orinda, Contra Costa County  
2022-03-17 11:04:23

Show simulation conditions

### Impacted zones

#### Summary

POPULATION	152.4k
VEHICLES	34,842
AREA	10,171 acres
STRUCTURES	20,136
ZONES	33

#### View by hour

1

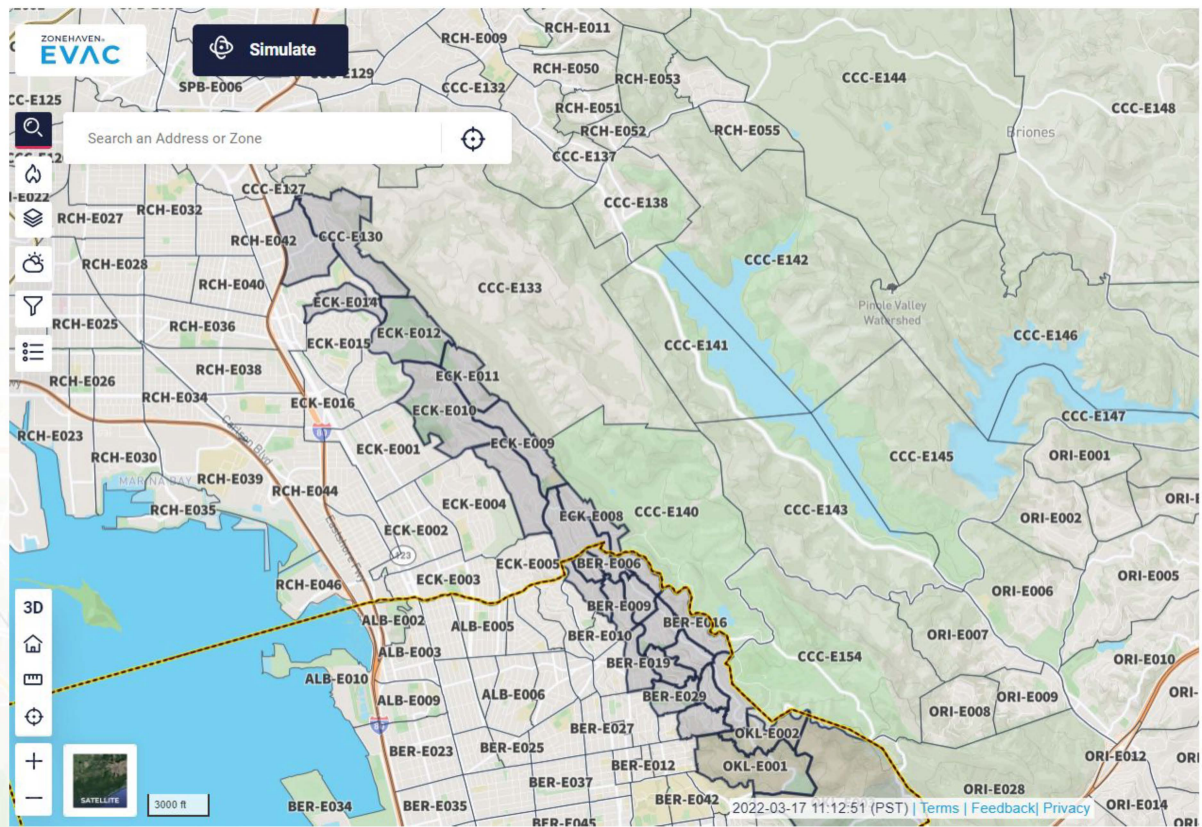
Back

Create new





# PDS = Trigger for Advisory Status in EVAC?



28 Zones selected

Hide zones list

- |                              |   |                              |   |
|------------------------------|---|------------------------------|---|
| US-CA-XAL-BER-E004<br>Normal | X | US-CA-XAL-BER-E005<br>Normal | X |
| US-CA-XAL-BER-E006<br>Normal | X | US-CA-XAL-BER-E007<br>Normal | X |
| US-CA-XAL-BER-E008<br>Normal | X | US-CA-XAL-BER-E009<br>Normal | X |
| US-CA-XAL-BER-E015<br>Normal | X | US-CA-XAL-BER-E016<br>Normal | X |
| US-CA-XAL-BER-E017<br>Normal | X | US-CA-XAL-BER-E018<br>Normal | X |
| US-CA-XAL-BER-E019<br>Normal | X | US-CA-XAL-BER-E029<br>Normal | X |
| US-CA-XAL-BER-E030<br>Normal | X | US-CA-XAL-BER-E031<br>Normal | X |
| US-CA-XAL-BER-E032<br>Normal | X | US-CA-XAL-OKL-E001<br>Normal | X |
| US-CA-XAL-OKL-E002<br>Normal | X | US-CA-XAL-OKL-E003<br>Normal | X |





