GENASYS ZONEHAVEN

Colorado Springs EVACUATION Management Clarifications

August 8, 2022

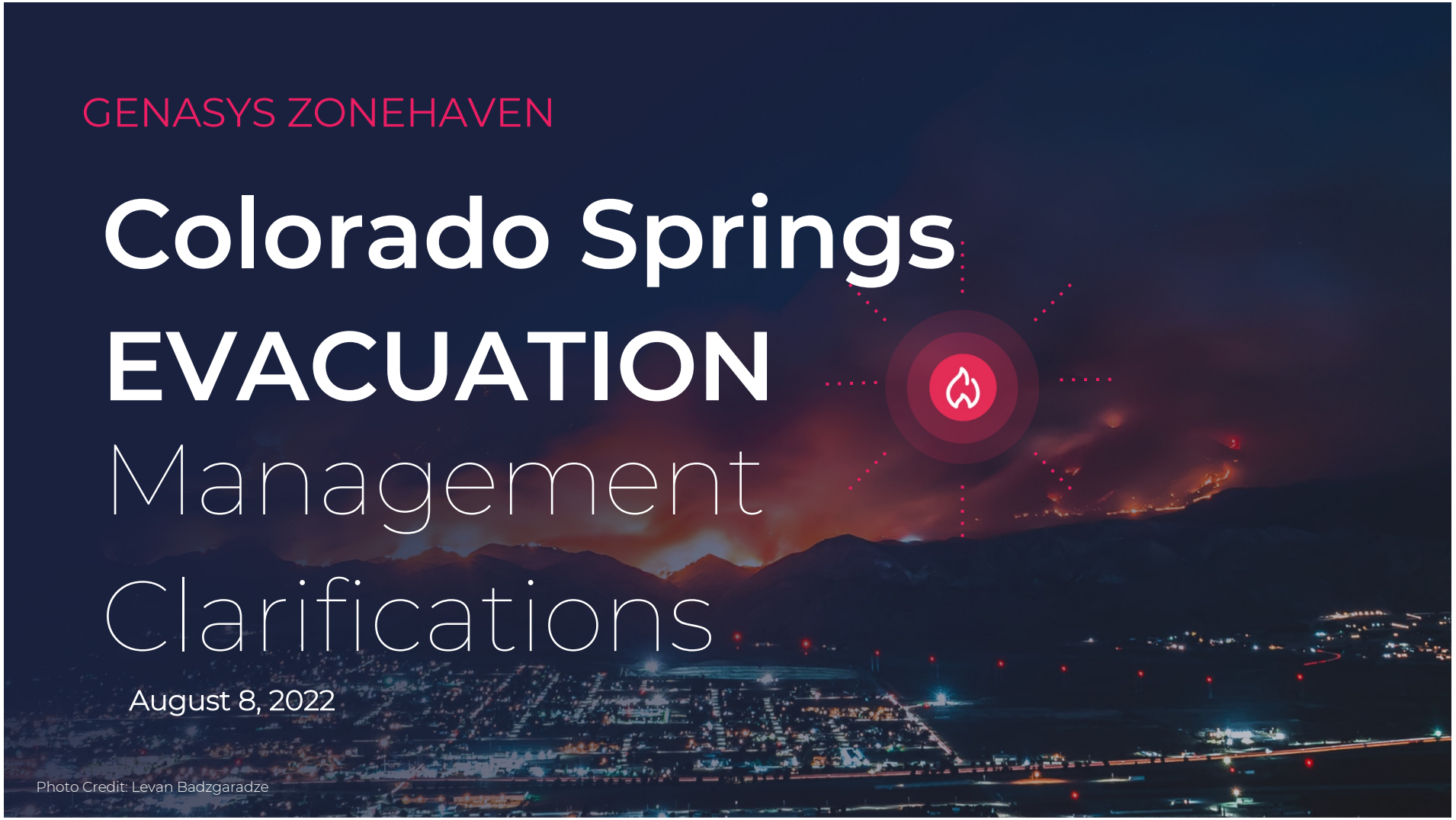


Photo Credit: Levan Badzgaradze

Zonehaven or FLEET?

Wrong Question

FLEET

Evacuation Tool

ZONEHAVEN

Evacuation Toolbox

What is the Correct Priority?

Right Question

FLEET

Publish
Evacuation
Maps

ZONEHAVEN

Speed:
Data-Driven
Evacuation
Decisions and
Immediate
Communication

Old Evac Process: Too Slow, Errors

- Ad-hoc: Guessing fire's path, drawing areas on maps
- Unknown real-time traffic implications
- Multi-agency decision making and communication issues
- Public Confusion: Spotty and unclear evac instructions

