

Town of Kensington

Zonehaven

Evacuation Management
Software

Wildfire Threat - Tilden Park & Diablo Wind Events

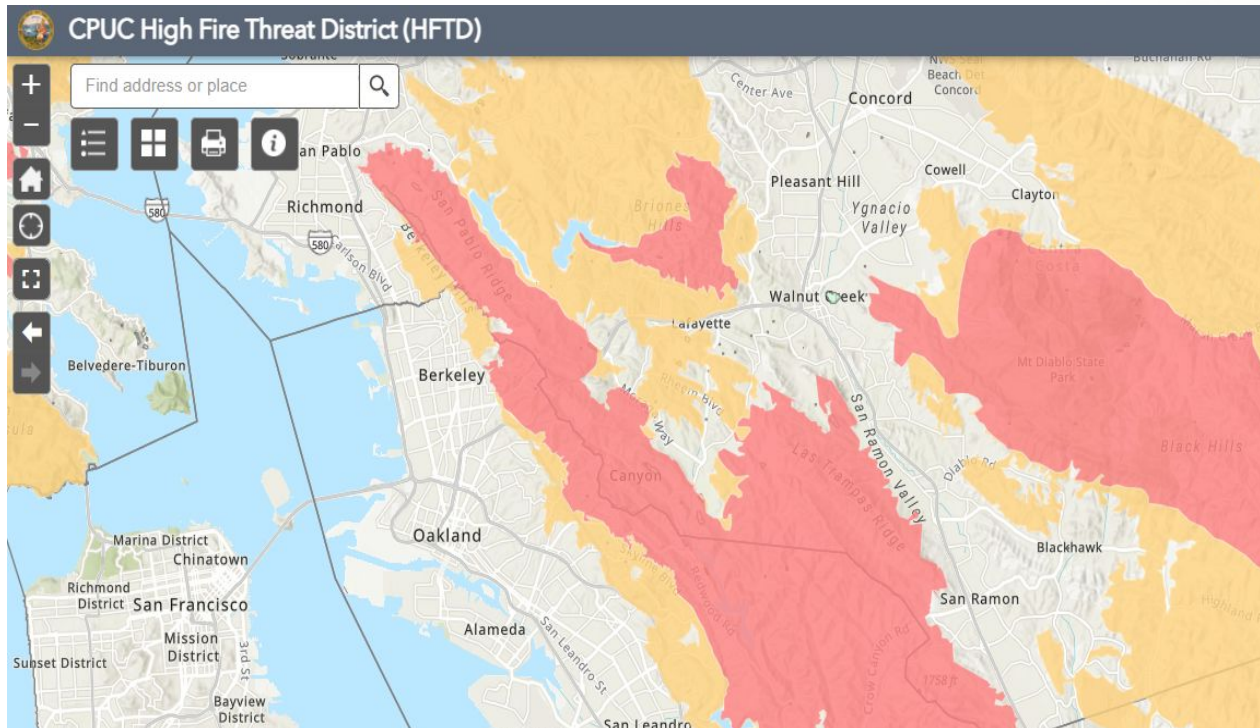




Wildfire Threat to Kensington

Combination of:

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

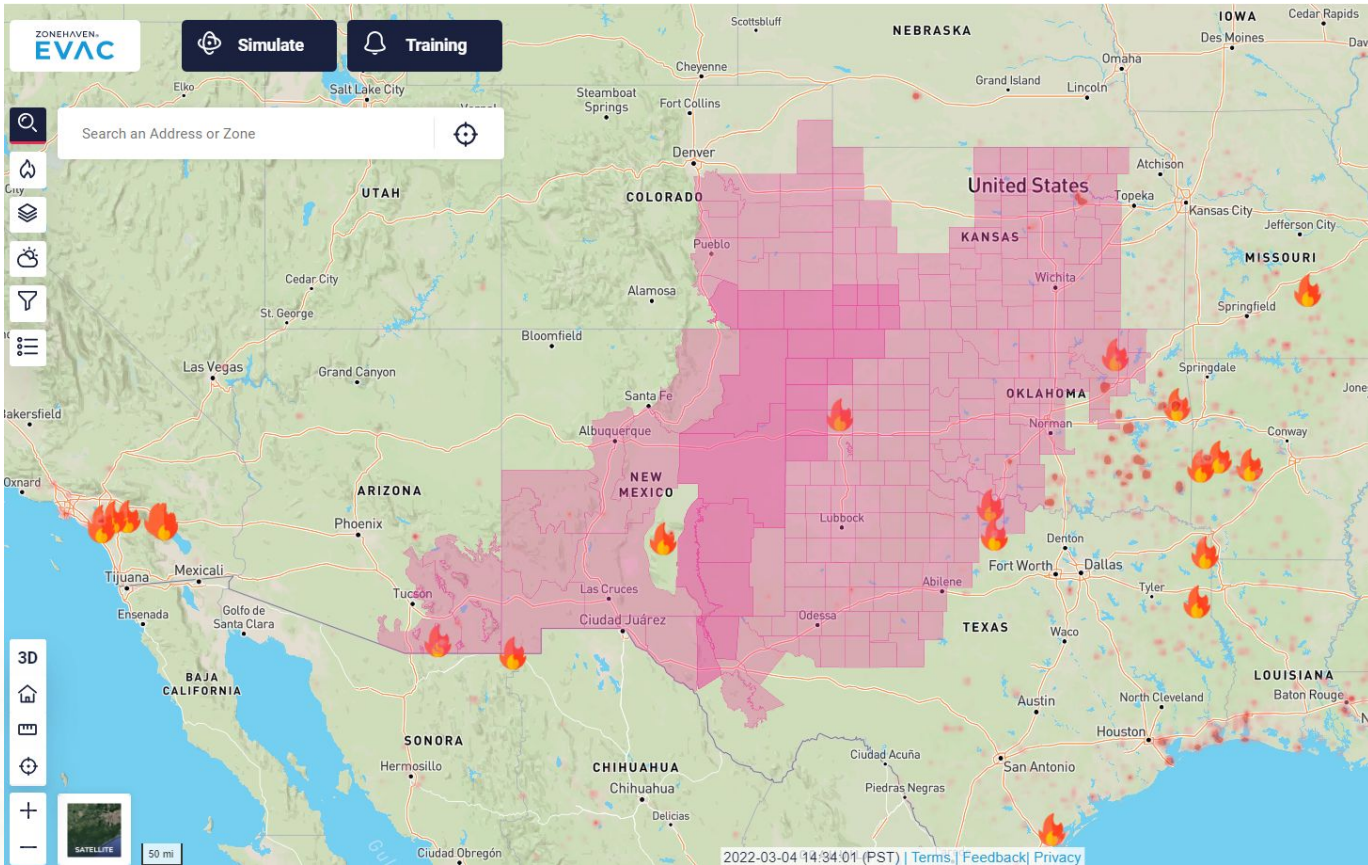


Worst Case Scenario:

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) - NWS Bay Area

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

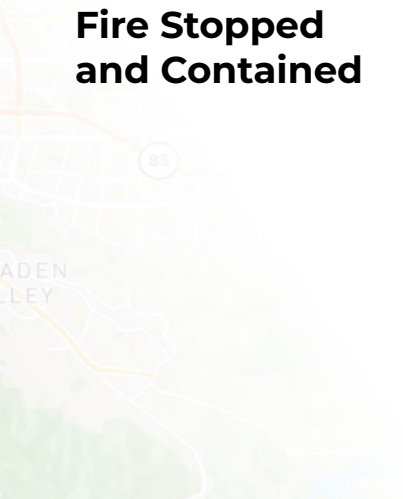
Size



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

inside climate news

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
Low	Medium	High	Very High	Extreme

