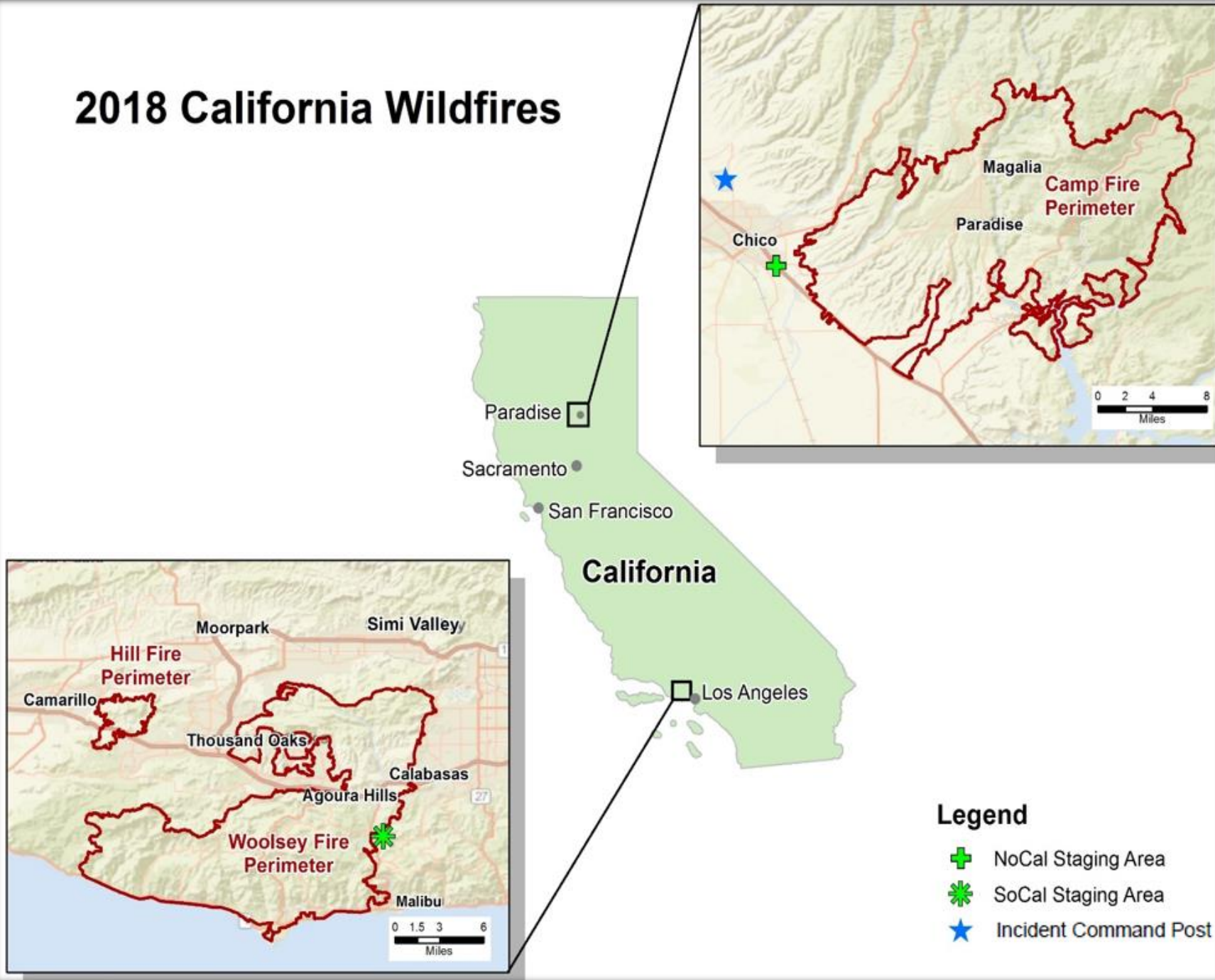


# 2018 California Wildfires



# 2018 California Wildfires

## Emergency Support Function #10

# Extent of Impact

An aerial photograph showing a residential neighborhood that has been almost entirely destroyed by a wildfire. The houses are reduced to piles of charred wood and debris. The surrounding trees are mostly dead and blackened. The sky is filled with a thick, orange-brown haze of smoke or ash, which obscures some of the details in the distance. The overall scene is one of total devastation.

- **3 counties**
  - Butte
  - Ventura
  - Los Angeles
- **> 150,000 acres consumed**
- **> 17,000 property parcels impacted**
- **89 fatalities**





# Types of HHW

- Car batteries
- Light filaments
- Solar panels
- Ammunition
- Paint cans
- Tank valves
- Propane tanks
- Pool chemicals
- Disinfectants



# Bulk Asbestos

- Characteristics
  - Heat resistant
  - Generally doesn't break down
  - Occurs naturally and in manufactured goods
- Carcinogenic; affects lungs
- Structures built prior to 1980 often contain asbestos containing materials that can become friable and mobile in the environment.

