



# USEPA DISASTER RESPONSE

Steve Calanog, IC

Bill Jones, ESF10 Coordinator/LNO



# California Wildfires Responses



Ops in Field



# RECENT CALIFORNIA WILDFIRES

2021

  
**2,568,948 Acres**  
Estimated Acres Burned

  
**8,835 Incidents**  
Number of Incidents

  
**3 Fatalities**  
Confirmed Loss of Life


  
**3,629 Structures**  
Structures Damaged or Destroyed

2020

  
**4,304,379 Acres**  
Estimated Acres Burned

  
**8,648 Incidents**  
Number of Incidents

  
**33 Fatalities**  
Confirmed Loss of Life

  
**11,116 Structures**  
Structures Damaged or Destroyed

2018

  
**1,975,086 Acres**  
Estimated Acres Burned

  
**7,948 Incidents**  
Number of Wildfires

  
**100 Fatalities**  
Confirmed Loss of Life

  
**24,226 Structures**  
Structures Damaged or Destroyed

2017

  
**1,548,429 Acres**  
Estimated Acres Burned

  
**9,270 Incidents**  
Number of Wildfires

  
**47 Fatalities**  
Confirmed Loss of Life

  
**10,280 Structures**  
Structures Damaged or Destroyed

Source: CalFire



Source: The Guardian

- Typically, USEPA gets mission assigned when there is a Presidential Disaster Declaration and the number of structures exceeds State and local capacity...usually ~1000 structures.
- 2019 total structures damaged/destroyed was 732.
- USEPA has been activated in years prior to 2017.

# NATIONAL RESPONSE FRAMEWORK EMERGENCY SUPPORT FUNCTIONS (ESFs)



- ESF 1: Transportation
- ESF 2: Communications
- ESF 3: Public Works & Engineering
- ESF 4: Firefighting
- ESF 5: Emergency Management
- ESF 6: Mass Care, Housing & Human Services
- ESF 7: Resource Support
- ESF 8: Public Health & Medical Services

- ESF 9: Urban Search & Rescue
- ESF 10: Oil & Hazardous Materials (USEPA)**
- ESF 11: Agriculture & Natural Resources
- ESF 12: Energy
- ESF 13: Public Safety & Security
- ESF 14: Long-term Community Recovery & Mitigation
- ESF 15: External Communications



# ESF10 GENERAL DUTIES

- ❖ Commit agency assets
- ❖ Approve and implement mission assignments
- ❖ Maintain situational awareness and report on ESF operations
- ❖ Represent agency on task forces and ad hoc groups
- ❖ Serve as technical experts





# MISSION ASSIGNMENTS

- **Activation MA - Surge funding**
  - ESF10 Deploys
  - SMEs develop cost estimates
- **HHW MA – Fed Disaster Dec**
  - Often amended to add counties, non-profits & other tasks
  - USEPA has always finished ahead of schedule & under-budget
  - Final HHW disposal, returning staging areas to original state, final data reports & contract closeouts take time after HHW collection is completed.

DEPARTMENT OF HOMELAND SECURITY  
Federal Emergency Management Agency  
MISSION ASSIGNMENT (MA)

