

Cupertino ARES / RACES Operational Checkpoint on Risks

1 Sept 2016

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CARES mission

The mission of Cupertino ARES is to maintain and train Amateur Radio volunteers capable of providing professional emergency communications, increasing the City's emergency response effectiveness, and speeding the recovery effort.

What keeps the City up at night?

The City has listed the following as hazards of concern:

1. Civil Disturbance
2. Dam Failure
3. Earthquake
4. Power system disruption (Power Failure)
5. Water system disruption (no potable water)
6. Floods
7. Hazardous Materials
8. Landslides
9. Transportation Accidents
10. Terrorism/Weapons of Mass Destruction
11. Wildland/Urban Interface Fires

Ref: Cupertino Emergency Operations Plan, 2005

Dealing with the risks

- **Hazards**

- 2. Dam Failure
- 3. Earthquakes
- 4. Power Failure
- 10. Terrorism/WMD
- 11. Wildland/Urban Interface Fires

- **Served Agencies**

- City of Cupertino
- SCCFD
- Cupertino Sanitary District
- San Jose Water

- **Processes**

- Operational Process
- Preliminary Safety Assessment
- Infrastructure Safety Assessment
- Field Communications
- EOC support

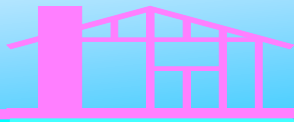
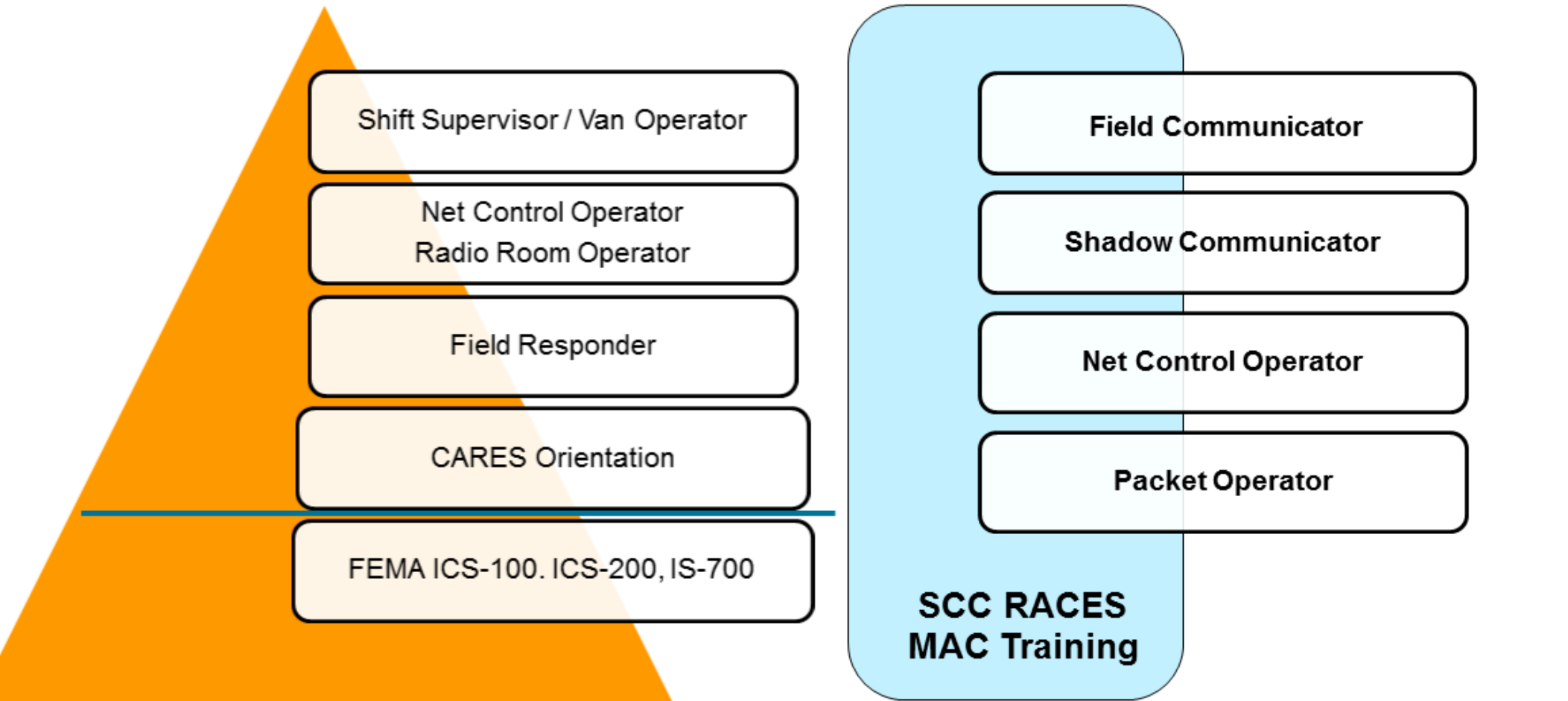
- **Tools**

- Voice Messaging
- Packet Messaging
- Mesh? Wide Area Networking?

- **Partners**

- CERT
- MRC
- County RACES

CARES Training Program



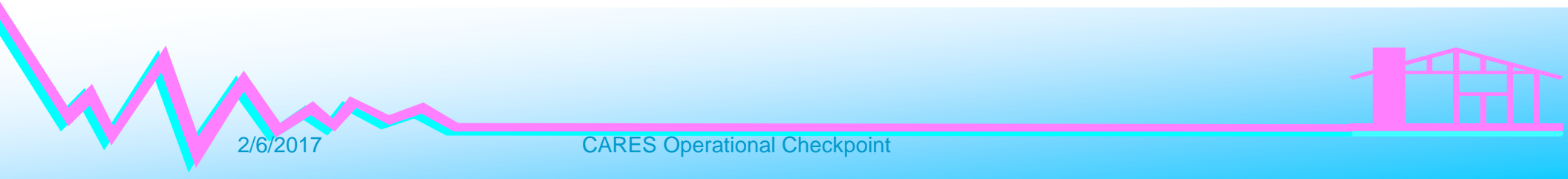
Hazards and Capabilities

Considerations for the City

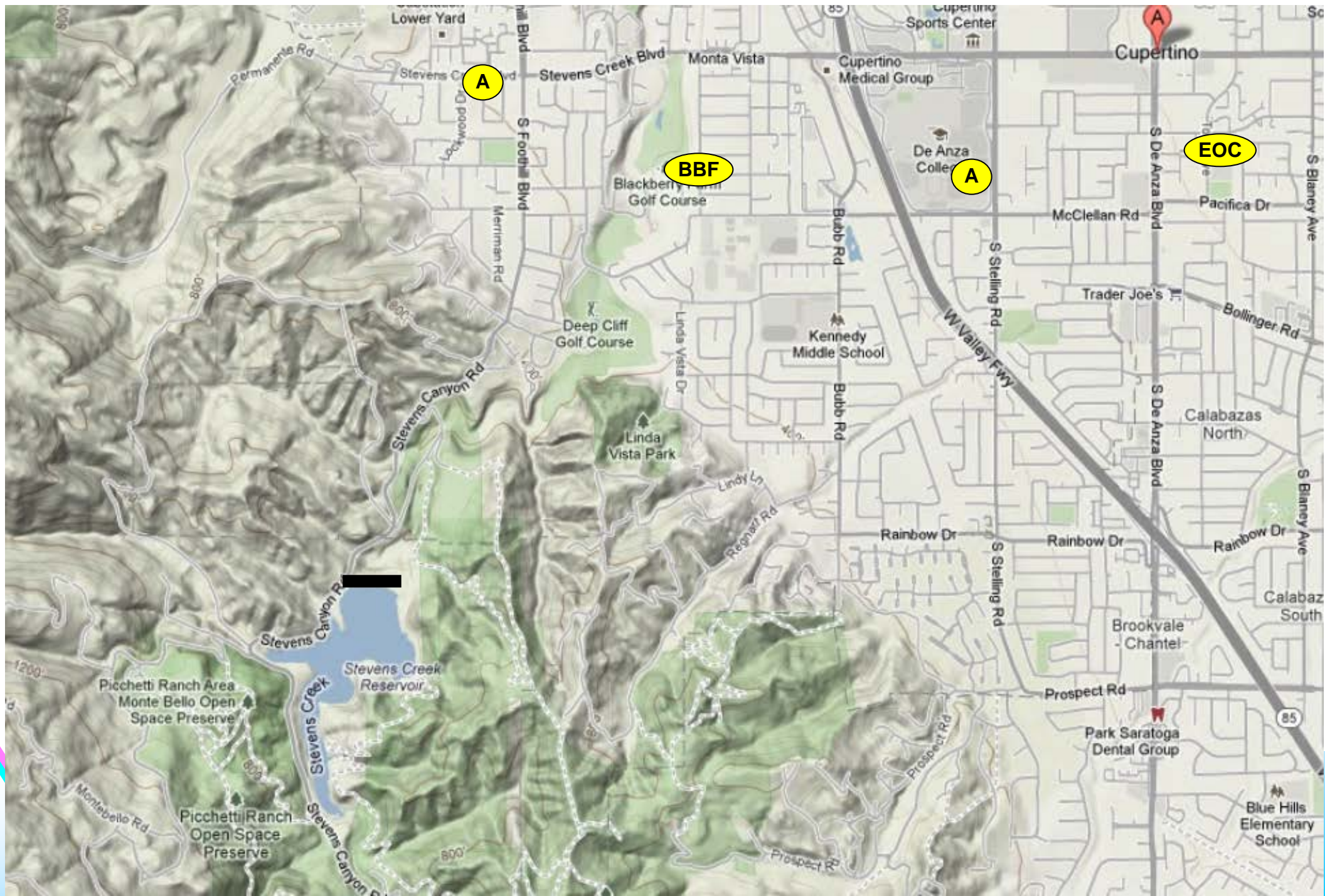
| Hazards | What could go wrong | Response | |
|--|--|---|---|
| | | Requirements | Capabilities |
| <ul style="list-style-type: none">• Dam Failure• Earthquakes• Power Failure• Terrorism/WMD• Wildland Fire• Urban Interface Fire | <ul style="list-style-type: none">• People – Injuries• People – Trapped• People – Homeless• People – Hungry• People – Sick• Structures Damaged• Structures Burning• Utilities – Power• Utilities – Gas main• Utilities – Sewage• Utilities – Water• Access problems• Communications loss | <ul style="list-style-type: none">• Mass care shelters• Evacuations• Field First Aid stations• Mass care, feeding• DC/Fire Suppression• DC/Prelim Safety• Mass Prophylaxis• Search and Rescue• Information Outreach• Information Gathering | <ul style="list-style-type: none">• Safety Assessments• Shelter Staff• Search & Rescue• First Aid• Fire Suppression• Watches (creek, fire, traffic, incident, etc.)• Communications (Field, Shadows, etc.)• General resource |