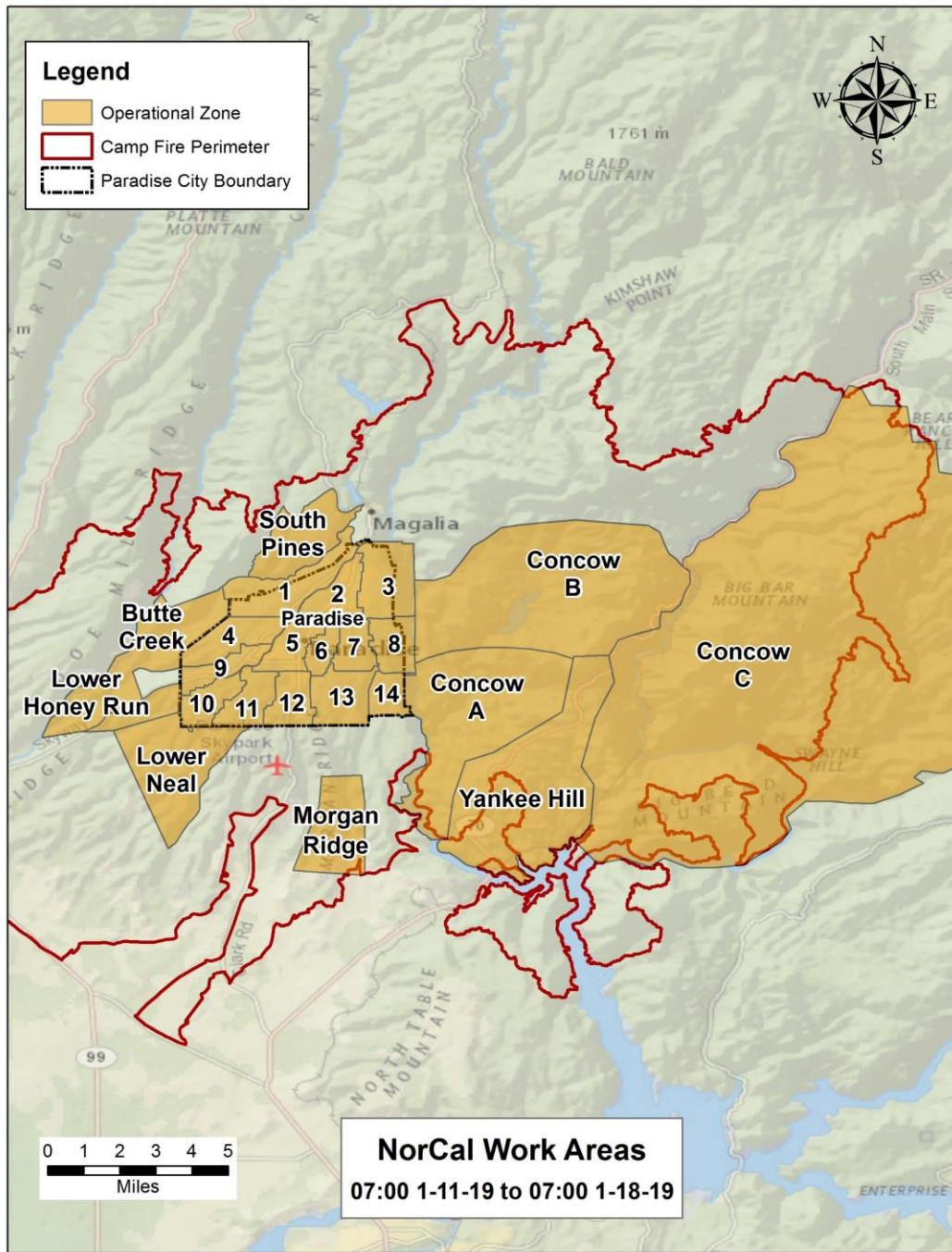


# US EPA Mission Assignments

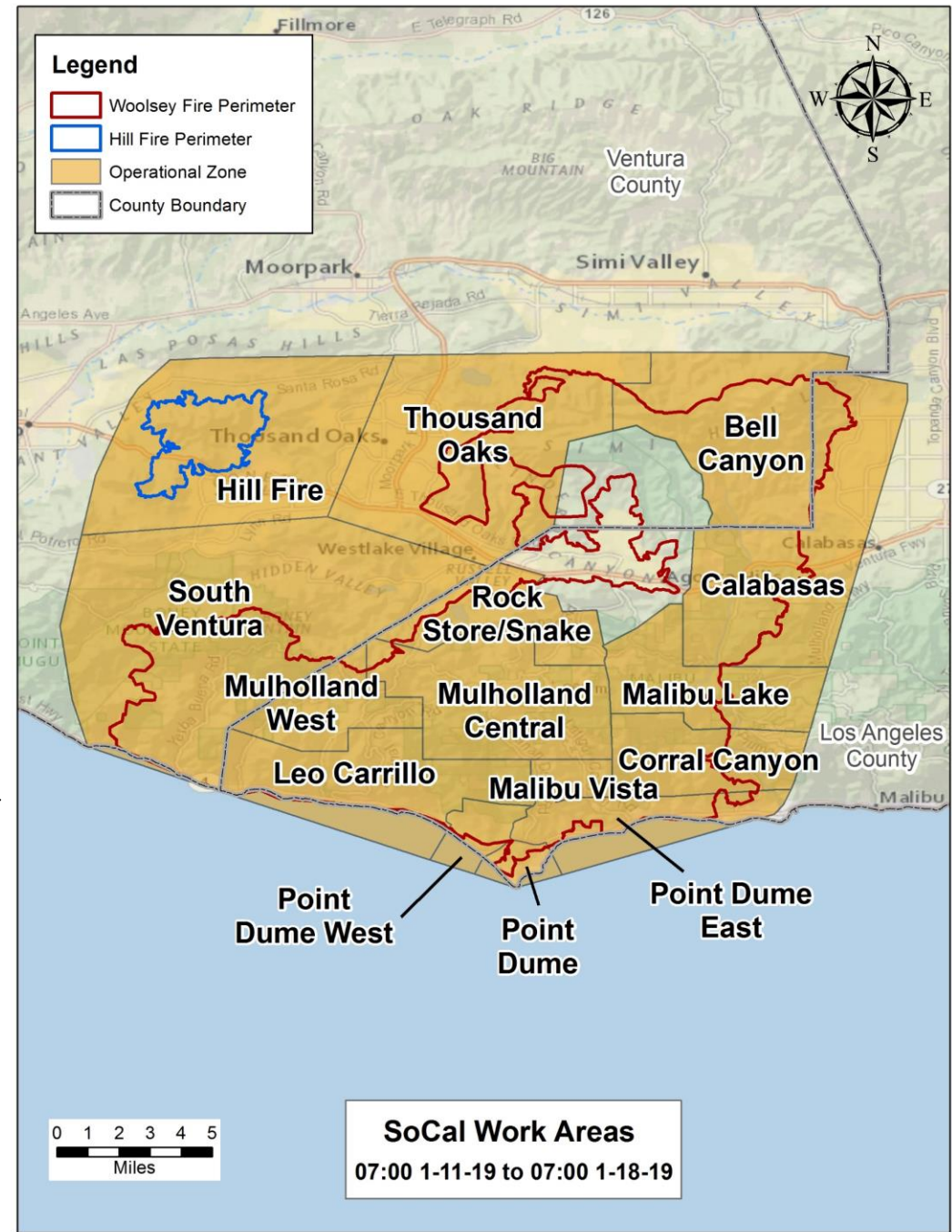
- Initial assessment \*
- Household hazardous waste (HHW) removal\*
- Radiological Monitoring and Assessment Team at Santa Susana Field Lab, Ventura County, CA