Particularly Dangerous Situation Explanation

Brian Garcia - NWS BayArea



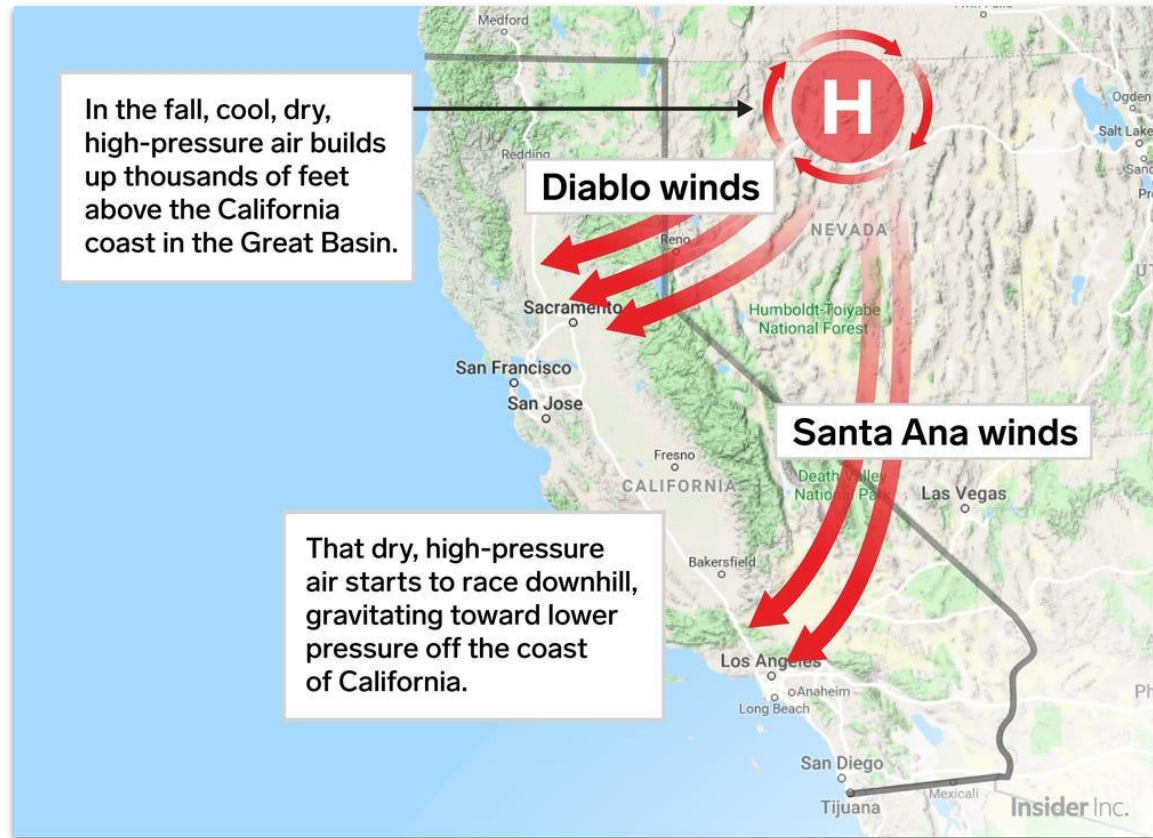


PDS - Particularly Dangerous Situation

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

