# Creek Rising Drill Prep

November 5, 2026

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# CARES mission

The mission of Cupertino Amateur Radio Emergency Service (CARES) 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.

# Topics for Tonight

- The Creek Watch mission
- Actual activation vs. exercise activation
- Creek observation locations
- Creek Watch reporting procedures
- Safety considerations
- November 7 exercise details

# Why a Creek Watch

## What problem are we trying to solve?

**During prolonged periods of heavy rain:**

- Creeks can rise rapidly.
- Creeks, culverts, and bridges can become obstructed.
- Localized flooding can develop with little warning.
- Automated monitoring systems cannot provide a complete picture.
- City emergency management may need additional information about conditions throughout Cupertino.

CARES can provide supplemental, ground-level situational awareness.

We would be asked to **observe and report**.

# Creek Watch Mission

Deploy CARES field responders to designated creek observation locations, collect information about current conditions, and communicate those observations to the Cupertino EOC.

**Key responsibilities:**

- **Observe** creek conditions
- **Record** specific information
- **Report** conditions accurately
- **Identify** and report significant changes
- **Maintain** communications.

# Creek Watch: Actual Emergency Activation

## What would a real activation look like?

1. **City-directed:** CARES is activated in response to a request from the Cupertino Emergency Manager.
2. **Little advance notice:** Our activation instructions come with minimal warning.
3. **AlertSCC notification:** We receive activation and reporting instructions through established notification procedures.
4. **Limited deployment:** Not everyone is needed.  Only enough responders to meet the City's immediate information needs may be requested.
5. **Specific assignments:** CARES are likely directed to different creek observation locations.
6. **No planned community interaction:** Responders observe and report rather than provide public assistance.
7. **Established procedures:** CARES members follow standard activation, deployment, communications, and demobilization procedures.

# Creek Watch: Exercise Activation

## How is the 7-Nov exercise different?

1. **Planned event:** Members know the date, time, and general mission in advance.
2. **Training preparation:** Previous meetings and this Drill Prep remind us of the procedures.
3. **Maximize participation:** Deployments are structured to provide opportunities for as many members as possible.
4. **Fixed assignments:** Responders generally remain at designated locations to maximize operating time.
5. **Scripted situations:** Scenario injects describe what we see.
6. **Controlled environment:** Exercise Control establishes the scenario and operating conditions.
7. **Defined schedule:** The exercise has a planned beginning and ending.
8. The exercise is designed to practice capabilities, not reproduce every aspect of an actual activation.

# Creek Watch: Actual vs. Exercise Activation

| Characteristic | Actual Activation | Exercise Activation |
|---|---|---|
| Initiation | City request | Scheduled exercise |
| Notification | AlertSCC / established procedures | Advance notification |
| Deployment size | Based on City requirements | Maximize participation |
| Locations | Based on current conditions | Predetermined locations |
| Assignments | May change | Generally fixed |
| Messages | Actual observations | Simulated conditions |
| Duration | As required | Scheduled |
| Primary goal | Support City operations | Validate and improve capabilities |

# What's the Same?

Although actual activations and exercises differ, the fundamental CARES operating procedures should remain the same.