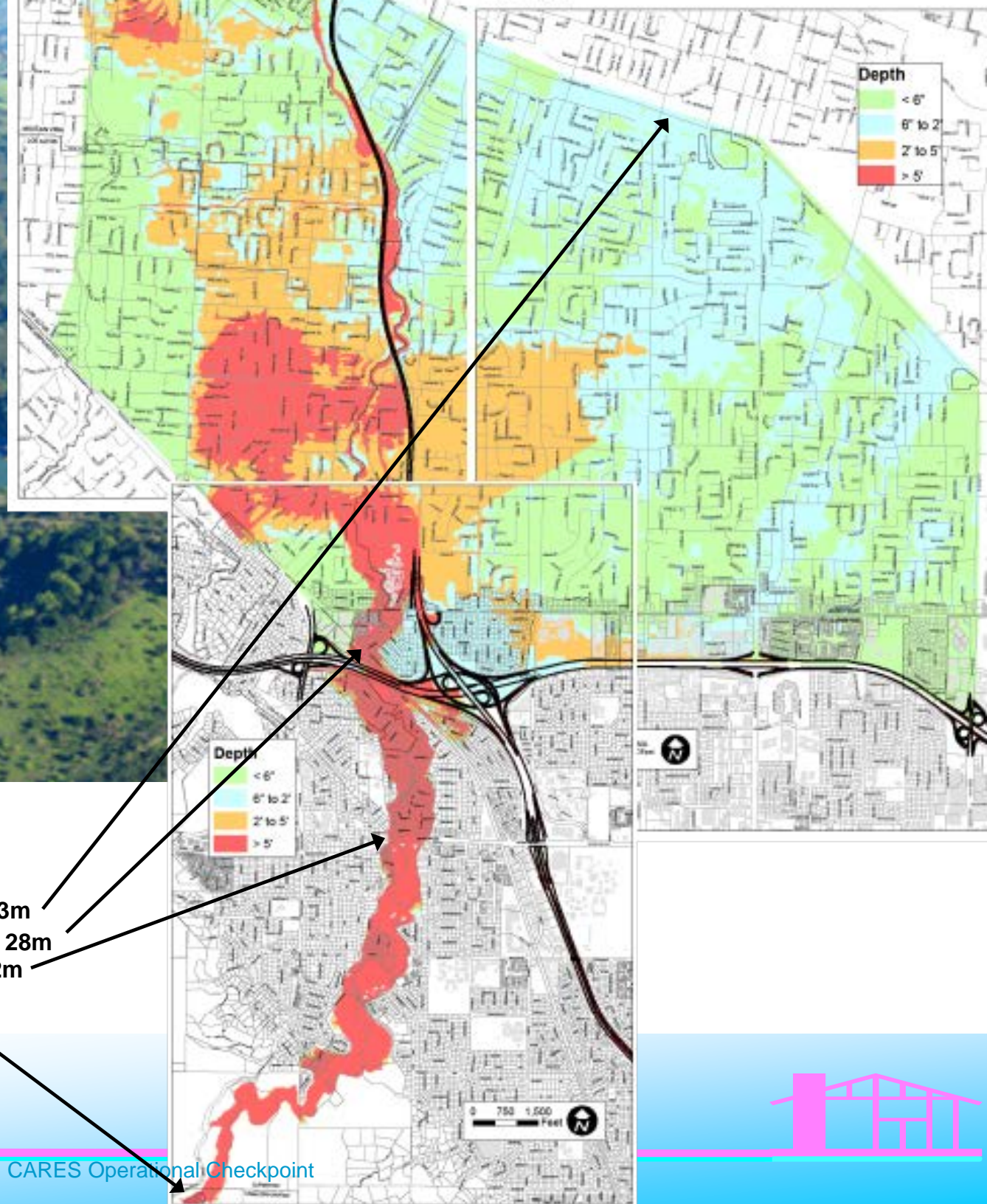


Dam Failure



Cupertino Topography





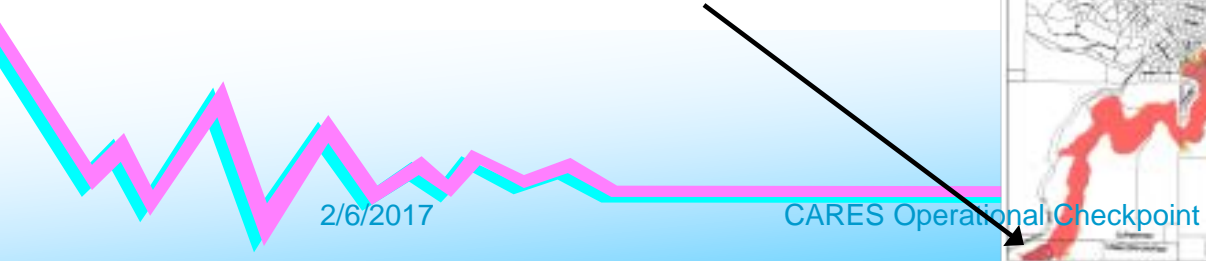
Flood / Peak / Deflood Times

Central Expy: 33m / 2h13m / 5h53m

I-280, North Side: 24m / 30m / 1h 28m

Stevens Ck Blvd: 15m / 19m / 32m

At the Dam: 0m / 7m / 13m



Dam Failure

Mapping Capabilities to Hazards

| Hazards | What could go wrong | Response | |
|---|--|---|---|
| | | Requirements | Capabilities |
| <ul style="list-style-type: none">• Dam Failure• Earthquakes• Power Failure• Terrorism/WMD• Wildland Fire• Urban Interface Fire | <ul style="list-style-type: none">• People – Injuries• People – Trapped• People – Homeless• People – Hungry• People – Sick• Structures Damaged• Structures Burning• Utilities – Power• Utilities – Gas main• Utilities – Sewage• Utilities – Water• Access problems• Communications loss | <ul style="list-style-type: none">• Mass care shelters• Evacuations• Field First Aid stations• Mass care, feeding• DC/Fire Suppression• DC/Prelim Safety• Mass Prophylaxis• Search and Rescue• Information Outreach• Information Gathering | <ul style="list-style-type: none">• Safety Assessments• Shelter Staff• Search & Rescue• First Aid• Fire Suppression• Watches (creek, fire, traffic, incident, etc.)• Communications (Field, Shadows, etc.)• General resource |



Dam Failure

Initial Response Actions

| | |
|----------------|--|
| City Staff | <ul style="list-style-type: none">• Informed of a problem• Resident communications• Initiates CARES, CERT, MRC activation |
| Various | <ul style="list-style-type: none">• Simultaneous resident notifications: EAS, Alert SCC, CAS, County Comm, Radio Cupertino, Local TV & Radio |
| County Fire | <ul style="list-style-type: none">• Search and Rescue as necessary |
| County Sheriff | <ul style="list-style-type: none">• Direct evacuation• Public safety, traffic control• Law and Order |
| CERT, MRC | <ul style="list-style-type: none">• Staff Shelters?• Resource support as needed |
| CARES | <ul style="list-style-type: none">• EOC support• Resource support as needed |



Dam Failure

Objective: mitigate damage to infrastructure and property, preserve life

| | What the City needs | CARES | CERT | MRC |
|--|---|---|---|---|
| Notification | | CAS | CAS | CAS |
| What do you do first | | <ul style="list-style-type: none">• Take care of family at home | <ul style="list-style-type: none">• Take care of family at home | <ul style="list-style-type: none">• Take care of family at home |
| Activation / Mobilization | <ul style="list-style-type: none">• Information on the dam failure impact• Need volunteers for various assignments | <ul style="list-style-type: none">• Activate, check into emergency net• Stand by | <ul style="list-style-type: none">• Stand by | <ul style="list-style-type: none">• Stand by |
| Deployment (Help stabilize the situation) | <ul style="list-style-type: none">• Neighborhood notification of hazards• Shelters opened | <ul style="list-style-type: none">• Comm van staffed• Respond as requested. | <ul style="list-style-type: none">• Respond as requested | <ul style="list-style-type: none">• Respond as requested |
| Recovery | <ul style="list-style-type: none">• Field Status Reports | <ul style="list-style-type: none">• Operational period reports | <ul style="list-style-type: none">• Operational period reports | <ul style="list-style-type: none">• Operational period reports |
| Demob | <ul style="list-style-type: none">• List of supplies to be replenished | <ul style="list-style-type: none">• PPE inventory• CARES asset inventory | <ul style="list-style-type: none">• PPE inventory• ARK asset, supplies inventory | <ul style="list-style-type: none">• PPE inventory• ARK First Aid asset, supplies inventory |



Dam Failure

CARES response assignments

| | |
|-------------------------------------|--|
| 1. Field Response | Respond and operate at field locations as needed. |
| 2. Preliminary Safety Assessment | Not required. |
| 3. Infrastructure Safety Assessment | Possibly required ... Depending on served agency resource constraints. |
| 4. EOC Support | Support the EOC |

Our response... Field Exercise

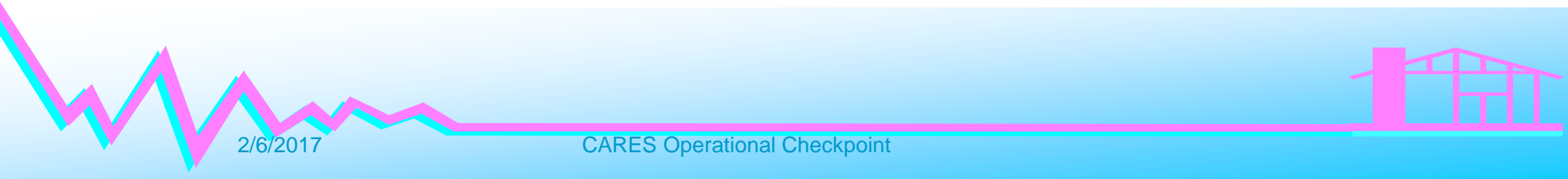
CUP-12-09T October 2012

1. Stevens Creek Dam Failure Plan approved October 2012
2. CCC drill held in October 2012 (CAS information outreach)

Next Steps

1. Determine the requirement for periodically running a Dam failure exercise from a CCC perspective

Wildland Fire



U.S. Drought Monitor California

April 22, 2014

(Released Thursday, Apr. 24, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--|------|--------|--------|-------|-------|-------|
| Current | 0.00 | 100.00 | 100.00 | 96.01 | 76.68 | 24.77 |
| Last Week <i>4/15/2014</i> | 0.00 | 100.00 | 99.80 | 95.21 | 68.76 | 23.49 |
| 3 Months Ago <i>1/21/2014</i> | 1.43 | 98.57 | 94.18 | 89.91 | 62.71 | 0.00 |
| Start of Calendar Year <i>12/31/2013</i> | 2.61 | 97.39 | 94.25 | 87.53 | 27.59 | 0.00 |
| Start of Water Year <i>10/1/2013</i> | 2.63 | 97.37 | 95.95 | 84.12 | 11.36 | 0.00 |
| One Year Ago <i>4/23/2013</i> | 2.84 | 97.16 | 63.42 | 30.00 | 0.00 | 0.00 |

Intensity:

| | |
|--|---|
|  D0 Abnormally Dry |  D3 Extreme Drought |
|  D1 Moderate Drought |  D4 Exceptional Drought |
|  D2 Severe Drought | |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