O.M.B. No. 1660-0002  
Expires May 31, 2017

PAPERWORK BURDEN DISCLOSURE NOTICE			
Public reporting burden for this form is estimated to average 20 minutes per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and submitting this form. This collection of information is required to obtain or retain benefits. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472-3100, Paperwork Reduction Project (1660-0047). NOTE: Do not send your completed form to this address.			
<b>I. TRACKING INFORMATION (FEMA Use Only)</b>			
State CA (California) Incident2020082004-R09 California Wildfires 2020	Resource Request Number 2810-460566		
Program Code/Event Number 4558DR-CA- WILDFIRES	Date/Time Received 12/17/2020 18:52		
<b>II. ASSISTANCE REQUIRED</b> <input checked="" type="checkbox"/> See Attached			
Assistance Requested Amendment #5 Extend projected end date to 02/15/2021 Amendment #4 Increase funding \$5,000,000.00 and extend project end date to 01/15/2021			
Delivery Location JFO - 2995 Prospect Park Dr Rancho Cordova, CA 95309	Internal Control Number	Date/Time Required 12/17/2020	
Initiator/Requestor Name Janston & #34; Jay & #34; dentongidea	24 Hour Phone Number (916) 636-3757	Email Address Ryan.Buras@caloes.ca.gov	Date 12/17/2020
Site POC Name Matt Davis	24 Hour Phone Number (202) 320-7179	Email Address	Date 12/17/2020
<b>III. INITIAL FEDERAL COORDINATION (Operations Section)</b>			
Action to: <input checked="" type="checkbox"/> ESF #: 10 <input type="checkbox"/> Other: _____	Date/Time 12/17/2020 18:36	Priority <input type="checkbox"/> 1. Lifesaving <input checked="" type="checkbox"/> 3. High	<input type="checkbox"/> 2. Life sustaining <input type="checkbox"/> 4. Normal
<input type="checkbox"/> RSF: _____ <input checked="" type="checkbox"/> See Attached			
<b>IV. DESCRIPTION (Assigned Agency Action Officer)</b>			
Statement of Work In support of State of California request, as directed by and in coordination with FEMA, EPA will conduct oil and hazardous materials field operations, including cleanup and disposal of hazardous materials and oil in support of FEMA disaster operations.			
Your agency must validate the unliquidated MA balance at least annually as stipulated by FEMA to maintain reimbursable authority. Accrual data must also be provided to FEMA no later than the third business day after fiscal quarter end close. Information can be submitted to FEMA-Disaster-MA-ULO@dhs.gov. For MA billing and reimbursement information, please visit <a href="http://www.fema.gov/federal-agencies-providing-disaster-assistance">http://www.fema.gov/federal-agencies-providing-disaster-assistance</a> .			
Assigned Agency EPA (ENVIRONMENTAL PROTECTION AGENCY)	Projected Start Date 09/09/2020	Estimated Projected End Date 02/15/2021	
<input type="checkbox"/> New or <input checked="" type="checkbox"/> Amendment to MA #: 4558DRCAEPA0204	Total Cost Estimated \$0.00	Total Required this Obligation Cycle	
ESF/OFA/RSF Action Officer BILL JONES	Phone # (619) 806-6737	Email jones.bill#64;epa.gov	
<b>V. COORDINATION (FEMA Use Only)</b>			
Type of MA: <input checked="" type="checkbox"/> Direct Federal Assistance State Cost Share (0%, 10%, 25%)	<input type="checkbox"/> Federal Operations Support State Share (0%)		
State Cost Share Percent 25 %	State Cost Share Amount: \$ 0.00		
Fund Citation: 20 2 1 -06 -4 5 5 8 DR -9 0 9 4 XXXX-250 -D Appropriation code: 70X0702			
Mission Assignment Manager (Preparer) DELANE GARNER	Date 12/18/2020		
**FEMA Project Manager/Branch Director (Program Approval) JANSTON DENTON-GILDEA	Date 12/18/2020		
**Comptroller/Funds Control (Funds Review) JOHN SVOLOS	Date 12/18/2020		



## PHASE 1 & PHASE 2 DEBRIS MISSIONS

- *Phase 1 - Survey, removal, and disposal of household hazardous waste (HHW) at affected properties. (ESF10)*
- Once teams remove household hazardous waste, property owners may move into Phase II. ESF3 is the lead for Phase 2.
- Typically, property owners cannot perform Phase 2 cleanup themselves – owners are required to engage in the Government Program or hire properly licensed and certified contractors and consultants to complete cleanup in the Private Program.



# Examples of household hazardous waste (HHW)

- Paint
- Fertilizers and pesticides
- Aerosol cans
- Fire extinguishers
- Pool chemicals
- High-pressure gas cylinders
- Propane cylinders
- Intact compressed gas cylinders
- Ammo =< .50 caliber
- Batteries
- Fuels and used oil
- Fluorescent light ballasts





## Examples of high-hazard waste

- Ammo larger than .50 (larger than your fist)
- Explosives
- Tanks >100 gal
- Radioactive material
- Bulging drums, or >1 large drum with unknown liquids
- Cylinders unsafe for transport



# e-Waste

- Microwave ovens
  - LCD, plasma, and CRT displays
  - Stereo components
  - Copiers, fax machines
  - Phones and answering machines
  - VCRs
  - Computers, laptops
  - Routers, peripherals
  - Calculators
- Solar panels are also e-Waste and will be collected when they are heat impacted but in relatively good condition.



# Asbestos-containing material (ACM)

- ACM typically removed as part of Phase 2 Debris mission.
- Removed during Phase 1 if it is easily identifiable, easily removable, poses a significant exposure risk, and can be removed in less than 30 minutes without heavy machinery.