\* Phase I of cleanup. (Phase II of cleanup is debris removal and conducted by FEMA and California.)





# US EPA Work Areas





# HHW Removal

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<http://www.oesnews.com/great-progress-being-made-with-household-hazardous-waste-removal-in-butte-county/>





# HHW Removal

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Car Batteries and Light Filaments



# HHW Removal

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## Drums



# HHW Removal

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## Cylinders and Tanks



HHW Removal  
Asbestos?!?



# HHW Removal

---

## High Hazards Team

- Ammo > 50 caliber
- Explosives
- Tanks > 100 gallons
- Radioactive material
- Leaking transformers
- Mercury

This property's Household Hazardous Waste removal has been designated

 **COMPLETE**

**Ash & other materials remain a health hazard.**



*Please review health advisories before entering burned areas.*

For questions regarding the cleanup, contact the  
**Right-of-Entry Center**  
at 530-552-3155

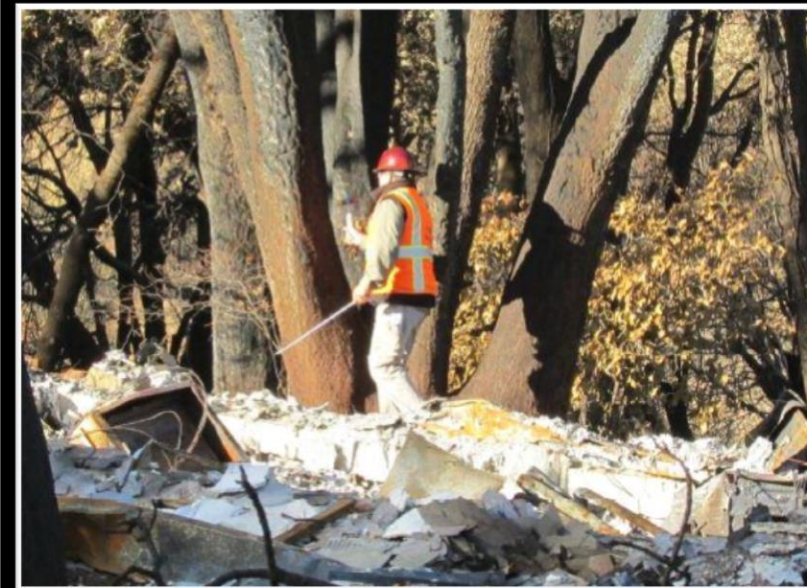


Signs mark completed parcels

# Quality Control Teams



Quality control team reviews completed parcels to ensure all HHW removed.