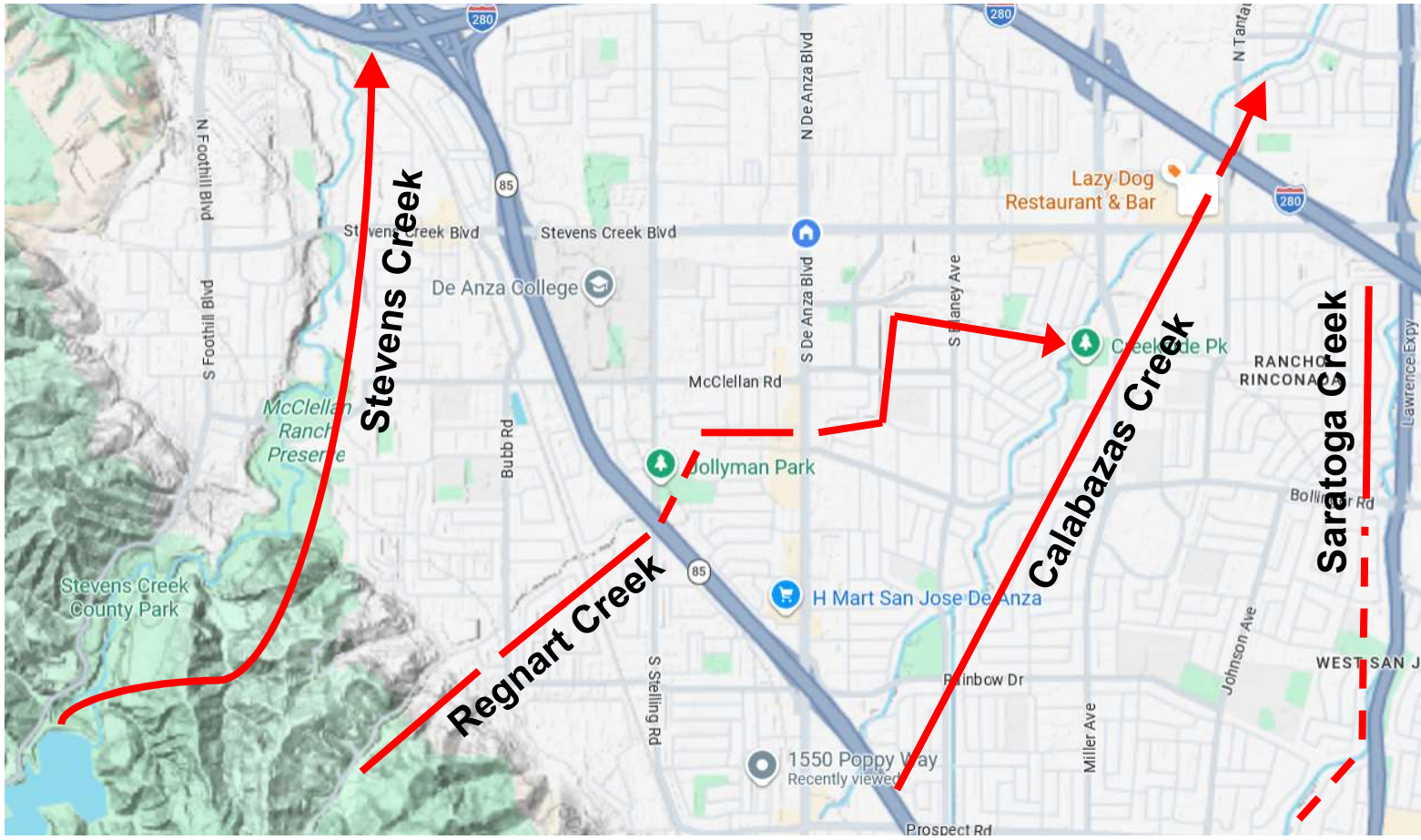
- Activation and check-in
- Resource management
- Net Control procedures
- Field communications
- Message passing accuracy
- Safety requirements
- Demobilization

***We train the way we deploy*** **and deploy the way we train.**

# Cupertino's Four Creeks

Based on our previous discussions (plus one), these include:

1. Stevens Creek
2. Calabazas Creek
3. Regnart Creek
4. Saratoga Creek



# Where we might deploy

## In general…

### Useful creek observation locations

- Roadway and Trail bridges
- Culvert entrances and exits
- Locations with a history of flooding
- Areas where debris may accumulate
- Locations near residential neighborhoods
- Locations without automated monitoring

### Site selection considerations

- Safe public access
- Nearby parking
- Visibility of creek conditions
- Ability to remain clear of traffic and pedestrians

# Where we might deploy

## Observation Locations

**Stevens Creek**

Stevens-1 Stevens Dam parking lot
Stevens-2 Stevens Creek at McClellan Road
Stevens-3 Stevens Creek at Stevens Creek Blvd

**Regnart Creek**

Regnart-1 Regnart Creek Trash Rack
Regnart-2 Regnart Creek at Festival Drive
Regnart-3 Regnart Creek at S.Blaney

