

Cupertino ARES/RACES 2023 Year-End Review

December 7, 2022
Jim Oberhofer KN6PE



Topics for tonight

The top 7 topics of interest for CARES and Cupertino Citizens Corps operations...

7. ISA Exercise Wrap-up
6. Packet in the Park
5. Form change: COES 213SS-ARK
4. Form change: 911 Incident Form
3. If a water tank breaks, what will San Jose Water do?
2. Earthquakes
1. California Cyclone





#7

ISA EXERCISE FOLLOW-UP

Overview

Purpose

The purpose of this exercise is to test existing and new Cupertino ARES tools and procedures for the Infrastructure Safety Assessment (ISA).

Objectives

1. Test a cold start during an Earthquake scenario.
2. Exercise the Mike-Mike reporting process.
3. Test the ISA dispatch process.
4. Test the ISA spreadsheet data collection.
5. Test the Demob Process.

Key Findings

- 1. Event Startup.** CARES has never incorporated a Cold-Start in its exercise before considering it likely will be the case that we will encounter for any self-evident, infrastructure-damaging event.
- 2. Broader task familiarity.** There is always a chance that those who know the key processes will not be available when needed. This exercise is the first to train up other members to perform new tasks... any other interest?!
- 3. Consolidated assessment approach.** The ISA assignment structure is divided into 11 assignment sets that cover all critical facilities to the city and served agencies. This structure worked well with 7 teams deployed to cover 9 of the 11 assignment-sets in about 2.0 hours.
- 4. Data management tools.** The complexity of the C469 custom ISA web-app proved to be too support-intensive. A paper- and spreadsheet-based solution was reintroduced for better long-term support. Several improvements were suggested.

1. Cold Start – Recommendations

- 1. Develop guidance** for taking emergency messages immediately after the net opens up.
 - a) Include procedure for checking for cell coverage.
 - b) How to test if the cell service is operational.
 - c) Look at e911 for texting 9-1-1 calls.
- 2. Revisit** the definition for information handoff from the Field/NCO to the C469/NCO.
- 3. Tabletop** the Cold-Start process with interested CARES members.

2. Mike-Mike – Recommendations

- 1. Activation trigger** method; look at Max MM vs average score.
- 2. Radio access options** for OEM staff -- Part 90 city trunk radio or WPYD282, Part 97 AMS radio.

3. ISA Process – Recommendations

- 1. Consider delegating ISA assets to members.** Assign 2-4 assets for specific individuals. Need to develop the process for assigning and tracking assigned asset paperwork.
- 2. Develop the ISA Staging location options** for different response level situations. Consider locations and resource availability.
- 3. For information handoffs...**
 - a) to CuSD, develop a resource pool of CARES or CERT members to deploy to CuSD offices in Cupertino to receive ISA reports by radio and relay reports to CuSD Staff.
 - b) to SJWC, work with SJWC on an approach for information access to ISA reports assuming that commercial power and communications is out.
- 4. Clarify the process** for making field assignments. This includes both assignments types (solo and buddy) as well as assignment timing (assign and go).
- 5. Tabletop** the end-to-end ISA process with interested CARES members.



4. Demob – Recommendations

1. **Forms** -- Encourage CARES members to watch the SCCo RACES Forms video, and save the form sample in their go-kit.

5. General – Recommendations

1. Incorporate CERT members in future exercises as a buddy.
2. Develop a clear list of our priorities for our response: ISA, ARKs, EOC, CAP, etc.
3. Review C469 training plan for completeness.
4. Create DPW work order to add Recessed D-Ding tie-down anchors to C469.
5. Update CARES Forms page to reference only one version of the form. Update training to reflect this change.
6. Correct the missing TRANS assets on ISA tracking form.
7. Correct the sort on ISA tracking form.



Interested in helping?

- We will (hopefully) schedule some Tabletop exercises.
- We can use your help in taking on certain roles to talk through what you might do in a particular role.
- Possible tabletops include:
 - Cold Start / Net Control / Operator-from-home process
 - ISA end to end process
 - Others?