# Adapting to Changing Conditions

## Tree Hazards

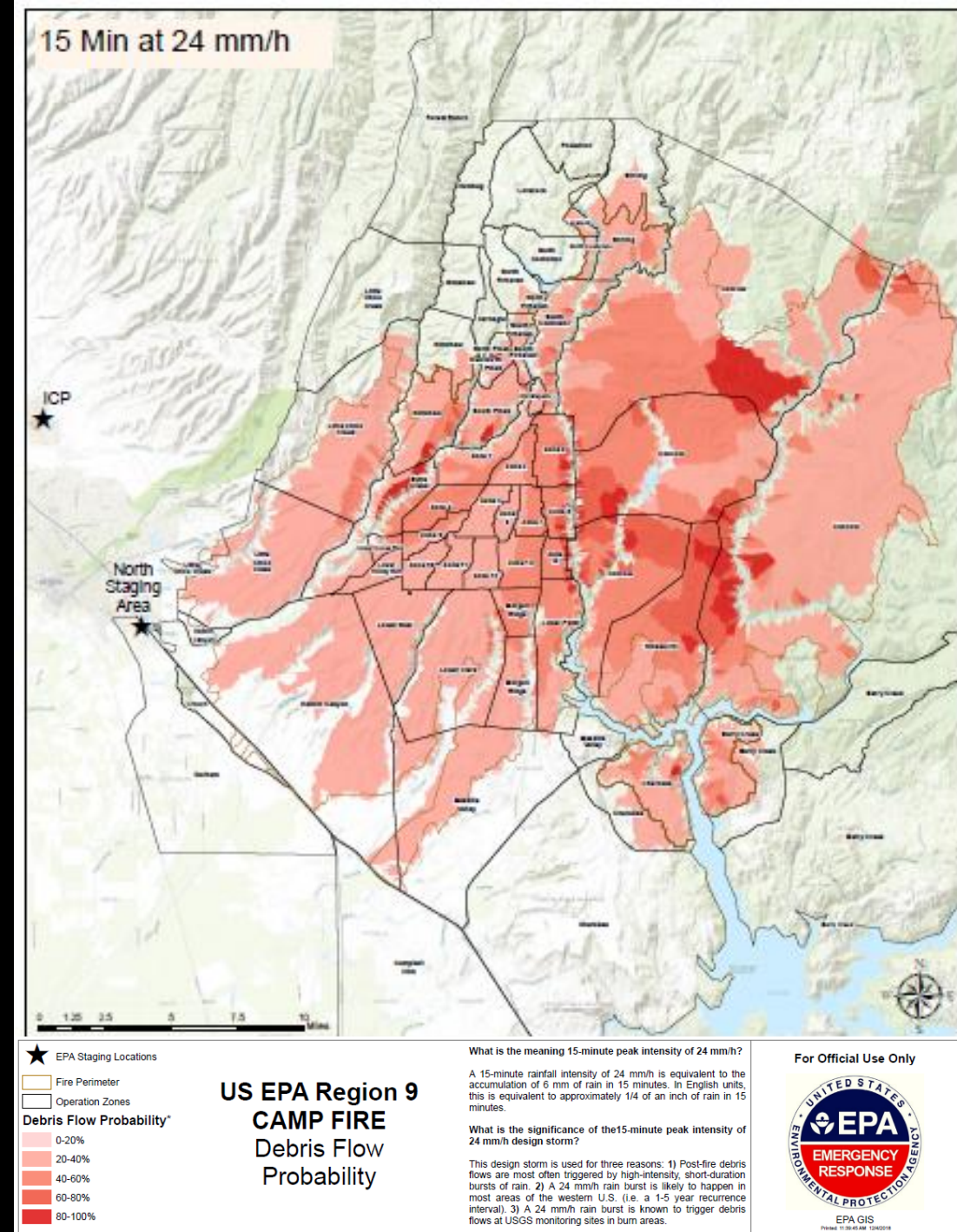


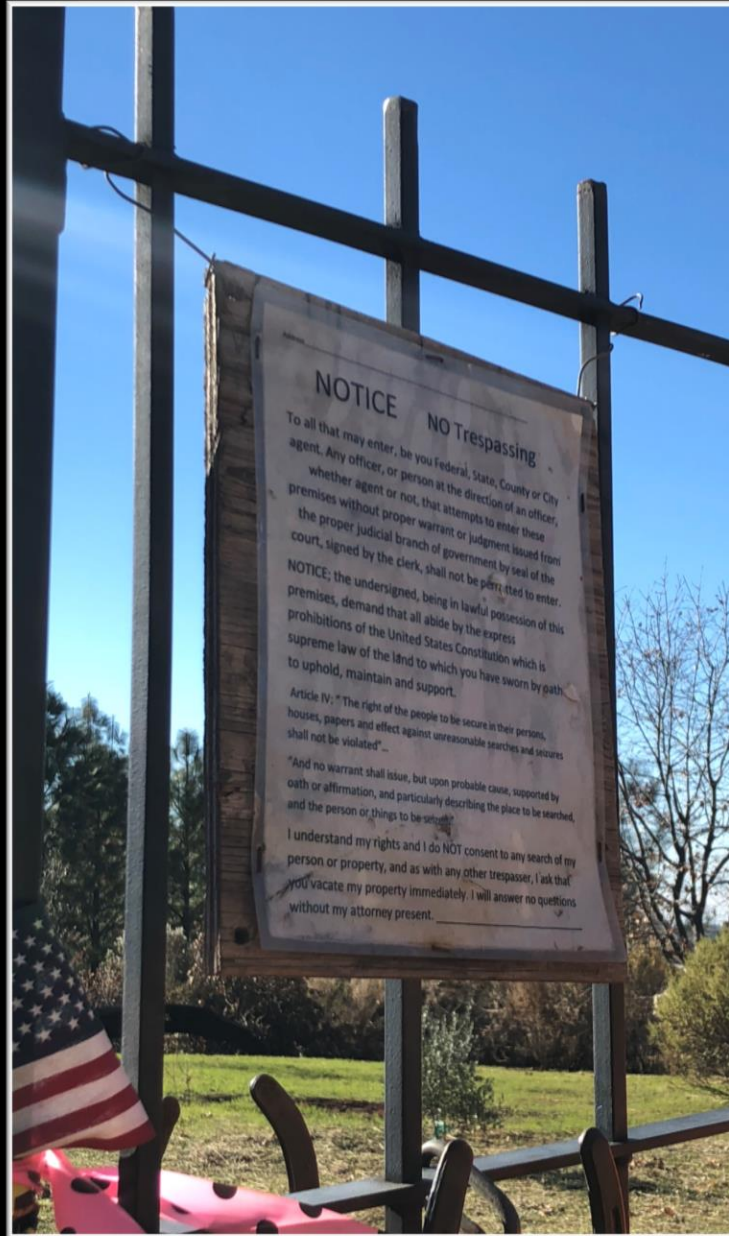
# Adapting to Changing Conditions

## Weather

...tornados, debris flows, storms, high winds, and flash floods...