# PRE-HOUSEHOLD HAZARDOUS WASTE MISSION ASSIGNMENT RECON

- Windshield Assessments of Damaged Areas
- Meetings with local agencies at County EOC
- Assess staging area Locations
- Develop data layers of damaged parcels





# MISSION ASSIGNMENTS COVERING NUMEROUS COUNTIES IN 2020 WORKED WITH 7 COUNTIES SIMULTANEOUSLY





## COUNTY OF SANTA CRUZ

701 OCEAN STREET, SANTA CRUZ, CA 95060-4073  
(831) 454-2000 WWW.SANTACRUZCOUNTY.US

CARLOS J. PALACIOS, COUNTY ADMINISTRATIVE OFFICER

### PRESS RELEASE

Date: September 15, 2020  
Contact: Jason Hoppin  
Jason.Hoppin@santacruzcounty.us

#### DEBRIS REMOVAL PROHIBITED

Fire debris removal from damaged properties is prohibited by local health order until property owners receive a hazard assessment and approval from environmental health authorities.

Property owners, tenants and members of the public should not attempt to remove, dig, sift or evaluate property debris. Fire sites are often toxic and include hazardous substances such as lead-acid and household batteries; compressed gas cylinders; bulk pesticides, fertilizers, and pool chemicals; paints, thinners, and aerosol cans; asbestos siding, pipe insulation, and tiles; e-waste and more.

Fire-damaged debris will not be accepted at any County waste facility and placement in residential or commercial trash collection bins will result in bins not being accepted by GreenWaste. Removal of hazardous waste must be completed by federal, state and local jurisdictions working under safe handling guidelines. Failure to follow these practices could jeopardize financial assistance and delay the rebuilding process.

"Fire debris can be toxic and needs special handling and disposal procedures," Santa Cruz County Environmental Health Director Dr. Marilyn Underwood said. "It is critical that the public refrain from removing any fire-damaged debris from their property."

Phase I hazardous debris removal will be completed at no cost to CZU Lightning Complex survivors with the assistance of the U.S. Environmental Protection Agency (USEPA), the California Environmental Protection Agency (CalEPA) and the Santa Cruz County Environmental Health Division (SCCEHD). All other debris removal must have an approved plan from the Environmental Health Division prior to removal. USEPA officials are working with the County, and the County will post information about progress on the Fire Recovery website at [www.santacruzcounty.us/firerecovery.aspx](http://www.santacruzcounty.us/firerecovery.aspx) once available.

Detailed information on debris removal, including an FAQ, is available at <http://scceh.com/Home/CZULightningComplexFire/DebrisRemoval.aspx>.

- All incidents begin and end locally.
- Local officials get the word out regarding site hazards and often restrict access due to public health concerns until Phase 1 HHW completed.



- USEPA has fact sheets and information hotlines to help reduce burden on local agencies.
- Collaboration with local agency reps is critical to ensure accurate and timely messaging.

## Wildfire Recovery



### Phase 1: Household Hazardous Waste Removal

El Dorado County, CA – September 2021

The U.S. Environmental Protection Agency (EPA) is leading the survey, removal, and disposal of household hazardous waste (HHW) at residential properties affected by the Caldor Fire in El Dorado County. This HHW removal is Phase 1 of the overall cleanup response.

#### What is household hazardous waste (HHW)?

Everyday products like paints, cleaners, solvents, oils, batteries, herbicides, and pesticides, which often have hazardous ingredients.

EPA's HHW field crews will remove items suspected of having asbestos if they are easy to identify, but the property will not be cleared of asbestos until Phase 2. Pressurized fuel cylinders can also pose a threat and will be removed. Following a fire, these products require special handling and disposal, especially if their containers are compromised.



Empty containers, marked with white paint, will be picked up during Phase 2.

#### How is HHW removed from properties?

EPA will survey each property, then remove the HHW materials identified during the survey.

Some empty containers and tanks will be marked with white paint (see image to the right) and left for collection in Phase 2, which is the debris removal process. Once EPA removes HHW and Phase 1 is complete on your property, you may move to Phase 2.



**You must get approval from El Dorado County before moving to Phase 2.** For more information on Phase 2, please call El Dorado County Environmental Health at (530) 621-5101

#### Why is HHW removed?

This work removes hazardous materials from the property that can harm the environment or people working on the property. It clears the way for the removal of ash and debris, allowing the rebuilding process to begin. An Executive Order issued August 30, 2021 by the Governor of California gives EPA authority to access properties to protect public health, animals, and the environment.

Phase 1 is being done at no cost to property owners.

#### Will EPA remove anything other than HHW?

No. EPA will **only** remove hazardous waste. If firearms or suspected remains are found, EPA will immediately stop work and contact the El Dorado County Sheriff. No other items will be removed.