Jackery

EXPLORER 300

DISPLAY



DC

USB

IN/OUT: PD 60W

AC

#6

PACKET-IN-THE-PARK



KN6EKQ



KN6YUH



K6IK



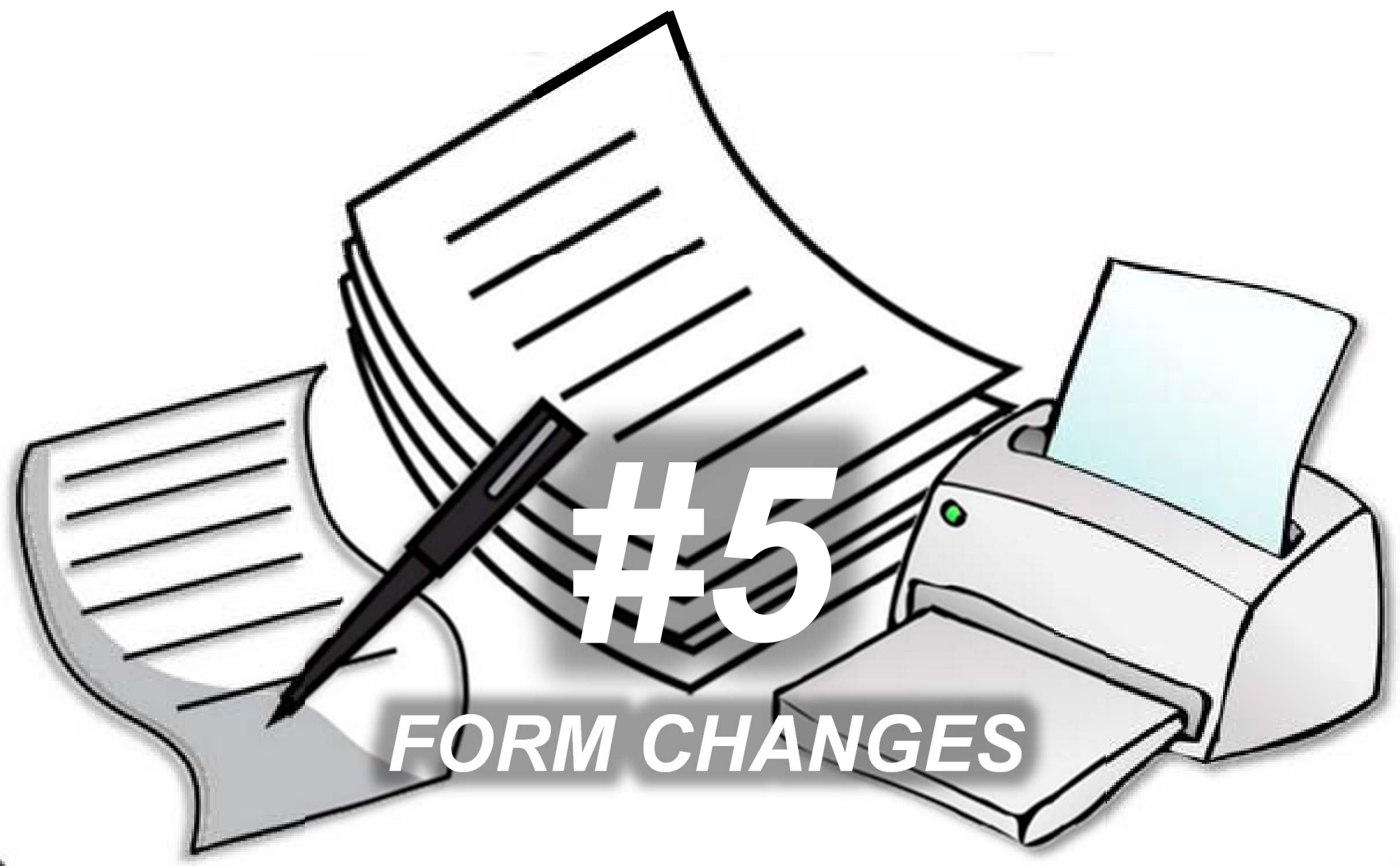
KJ6OHF

Scorekeeper!



KI6SYY





ARK Sitstat Form

COES 213SS-ARK

1. The original ARK SitStat form was not very efficient for passing data by radio.
2. During the May 2023 MRC exercise, CARES proposed a form revision that was subsequently approved.
3. The new form is easier to fill in and pass by voice or packet radio.



Form comparison

OLD FORM

NEW FORM

Cupertino ARK Status Rollup Message Form

Cupertino ARK Situation Status Report Form

Activation # _____	ARK/ICP: _____ DOC <input type="checkbox"/>
Method Sent: Voice <input type="checkbox"/> Packet <input type="checkbox"/>	Message Number: _____
TO: _____	Position: _____
FROM: _____	Position: _____
Subject: Status Rollup	Date: _____
Message Priority: Routine (Green) <input type="checkbox"/>	

¹ Message Priority: ROUTINE	² Message Number: _____
³ Activation Number: _____	⁴ Location: (ARK name) _____
⁵ TO: _____	⁷ FROM: _____
⁶ TO Position: _____	⁸ FROM Position: _____
⁹ SUBJECT: Status Rollup, (ARK name)	¹⁰ Date, Time: (mm/dd/yyyy, hh:mm)

***** CARES - Do Not Send This Format Information *****
 **** Instructions for IC and S&M – Using this format enter the names, number,
 Org, IncidentCommander, Status&Mapping, Operations, Logistics
 CellPh, IC_cell #, S&M_cell#, Ops_cell#, Logistics_cell#
 Current_Mil_Time, #CERT, #CARES, #MRC, #SUV
 +2_Hours_Mil_Time, #CERT, #CARES, #MRC, #SUV (estimated)
 Rollup, Mil_Time, #Injuries, #People-Trapped, #Structure, #Fires, #Flooding, #Utility, #Chemical,
 #Access, #Security, #Missing

***** CARES - Send message below as comma delimited format *****

Org, _____, _____, _____, _____
 CellPh, _____, _____, _____, _____
 Time, _____, _____, _____, _____
 Time+2, _____, _____, _____, _____
 Rollup, _____, _____, _____, _____, _____, _____, _____

Staff:	¹¹ IC Name: _____	_____
	¹² IC Cell Num: _____	_____
	¹³ S&M Name: _____	_____
	¹⁴ S&M Cell Num: _____	_____
	¹⁵ Ops Name: _____	_____
	¹⁶ Ops Cell Num: _____	_____
	¹⁷ Logistics Name: _____	_____
	¹⁸ Logistics Cell Num: _____	_____
Headcount	¹⁹ Time Now: _____	(hh:mm)
Now:	²⁰ CERT: _____	_____
	²¹ CARES: _____	_____
	²² MRC: _____	_____
	²³ SUV: _____	_____
Headcount	²⁴ Time in 2 hours: _____	(hh+2:mm)
in two hours:	²⁵ CERT: _____	_____
	²⁶ CARES: _____	_____
	²⁷ MRC: _____	_____
	²⁸ SUV: _____	_____
Roll-Up:	²⁹ Time Now: _____	(hh:mm)
	³⁰ # Injuries: _____	_____