# Pause for Questions?

ZONEHAVEN®  
**EVAC**



ZONEHAVEN®  
**AWARE**





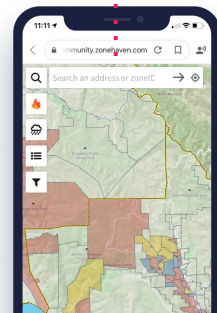
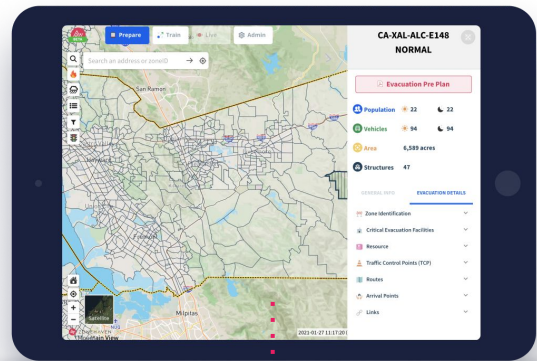
# Review Zonehaven Tools

ZONEHAVEN®  
**EVAC**

- **app.zonehaven.com**
  - Public Safety ONLY
  - Zone Status and Data Inputting

ZONEHAVEN®  
**AWARE**

- **community.zonehaven.com**
  - This is LIVE to the Internet 24/7
  - Public Facing Immediately