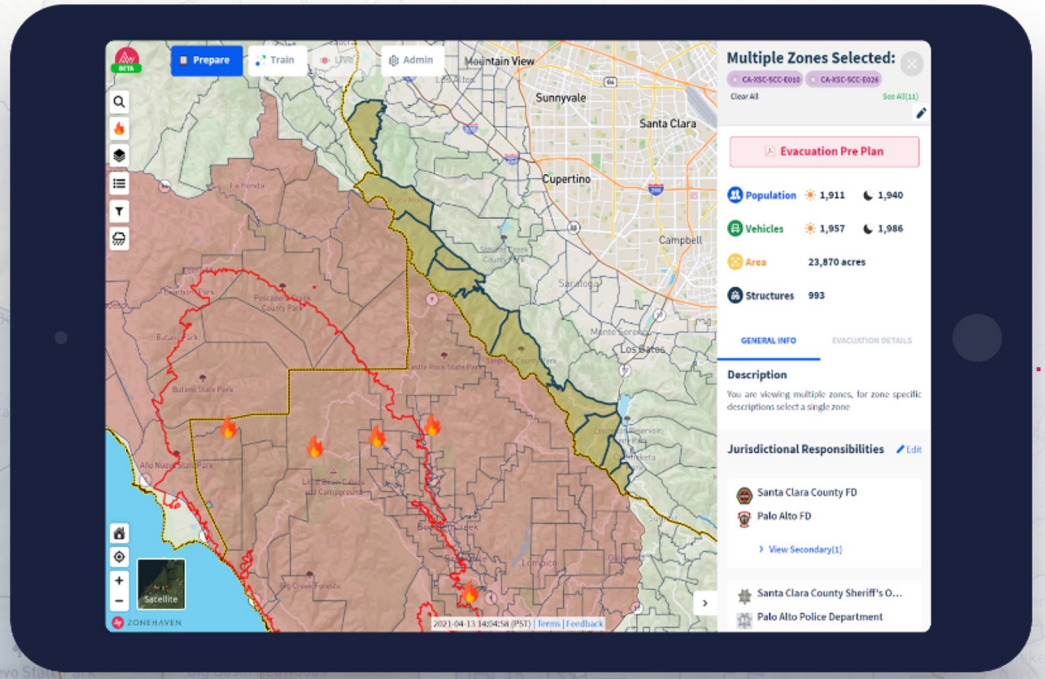
Communication

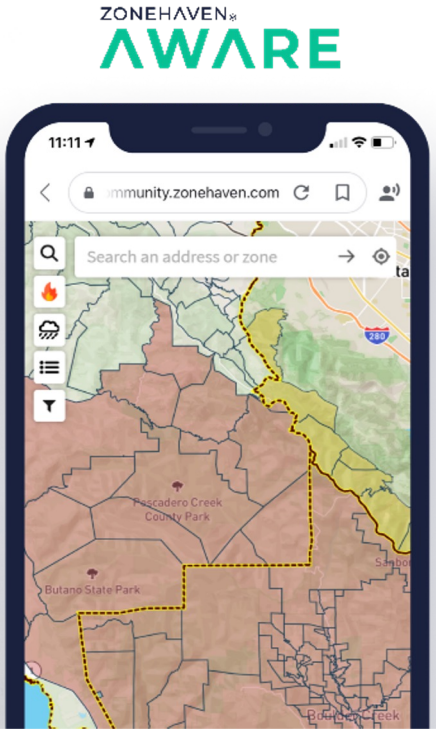
Time-Consuming and Prone to Error

New Process

Data-Driven Evacuation Decisions and Immediate Execution

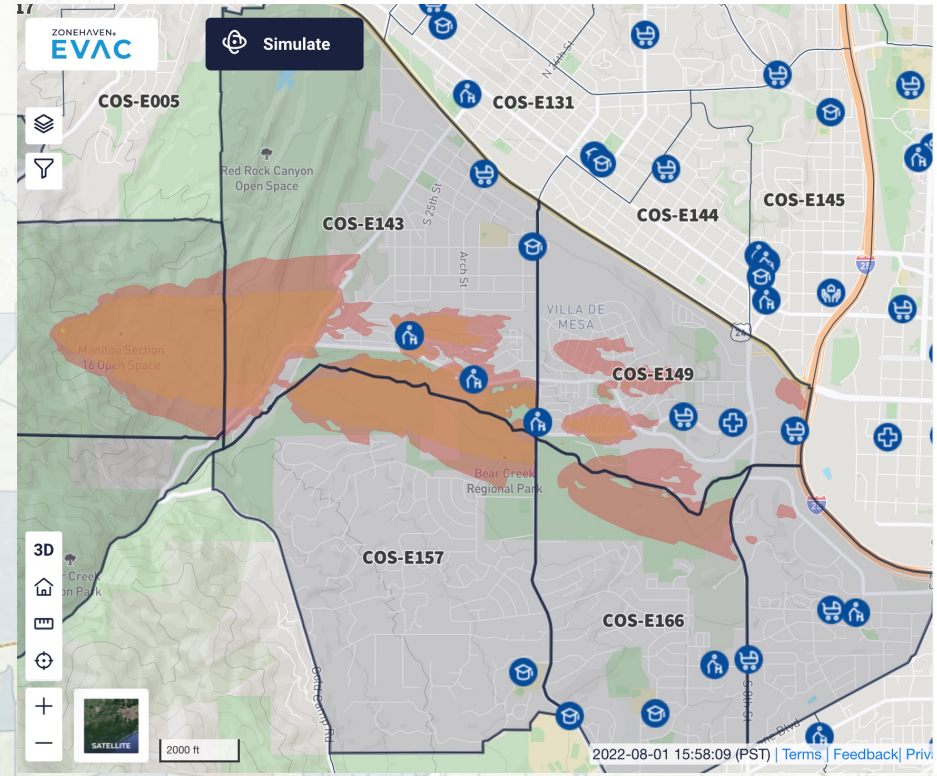
AWARE

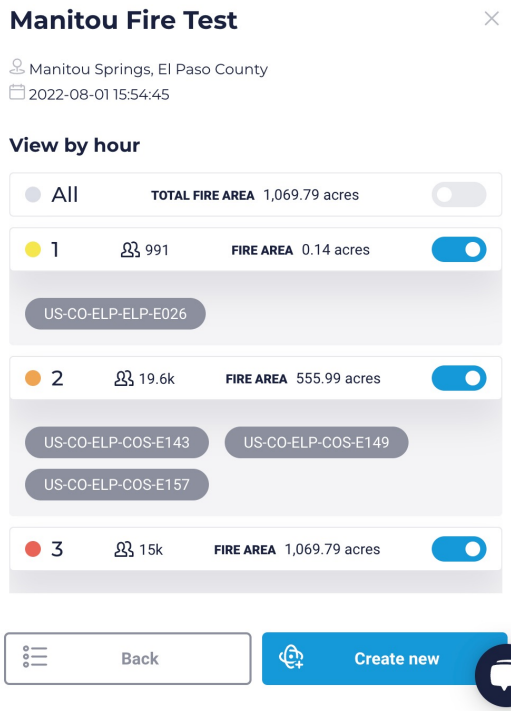




Data-Driven Evacuations

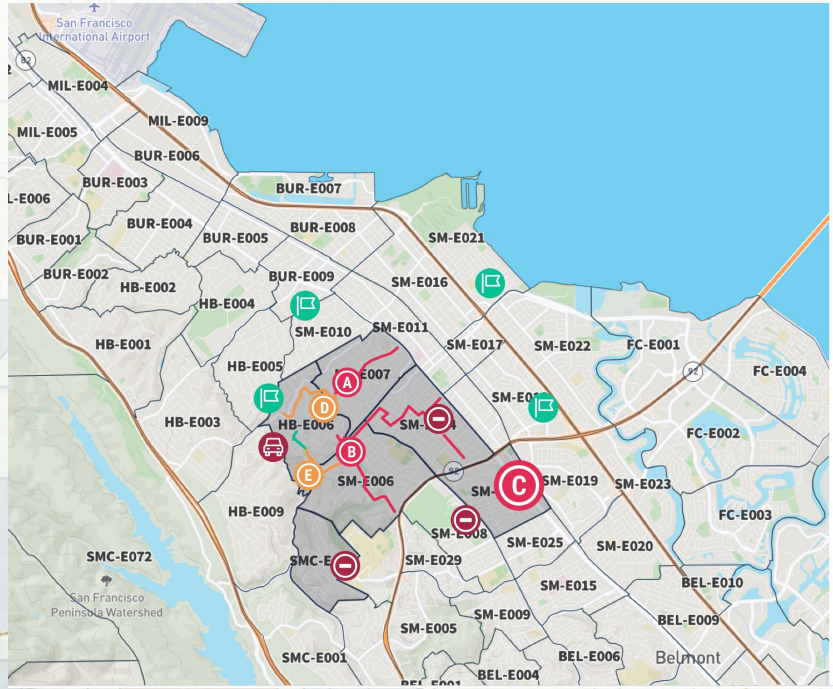
Fire Simulations to Decide Which Zones





Data-Driven Evacuations

Real-Time Traffic Modeling