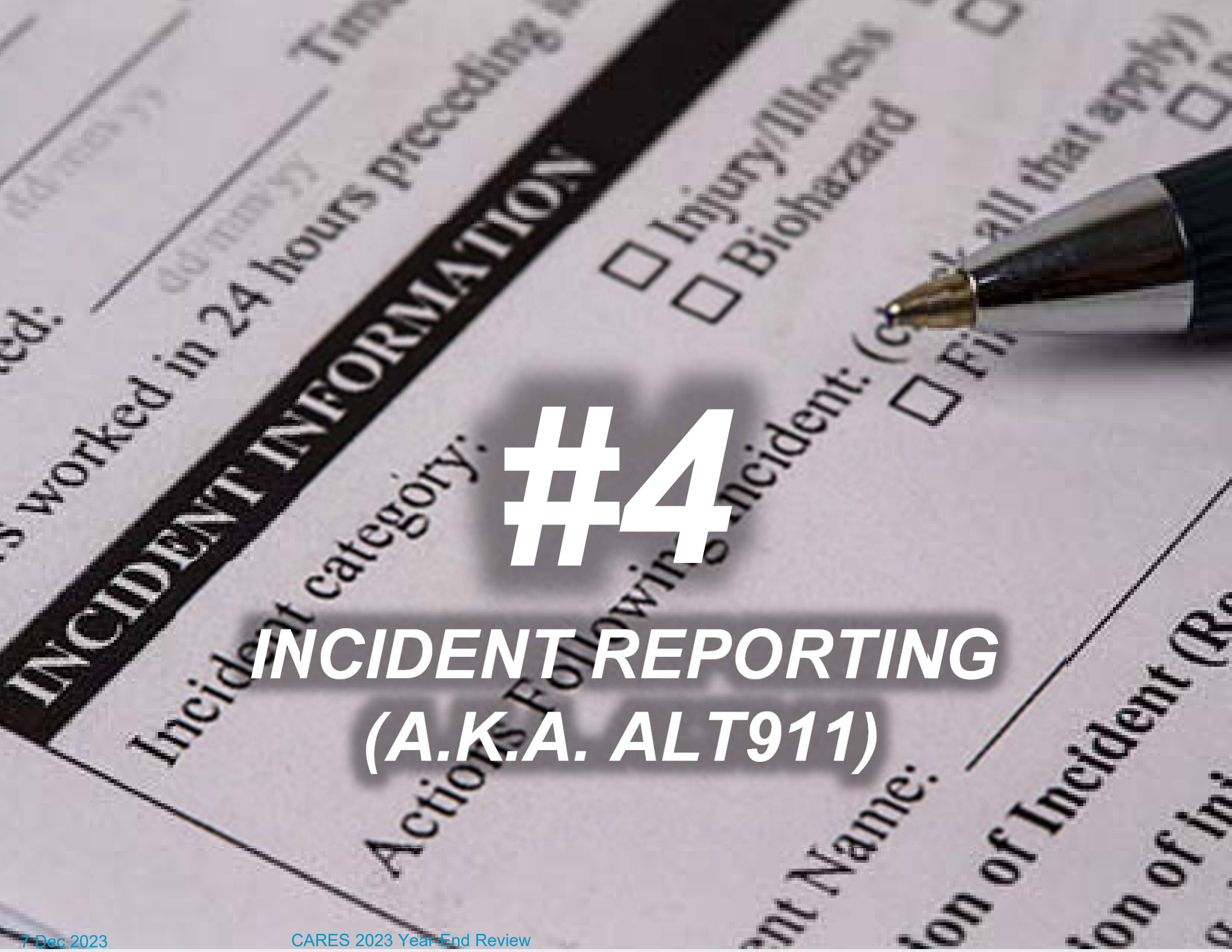
A packet version

1. You get handed the form
2. Fill in the spreadsheet
3. Copy columns C & D, or save as a .csv file
4. Paste into a packet msg
5. Address and send!
6. Add this .csv form now to your packet PC or packet USB drive.

Find this form here

CARES website > [Resources](#) > [Packet Operations](#)

	A	B	C	D	E	F	G	H
1	COES 213SS	SS-ARK: Cupertino ARK Situation Status Report Form						
2	Section	Item	Ref #	Data				
3		Form	0	COES213SS-ARK 230704				
4	Header	Priority	1					
5		Message No	2					
6		Activation No	3					
7		Location	4					
8		TO Name	5					
9		TO Pos	6					
10		FR Name	7					
11		Fr Pos	8					
12		Subj	9	Status Rollup, <ARK name>				
13		Date, Time	10	<mm/dd/yyyy>, <hh:mm>				
14	Staff Name	IC Name	11					
15		IC Cell Num	12					
16		S&M Name	13					
17		S&M Cell Num	14					
18		Ops Name	15					
19		Ops Cell Num	16					
20		Logistics Name	17					
21		Logistics Cell Num	18					
22	HeadCt No	Time Now	19	<hh:mm>				
23		CERT	20					
24		CARES	21					
25		MRC	22					
26		SUV	23					
27	HeadCt +2	Time in 2 hrs	24	<hh:mm>				
28		CERT	25					
29		CARES	26					
30		MRC	27					
31		SUV	28					



#4

INCIDENT REPORTING (A.K.A. ALT911)

Incident Reporting / ALT911

What is it?

1. A new method for collecting information for an Alternate 9-1-1 call when commercial phone service is out.
2. Can be used for passing voice and packet messages (yes, it is a PackItForm!).
3. Leverages the experience we gained by working with County Comm on our internal ALT911 solution.
4. Builds on the solution Cupertino OEM supports to solve the *last mile* issue to County Comm

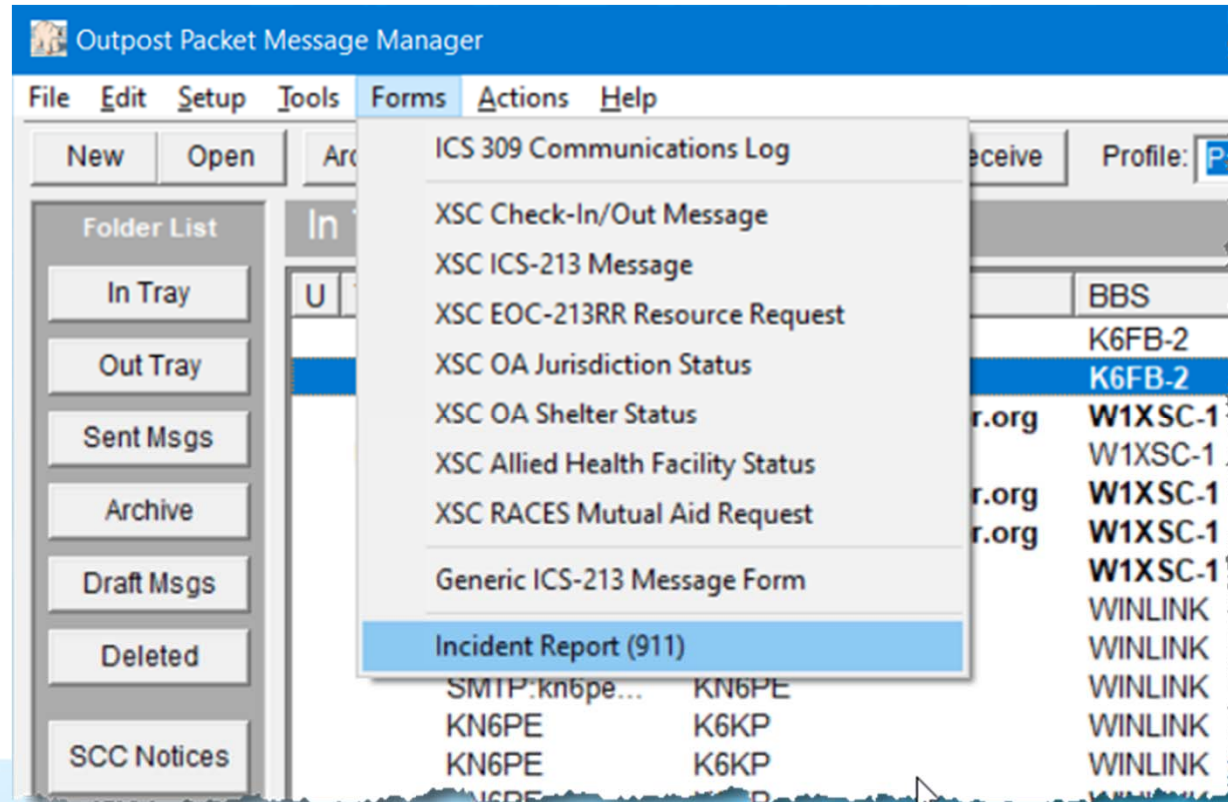
Why the change?