**Calabazas Creek**

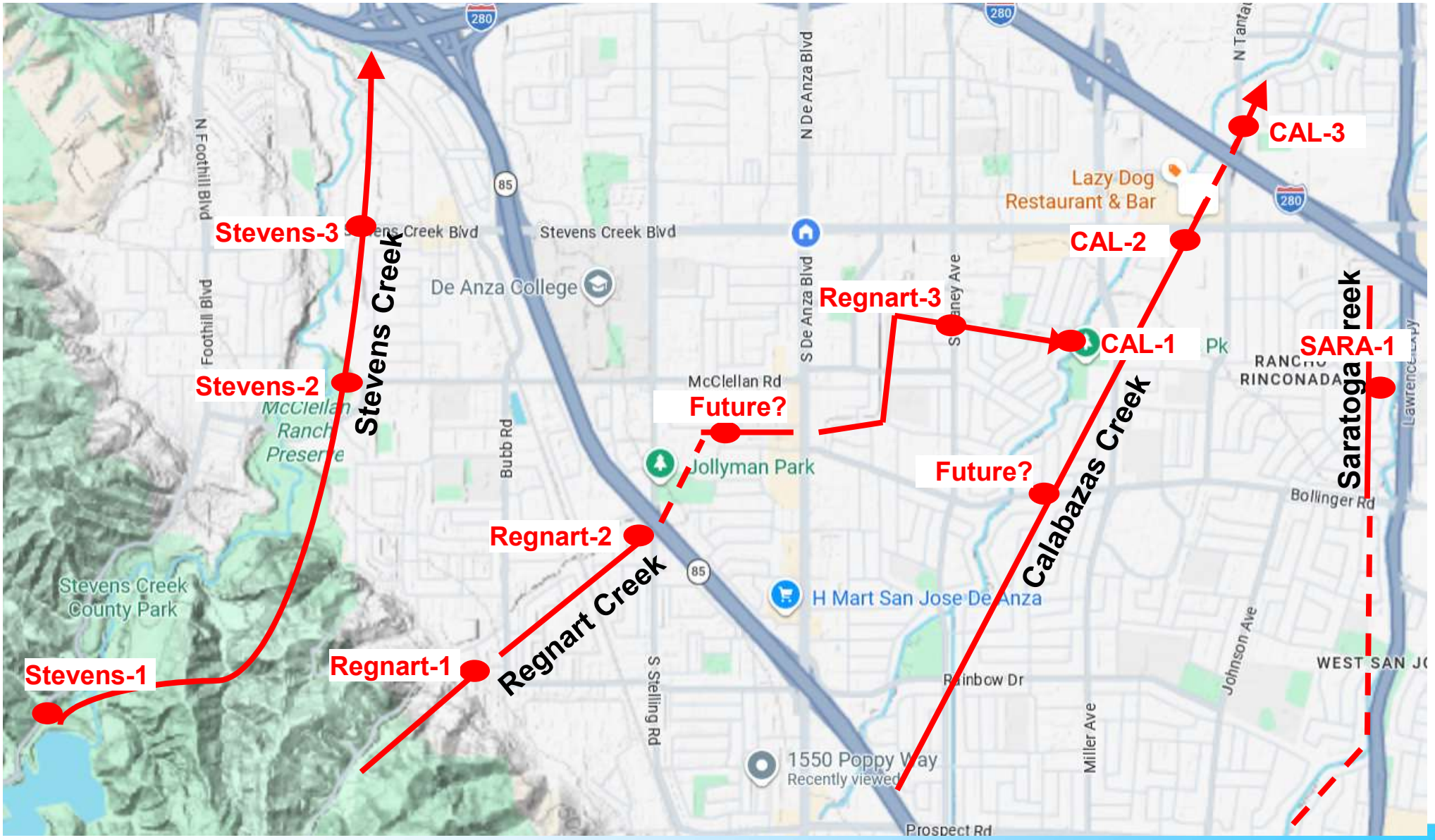
CAL-1 Calabazas Creek at Creekside Park
CAL-2 Calabazas Creek at Stevens Creek Blvd
CAL-3 Calabazas Creek at N.Tantau

**Saratoga Creek**

SARA-1 Saratoga Creek at Sterling Barnhart Park

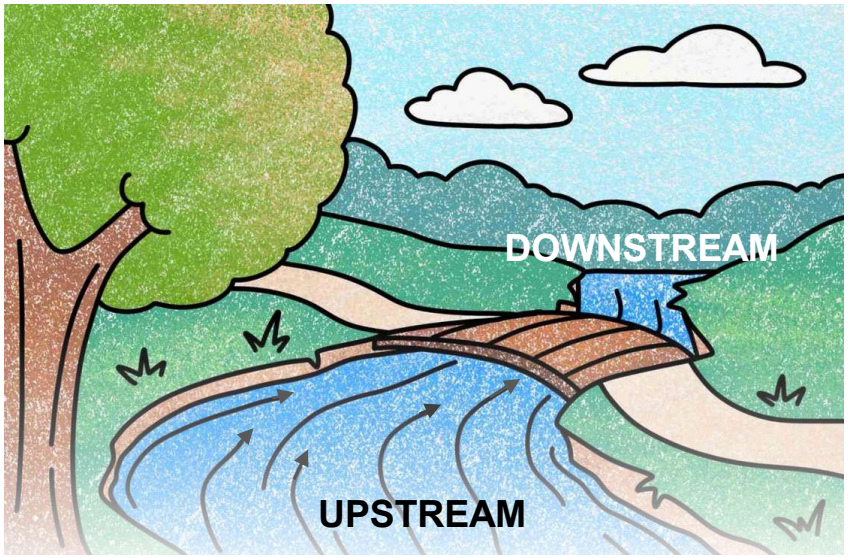
**NOTE:** These are just a few Creek Watch observation locations. Actual locations will be selected based on the mission objectives, site accessibility, safety, and CARES responder availability.