Traffic Simulation

Show selected parameters

TIME TAKEN TO EVACUATE 5 hours

VIEW MODE
Show map results using aggregated time

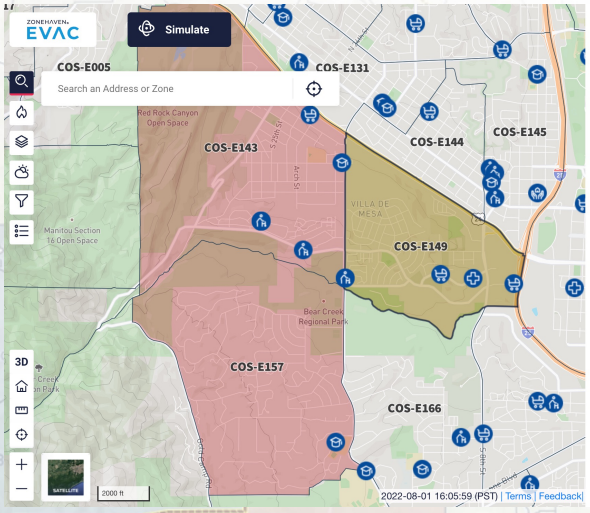
Choke Points

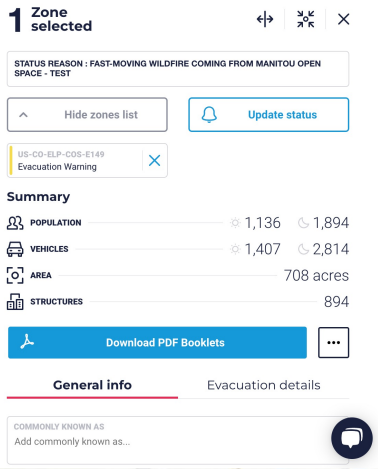
A	Name of Street 1 and Street 2 3,200 vehicles	+45 min
B	Name of Street 1 and Street 2 3,200 vehicles	+43 min
C	Name of Street 1 and Street 2 3,200 vehicles	+41 min
D	Name of Street 1 and Street 2 3,200 vehicles	+30 min