and the government shutdown





# Adapting to Changing Conditions

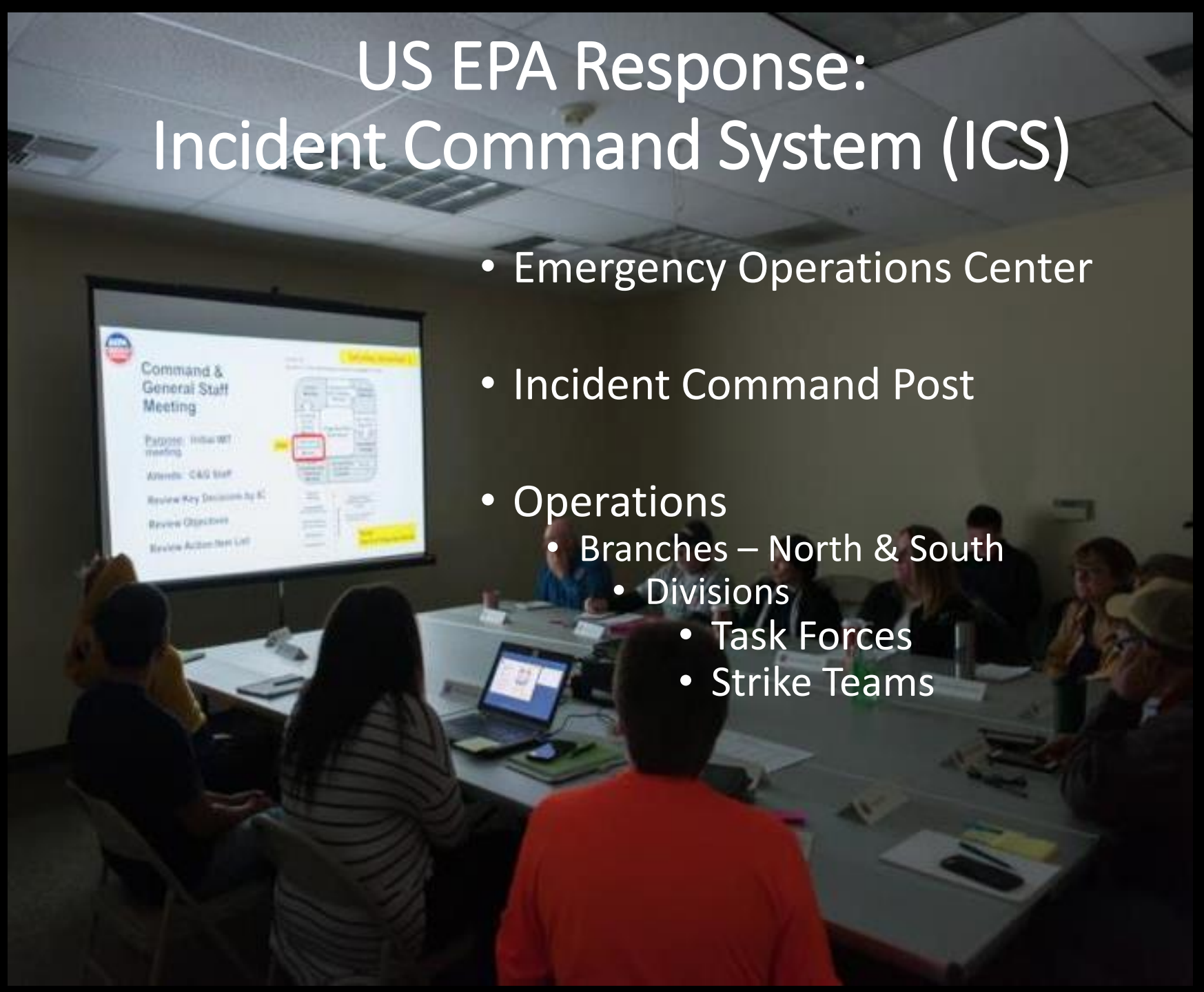
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## Access



# US EPA Response: Incident Command System (ICS)

- Emergency Operations Center
- Incident Command Post
- Operations
  - Branches – North & South
  - Divisions
  - Task Forces
  - Strike Teams



# US EPA Response: Incident Command System (ICS)

<b>1. Incident Name:</b>		<b>2. Operational Period:</b> ( Date / Time )		<b>DAILY MEETING/ CONFERENCE CALL SCHEDULE ICS 230 - EPA</b>
2018 California Wildfires- ESF- 10		From: 01/18/2019 0700 To: 01/19/2019 0700		
<b>3. Meeting Schedule (Commonly-held meetings are included) :</b>				
Date/ Time	Meeting Name	Purpose	Attendees	Location
<b>0700</b> (Mon/Thurs)	OPS Briefing/ Staging Area Safety Mtg	Discuss Safety Concerns with Task Forces	SO, Ops	Staging Area 2850 Fair St
<b>1000</b> (Daily)	C&GS Meeting	IMT Coordination Meeting	Command and General Staff	ICP Conference Rom 800-320-4330 Code: 561078
<b>1730</b> (Daily)	Tactics Meeting	Coordination Opportunity for Operations	OPS, d-OPS, PSC, RESL, SITL	Staging Area 2850 Fair St
<b>1830</b> (Daily)	Planning Meeting	Present the operational plan for IC approval	Command and General Staff	ICP Conference Rom 800-320-4330 Code: 561078
<b>4. Special and Other Meetings:</b>				
None				
<b>5. Prepared by: (PSC)</b>			<b>( Date / Time )</b>	
Name:		Signature:		
<b>DAILY MEETING SCHEDULE</b>				<b>ICS 230 - EPA (Rev 02/10)</b>