1. This replaces the ALT911 reporting tool that CARES previously deployed.
2. Leverages a common need expressed by several jurisdictions for data collection needed for Incident Reporting.
3. Broader solution ownership across the county.



Packet Radio Implementation

1. Integrates with the SCCo RACES Packet installer.
2. Find the software on the CARES website > [Resources](#) > [Packet Operations](#) > [911-Incident Report PackItForm](#)
3. Once installed, look at the Outpost Forms menu, last entry.
4. Packet Ops: Please do this now!
 - a) Uninstall the old ALT911 solution now!
 - b) Download and install the [911-Incident Report PackItForm](#) package.
 - c) Give it a try, and more training to come



No packet? Pass the message by voice

1. The goal is still to create a 9-1-1 dispatchable message.
2. CARES website > [Forms](#) > [9-1-1 Incident Reporting Form](#)
3. We will pass form data by field number, and only for the filled-in fields.
4. Minimum number of required fields.
5. More training to come, and...
6. ... we will work this into a 2024 field comm exercise.

Incident Reporting Form (911)		
Field Numbers Correspond to Instructions on Back of Printed Form		
Message Numbers:	Origin:	Destination:
Date:	Time when incident was observed:	
Incident Information		
Incident Address: ¹ _____		
Common Place Name: ² _____		
Brief Description: ³ _____		
Reporting Person (RP)		
Name: ⁴ _____		Phone: ⁵ _____
Suspect / Subject		
Race: ⁶ _____	Gender: ⁷ _____	Age: ⁸ _____
Height: ⁹ _____	Weight: ¹⁰ _____	Hair: ¹¹ _____
Build: ¹² _____	Clothing: ¹³ _____	
Last Known Location: ¹⁴ _____		
Weapon Seen: ¹⁵ _____		
Vehicle (e.g. hit-and-run or suspect's vehicle. Not necessary for most traffic accidents.)		
Color: ¹⁶ _____	Year: ¹⁷ _____	State: ²⁰ _____
Make: ¹⁸ _____	License: ¹⁹ _____	
Model/Type: ²¹ _____		
Victim / Patient		
Gender: ²² _____	Adult Child: ²³ _____	Age: ²⁴ _____
Conscious: ²⁶ <input type="radio"/> Yes <input type="radio"/> No	Is Patient Breathing: ²⁶ <input type="radio"/> Yes <input type="radio"/> No	
Injury / Condition: ²⁷ _____		
Fire		



#3

***IF A TANK LEAKS,
WHAT WILL SJWC DO?***

Do we have water tanks in Cupertino?

San Jose Water Company

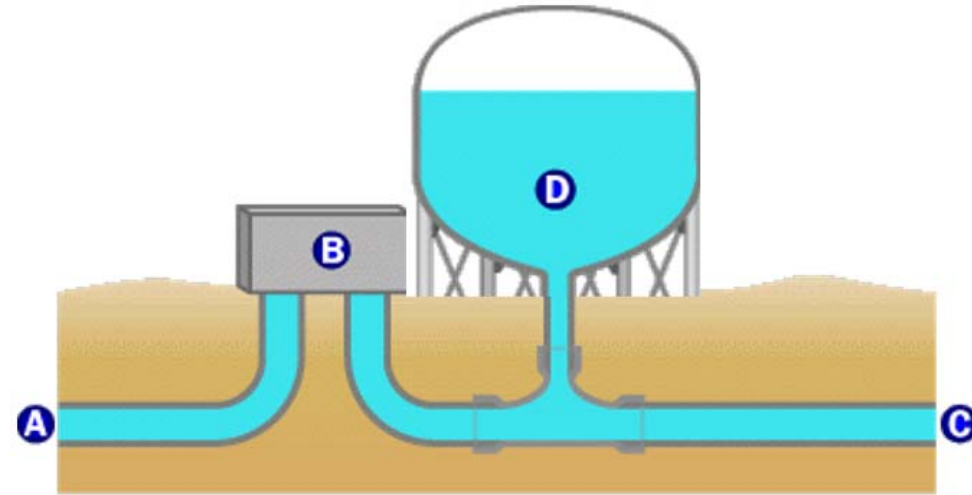
What does SJWC have in Cupertino?

- Tanks... 10
- Pump stations... 4
- Wells... 3
- Miles of water mains

How the system works

San Jose Water Company

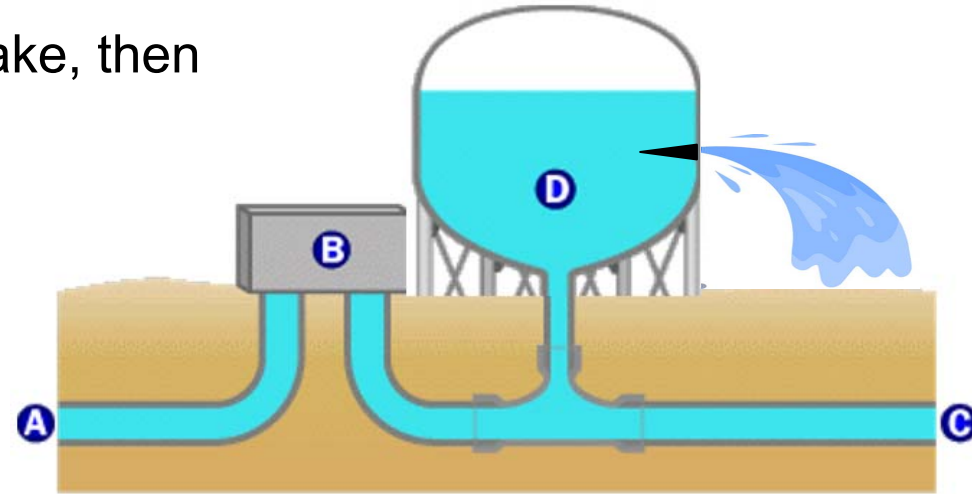
- A** From the supplier of the treatment plant
- B** Pump station – a high-lift pump that pressurizes the water.
 - If the pump is producing more water than the community needs, then the excess flows automatically into the tank.
 - If the community is demanding more water than the pump can supply, then water flows out of the tank to meet the need.
- C** To primary feeders and customers
- D** Water



What happens if a tank is damaged?

The plan

- SJWC's goal is to keep the water distribution system pressurized.
- If a tank is damaged due to an earthquake, then **DO NOT** turn off the pumps.
- If the tank and pumps are lost, then the water system loses pressure and the community may be subject to a ***Boil Water Order***.
- ***Boil Water Orders*** are used to keep people from getting sick from bacteria and other contaminants that may be present in drinking water. They are usually issued when there is flooding, broken water lines, power failures, water treatment failures, or pumping difficulties.
- ***ISA Bottom line:*** Both tanks and pump stations make up a complete system. If a tank problem is reported, we definitely want to know about the pump stations!