#### How will I know if my property will be surveyed for HHW?

- Search for your address on the EPA StoryMap: <https://www.epa.gov/2021CAfireresponse>
- Click on the El Dorado County button (for mobile users, click on the arrow pointing right to get to El Dorado County)
- Type in your APN or street address.
- Results from your search will show if your property is damaged and in need of assessment.
- If your property is not shown as damaged, but you have fire-damaged or destroyed buildings (even small structures), please call El Dorado County at (530) 621-5101.

#### May I provide input about potential hazards to EPA crews before they arrive at my property?

Yes. Please call the EPA hotline at (415) 947-8135 if you have any special comments or concerns about your property, or if there is a locked gate preventing access.

#### How will I know when the process has been completed?

EPA will post a sign (see image to the right) on each property when the HHW removal (Phase 1) is complete. Completed properties are also marked on the EPA StoryMap and can be found through the search function on the map for El Dorado County.

#### My neighbors' properties were completed for HHW but mine was not. Why not?

There are several factors affecting HHW schedules. For example, HHW field crews may not work in an area when other field crews are present, to decrease traffic and congestion. Weather and daylight also affect the schedule. Also, HHW field crews cannot work on properties with dangerous trees or terrain, unstable structures, or other unsafe conditions. Those properties will be addressed during Phase 2.

This property's Household Hazardous Waste removal has been designated

**COMPLETE**

by the US Environmental Protection Agency

Ash and other materials remain a health hazard.  
Please review health advisories before entering burned areas.

For questions, please call  
El Dorado County at:  
**(530) 621-5101**

For more information, please call El Dorado County at

**(530) 621-5101**



**Governor Executive Order**  
granting USEPA the authority to  
“enter private property in all  
impacted counties to remove debris  
that may contain hazardous  
substances, and to conduct any  
testing appropriate to ensure the  
hazards are mitigated.”

**Debris removal (Phase 2) requires  
opt out or right of entry forms.**

EXECUTIVE DEPARTMENT  
STATE OF CALIFORNIA

EXECUTIVE ORDER N-81-20

**WHEREAS** the 2020 fire season has already proven to be the most destructive fire season on record in California; and

**WHEREAS** on August 16, 2020, I proclaimed a State of Emergency to exist statewide due to an Extreme Heat Event, which resulted in record-breaking temperatures and dangerous fire conditions throughout the State; and

**WHEREAS** on August 18, 2020 I proclaimed a State of Emergency to exist statewide due to the numerous wildfires burning throughout the State, including but not limited to the LNU, CZU, and SCU Complex Fires; and

**WHEREAS** on September 3, 2020, I proclaimed a State of Emergency to exist statewide due to another Extreme Heat Event, which again resulted in record-breaking temperatures and dangerous fire conditions throughout the State; and

**WHEREAS** on September 6, 2020, I proclaimed a State of Emergency to exist in Fresno, Madera, and Mariposa counties due to the Creek Fire; in San Bernardino County due to the El Dorado Fire; and in San Diego County due to the Valley Fire; and

**WHEREAS** on September 10, 2020, I proclaimed a State of Emergency to exist in Siskiyou County due to numerous fires within that county, including the Slater Fire; and

**WHEREAS** these wildfires have collectively destroyed thousands of homes and other structures, tragically claimed 26 lives to date, damaged and destroyed critical infrastructure, burned millions of acres of land, and created a substantial amount of ash, burnt vegetation, and other such debris over large areas of communities; and

**WHEREAS** the wildfires have resulted in widespread hazardous debris, which contains dangerous toxins including heavy metals such as arsenic, cadmium, copper, lead, and asbestos, and which must be cautiously and expeditiously removed and properly disposed of; and

**WHEREAS** recovery will be ongoing and it is imperative that governmental agencies are adequately staffed to help facilitate recovery, and that protections remain in place to ensure communities impacted by these wildfires are able to fully recover; and