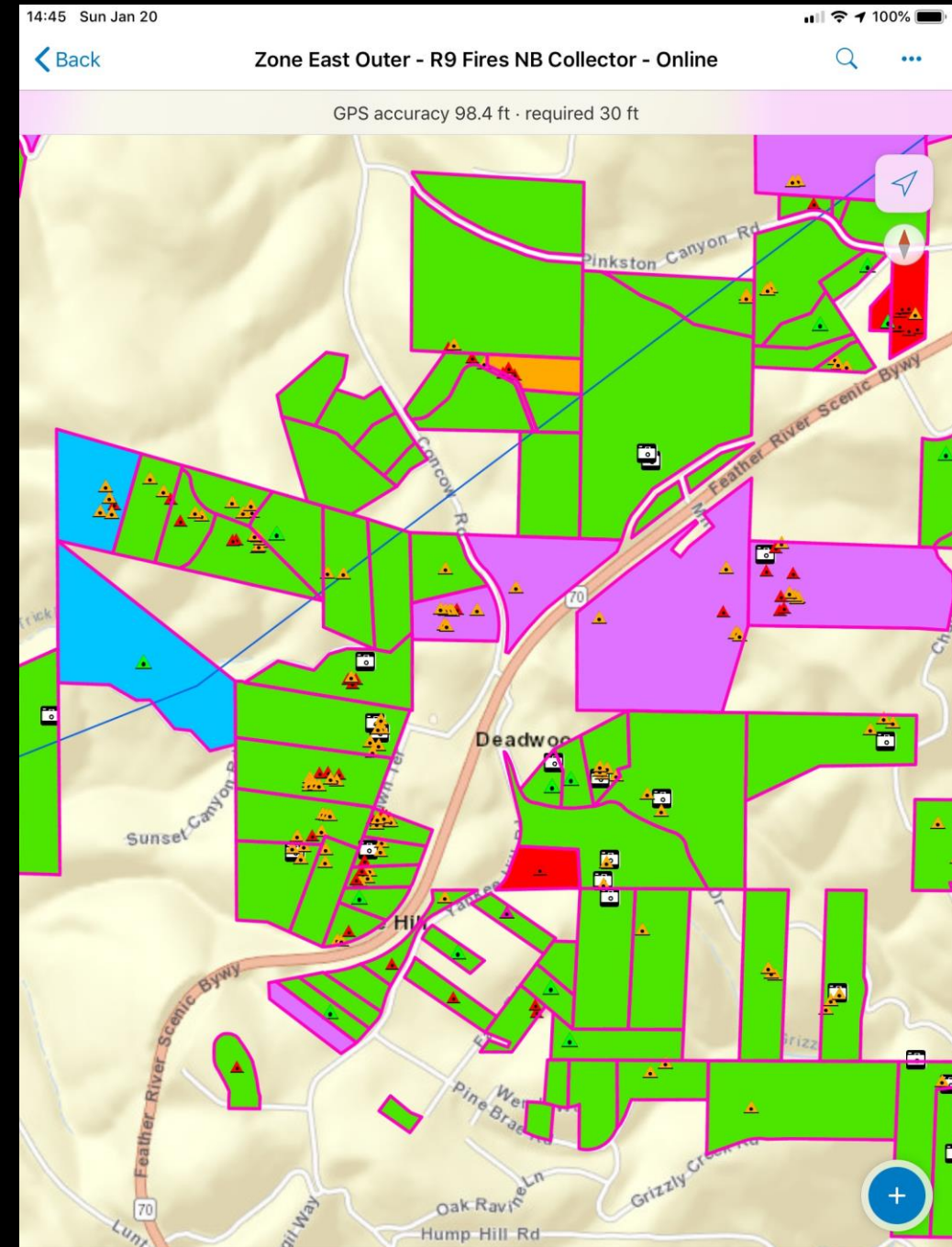
# Operations Morning Meeting

- Work assignments
- Safety briefing
- Important announcements



# HHW Collector Apps

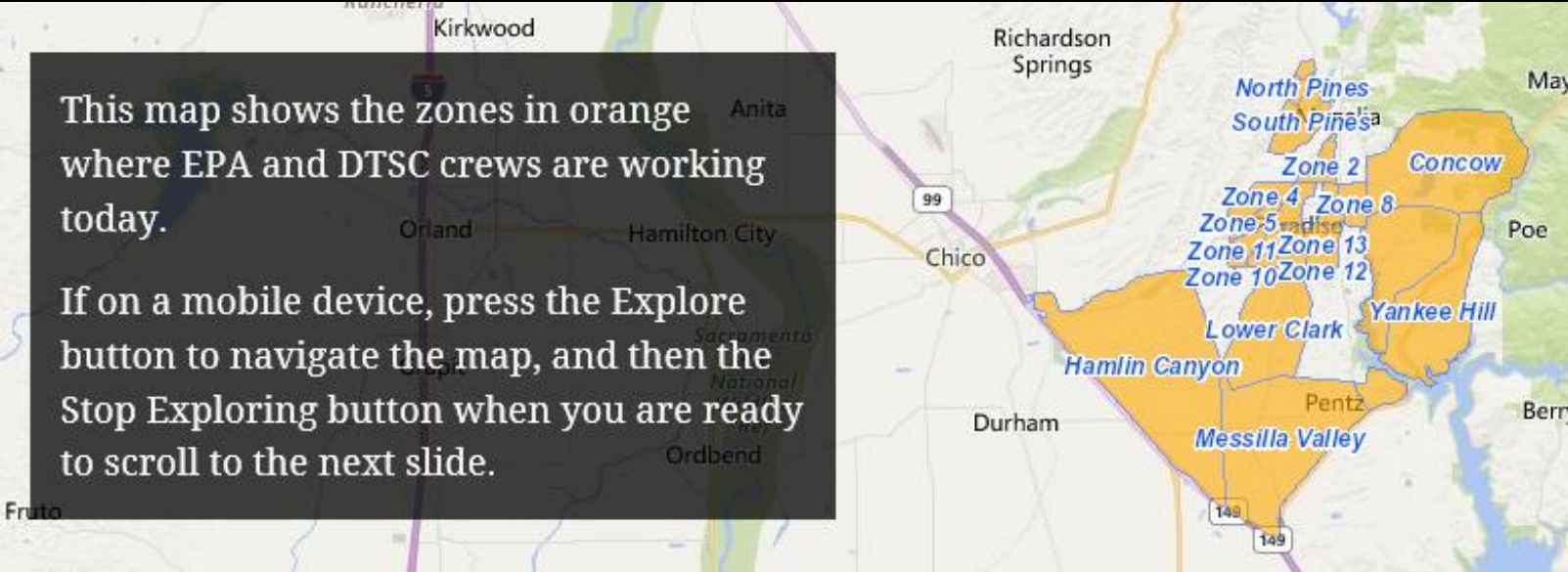
- Access on iPad in field
- Documents site activity
- Standard operating procedures for consistency
- Relevant parcel information
- Uploaded to EPA's data management system
- Ability to look up in real time parcel status to interested residents at public meetings