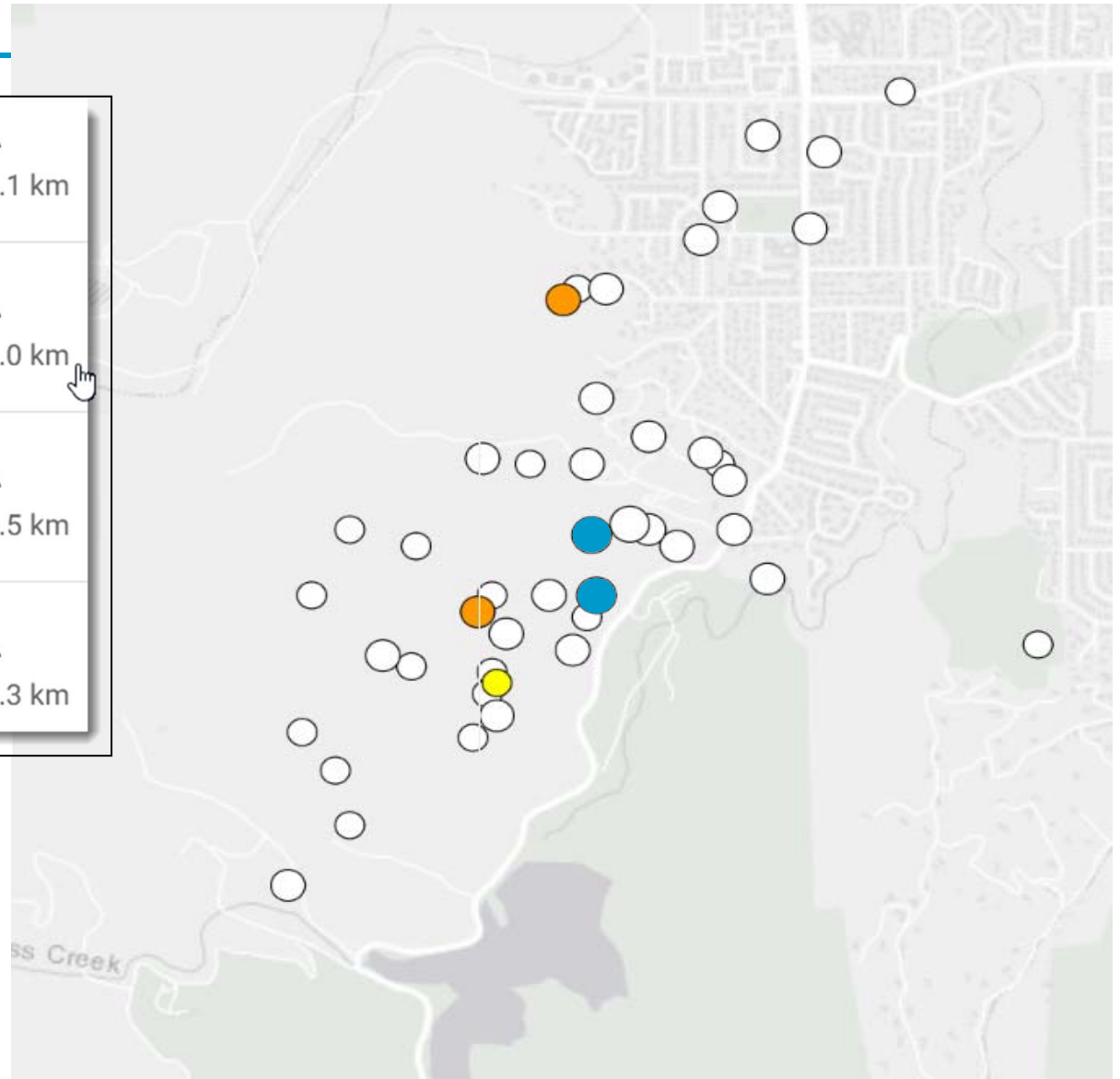
A black and white seismogram showing seismic activity. The background features a horizontal line with various amplitude fluctuations. A large, semi-transparent grey circle is centered behind the text "#2".