**WHEREAS** under the provisions of Government Code section 8571, I find





# USDOT HAZMAT TRANSPORT EMERGENCY WAIVER





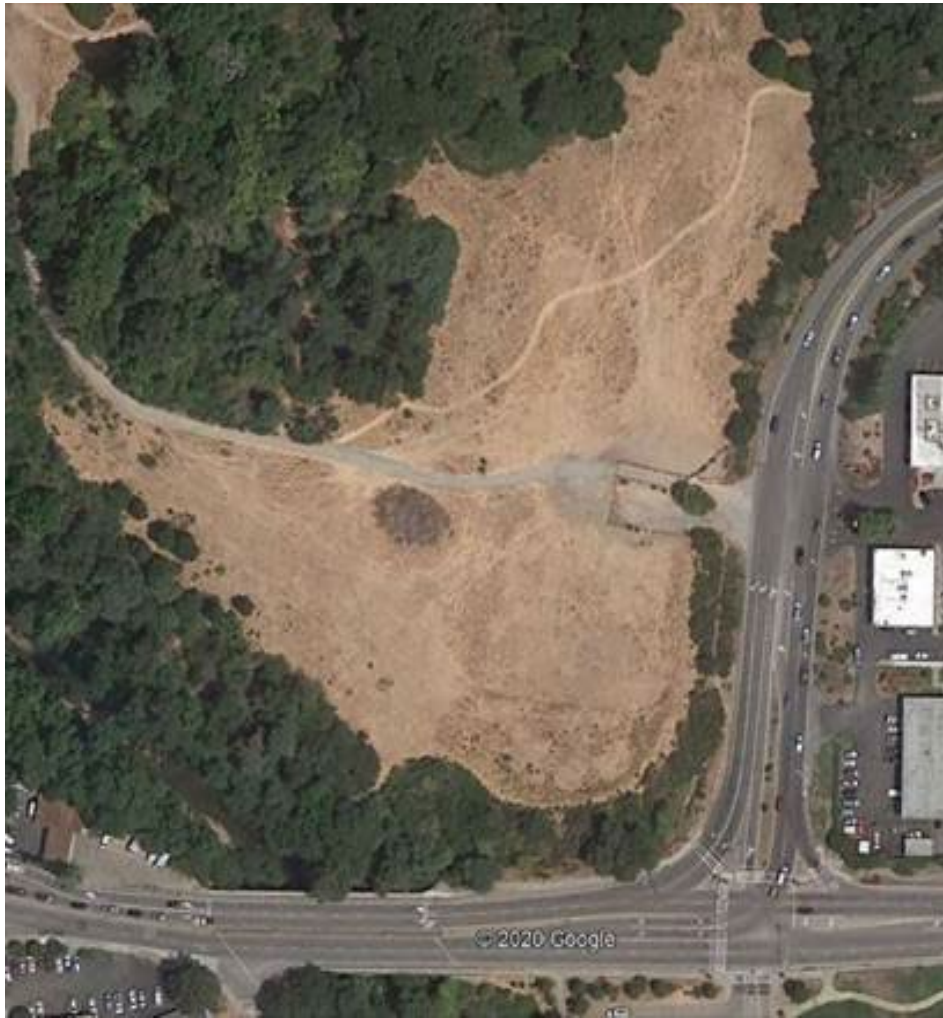
## PREPARING FOR DEPLOYMENT

- ✓ Planning for resources: people, staging area, equipment, safety (hazards, COVID-19), areas needing assessment/cleanup
- ✓ Operations: training, logistics to equip and move teams, collect materials





# STAGING AREA BEFORE AND AFTER





# OPERATIONS SOPs

- Field Procedures
- HHW Quick Field Guide
- Pressurized Cylinders
- Equipment Handling – PPE, Ipads, vehicles
- UXO