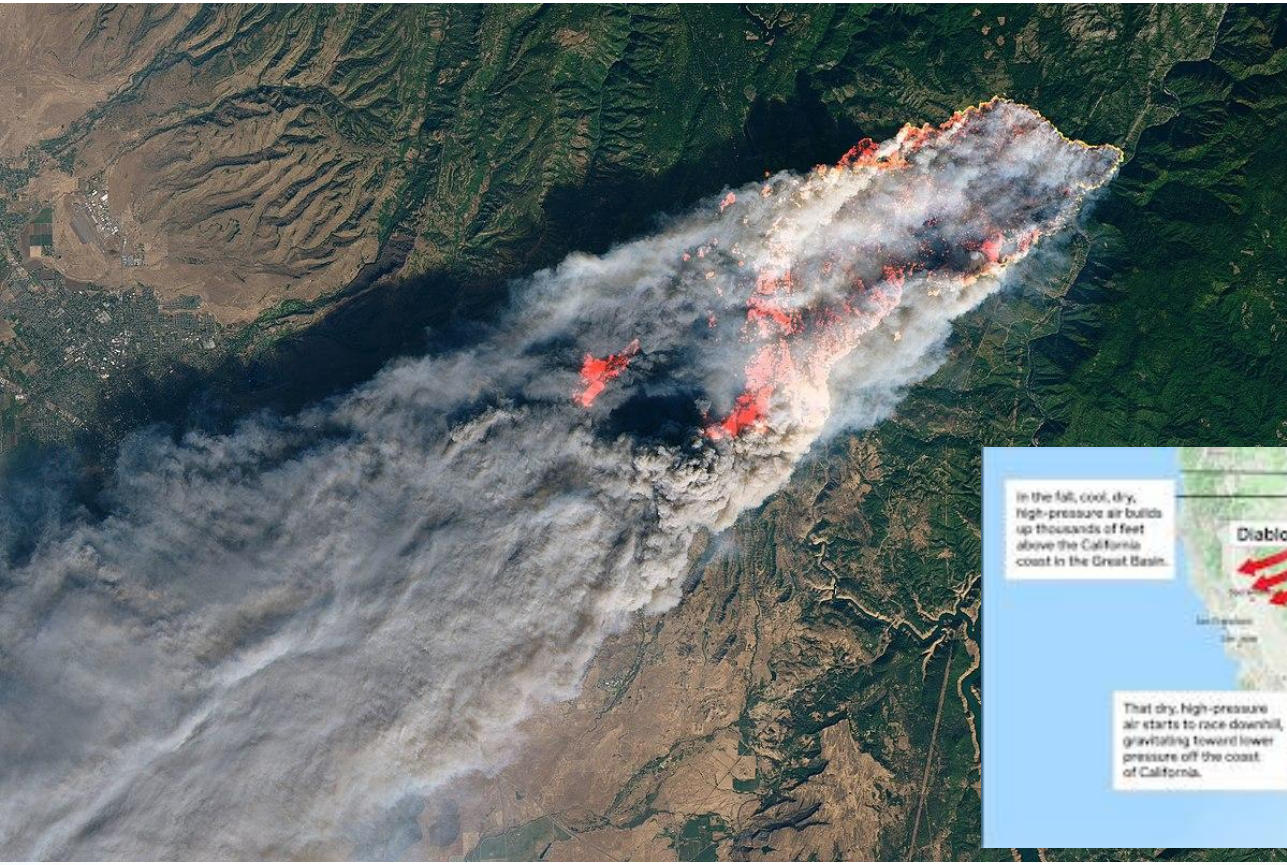


**PUBLIC SAFETY
POWER SHUTOFF**





PDS - Particularly Dangerous Situation



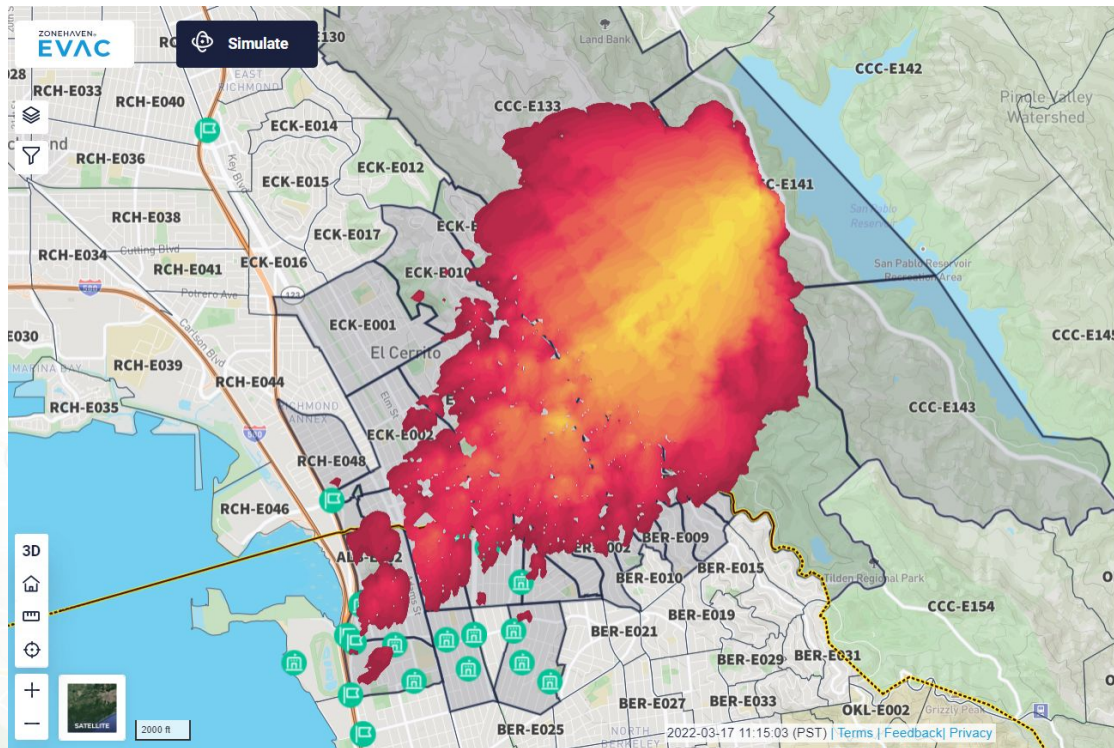
Paradise Fire