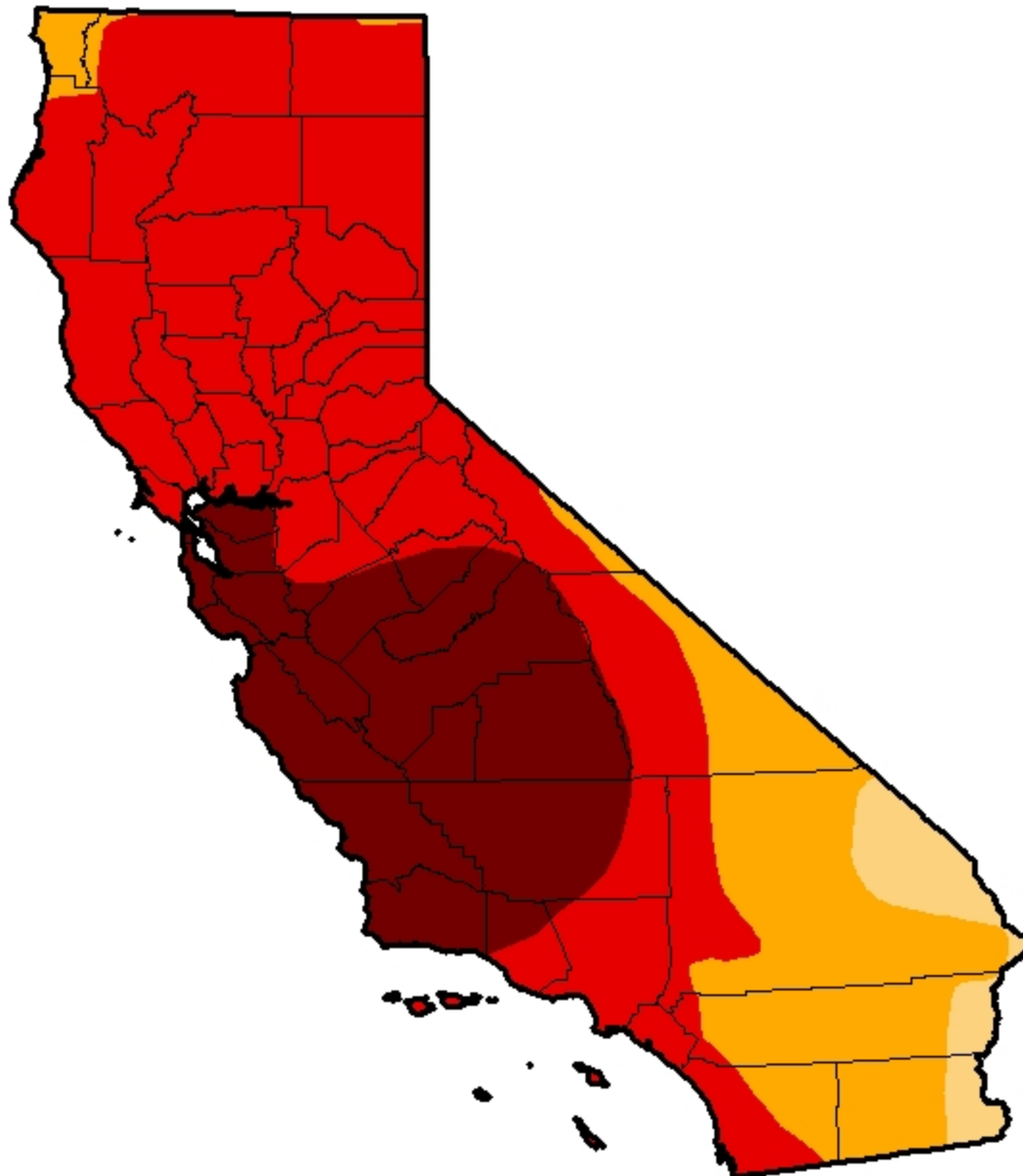
Author:

Richard Heim

NCDC/NOAA

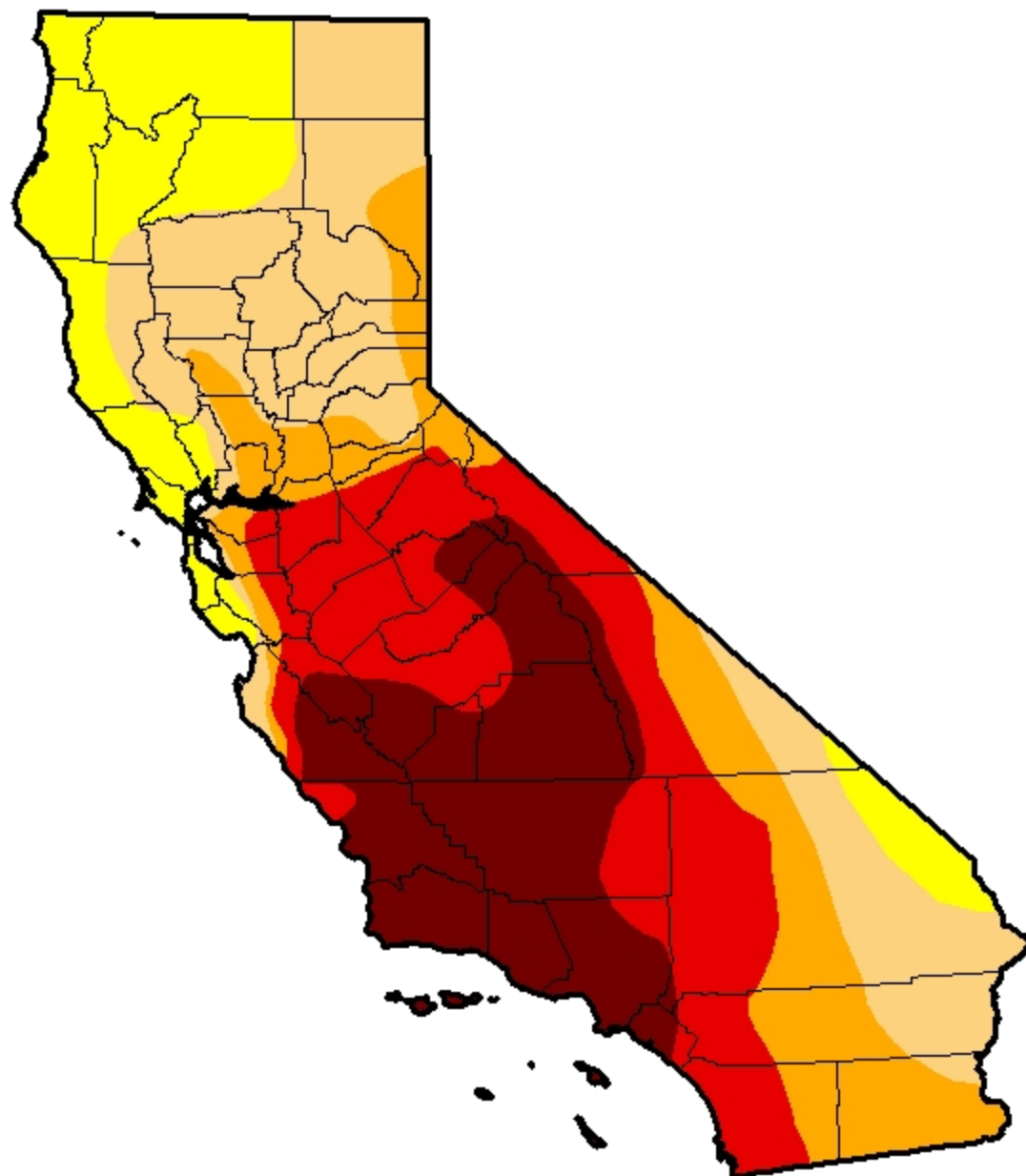


<http://droughtmonitor.unl.edu/>



U.S. Drought Monitor California

August 23, 2016
(Released Thursday, Aug. 25, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|------|--------|-------|-------|-------|-------|
| Current | 0.00 | 100.00 | 83.59 | 59.02 | 42.80 | 21.04 |
| Last Week 8/16/2016 | 0.00 | 100.00 | 83.59 | 59.02 | 42.80 | 21.04 |
| 3 Months Ago 5/24/2016 | 5.50 | 94.50 | 86.39 | 61.00 | 42.99 | 21.04 |
| Start of Calendar Year 12/29/2015 | 0.00 | 100.00 | 97.33 | 87.55 | 69.07 | 44.84 |
| Start of Water Year 9/29/2015 | 0.14 | 99.86 | 97.33 | 92.36 | 71.08 | 46.00 |
| One Year Ago 8/25/2015 | 0.14 | 99.86 | 97.35 | 92.36 | 71.08 | 46.00 |

Intensity:

| | |
|---------------------|------------------------|
| D0 Abnormally Dry | D3 Extreme Drought |
| D1 Moderate Drought | D4 Exceptional Drought |
| D2 Severe Drought | |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brad Rippey
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

Wildland Fire

Mapping Capabilities to Hazards

| Hazards | What could go wrong | Response | |
|---|--|---|---|
| | | Requirements | Capabilities |
| <ul style="list-style-type: none">• Earthquakes• Dam Failure• Power Failure• Terrorism/WMD• Wildland Fire• Urban Interface Fire | <ul style="list-style-type: none">• People – Injuries• People – Trapped• People – Homeless• People – Hungry• People – Sick• Structures Damaged• Structures Burning• Utilities – Power• Utilities – Gas main• Utilities – Sewage• Utilities – Water• Access problems• Communications loss | <ul style="list-style-type: none">• Mass care shelters• Evacuations• Field First Aid stations• Mass care, feeding• DC/Fire Suppression• DC/Prelim Safety• Mass Prophylaxis• Search and Rescue• Information Outreach• Information Gathering | <ul style="list-style-type: none">• Safety Assessments• Shelter Staff• Search & Rescue• First Aid• Fire Suppression• Watches (creek, fire, traffic, incident, etc.)• Communications (Field, Shadows, etc.)• General resource |



Wildland Fire

Objective: mitigate damage to infrastructure and property, preserve life

| | What the City needs | CARES | CERT | MRC |
|--|--|---|---|---|
| Notification | | CAS | CAS | CAS |
| What do you do first | | <ul style="list-style-type: none">• Take care of family at home | <ul style="list-style-type: none">• Take care of family at home | <ul style="list-style-type: none">• Take care of family at home |
| Activation / Mobilization | <ul style="list-style-type: none">• Help with initial EOC staffing• Need volunteers for various assignments | <ul style="list-style-type: none">• Activate, check into emergency net• Stand by | <ul style="list-style-type: none">• Stand by | <ul style="list-style-type: none">• Stand by |
| Deployment (Help stabilize the situation) | <ul style="list-style-type: none">• Neighborhood notification of hazards• Shelters opened• City official shadows | <ul style="list-style-type: none">• Comm Van staffed• Assign Field Responders as needed• Support Agency Reps• Assign to Fire Watch Teams | <ul style="list-style-type: none">• Activate ARK(s)• Establish, staff ICS• Check in volunteers• Assemble, dispatch information teams• Assign volunteers to Fire Watch teams• Assign volunteers to shelters | <ul style="list-style-type: none">• Establish First Aid Stations at or near open Shelters |