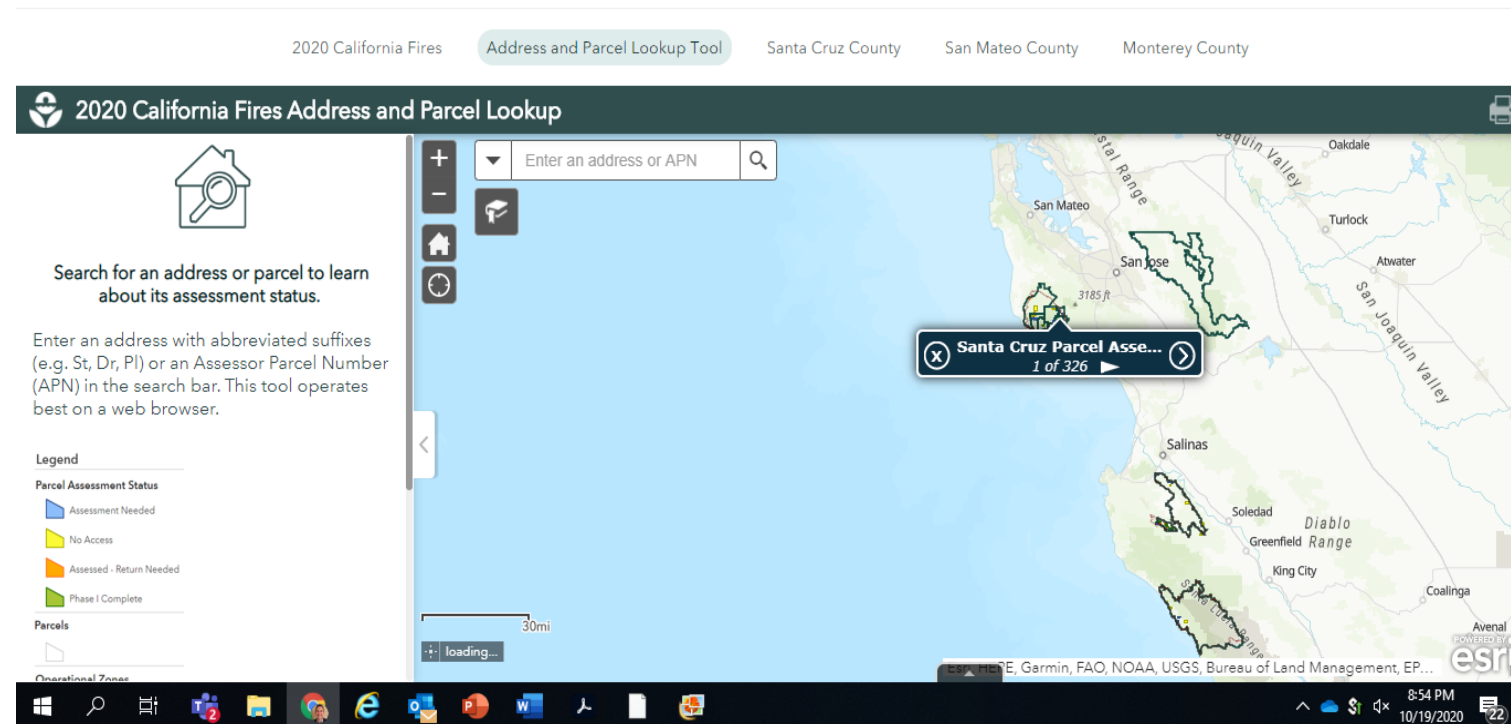


Source: Environmental Protection Agency | 04/01/00 104076



# HHW Collector Apps

- Access on iPad in field
- Documents site activity
- Standard operating procedures for consistency
- Relevant parcel information
- Ability to look up in real time parcel status