# Possible Observation Locations



# Anatomy of a Creek…

## What are we actually looking at?




**The Terms:**

- **Channel** -- the normal path that carries the creek.
- **Banks** -- the sides that contain the creek; useful reference for how high the water has risen.
- **Normal flow** -- what the creek looks like under ordinary conditions.
- **Upstream / downstream** -- especially important when describing where a condition exists.
- **Culvert / bridge opening** -- the opening available for water to pass beneath the roadway.
- **Waterline / height marker** -- a fixed reference for reporting water level and change.
- **Debris accumulation** -- branches, vegetation, trash, etc. that may restrict the opening.

**Creek Watch reports should describe what we can observe and measure — not what we think might happen.**

# What Conditions Are Important?

| Observation | What we want to know |
|---|---|
| Level | How high is the water relative to a fixed reference? |
| Trend | Is the water rising, falling, or remaining steady? |
| Flow | Is water moving normally, rapidly, slowly, or backing up? |
| Obstructions | Is debris or another obstruction restricting the channel? |

# Creek Watch Situation Status Report

## Eight required reporting elements:

| Field | Description |
|---|---|
| 1. Tactical Call | Your assigned tactical call. These calls identify both the creek and the specific location where your observations will be made. |
| 2. Level | Water level relative to a fixed reference. This reference may be existing level markers or other fixed structures in or on the side of the creek. |
| 3. Trend | Change since previous observation. State "no previous reading" if this is the first record. |
| 4. Flow | Observed water movement |
| 5. Obstructions | Debris or other restrictions |
| 6. Other Notes | Optional; additional observations or concerns; be brief |
| 7. Call Sign or Name | Radio call sign or name if a call sign is not assigned. |
| 8. Observation Time | Time the observation was made (24 hr time) |

# LEVEL: How High Is the Water?

## What should you report?

**Use a recognizable reference whenever possible:**

- Water approximately 2 feet below the bridge opening.
- Water approximately 6 inches below the top of the channel.
- Water has reached a visible high-water marker.
- Water is approaching the bottom of the culvert opening.

**And avoid vague descriptions:**

- "Water is high."
- "Creek looks full."
- "Looks dangerous.“

**Reminder:** Describe what you see, not what you think might happen.

# TREND: Is the Water Level Changing?

## What should you report?

### Three basic conditions:

- Rising
- Falling
- Steady
- Unknown — insufficient observations.

### NOTE:

- A trend requires at least 2 consecutive observations.
- An operator just arriving at a location cannot determine whether the water is rising or falling… unless the change is happening very quickly.

# FLOW: How Is the Water Moving?

## What should you report?

### Examples:

- Normal flow
- Fast-moving water
- Slow-moving water
- Turbulent flow
- Backwater or apparent pooling
- Water flowing outside the normal channel

### NOTE:

- Fast-moving water does not necessarily mean flooding is occurring.
- The objective is to describe visible conditions rather than interpret their significance.

# OBSTRUCTIONS: What Is Blocking the Water?

## What should you report?

### Examples:

- No visible obstruction
- Branches accumulating at a culvert entrance
- Debris against bridge supports
- Vegetation restricting the channel
- Large objects lodged in the waterway

### What additional information would help?

- Approximate location of the obstruction
- Whether water is visibly backing up
- Whether the obstruction appears to be increasing

**Reminder:** Do not attempt to clear obstructions.

# What you could see

## Routine Message



# What you could see

## Changing Conditions



# What you could see

## Urgent Conditions



# Message Passing

## Front of the form

| | |
|---|---|
| **Incident Name** (Optional): | **Message No:** |
| **Creek, Location:** | **Date:** |
| **1. Tactical Call:** | |
| **2. Observation Time:** | |
| **3. Level:** | |
| **4. Trend:** | |
| **5. Flow:** | |
| **6. Obstruction:** | |
| **7. Other Notes** (Optional): | |
| **8. Call Sign or Name:** | |
| **CUP ICS 213CW Creek Watch Form** | v261101 |