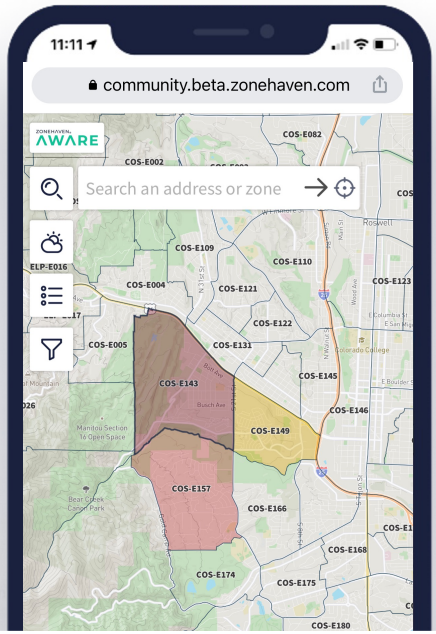
Multi-Channel Notifications

Simple Communication from an Authoritative Source

AWARE

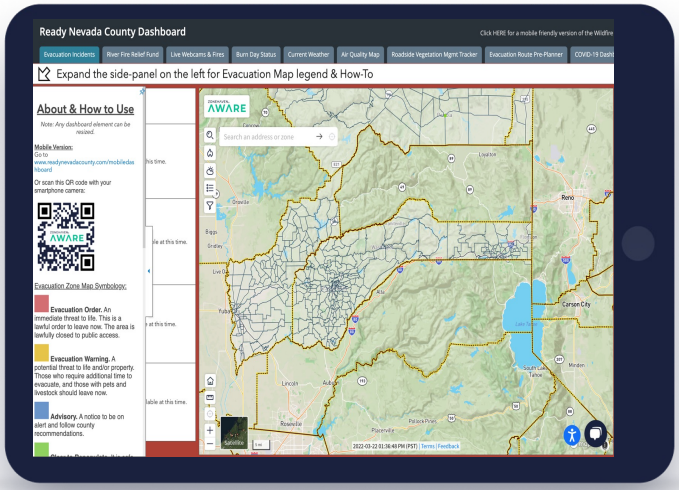






Immediate Multi-channel Notifications

Simple, reliable communication



Community App

Integrations

Social Media

Email

Press Release

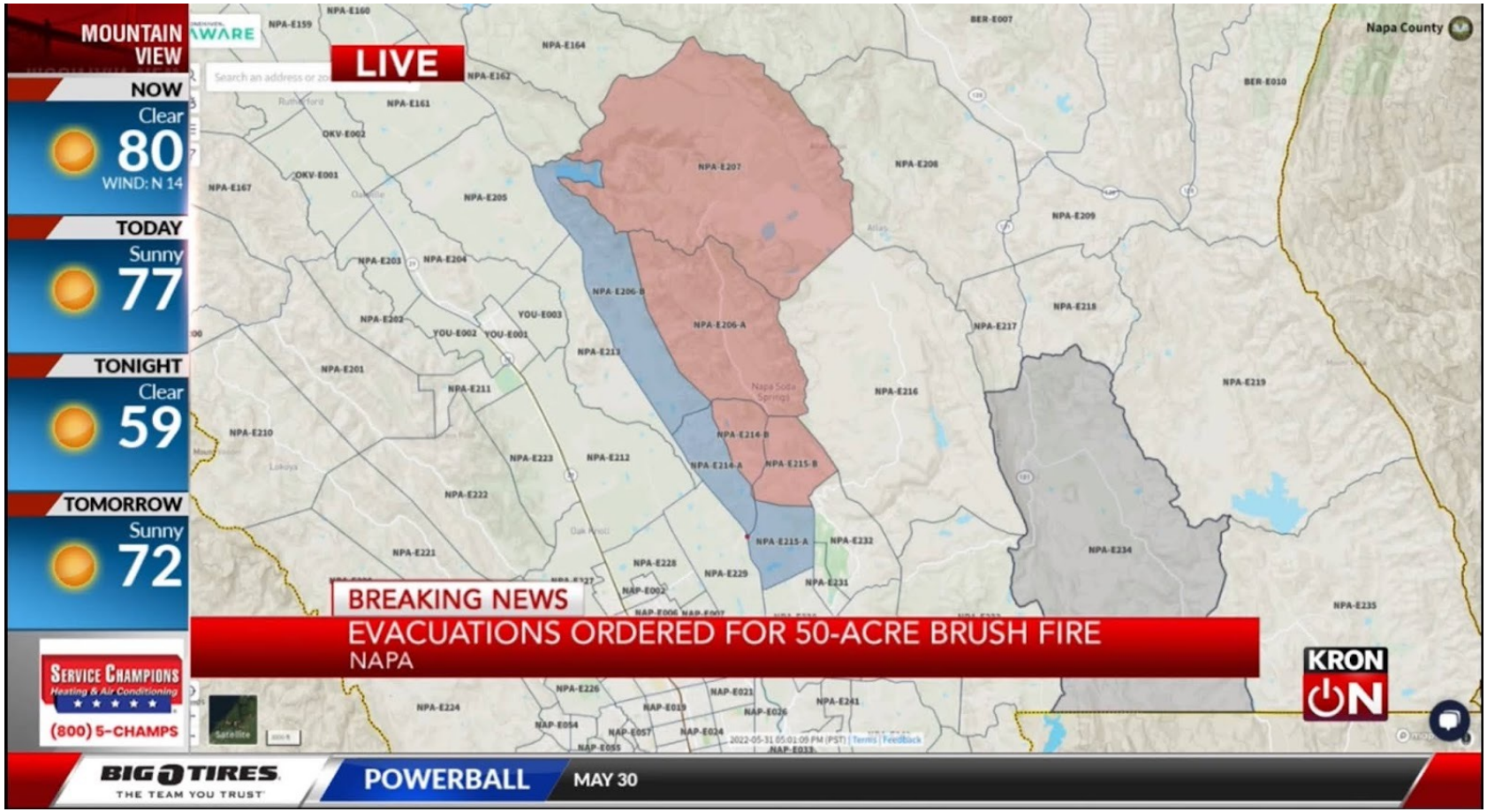
ZONEHAVEN AWARE