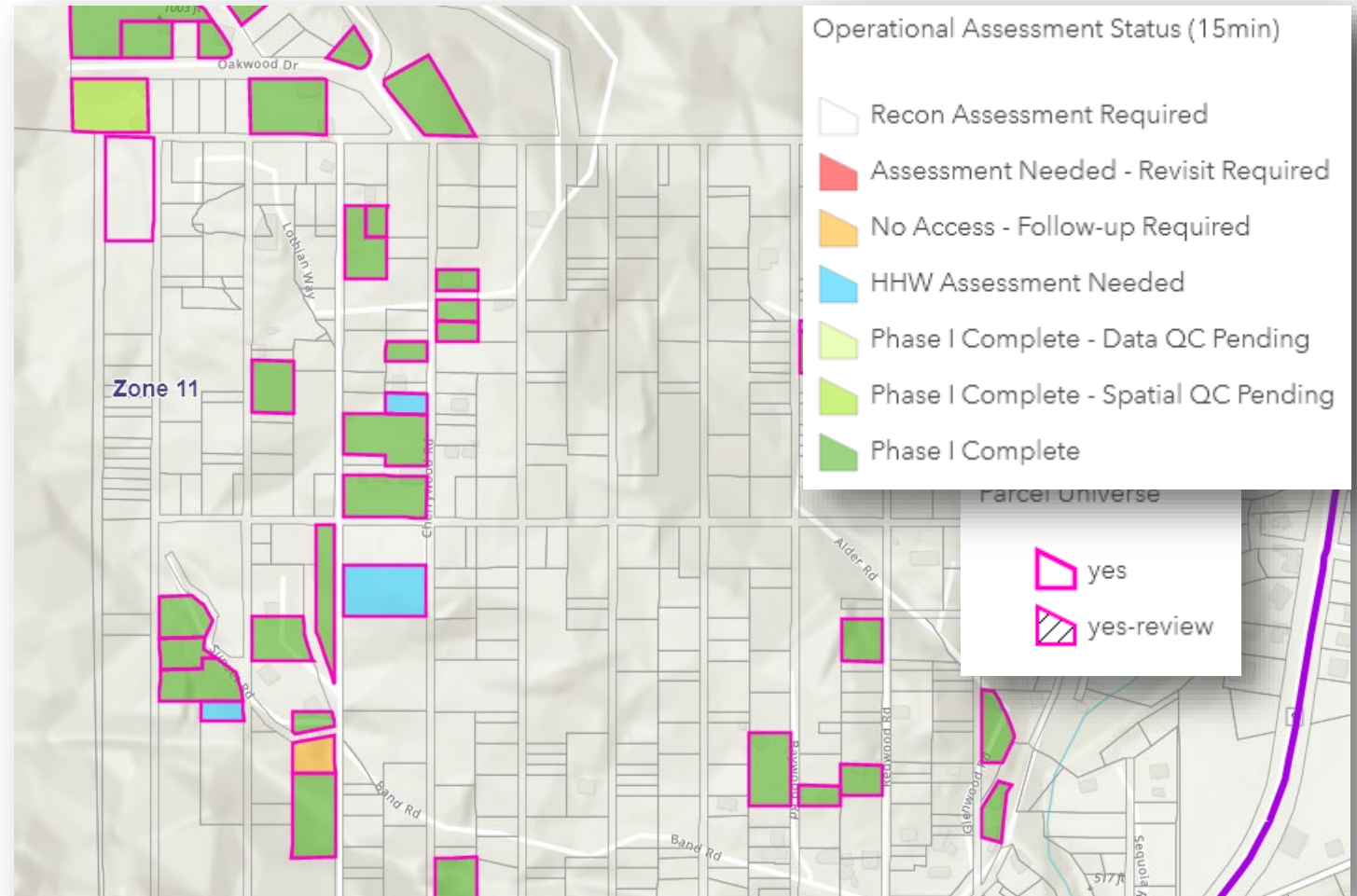




# Phase 1 Project Goals

- Recon and Assess each parcel in the Parcel Universe
- Collect all possible HHW
- Stake properties as:  
**Phase 1 Complete**

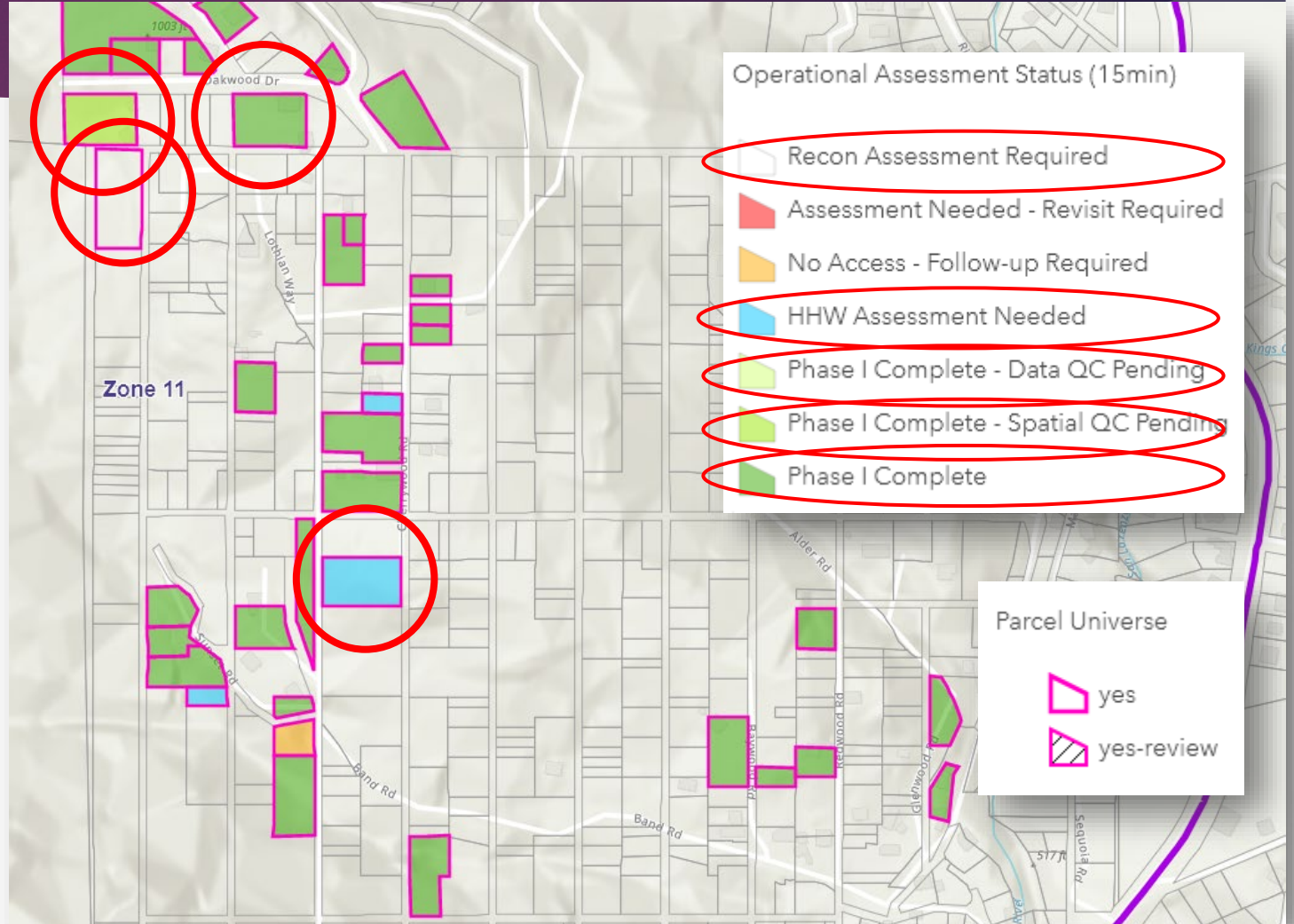
- ❖ *HHW - Household Hazardous Waste*
- ❖ *Parcel Universe – Parcels that have been burned or damaged, outlined in pink in Collector*