# Message Passing

## Back of the form

**CUP ICS 213CW Creek Watch Form Instructions**

General Instructions

- Use this form for each observation record that you report: One Report = One complete observation record
- Review the creek situation and collect the information on the form.
- Fill in the fields as follows:

| Field | Description | Example |
|---|---|---|
| 1. Tactical Call | Your assigned tactical call. These calls identify both the creek and the specific location where your observations will be made. | REGNART 1 |
| 2. Observation Time | Time the observation was made (24 hr time) | 10:30 |
| 3. Level | Water level relative to a fixed reference. This reference may be existing level markers or other fixed structures in or on the side of the creek. | 1 foot below top of creek bank |
| 4. Trend | Change since previous observation. State "no previous reading" if this is the first record. | Rising |
| 5. Flow | Observed water movement | Fast, with upstream pooling |
| 6. Obstructions | Debris or other restrictions | Large tree branch lodged against trash rack |
| 7. Other Notes | Optional; additional observations or concerns; be brief | DPW on scene clearing debris; minor roadway flooding |
| 8. Call Sign or Name | Radio call sign or name if a call sign is not assigned. | K6ABC; Bob Henderson |

# Message Passing

## Developing the report

| | | |
|---|---|---|
| **Incident Name** (Optional): | *November 2026 Flooding* | **Message No:** ***41*** |
| **Creek, Location:** | *Regnart Creek, Regnart Road* | **Date:** *11/7/2026* |
| **1. Tactical Call:** | *Regnart 1* | |
| **2. Observation Time:** | *10:30* | |
| **3. Level:** | *About 2 foot below top of creek bank* | |
| **4. Trend:** | *Rising* | |
| **5. Flow:** | *Moderate* | |
| **6. Obstruction:** | *None visible* | |
| **7. Other Notes** (Optional): | *No Roadway Flooding* | |
| **8. Call Sign or Name:** | *KV6BC* | |
| **CUP ICS 213CW Creek Watch Form** | | v261101 |

# Creek Watch Addendum

## 2. On-Air Exchange

### 2.1 Message Passing – Creek Watch Report

| | WHO SAYS WHAT | | NOTES |
|---|---|---|---|
| 1 | NCS: | Beginning the Creek Watch Roll Call. Regnart-1, your message number is 41. Your report please. | The NCO pulls out a Creek Watch form to record this data. |
| 2 | KV6BC: | Net Control, **Regnart-1**: starting the report:<br>**Field 2** 10:30<br>**Field 3:** 2 feet below the top of creek bank<br>**Break** | (1: Tactical Cal,<br>2: Observation Time,<br>3: Level)<br>Keep the entries as brief as possible |
| 3 | NCS: | Continue | |
| 2 | KV6BC: | **Field 4:** Rising<br>**Field 5:** Moderate<br>**Field 6:** None visible<br>**Break** | (4: Trend,<br>5: Flow,<br>6: Obstruction)<br>Keep the entries as brief as possible |
| 3 | NCS: | Continue | |
| 4 | KV6BC: | **Field 7**: No roadway flooding<br>End of Message This is **KV6BC** | (7: Other Notes,<br>8: your call sign)<br>**Other Notes** is where you can elaborate on the msg. |
| 5 | NCS: | Continue | |
| 7 | NCS: | Acknowledged. This is K6KP, Net Control for the Cupertino Emergency Net. Stations with any traffic, identify now. | |

# Message Passing

## Developing the report – **with Form Modification**

| | | |
|---|---|---|
| **Incident Name** (Optional): *November 2026 Flooding* | | **Message No:** ***41*** \| ***48*** |
| **Creek, Location:** *Regnart Creek, Regnart Road* | | **Date:** *11/7/2026* |
| **1. Tactical Call:** | *Regnart 1* | *Regnart 1* |
| **2. Observation Time:** | *10:30* | *11:00* |
| **3. Level:** | *About 2 foot below top of creek bank* | *About ½ foot below top of creek bank* |
| **4. Trend:** | *Rising* | *Rising* |
| **5. Flow:** | *Moderate* | *Moderate* |
| **6. Obstruction:** | *None visible* | *Minor* |
| **7. Other Notes** (Optional): | *No Roadway Flooding* | *Water on the street* |
| **8. Call Sign or Name:** | *KV6BC* | *KV6BC* |
| **CUP ICS 213CW Creek Watch Form** | | v261101 |

# Message Passing to the EOC

1. Field responder: observes conditions.
2. Field responder: records the eight reporting elements.
3. Field responder: Wait for the call from the Message Net.
4. Report is received and passed to the DOC/EOC.
5. Significant changes are reported as they occur.