#2

***EARTHQUAKES...
ALWAYS WITH US?***

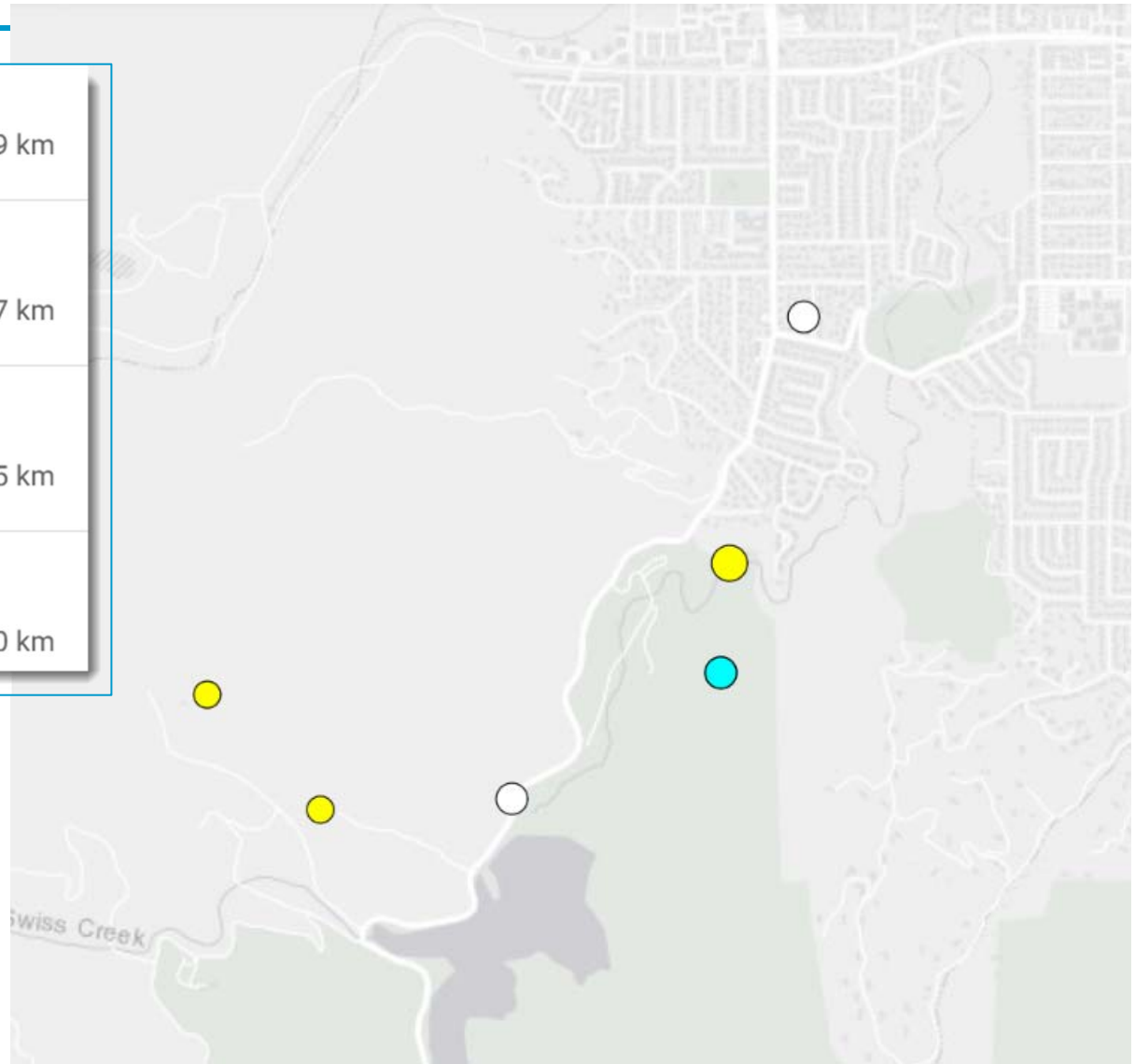
Cupertino Earthquakes, 1 October

2.9	4 km WSW of Cupertino, CA 2023-09-21 00:14:07 (UTC-07:.... 8.1 km
2.8	4 km WSW of Cupertino, CA 2023-09-22 11:03:14 (UTC-07:.... 8.0 km
2.1	4 km WSW of Cupertino, CA 2023-09-22 23:59:24 (UTC-07:.... 6.5 km
1.9	4 km WSW of Cupertino, CA 2023-10-02 22:49:51 (UTC-07:.... 6.3 km



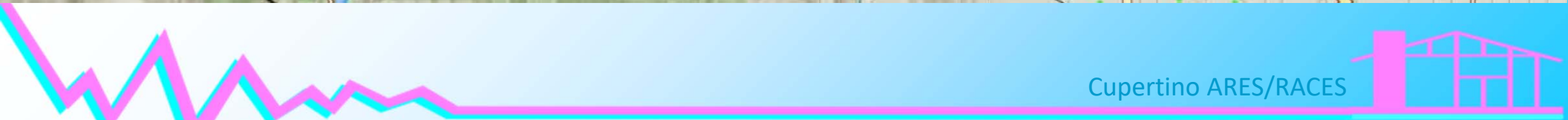
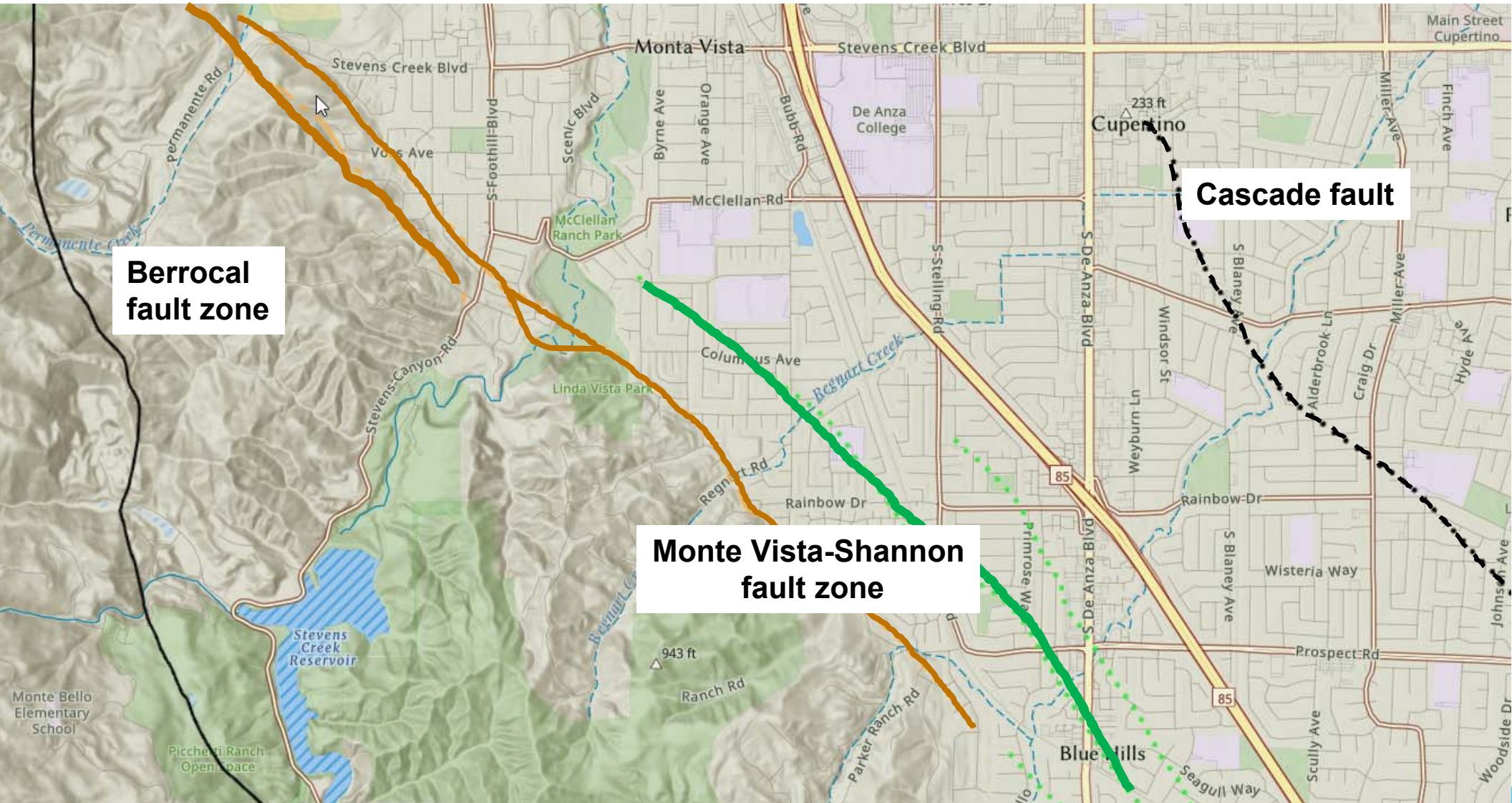
... and today