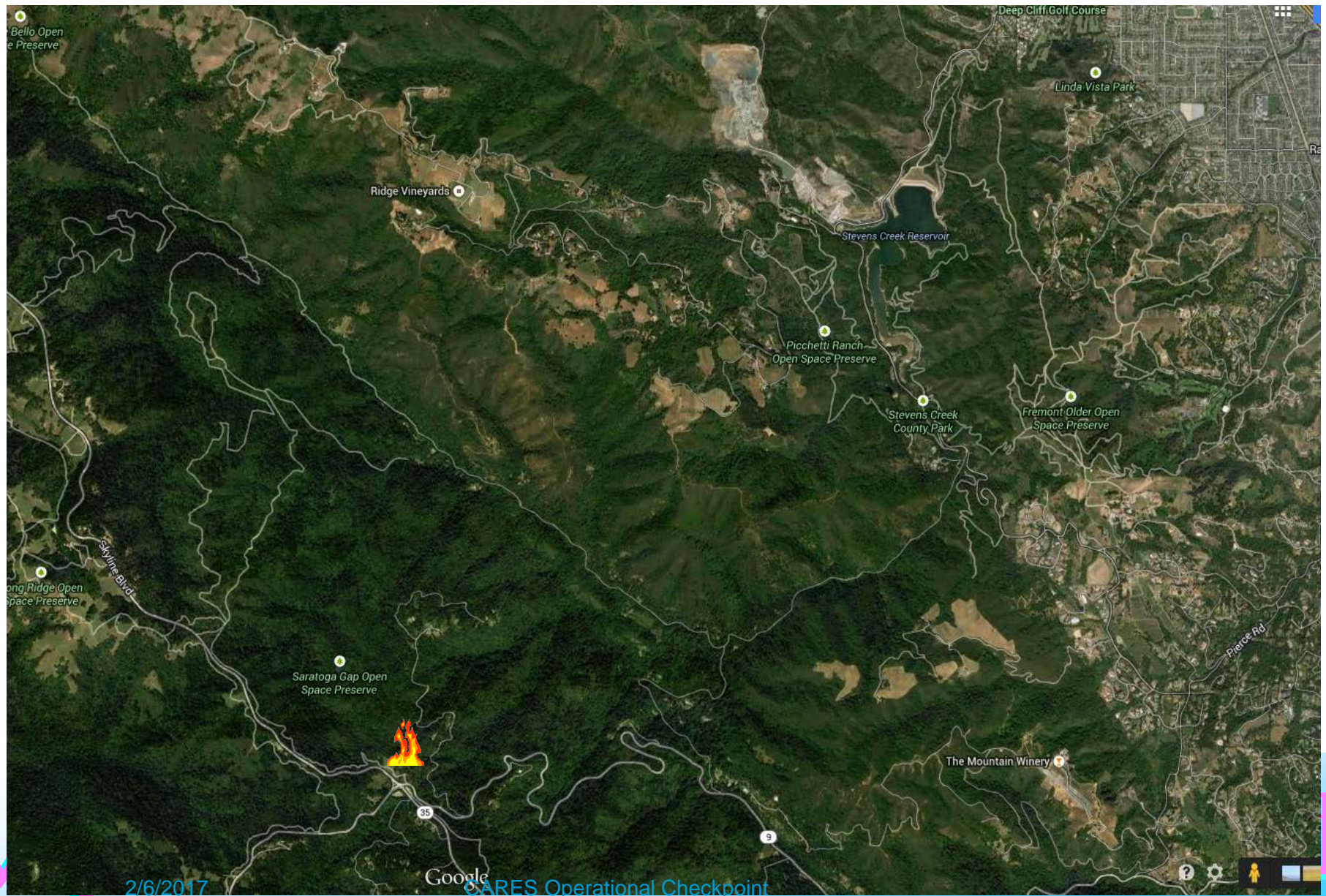
Wildland Fire

CARES response assignments

| | |
|-------------------------------------|---|
| 1. Preliminary Safety Assessment | Collect and report information about the state of the city immediately after a city-wide emergency or disaster occurred. |
| 2. Field Response | <p>Respond and operate at a field assignment during a declared emergency.</p> <ul style="list-style-type: none">• Ember watch / Ember patrols• Shadows (Sheriff, Agency Rep, Cal Fire, County Fire, City officials, others)• Shelter communications |
| 3. Infrastructure Safety Assessment | Observe and report on selected Cupertino critical facilities that are deemed to be important to the City or other Agencies. |
| 4. EOC Support | <ul style="list-style-type: none">• Staff the Comm Van• Provide situation roll-up of field reports |