**As always…**

- Use plain language.
- Be concise.
- Distinguish observations from assumptions.
- Provide repeats when requested.
- And don’t forget to make your ICS 309 log entry

# Creek Watch Safety: Our First Priority

## Key requirements:

1. Remain at designated observation locations.
2. Stay clear of creek banks and moving water.
3. Never enter creek channels.
4. Never enter flooded roadways.
5. Do not climb barriers or enter restricted areas.
6. Do not attempt to remove debris.
7. Withdraw immediately if conditions become unsafe.

**Reminder:** We are observers, not flood-control experts

# Field Responder Safety Procedures

**Before deployment:**

- Review assigned location and access instructions.
- Check weather and road conditions.
- Confirm the designated observation point.
- Perform a radio check with Net Control.

**While deployed:**

- Use the buddy system.
- Maintain contact with Net Control.
- Stay aware of changing conditions.
- Report hazards.
- Relocate or withdraw if necessary.

**Before leaving:**

- Notify Net Control.

# What If Something Goes Wrong?

## The ***Do not*** slide

**Situation A:** You arrive at your assignment, but the designated observation point is flooded.

**Response: Do not** enter. Notify Net Control and request instructions.

**Situation B:** You see debris blocking a culvert and believe it may cause flooding.

**Response:** Observe from a safe location and report the conditions. Report what you see. **Do not** attempt to clear the debris. **Do not** speculate.

**Situation C:** A resident approaches and asks whether their home will flood.

**Response: Do not** offer an opinion or unofficial flood prediction. Direct them to official City or public safety information.

**Situation D:** You observe an actual emergency during the exercise.

**Response:** Stop treating the situation as simulated. Follow real-world emergency reporting procedures, call 9-1-1, and notify Net Control.

# Creek Rising Exercise: The Scenario

## November 7 Exercise Details

**THIS IS DRILL TRAFFIC**

- Multiple days of heavy rainfall across the Bay Area.
- Saturated ground and elevated creek levels.
- Additional storms are forecast.
- The City activates the EOC.
  - CARES is requested to provide Creek observations.
  - CERT home responders are requested to provide local neighborhood reports using QuickCapture.

# Exercise Objectives

## November 7 Exercise Details

1. Manage CARES field responders using established procedures.
2. Pass Creek Watch Situation Status messages from field locations to the Cupertino EOC by voice.
3. Activate neighborhood CERT home responders to provide supplemental situational awareness using QuickCapture.

**Remember:** This exercise evaluates our processes and procedures, not individual performance.

# How the Exercise Will Work

## November 7 Exercise Details

### CARES Field Responders

- Check in at staging.
- Receive event and safety briefing.
- Receive field assignments.
- Deploy to designated observation locations.
- Establish radio communications.
- Handle scripted Creek Watch observations.
- Transmit reports to the DOC/EOC.
- Maintain communications logs.
- Demobilize when directed.

### CERT Home Responders

- Operate from their neighborhoods.
- Receive exercise instructions.
- Submit simulated neighborhood conditions using QuickCapture.
- Follow CERT exercise procedures.

# How the Exercise Will Work

## November 7 Exercise Details

**Each CARES field assignment will include:**

- A designated creek observation location.
- A series of five simulated creek condition reports.
- Changing conditions that may require additional reporting.
- Possibly one or more supplemental situations or requests for information.
- Standard CARES communications and documentation procedures.

**In short…**Field responders will receive scripted observations representing simulated creek conditions. These observations will be treated as drill traffic and reported using standard CARES procedures.

# What You Will Receive

## November 7 Exercise Details

### Before the exercise:

- Final instructions and updates.

### At the exercise:

- ICS-204 assignment information.
- ICS-205 communications plan.
- Creek Watch reporting reference, Forms.
- Scenario/inject sheets.
- Safety instructions.