**\*Recommendation - have both sites up and running while working in the applications.**



# Review: County CWS Alert Request Workflow

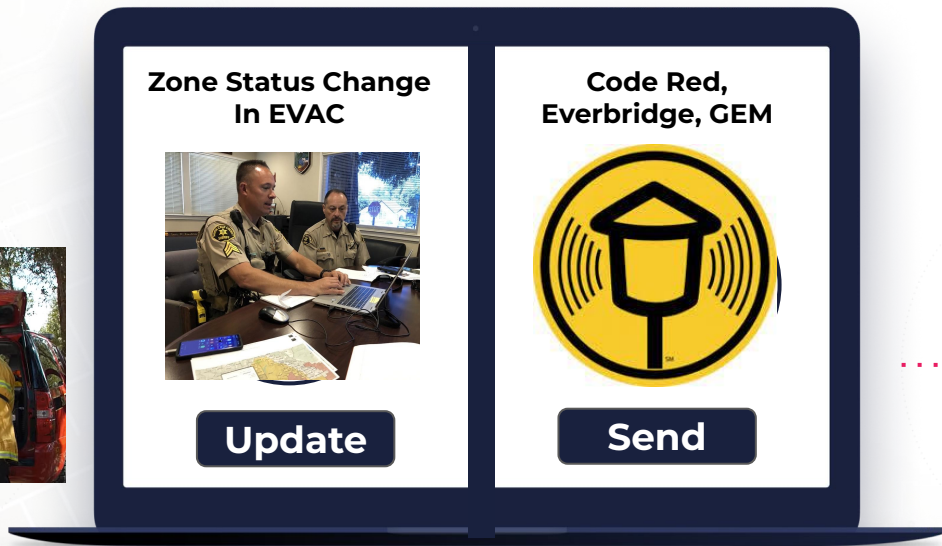
1

**Unified Command**  
Request thru SO



2

**Info "Relay"**  
Multi-Channel Notifications



3

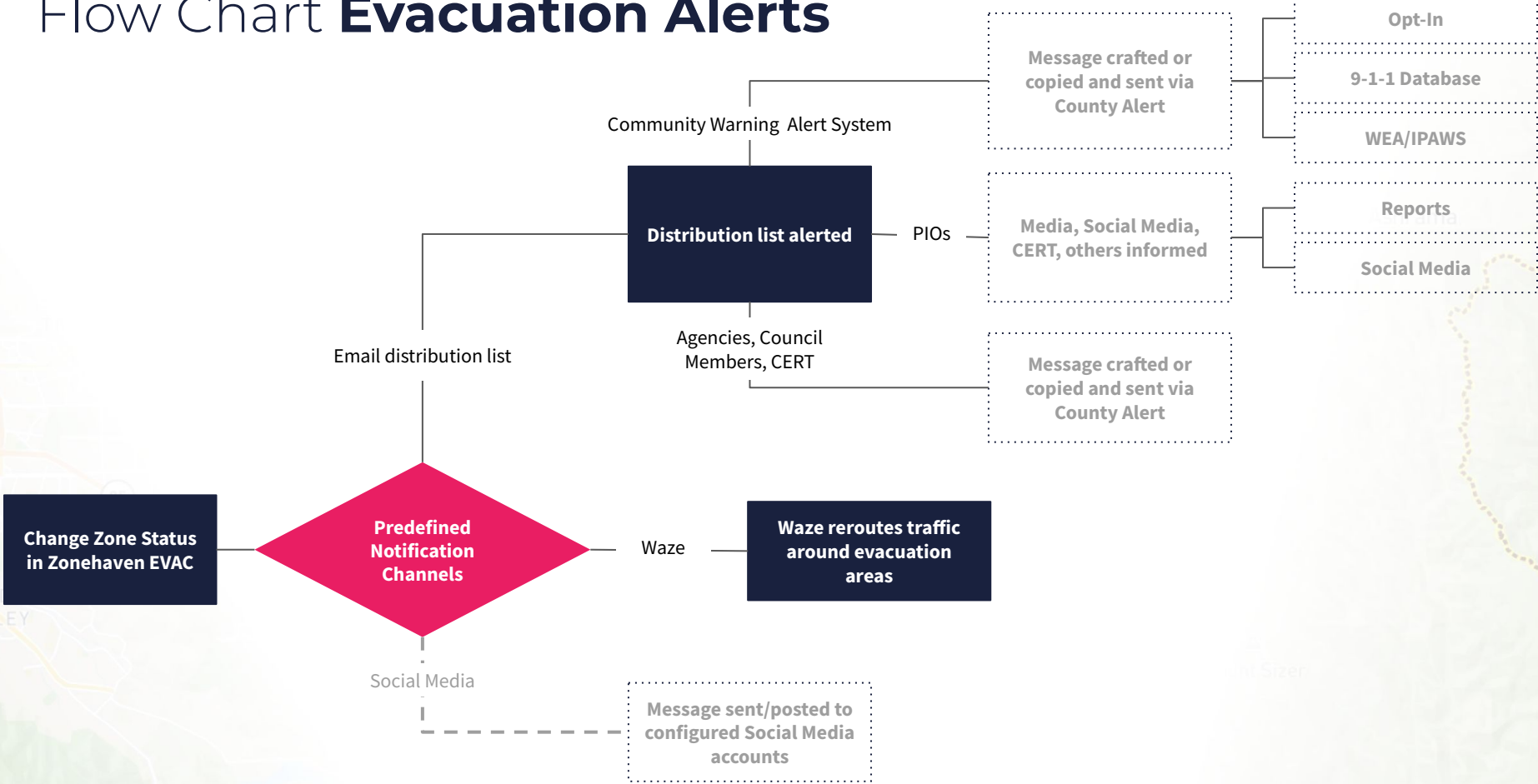
**Notification**  
out to the Public







# Flow Chart **Evacuation Alerts**





# Unified Command Alert Request Process

- <https://youtu.be/PiC6kNmWGDg>



## Get Ready Marin County: Know Your Zone

3.2K views • 1 month ago



Marin Wildfire Prevention Authority

Learn more about Marin County's improved evacuation system

CC



# Zone Status Change in EVAC is Critical

ZONEHAVEN.  
**EVAC**

Zone Status Changes Made by “Alerters” in EVAC application.



## Examples:

- Police LT's, Capt's, Sgt's
- Fire: 2nd-in BC, AC, DC
- OES: EM's