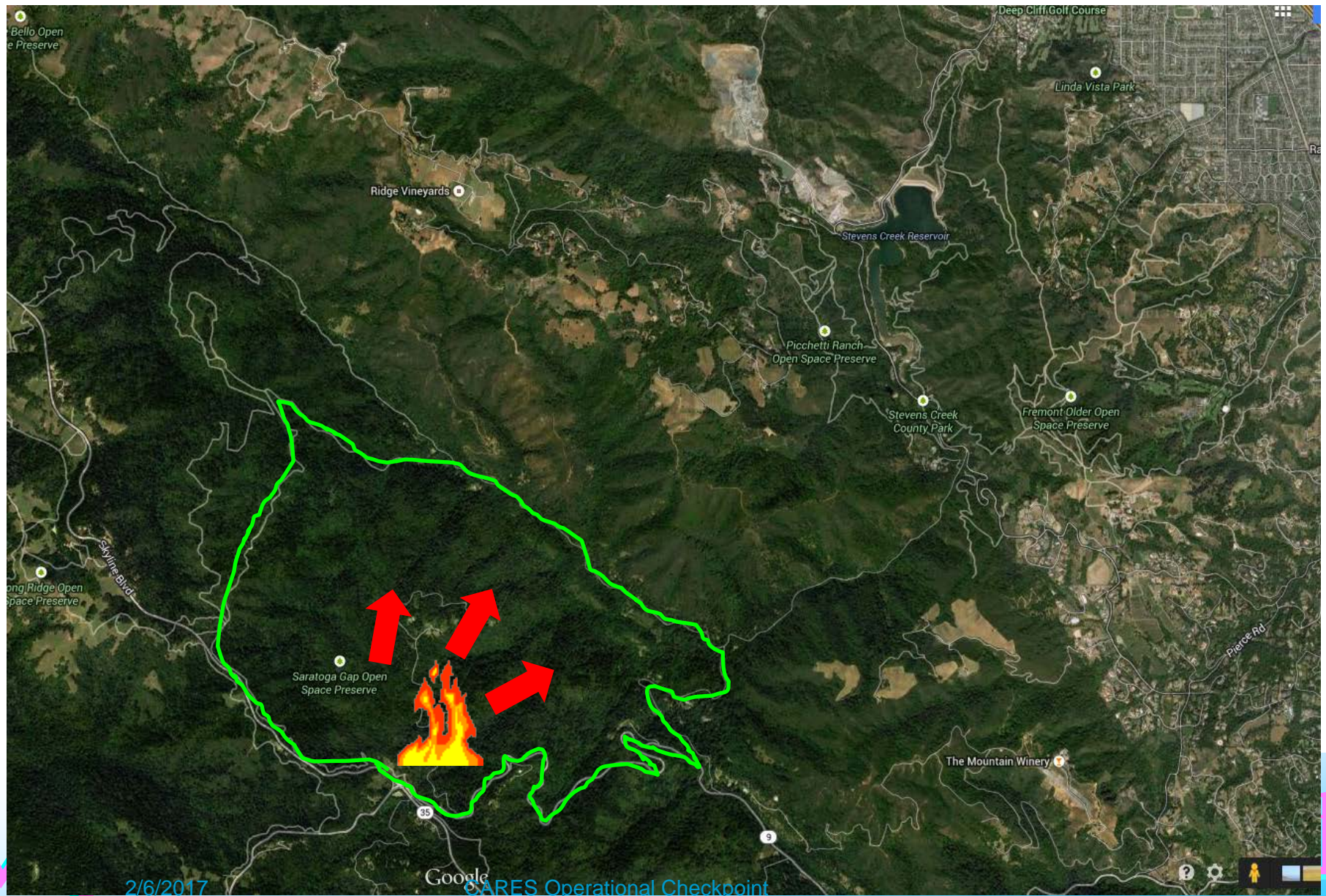
Tuesday Night

Fire Starts at Saratoga Gap



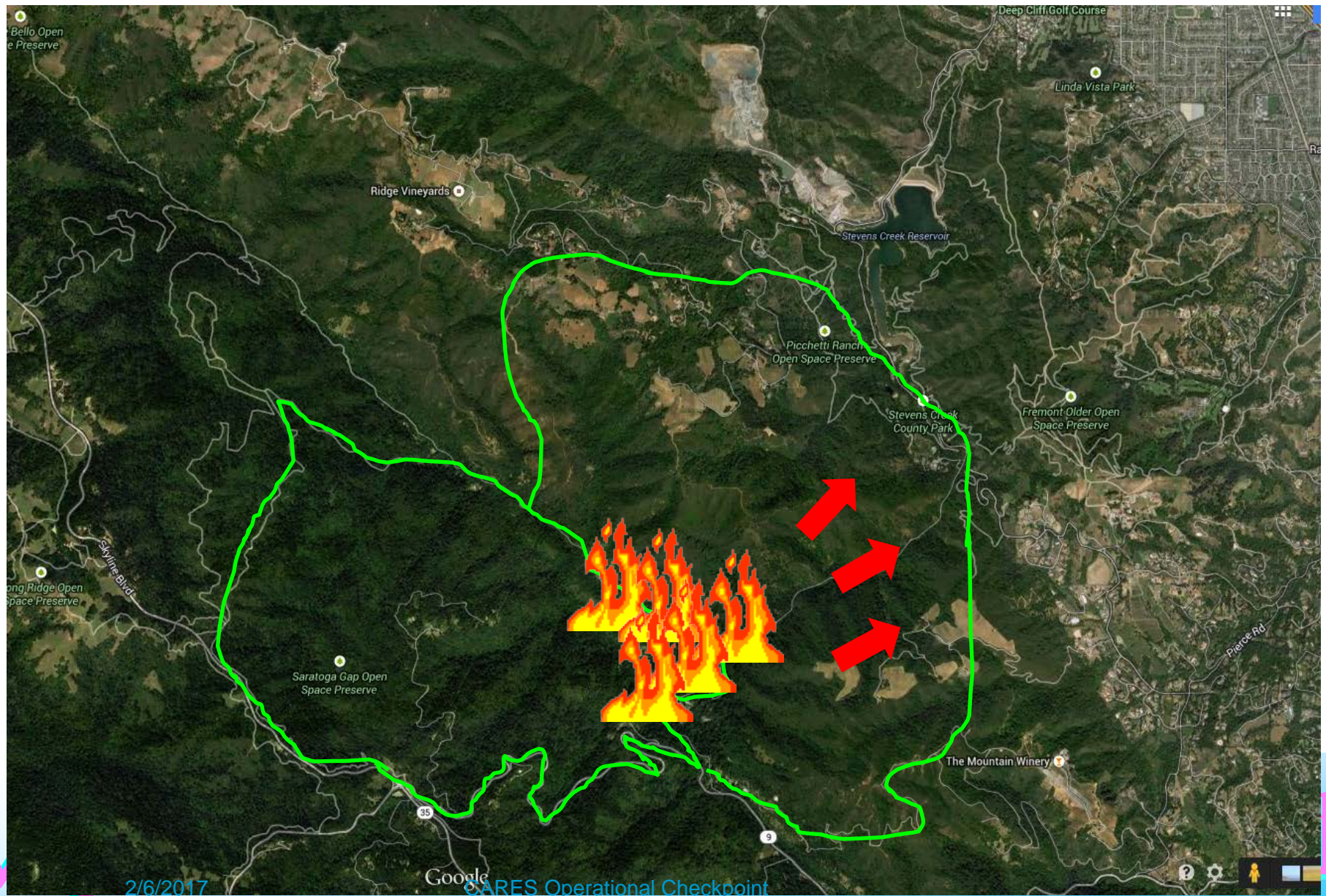
Wednesday

Cal Fire works to contain Southwest of Stevens Canyon Road



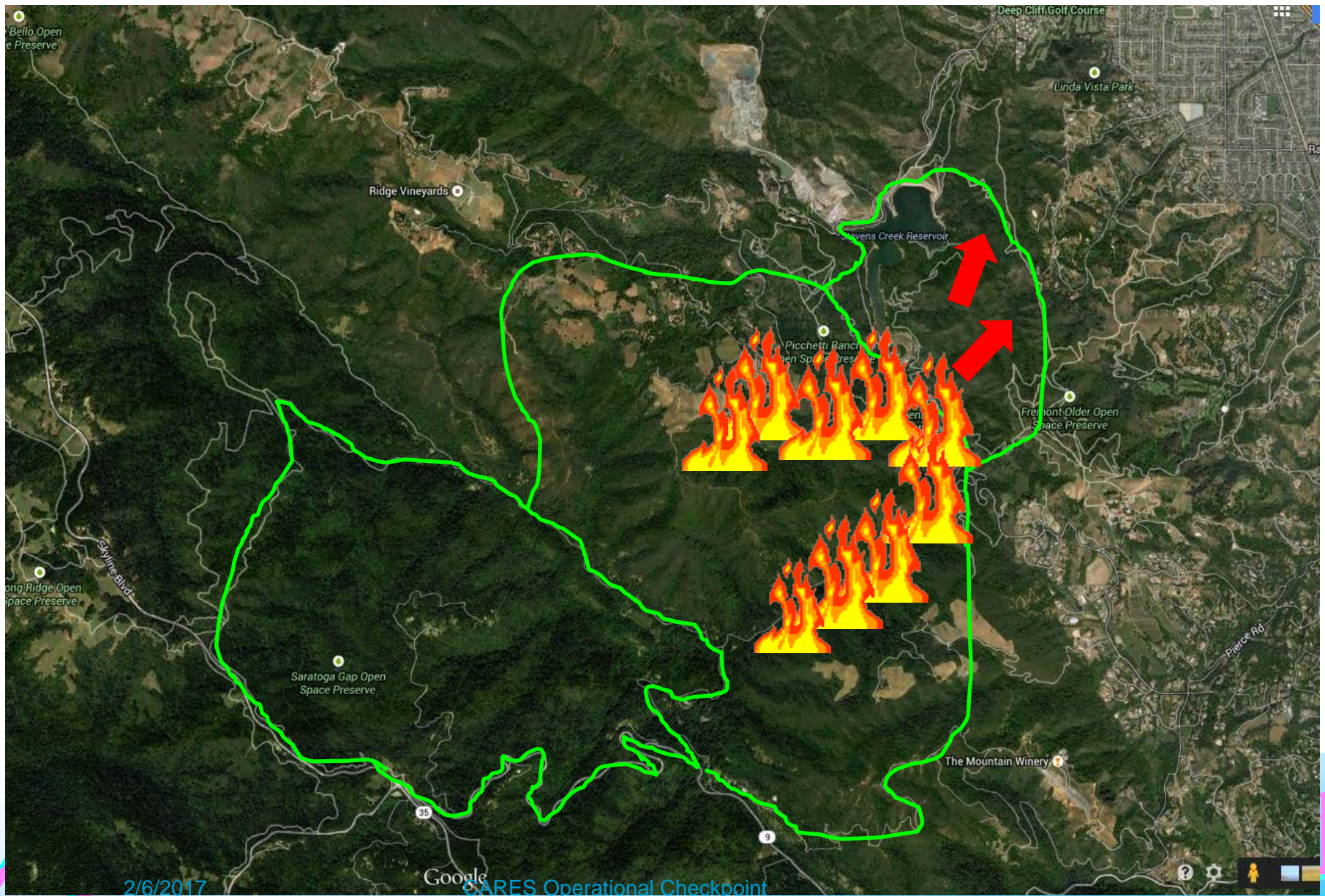
Thursday

Fire pushes down Stevens Canyon Road toward Mt Eden Road

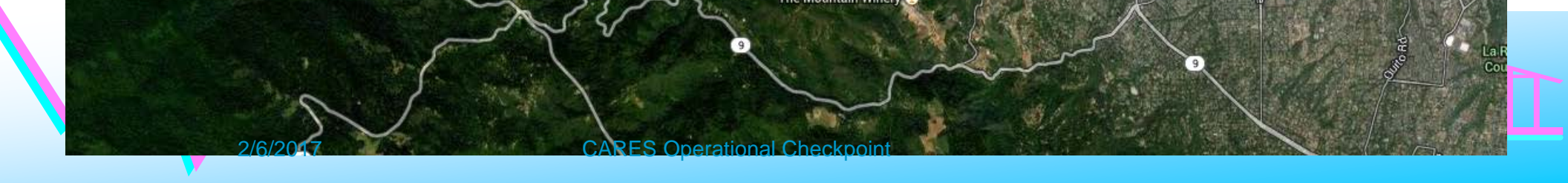


Friday

Fire crosses Stevens Canyon Road and approaches Cupertino



Cal Fire tries to contain fire West of Coyote Ridge Trail



Our response... Field Exercise

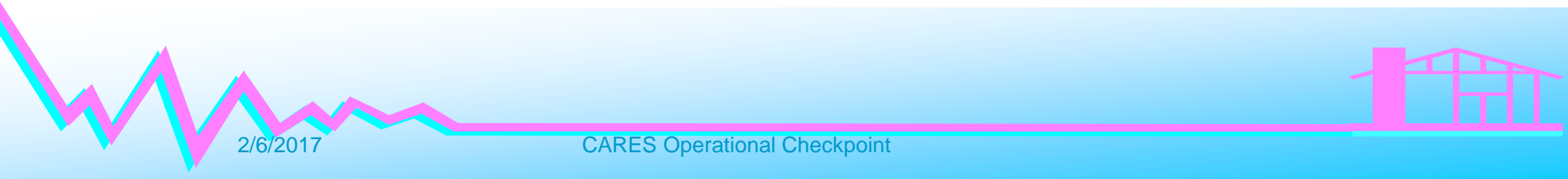
CUP-14-14T, May 2014

1. Drill held in May 2014
2. Deployed field teams to locations with reasonable views of Cupertino to support an Ember Watch.
3. Field teams reported observations, headings of smoke rising within the city.
4. Reported ember sightings over and in the city.

Next Steps

1. If the Drought continues into FY'17, consider rerunning this scenario in 2017.

Terrorism/WMD



WMD / Biological

Mapping Capabilities to Hazards

| Hazards | What could go wrong | Response | |
|---|--|---|---|
| | | Requirements | Capabilities |
| <ul style="list-style-type: none">• Dam Failure• Earthquakes• Power Failure• Terrorism/WMD• Wildland Fire• Urban Interface Fire | <ul style="list-style-type: none">• People – Injuries• People – Trapped• People – Homeless• People – Hungry• People – Sick• Structures Damaged• Structures Burning• Utilities – Power• Utilities – Gas main• Utilities – Sewage• Utilities – Water• Access problems• Communications loss | <ul style="list-style-type: none">• Mass care shelters• Evacuations• Field First Aid stations• Mass care, feeding• DC/Fire Suppression• DC/Prelim Safety• Mass Prophylaxis• Search and Rescue• Information Outreach• Information Gathering | <ul style="list-style-type: none">• Safety Assessments• Shelter Staff• Search & Rescue• First Aid• Fire Suppression• Watches (creek, fire, traffic, incident, etc.)• Communications (Field, Shadows, etc.)• General resource |



WMD / Biological Scenario

Objective: inoculate the population, treat the sick

| | What the City needs | CARES | CERT | MRC |
|--|--|--|--|--|
| Notification | | CAS | CAS | CAS |
| What do you do first | | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home |
| Activation / Mobilization | <ul style="list-style-type: none"> • Need volunteers for various assignments | <ul style="list-style-type: none"> • Activate, check into emergency net • Stand by | <ul style="list-style-type: none"> • Stand by | <ul style="list-style-type: none"> • Stand by |
| Deployment (Help stabilize the situation) | <ul style="list-style-type: none"> • Protect the Staff • City Status • Community outreach | <ul style="list-style-type: none"> • Comm van staffed • Assign responders to shadows, Mass Prophylaxis support teams | <ul style="list-style-type: none"> • Check in volunteers • Assign volunteers to Mass Prophylaxis Support teams | <ul style="list-style-type: none"> • Assign volunteers to Mass Prophylaxis teams |
| Recovery | <ul style="list-style-type: none"> • Field Status Reports | <ul style="list-style-type: none"> • Operational period reports | <ul style="list-style-type: none"> • Operational period reports | <ul style="list-style-type: none"> • Operational period reports |
| Demob | <ul style="list-style-type: none"> • List of supplies to be replenished | <ul style="list-style-type: none"> • PPE inventory • CARES asset inventory | <ul style="list-style-type: none"> • PPE inventory • ARK asset, supplies inventory | <ul style="list-style-type: none"> • PPE inventory • ARK First Aid asset, supplies inventory |



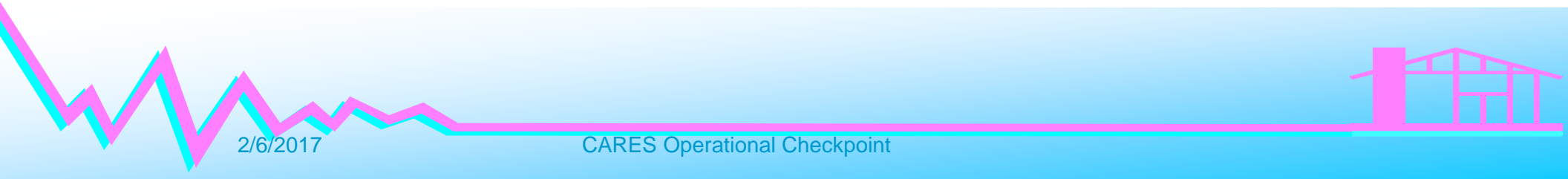
Our response... Field Exercise

1. No Drills held.

Next Steps

1. Wait for the Mass Prophylaxis plan from Santa Clara County Dept of Health Services.

Power Failure



Ukrainian Cyber Attack

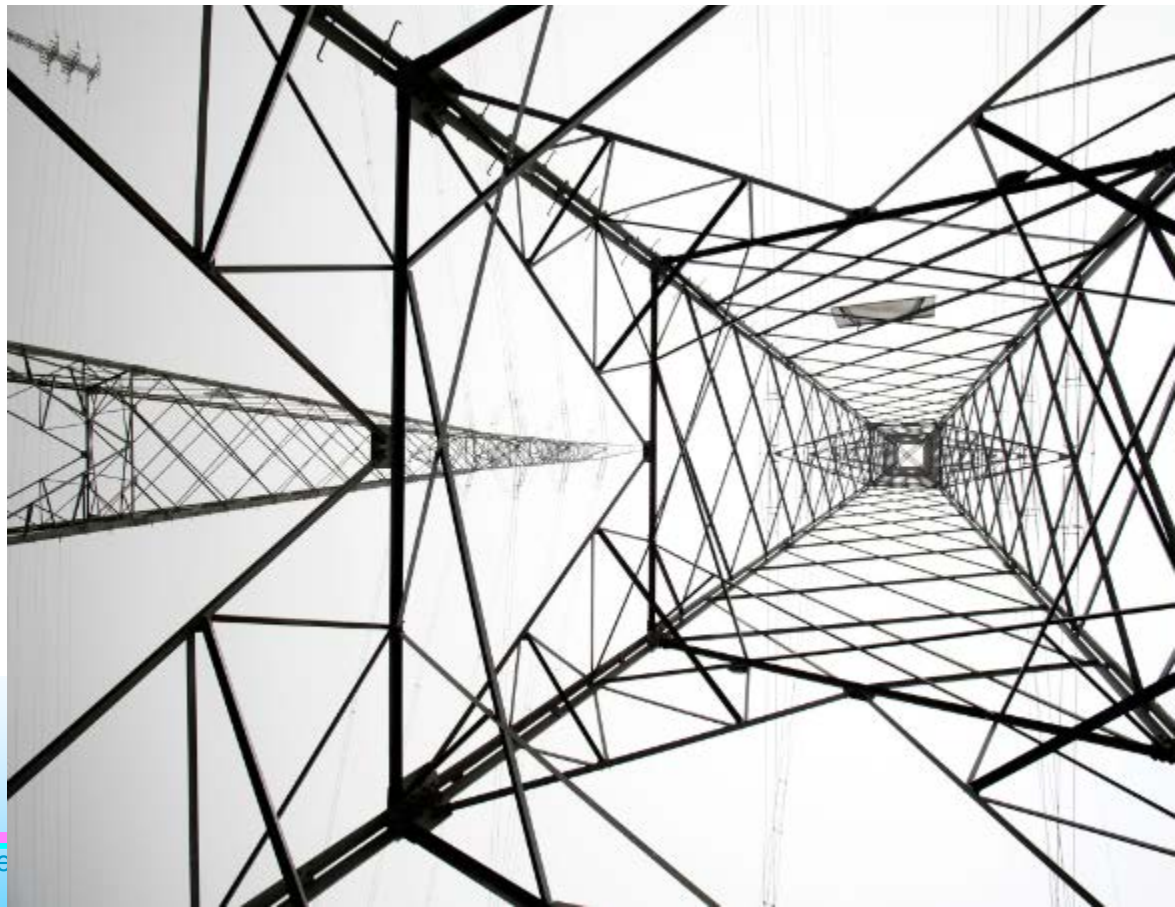
23-Dec-2015

Inside the Cunning, Unprecedented Hack of Ukraine's Power Grid

ref: <https://www.wired.com/2016/03/inside-cunning-unprecedented-hack-ukraines-power-grid/>

It was 3:30 p.m. last December 23, and residents of the Ivano-Frankivsk region of Western Ukraine were preparing to end their workday and head home through the cold winter streets. Inside the Prykarpattyaoblenergo control center, which distributes power to the region's residents, operators too were nearing the end of their shift. But just as one worker was organizing papers at his desk that day, the cursor on his computer suddenly skittered across the screen of its own accord.