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

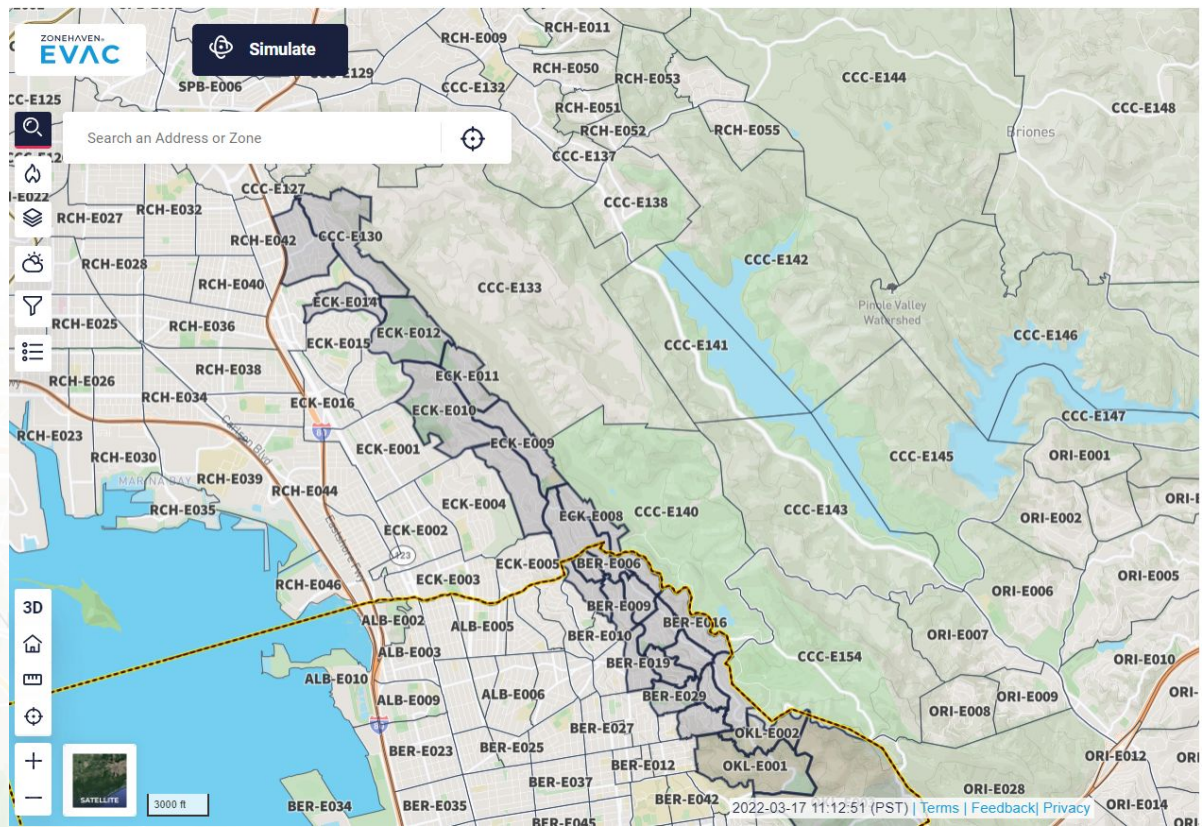
1

Back

Create new



PDS = Trigger for Advisory Status in EVAC?



28 Zones selected

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





Pause for Questions?

ZONEHAVEN®
EVAC



ZONEHAVEN®
AWARE





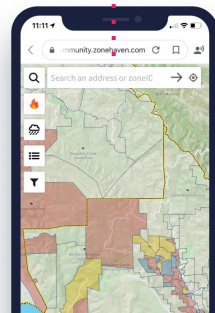
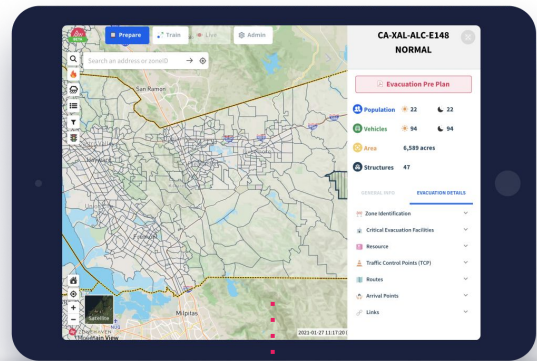
Review Zonehaven Tools