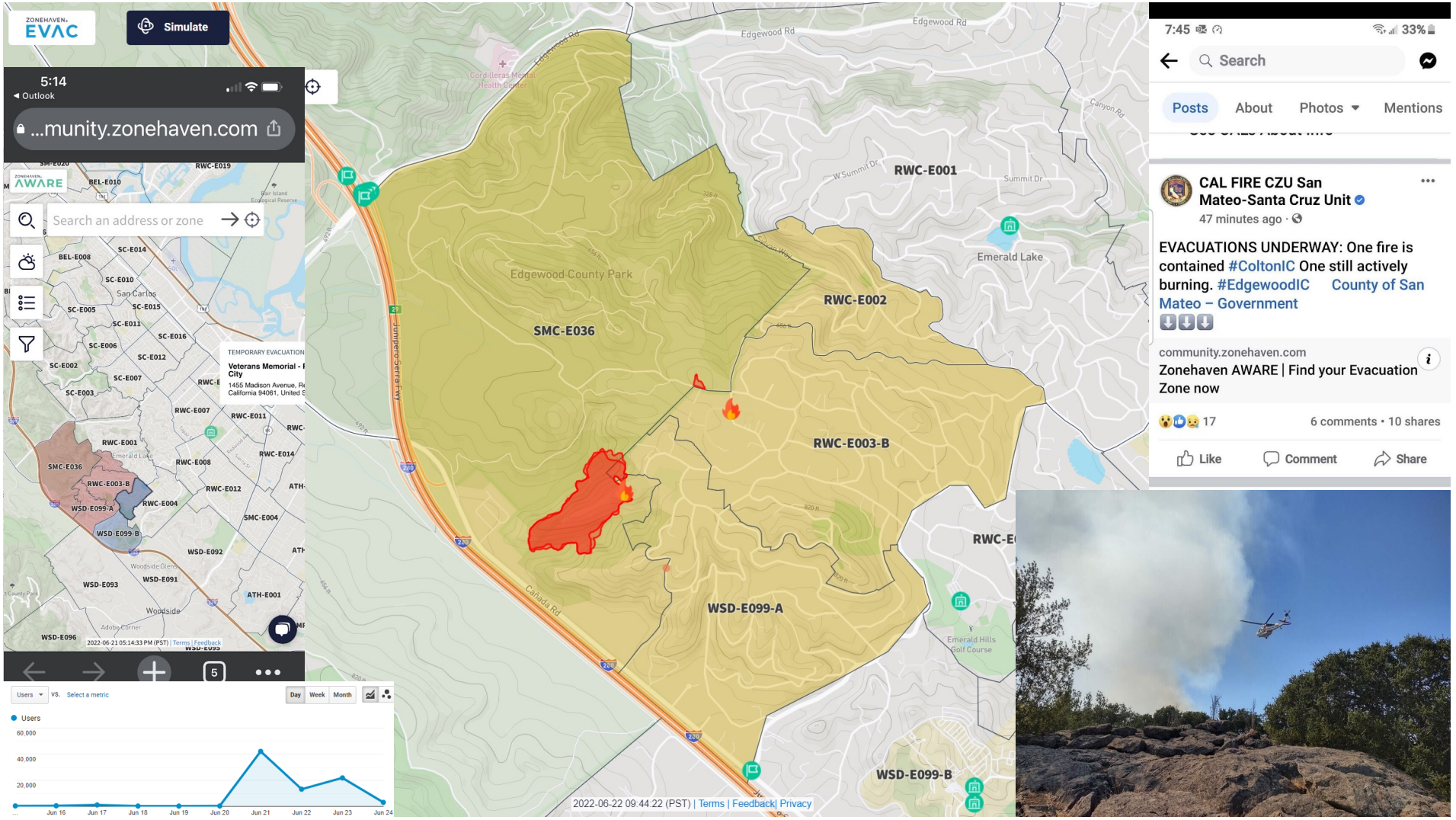
waze

everbridge

Genasys

Wireless Emergency Alerts


MOUNTAIN VIEW
NOW
Clear
80
WIND: N 14
TODAY
Sunny
77
TONIGHT
Clear
59
TOMORROW
Sunny
72
LIVE
Napa County
BREAKING NEWS
EVACUATIONS ORDERED FOR 50-ACRE BRUSH FIRE
NAPA
KRON ON
SERVICE CHAMPIONS
Heating & Air Conditioning
(800) 5-CHAMPS
BIG O TIRES
THE TEAM YOU TRUST
POWERBALL
MAY 30