# Exercise Timeline

## November 7 Exercise Details

***** All Times are Approximate *****

| **Saturday, November 7, 2026** | |
|---|---|
| 06:45 | **Drill Begins.**<br>• Retrieve C469, deploy to the EOC<br>• Set up staging |
| 07:45 | EOC Staging opens, Sign-in at Cupertino City Hall parking lot |
| 08:00 | Begin briefing, make field assignments |
| 08:30 | • Open the Resource Net<br>• Radio checks, responders deploy |
| 08:45 | Open the Message Net |
| 09:00 | All responders are on station. Secure the Resource Net |
| 11:00 | • Open the Resource Net<br>• Field are responders directed to return to EOC<br>• Start Demob<br>• On last passed message, secure the Message Net |
| 11:30 | • Secure the Resource Net<br>• End of the exercise |

# What You Should Bring

## November 7 Exercise Details

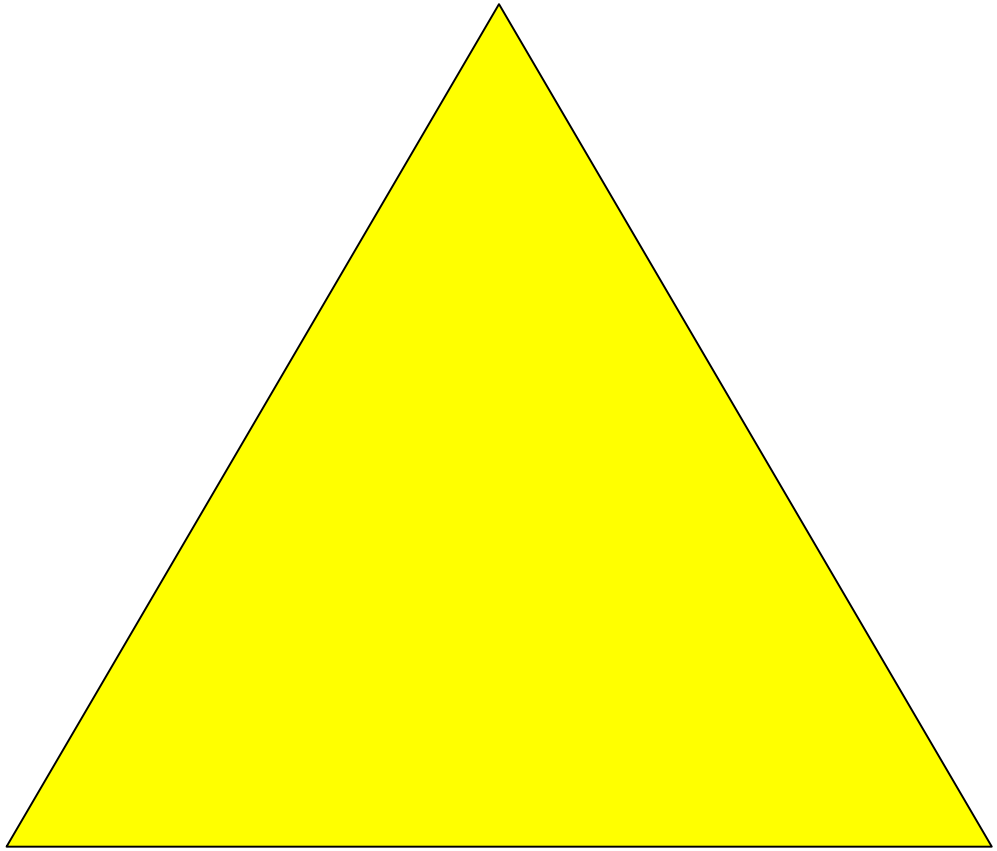
### All CARES Field Responders

- Standard CARES field go-kit
- Programmed VHF/UHF radio
- Charged batteries
- Field Communications Handbook
- ICS-214 and ICS-309
- CUP ICS 213CW Creek Watch Form
- Creek Watch *Addendum* reference
- Appropriate clothing and footwear
- Drinking water
- Smartphone; with QuickCapture loaded
- **Binoculars**

# Thank you

*Any Questions?*





# Stream Sensors

## In Town

Stevens Creek Inflow (Stream Sensor 5045)
https://alert.valleywater.org/?p=sensor&sid=5045&disc=f