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

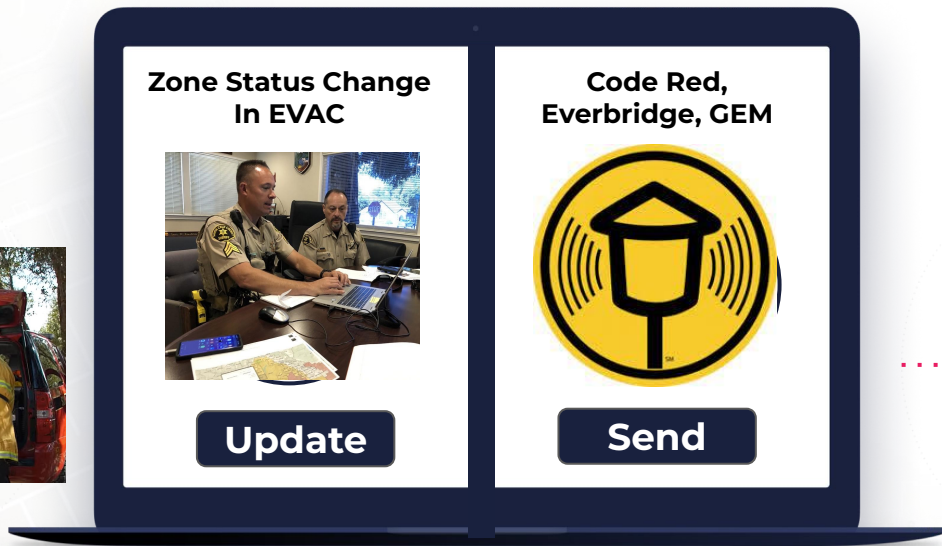
1

Unified Command
Request thru SO



2

Info "Relay"
Multi-Channel Notifications



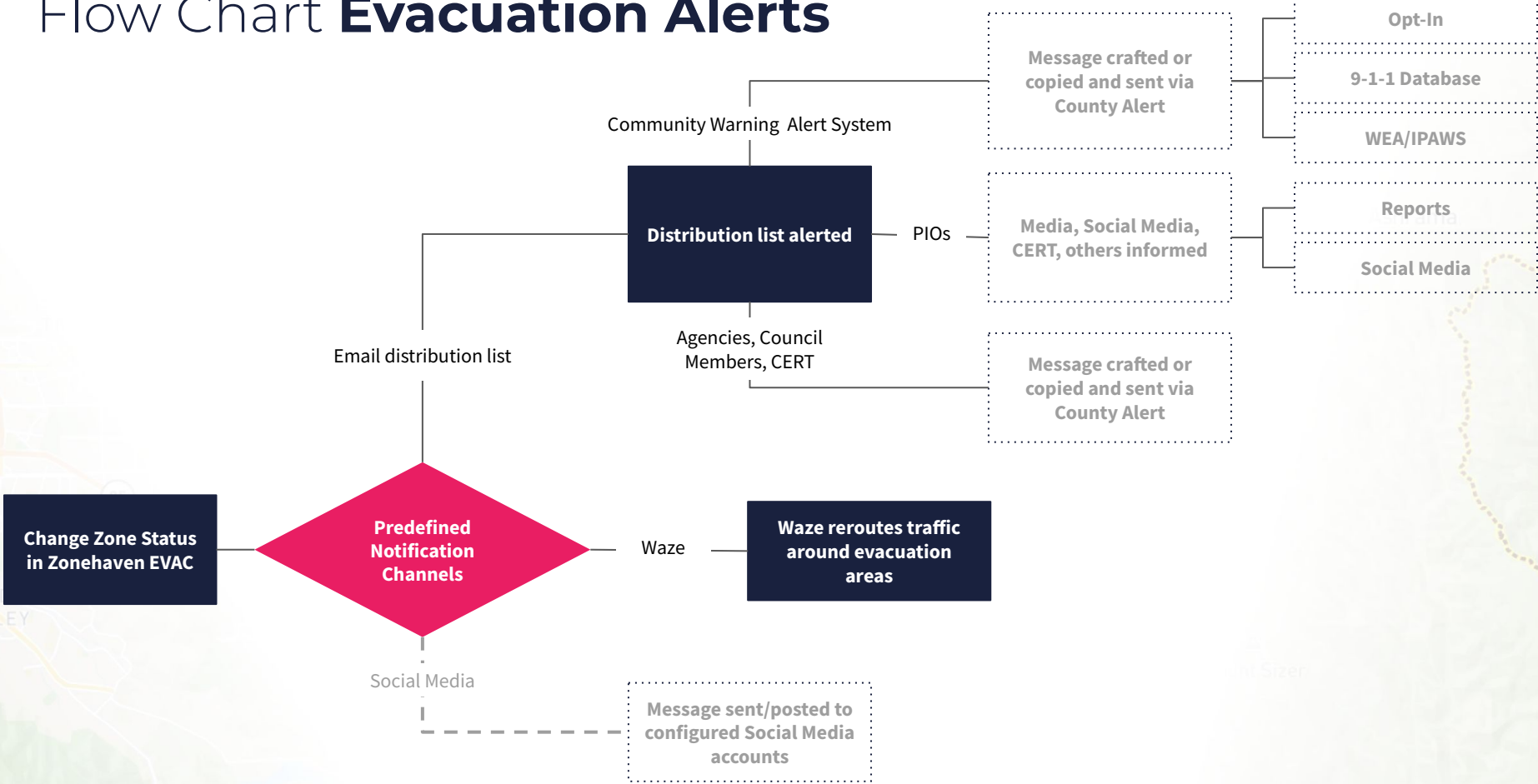
3

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