2.2	4 km WSW of Cupertino, CA	2023-12-02 03:08:02 (UTC-08:...	6.9 km
1.4	4 km WSW of Cupertino, CA	2023-11-04 19:10:50 (UTC-07:...	5.7 km
1.2	3 km WSW of Cupertino, CA	2023-11-20 18:59:39 (UTC-08:...	5.5 km
1.0	5 km WSW of Cupertino, CA	2023-11-04 19:24:41 (UTC-07:...	5.0 km

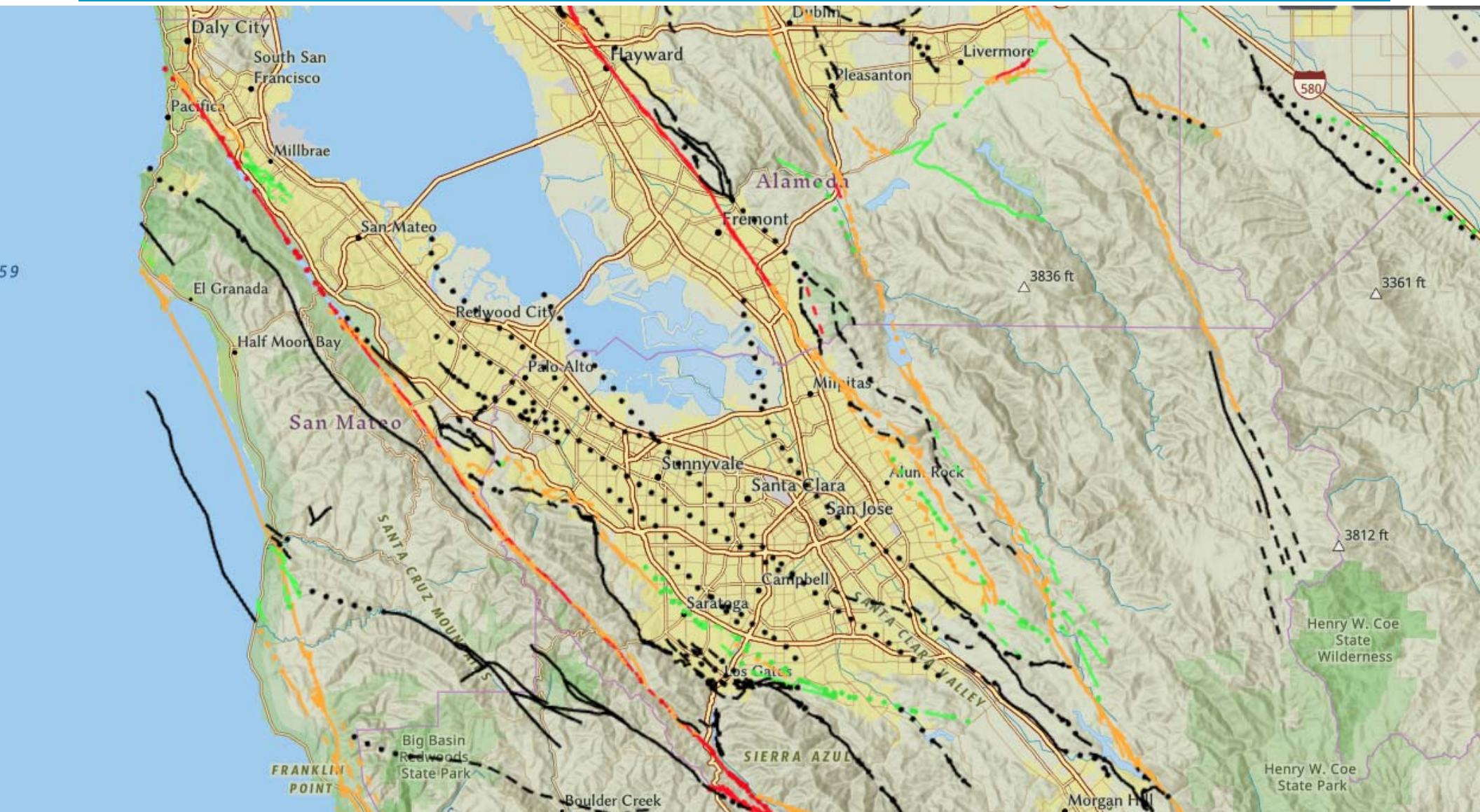


Yes, we have faults

<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>



... as does the Bay Area



What are the risks

near Santa Clara County

GREATER BAY AREA



76%

LIKELIHOOD OF ONE OR MORE M7.0+ QUAKES STRIKING NORTHERN CA*



SAN ANDREAS & HAYWARD

NOTABLE FAULTS



LESS THAN 10 MILES

PROXIMITY TO A MAJOR FAULT

Ref: <https://www.earthquakeauthority.com/California-Earthquake-Risk/Faults-By-County>





#1 WEST COAST CYCLONE



AlertSCC

Sheriff's Notification

Thursday, March 9...

Monday March 13...

Tuesday March 14...

15:01



< 106



88911 >

Thu, Mar 9 at 14:48

SCC COMMUNITY SAFETY ADVISORY: Prepare now for rain and potential flooding. www.PrepareSCC.org/Flood

Mon, Mar 13 at 17:22

SCC COMMUNITY SAFETY ADVISORY: Prepare now for rain and potential flooding. www.PrepareSCC.org/Flood

Tue, Mar 14 at 12:51

This is the Santa Clara County Sheriffs Office. Due to the high winds please STAY... <https://evb.gg/n#oj444chmpi/0aH1S2fu> or Reply with YES to confirm receipt.