# Community Outreach and Public Meetings



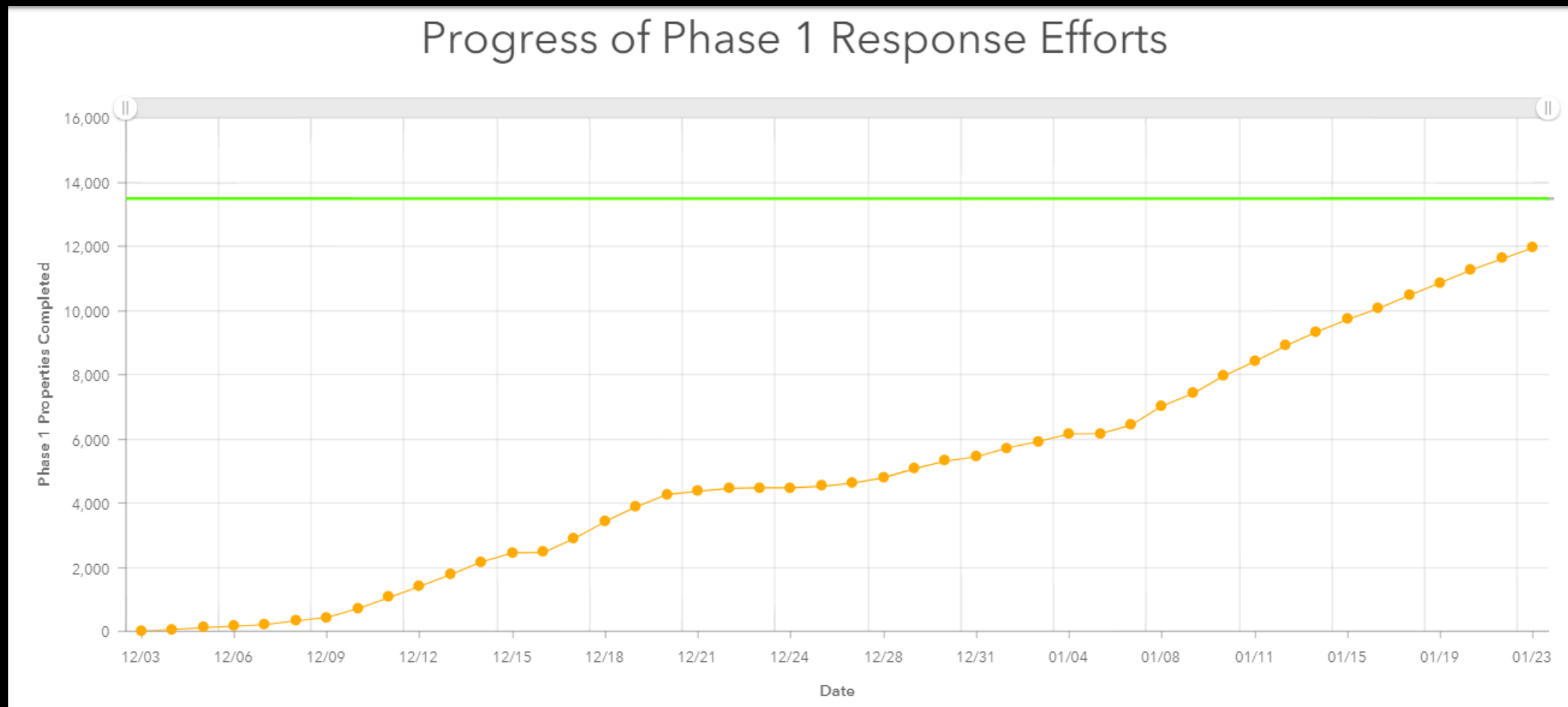
# US EPA Story Map





# US EPA Story Map: Progress Metrics

- Jan. 23, 2019: 91% of properties completed
- Feb. 1, 2019: Phase I complete



# US EPA Story Map: Address Lookup

**Camp Fire - Address Lookup for Phase 1 Response**

Enter Address Here

**Legend**

**Property Status**  
Butte County

- Assessment Needed
- Phase 1 Complete
- Phase 1 Deferred

**Camp Fire Response** Address Lookup

Look up your address for Phase 1 household hazardous waste (HHW) removal

**Camp Fire - Property Status for Phase 1 Response Efforts**

**Legend**

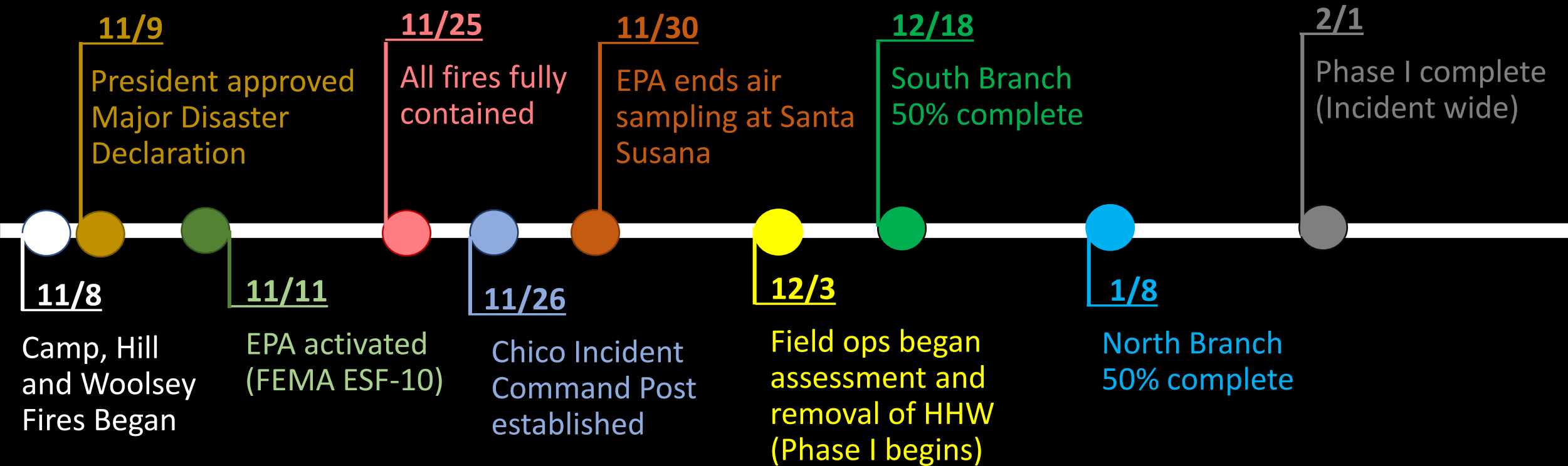