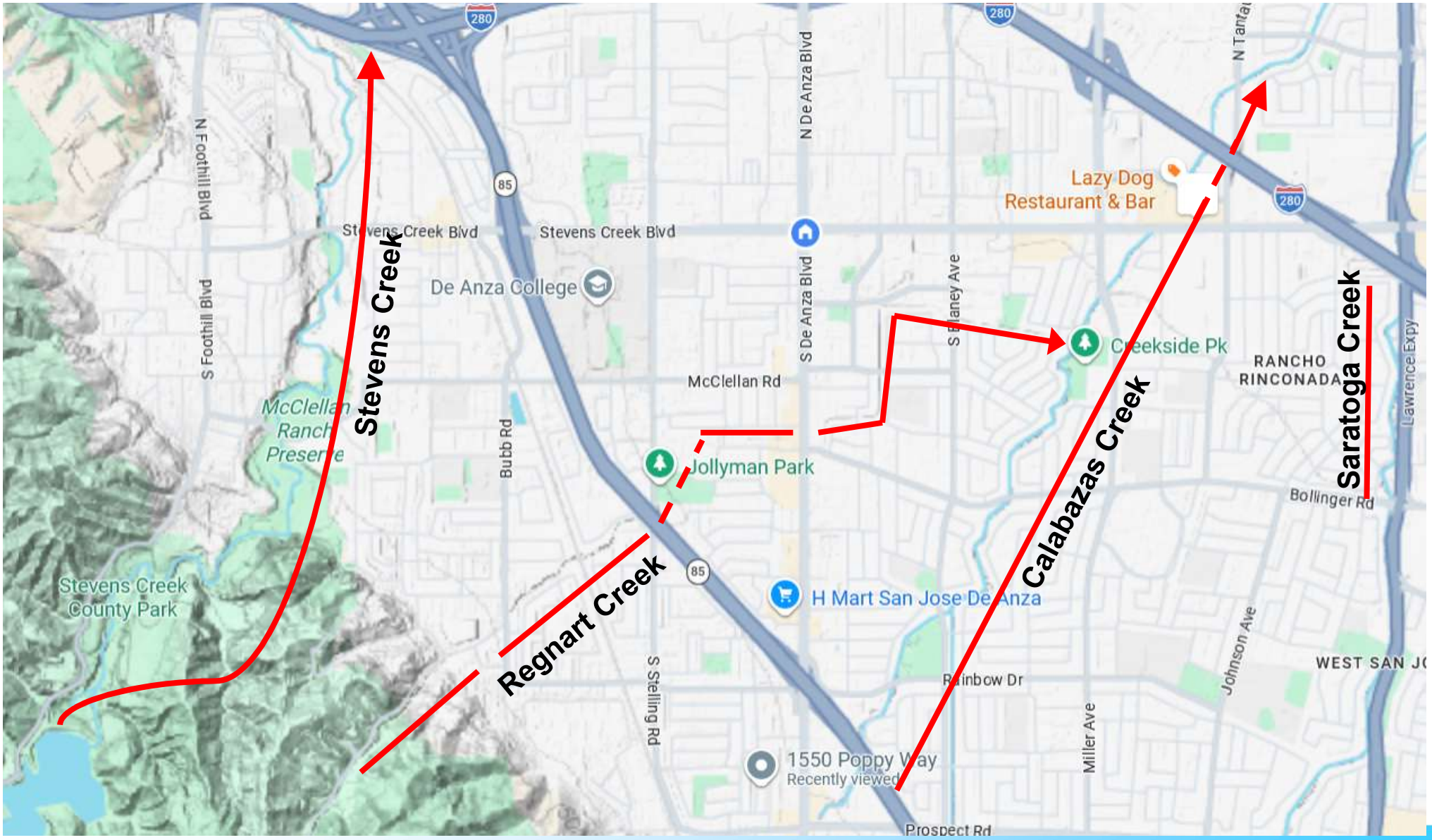
Stevens Creek below Stevens Creek Reservoir (Stream Sensor 5044)
https://alert.valleywater.org/?p=sensor&sid=5044&disc=f

## Close, but not In Town

Calabazas Creek above Rainbow Ave, San Jose (Stream Sensor 5031)
https://alert.valleywater.org/?p=sensor&sid=5031&disc=f

# Creeks in Cupertino

## Creeks of interest



# What do you see?

## Regnart Trash Rack

*Regnart Road*

A trash rack -- also known as a debris screen or debris grille -- is a heavy-duty structural steel or metal grate installed across water inflows, culverts, or storm drain openings.

***"You are the Creek Watch responder. What would you report?"***

*Think: Level, Trend, Flow, Obstruction*





# What do you see?

## Regnart Trash Rack

*November and Festival Dr*

A *BIGGER* trash rack. This is located before the creek flows under Rt 85.

***"You are the Creek Watch responder. What would you report?"***

*Think: Level, Trend, Flow, Obstruction*



# What do you see?

## Regnart Creek

*at Miller Ave, east side*

‘Bridge’ was rebuilt 1998. Level change on the downstream side.



***“You are the Creek Watch responder. What would you report?”***

*Think: Level, Trend, Flow, Obstruction*