Yes



Text Message

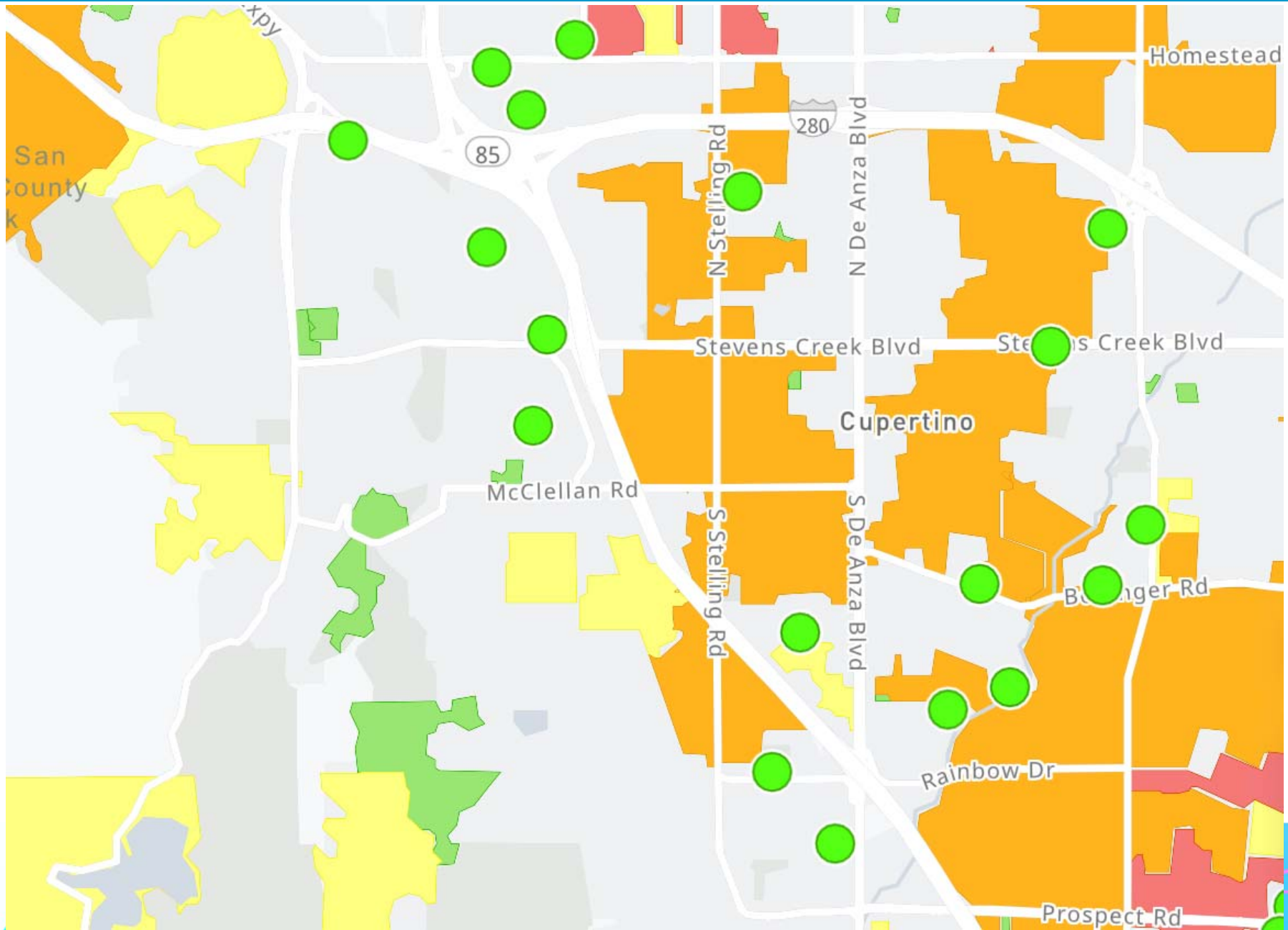


Increased Readiness Ops

- On Tuesday 14-March, Cupertino OEM asked us to report on damage in the city caused by an extreme wind that followed an atmospheric river.
- CARES shifted to **Increased Readiness Ops**, then **Initial Response Ops** once we were activated under CUP-23-100.
- Specifically, identify and report on wind-related damage and situations involving downed trees, down power poles, access problems, power and communications outages, and damage to property in a members' immediate neighborhood.
- Due to the risk from blowing debris, there was no intent to deploy CARES members into the field to perform a more detailed damage assessment (however, some members ventured out anyway).
- Over the course of 3 hours, 13 CARES members responded and provided local damage information.



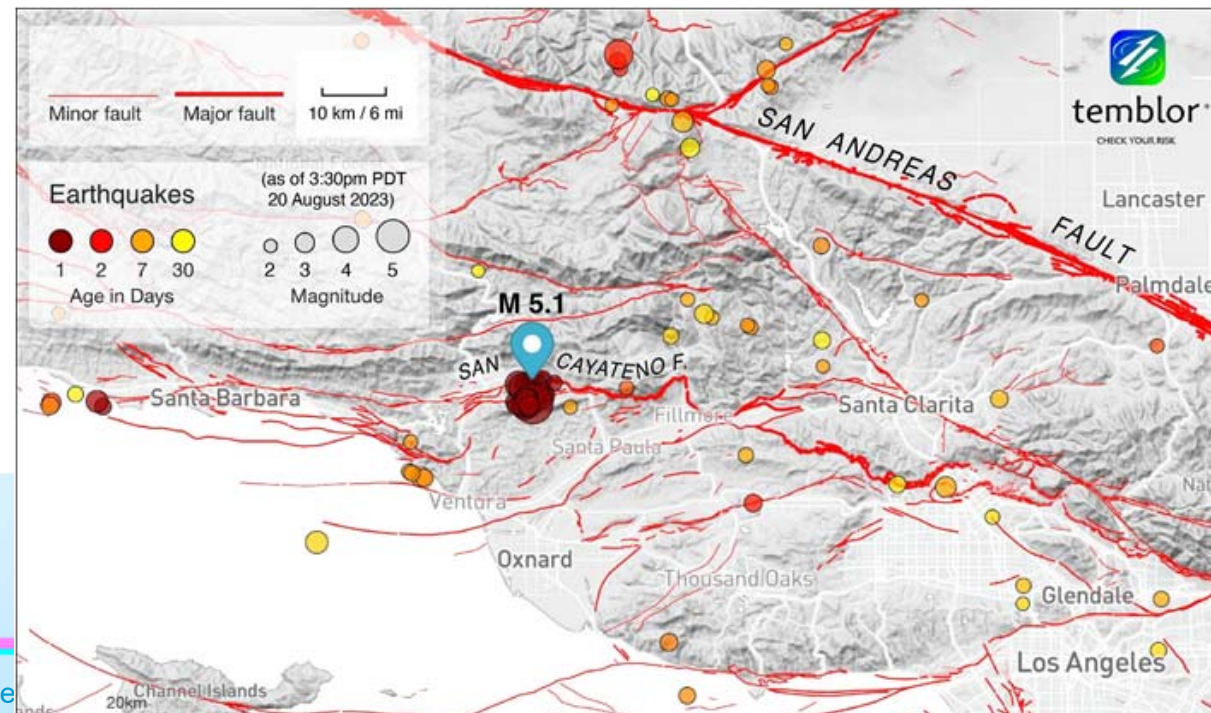
Power Outages in the city



When it rains, it... shakes?

Dealing with compound disasters

- Southern California shaken by earthquake during unrelated hurricane,
- On Sunday (20-August-2023), a magnitude-5.1 earthquake struck about 7 kilometers (4.3 miles) southeast of Ojai, CA., likely due to a small, as-yet unidentified fault near the San Cayetano Fault.
- The confluence of earthquake and Tropical Storm Hilary is an unfortunate coincidence.



Could it happen again?

- And, what would we do differently?
- We will talk about this during the January meeting.



Thank you

Any Questions?