...



Power / Communications Failure

Mapping Capabilities to Hazards

| Hazards | What could go wrong | Response | |
|---|--|---|---|
| | | Requirements | Capabilities |
| <ul style="list-style-type: none">• Dam Failure• Earthquakes• Power Failure• Terrorism/WMD• Wildland Fire• Urban Interface Fire | <ul style="list-style-type: none">• People – Injuries• People – Trapped• People – Homeless• People – Hungry• People – Sick• Structures Damaged• Structures Burning• Utilities – Power• Utilities – Gas main• Utilities – Sewage• Utilities – Water• Access problems• Communications loss | <ul style="list-style-type: none">• Mass care shelters• Evacuations• Field First Aid stations• Mass care, feeding• DC/Fire Suppression• DC/Prelim Safety• Mass Prophylaxis• Search and Rescue• Information Outreach• Information Gathering | <ul style="list-style-type: none">• Safety Assessments• Shelter Staff• Search & Rescue• First Aid• Fire Suppression• Watches (creek, fire, traffic, incident, etc.)• Communications (Field, Shadows, etc.)• General resource |



Power / Communications Failure

Objective: keep the community informed

| | What the City needs | CARES | CERT | MRC |
|--|---|--|--|--|
| Notification | | Self-evident | Self-evident | Self-evident |
| What do you do first | | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home |
| Activation / Mobilization | <ul style="list-style-type: none"> • Need volunteers for various assignments | <ul style="list-style-type: none"> • Activate, check into emergency net | <ul style="list-style-type: none"> • Stand by | <ul style="list-style-type: none"> • Stand by |
| Deployment (Help stabilize the situation) | <ul style="list-style-type: none"> • City Status • Inform the Community | <ul style="list-style-type: none"> • Comm van staffed • Assign responders ARKs, Fire Stations. • Information outreach, intake | ARK Deployment <ul style="list-style-type: none"> • Activate ARK • Establish, staff ICS • Check in volunteers • Information outreach, intake | <ul style="list-style-type: none"> • Establish First Aid Stations where required. |
| Recovery | <ul style="list-style-type: none"> • Field Status Reports | <ul style="list-style-type: none"> • Operational period reports | <ul style="list-style-type: none"> • Operational period reports | <ul style="list-style-type: none"> • Operational period reports |
| Demob | <ul style="list-style-type: none"> • List of supplies to be replenished | <ul style="list-style-type: none"> • PPE inventory • CARES asset inventory | <ul style="list-style-type: none"> • PPE inventory • ARK asset, supplies inventory | <ul style="list-style-type: none"> • PPE inventory • ARK First Aid asset, supplies inventory |



Power / Communications Failure

CARES response assignments

| | |
|-------------------------------------|--|
| 1. Preliminary Safety Assessment | CARES collects and reports information about the state of the city immediately after a city-wide emergency or disaster occurred. |
| 2. Field Response | CARES members respond and operate at field assignments with CCC during a declared emergency. <ul style="list-style-type: none">• Public Information Outreach• Community Emergency Assistance Request Intake |
| 3. Infrastructure Safety Assessment | CARES observes and reports on selected Cupertino critical facilities that are deemed to be important to the City or other Agencies. |
| 4. EOC Support | <ul style="list-style-type: none">• Staff the Comm Van / Radio Room• Provide situation roll-up of field reports• Support the EOC |

Our response... Field Exercise

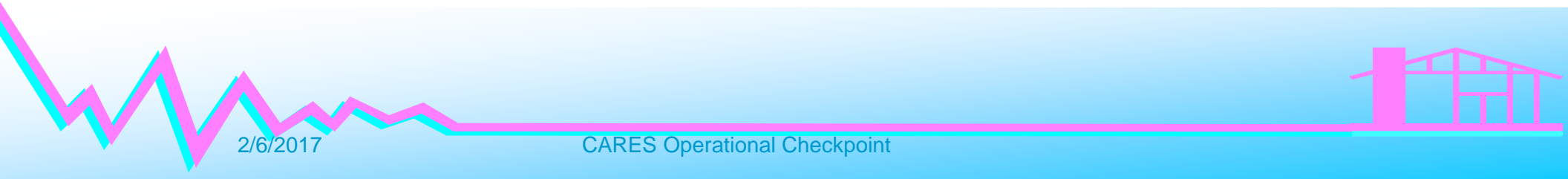
CUP-15-26T November 2015, CUP-16-40T May 2016

1. Held 2 exercises simulating a massive sustained power outage that triggered a communications outage.
2. Deployed field teams to strategic locations to share information with the community, and...
3. received community assistance requests; passed to 9-1-1.
4. Determined 9-1-1 messages by Packet is the way to go.

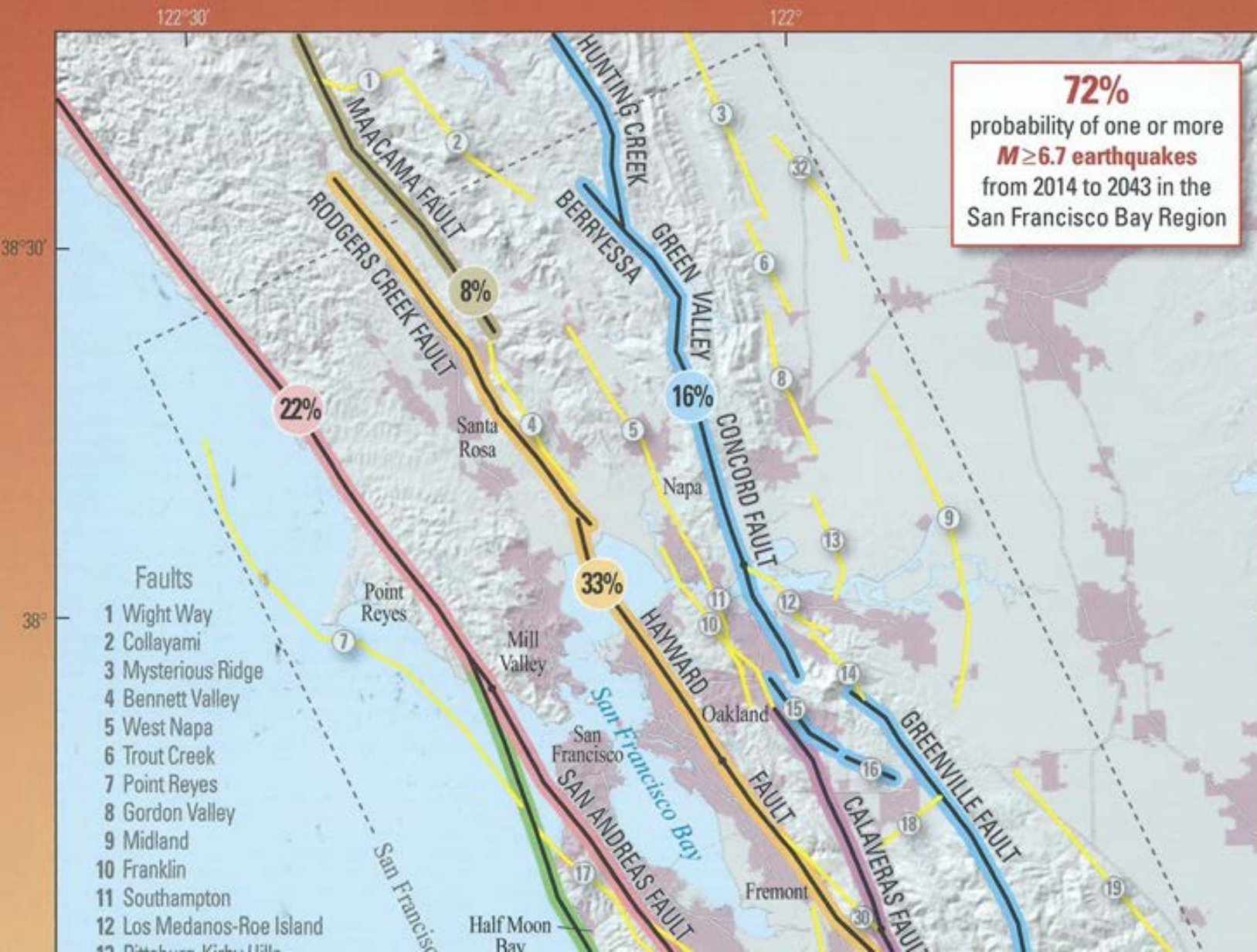
Next Steps

1. Resolve plan for delivering 9-1-1 messages directly to County Comm for dispatch.

Earthquake



Earthquake Outlook for the San Francisco Bay Region 2014–2043



Using information from recent earthquakes, improved mapping of active faults, and a new model for estimating earthquake probabilities, the 2014 Working Group on California Earthquake Probabilities updated the 30-year earthquake forecast for California. They concluded that there is a 72 percent probability (or likelihood) of at least one earthquake of magnitude 6.7 or greater striking somewhere in the San Francisco Bay region before 2043. Earthquakes this large are capable of causing widespread damage; therefore, communities in the region should take simple steps to help reduce injuries,

Earthquake Scenario

Mapping Capabilities to Hazards

| Hazards | What could go wrong | Response | |
|---|--|---|---|
| | | Requirements | Capabilities |
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Earthquake Scenario

Specifically, what's the need?

| Served Agencies | Critical Need |
|-----------------------------|--|
| City of Cupertino | <ol style="list-style-type: none">1. Preliminary Safety Assessment2. ARK communications support3. Critical facility staffing4. General communications support |
| Santa Clara County Fire | <ol style="list-style-type: none">1. Infrastructure Safety Assessment2. Presence for the community |
| Cupertino Sanitary District | Infrastructure safety assessment |
| San Jose Water Company | Infrastructure safety assessment |

| Other agencies of interest | Need |
|-----------------------------------|----------------------------------|
| Cupertino Medical Center | Communications with the city |
| Cal Water | Infrastructure Safety Assessment |
| Santa Clara Valley Water District | Infrastructure safety assessment |
| Union Pacific RR | Infrastructure safety assessment |



Earthquake Scenario

Objective: mitigate further damage to infrastructure and property, preserve life, restore services

| | What the City needs | CARES | CERT | MRC |
|--|---|---|--|--|
| Notification | | Self-evident | Self-evident | Self-evident |
| What do you do first | <ul style="list-style-type: none"> • Preliminary Safety Assessment | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home | <ul style="list-style-type: none"> • Take care of family at home |
| Activation / Mobilization | <ul style="list-style-type: none"> • Help with the initial EOC staffing | <ul style="list-style-type: none"> • Activate the CARES emergency net • Check into the net • Preliminary Safety Assessment | <ul style="list-style-type: none"> • Respond to organized neighborhood • Neighborhood PSA • Respond to local ARK | <ul style="list-style-type: none"> • Respond to local ARK |
| Deployment (Help stabilize the situation) | <ul style="list-style-type: none"> • Information on the state of the city • Windshield survey • Rescue assistance to residents • Medical assistance to residents • Help with logistics, distribution of food, shelter, material • Help reassure residents | <ul style="list-style-type: none"> • Comm Van staffed • Deploy Field Responders (ARKs, Fire Stations, etc.) • Infrastructure Safety Assessment • Provide served agency support (per plans) • Build staffing plan | ARK Deployment <ul style="list-style-type: none"> • Activate ARK • Establish, staff ICS • Check in volunteers • Process community assistance requests • Assemble, dispatch SAR, First Aid teams • Support ARK Site staff • Assign to survey teams; verify the Cupertino 100 • Build staffing plan | <ul style="list-style-type: none"> • Establish First Aid Stations at the ARKs • Deploy as requested • Build staffing plan |

Earthquake Scenario

What is CARES doing? Initial Response Assignments

| | |
|-------------------------------------|---|
| 1. Preliminary Safety Assessment | Collect and report on information about the state of the city immediately after a city-wide emergency or disaster occurred. |
| 2. Infrastructure Safety Assessment | Observe and report on selected Cupertino critical facilities that are deemed to be important to the City or other Agencies. |
| 3. Field Responder | Operate at designated field assignments – ARKs, Fire Stations, EOC, others. Pass 9-1-1 traffic as required. |
| 4. EOC Support | <ul style="list-style-type: none">• Staff the Comm Van• Provide situation roll-up of field reports |

Our response... Field Exercise

Various exercises with Comm Components

1. CUP-YY-##T, Every January since 2000, PSA Exercise
2. CUP-09-24T, May 2009, CCC
3. CUP-09-30T, October 2009, CCC
4. CUP-10-24T, October 2010, CCC, all ARKS
5. CUP-11-29T, May 2011, Comms, 4 ARKs
6. CUP-11-41T, October 2011; CCC, all ARKs
7. CUP-13-15T, May, 2013, ISA Exercise
8. CUP-13-16T, October-2013; limited ARK activation; redirect to Linda Vista Park
9. CUP-15-20T, May, 2015, ISA Exercise

Next Steps

1. Its been 5 years since we had an all-ARK activation. Revisit the ARK-based Earthquake exercise scenario with a Communications emphasis

What keeps the City up at night?