ZONEHAVEN EVAC
Simulate
5:14
Outlook
...munity.zonehaven.com
AWARE
Search an address or zone
TEMPORARY EVACUATION
Veterans Memorial - F
City
1455 Madison Avenue, Re
California 94061, United S
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Jun 17
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Jun 22
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Jun 24
Edgewood Rd
Edgewood County Park
SMC-E036
RWC-E001
RWC-E002
RWC-E003-B
WSD-E099-A
WSD-E099-B
Emerald Lake
Emerald Hills Golf Course
Cañada Rd
Jumpero Serra Fwy
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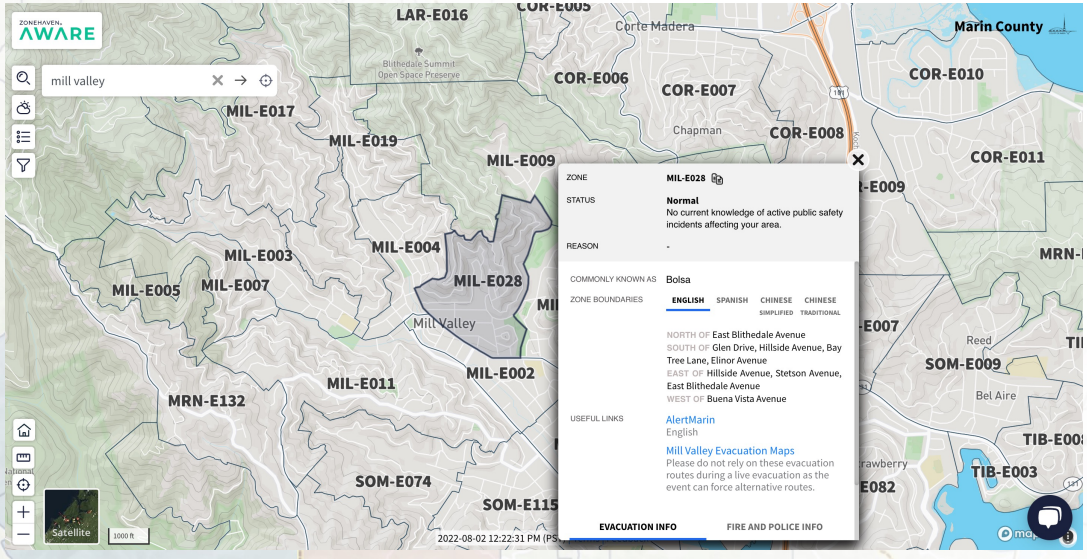
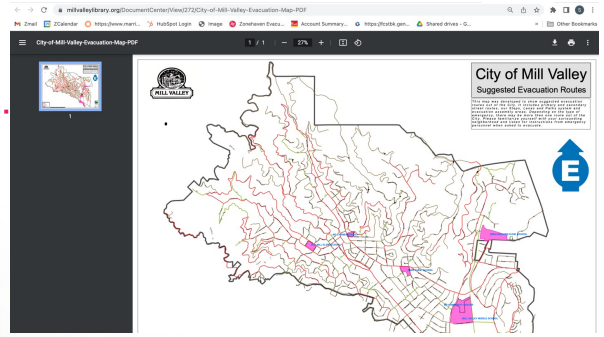
7:45
33%
Search
Posts
About
Photos
Mentions
CAL FIRE CZU San Mateo-Santa Cruz Unit
47 minutes ago
EVACUATIONS UNDERWAY: One fire is contained #ColtonIC One still actively burning. #EdgewoodIC County of San Mateo – Government
community.zonehaven.com
Zonehaven AWARE | Find your Evacuation Zone now
17
6 comments • 10 shares
Like
Comment
Share

Some Cities Publish Evacuation Maps

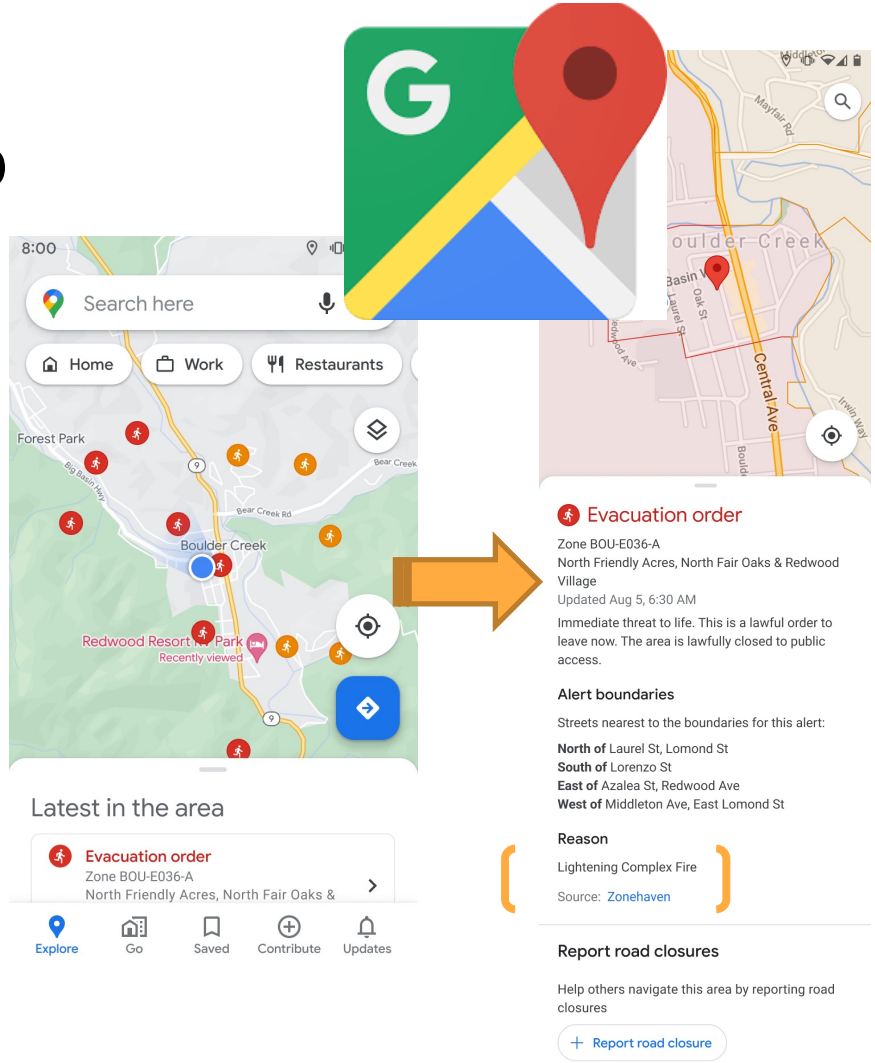
Most Advise Residents NOT to rely on them