- Phase 1 Complete
- Phase 1 Deferred
- Assessment Needed

Sun Dec 02, 2018 - Sun Dec 30, 2018

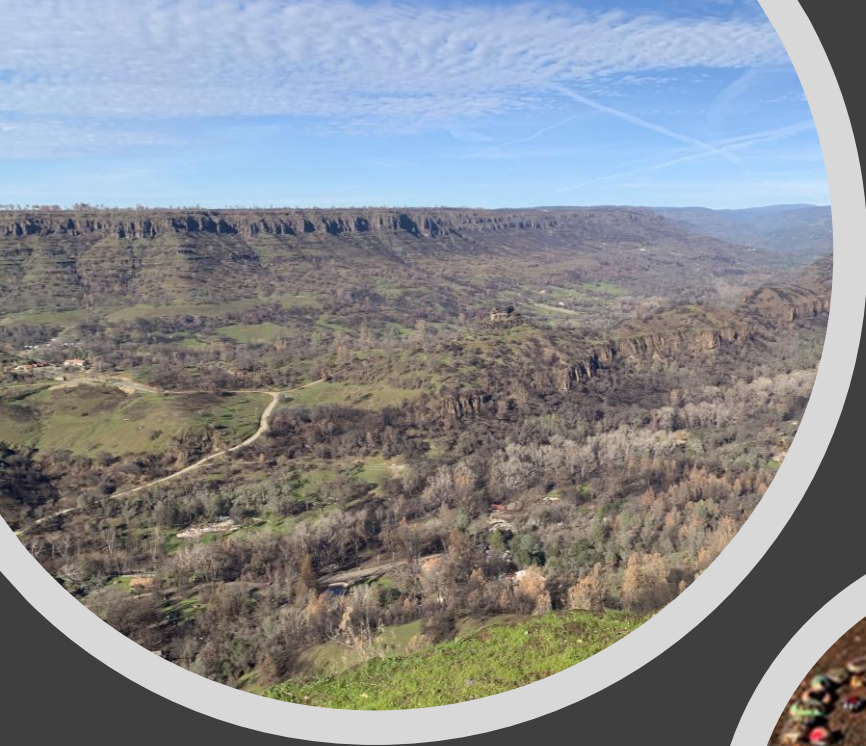
Stop Exploring



# 2018 California Wildfires Timeline



# Lessoned Learned



- **Efficient scale up**
  - Ability to access resources quickly
  - “Go big early”
  - Established ICP close to impacted areas
  - Data systems invaluable
- **Early investment with partners and public**
  - Community engagement
  - Integrate with local government
  - Communicate directly with the affected population
- **Resilience and dedication of EPA staff nationwide to serve deployments through holidays and furlough periods**