The City has listed the following as hazards of concern:

1. Civil Disturbance
2. Dam Failure
3. Earthquake
4. Power system disruption (Power Failure)
5. Water system disruption (no potable water)
6. Floods
7. Hazardous Materials
8. Landslides
9. Transportation Accidents
10. Terrorism/Weapons of Mass Destruction
11. Wildland/Urban Interface Fires

Ref: Cupertino Emergency Operations Plan, 2005

Over the next 3 months

Get ready for a Full Field Deployment Communications Exercise, with partial activation of all ARKs.

Oct 6th ARK overview, levels of activation

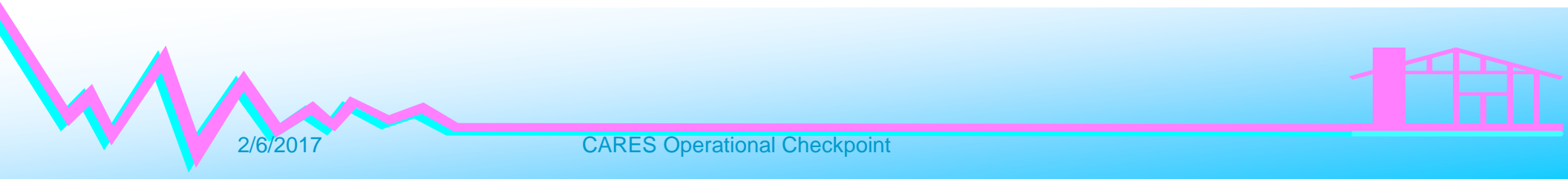
Nov 3rd Mixed mode message passing

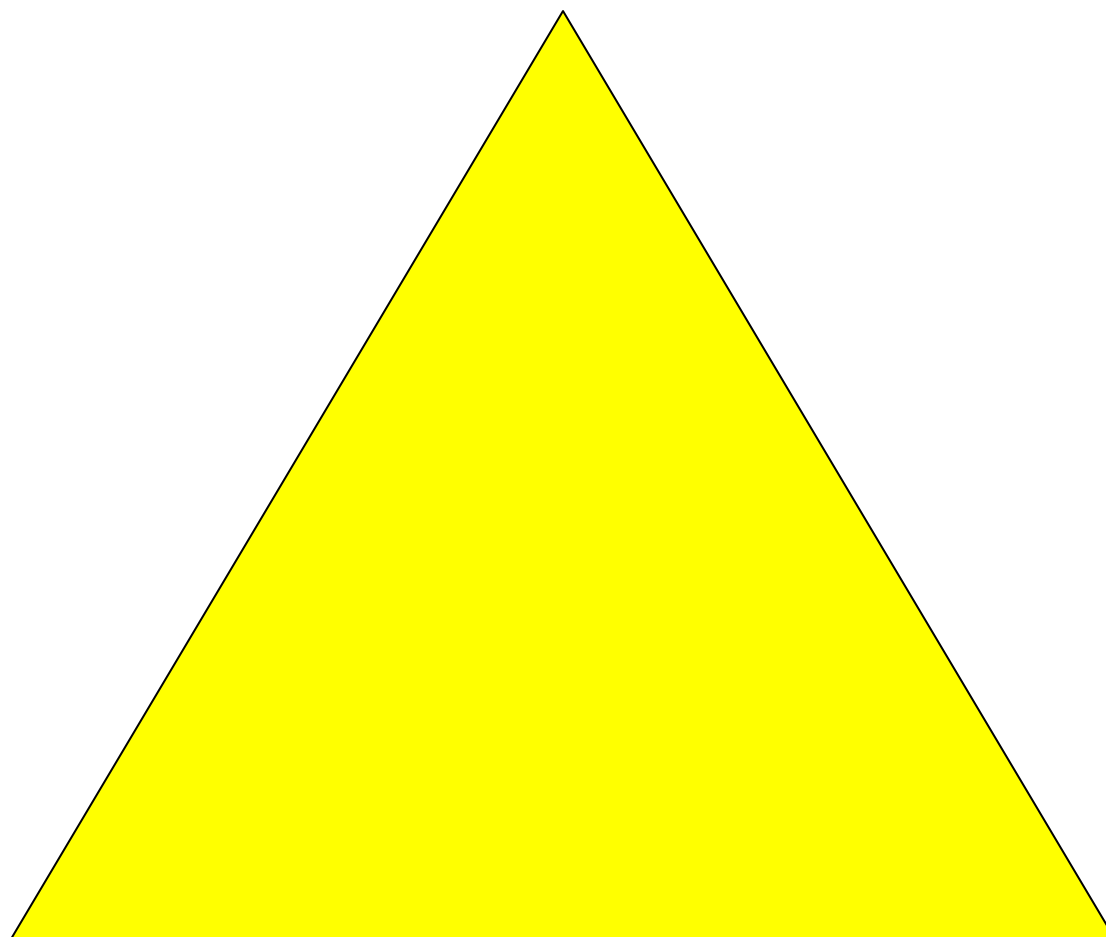
Dec 1st Drill Prep

Dec 10th ***Earthquake 2016***

Thank you!

Questions?





2/6/2017

CARES Operational Checkpoint

What's critical?

| Served Agencies | Critical Need |
|-----------------------------------|---|
| San Jose Water Company | 21 Assets, includes <ul style="list-style-type: none">• Tanks• valve stations• critical pipeline sections |
| Cupertino Sanitary District | 10 Assets, include <ul style="list-style-type: none">• Pump and wet wells• Metering stations |
| Santa Clara Valley Water District | 2 Assets, includes <ul style="list-style-type: none">• Pipeline• Stevens Dam |
| PG&E | 3 Assets, includes <ul style="list-style-type: none">• Substations |
| Transportation | 12 Assets, all overpasses |
| Total | 48 |

Earthquake Scenario

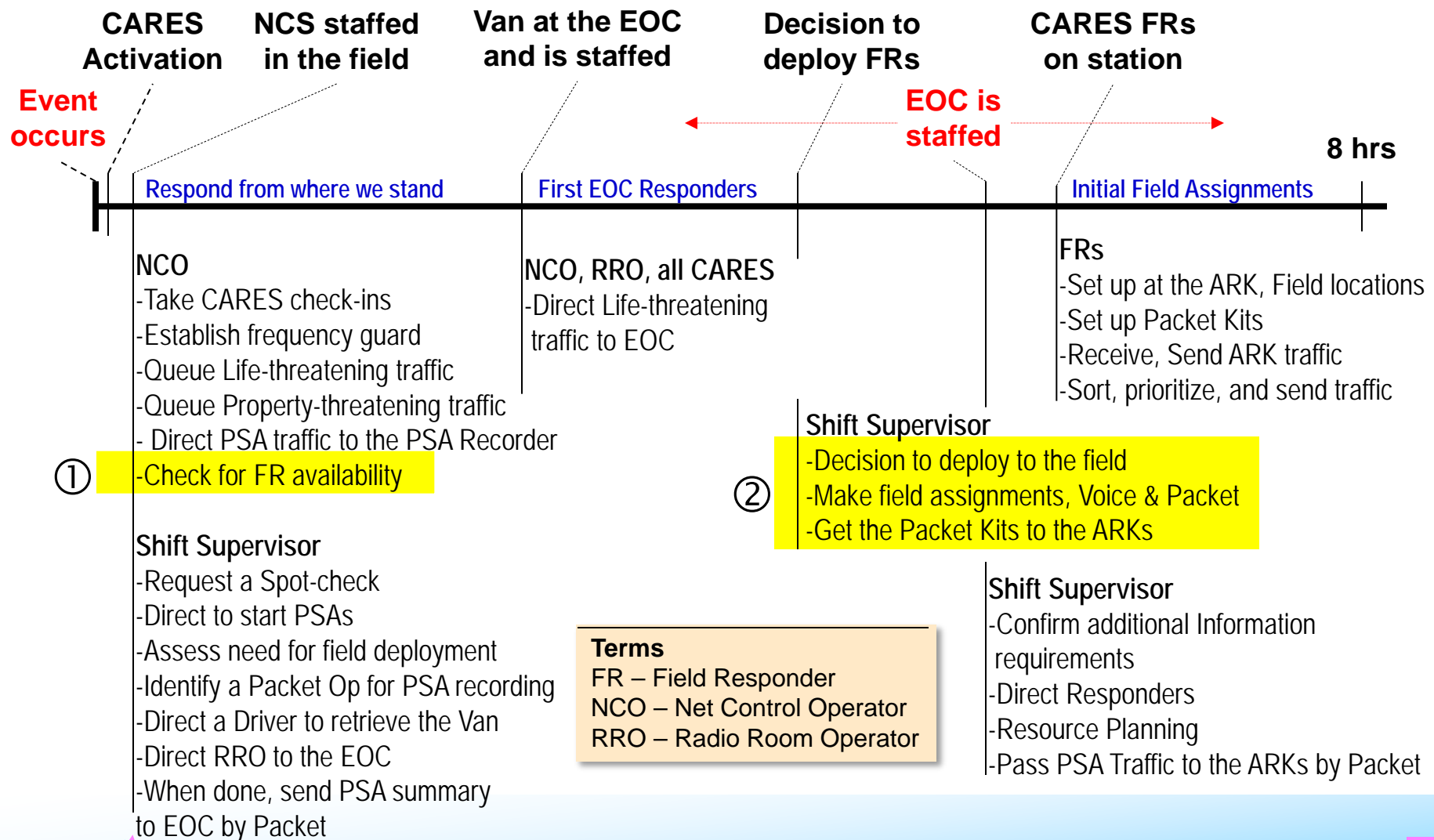
What is everyone doing? Initial Response Assignments

| | |
|----------------|--|
| City Staff | <ul style="list-style-type: none">• Inspect City facilities• Staff the EOC |
| County Fire | <ul style="list-style-type: none">• Fire suppression• Search and Rescue• Mutual Aid |
| County Sheriff | <ul style="list-style-type: none">• Public Safety• Law and Order |
| CERT, MRC | <ul style="list-style-type: none">• CERT operations (SAR, medical, care and shelter, etc.) and support for:<ul style="list-style-type: none">– Organized neighborhoods– ARK ICS, response |
| CARES | <ul style="list-style-type: none">• Preliminary Safety Assessment• Field communications (ARKs, Fire Stations, shadows)• Infrastructure Safety Assessment |