Google Maps Partnership

- 70% of Market (Waze #2 with 12%)
- Google Crisis Response Division
- January 2023: Live From Zonehaven
- Extended Information:
  - Zones and Status
  - Road Closures
  - Evac Shelters, Arrival Points
  - Real-time Routing



WAZE Partnership

Evacuation Zones

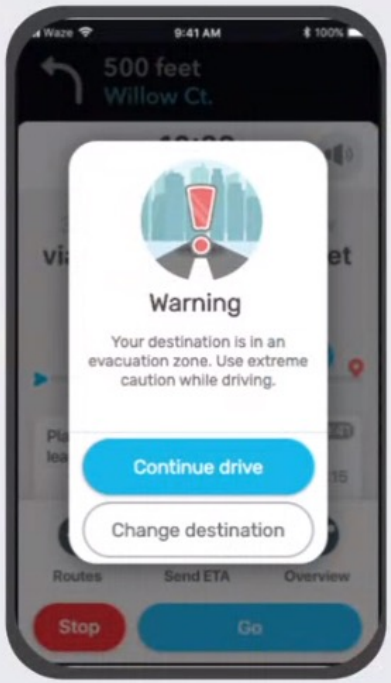
An area where an official organization orders an evacuation

If submitted in advance:

- Waze navigates users around the zone, even if the fastest route is through the zone
- Waze warns users trying to navigate into the zone and offers to change their destination

Dynamic zones discovered in real-time:

- Waze notifies users with a pop up if their destination is in the evac zone
- Waze is **not** able to navigate users around the zone itself



- Fire
- Debris Flow
- Active Shooter
- Tsunami
- Police Activity

2020 FIRES

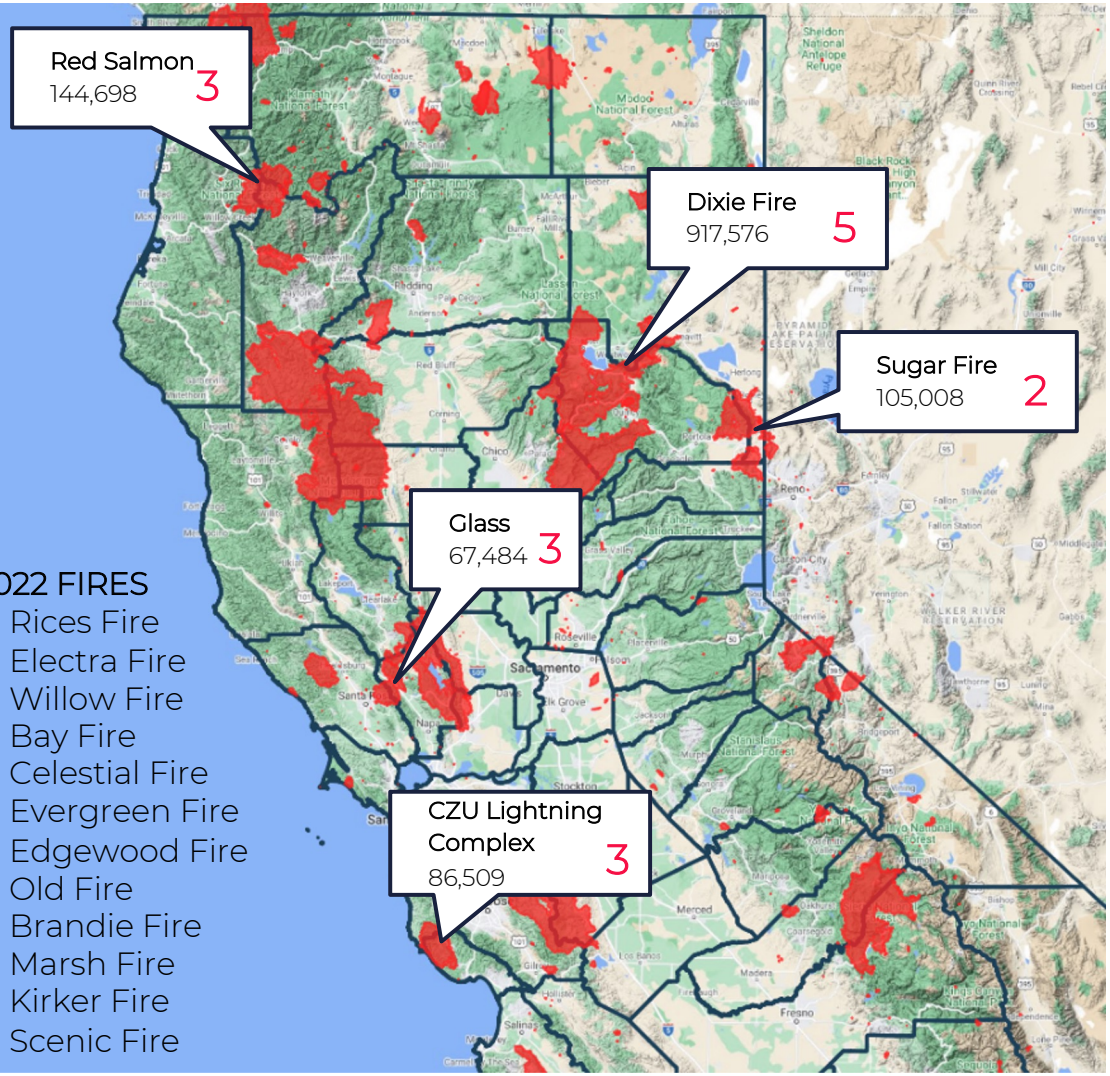
- Sign Hill Fire
- Glass Fire
- Red Salmon Fire
- CZU Complex Fire