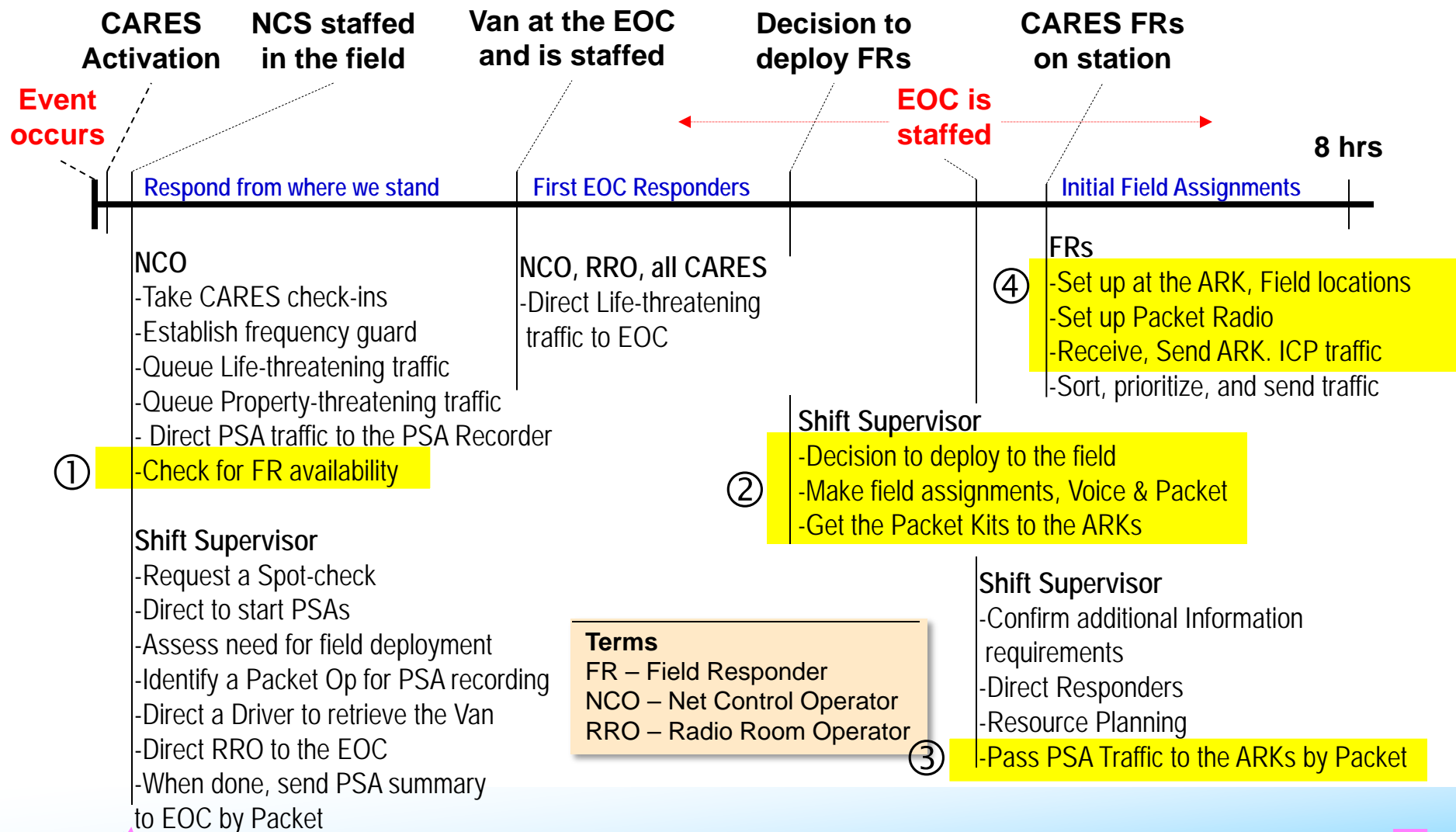
1. Activation

Initial Response Operations



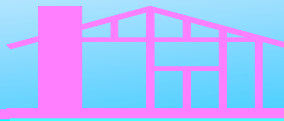
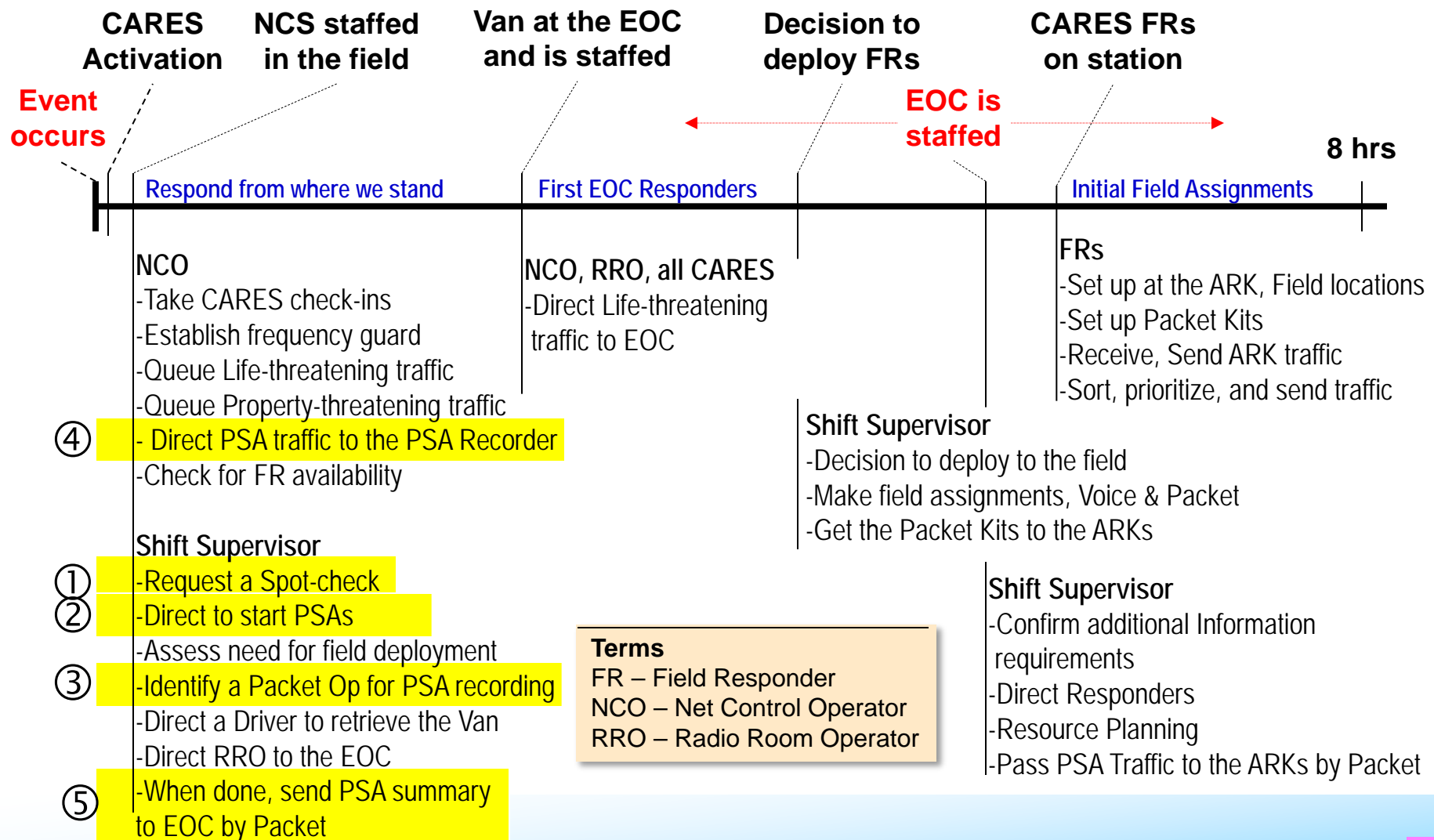
4. Setup

Initial Response Operations



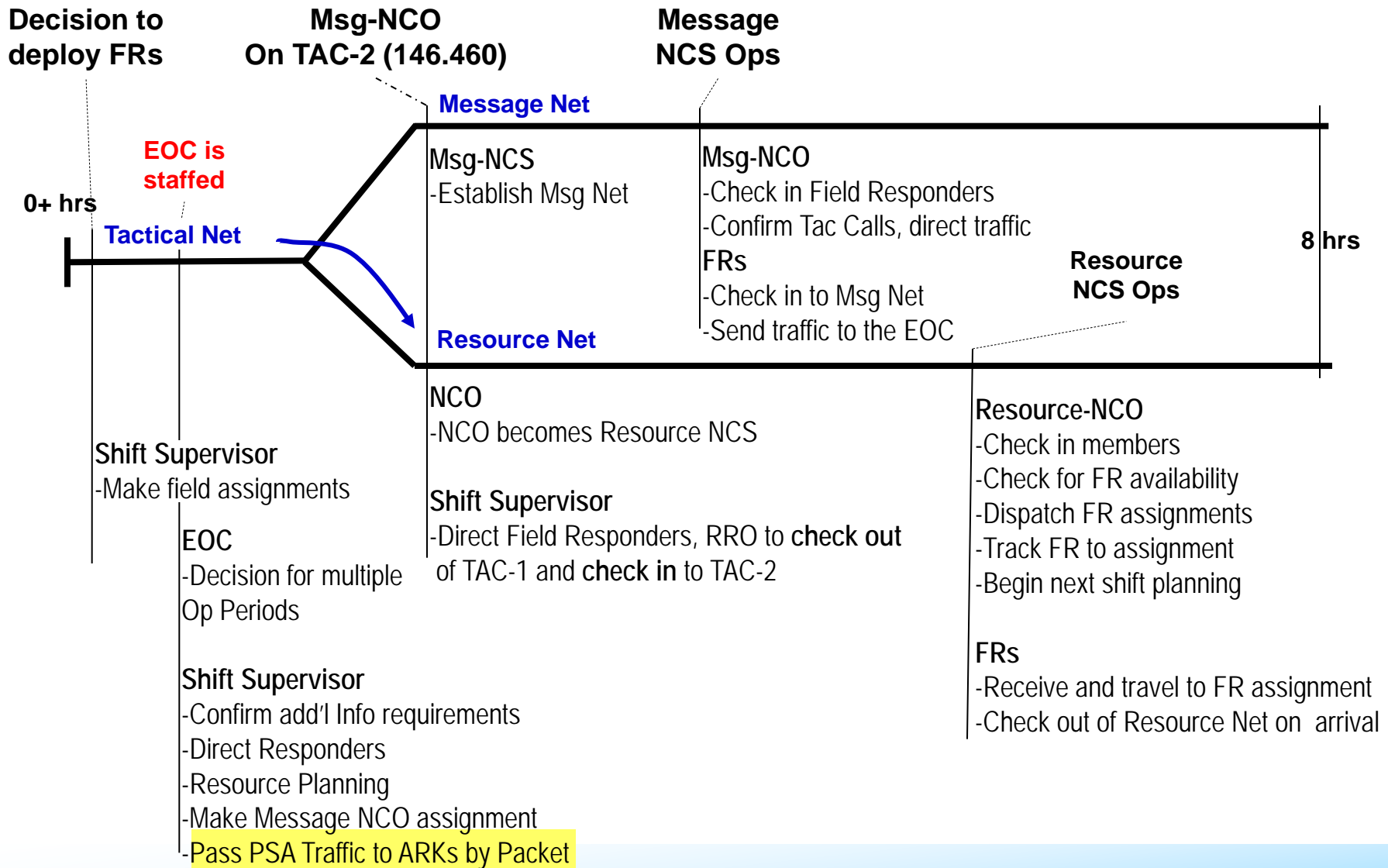
Initial Response Ops

PSA activities



Extended Response Ops

Tactical, Message & Resource Net



CARES Response – what we generally do

| | |
|--|--|
| 0. Operational Process | Guides how we operate day by day as well as during periods of activations. |
| 1. Field Response | Respond and operate at field locations during a declared emergency or time of need. |
| 2. Preliminary Safety Assessment | Collect and report information about the state of the city immediately after a city-wide emergency or disaster occurred. |
| 3. Infrastructure Safety Assessment | Observe and report on selected Cupertino critical facilities that are deemed to be important to the City or other Agencies. |
| 4. EOC Support | <ul style="list-style-type: none">• Staff the Comm Van / Radio Room• Provide situation roll-up of field reports• Support the EOC |