2021 FIRES

- Estrada Fire
- Newell Fire
- Miners Fire
- Fawn Fire
- Bennett Fire
- McCash Fire
- Cache Fire
- Coyote Fire
- Glen Fire
- River Fire
- Antelope Fire
- River Complex
- Fly Fire
- Dixie Fire
- Beckwourth
- Tennant Fire
- Marshall Fire
- Church Fire
- Lava Fire
- Intanko Fire

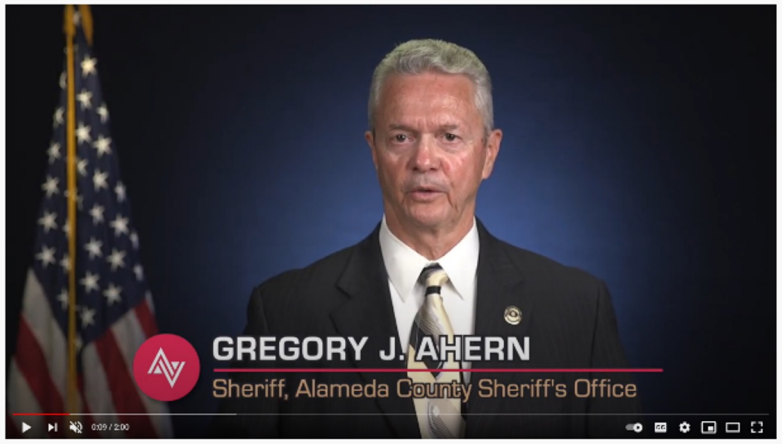
2022 FIRES

- Rices Fire
- Electra Fire
- Willow Fire
- Bay Fire
- Celestial Fire
- Evergreen Fire
- Edgewood Fire
- Old Fire
- Brandie Fire
- Marsh Fire
- Kirker Fire
- Scenic Fire

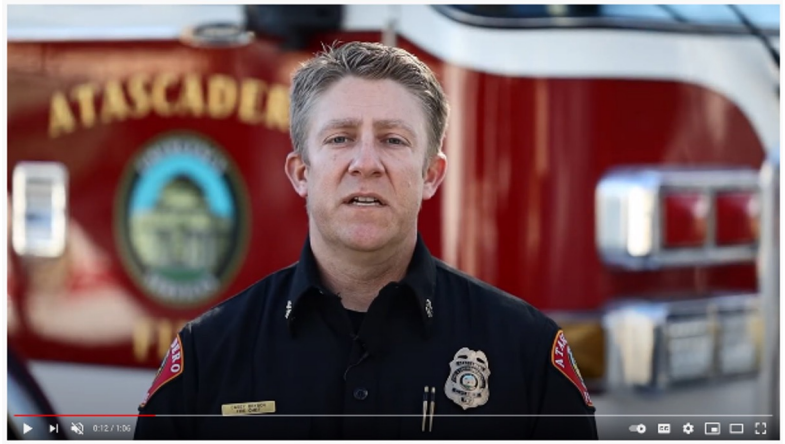


Nevada County, CA

Alameda County, CA



Atascadero, CA



Lake County, CA

Zonehaven Clarifications and Corrections

Camp Fire had Problems using Zonehaven:

- Zonehaven was not used (or even in existence) for Camp Fire
- Paradise had created Zones per FEMA recommendations:

  "**The goal of an evacuation is to move as few people as needed the shortest distance to safety**. Zone-based evacuation plans can be most effective in meeting this goal. They reduce resource burdens, facilitate re-entry, and accelerate the transition to recovery."
- Town educated residents to shelter-in-place until evacuated

  This is independent and not related to having zones or not
- Delay in notification: Staff had Dispatch and 911 priorities

What is the Correct Priority?

Right Question

Publish Evacuation Maps

"Given the choice of implementing a Zone-based Evacuation Management System or to publish evacuation maps, I would prioritize Zonehaven. Speed is everything in evacuations, and Zonehaven cuts the time by 80% with better decisions."

Mark Brown, Executive Director
Marin County Fire Prevention District

Data-Driven Evacuation Decisions and Immediate Communication

ZONEHAVEN

Genasys
Providing equitable & consistent evacuation planning and management
Questions? Reach out to Stephen Sickler: ssickler@genasys.com
For more information visit: https://www.zonehaven.com
Photo Credit: Levan Badzgaradze