# Project Cycle

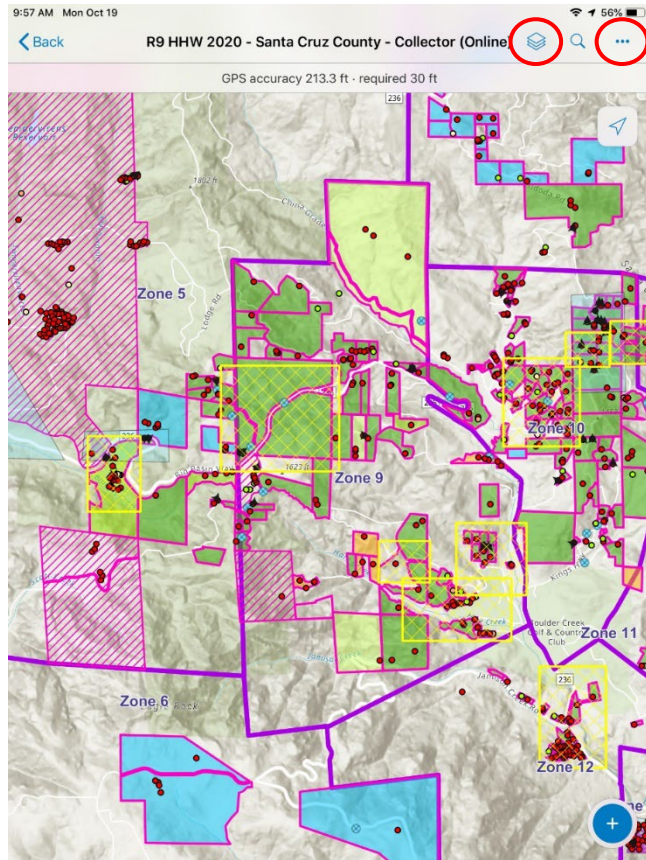
## Steps to Phase 1 Complete

- ▶ Recon team assesses parcels
  - ▶ Adds Hazards to Collector
- ▶ HHW team assesses parcels
  - ▶ Document all collected HHW in Survey123
  - ▶ If no issues, leaves sign for resident saying HHW removal is complete
- ▶ QC team assesses any issues
- ▶ Phase 1 Complete



# Collector Overview

- CalFire Structure Locations
- Parcel Universe
- Operational Assessment Status
- Updated every 15 minutes



### Legend

**Drone Imagery Available**

Drone Imagery Available

**Parcel Shift Arrows**

Major Parcel Shifts

Santa Cruz Permission Denied 2

**Santa Cruz Parcel Universe**

yes

yes

yes-review

**Santa Cruz Reference Parcels (off...)**

Santa Cruz Reference Parcels (off...)

### Operational Assessment Status (1...

Recon Assessment Required

Assessment Needed - Revis...

No Access - Follow-up Requ...

HHW Assessment Needed

Phase I Complete - Data QC...

Phase I Complete - Spatial...

Phase I Complete

**Operational Zones**

Operational Zones

### Layers

MAP LAYERS

Drone Imagery Available

Parcel Shift Arrows

Photo Observations

CalFire DINS (Damage)

Recon\_Hazard\_Quick\_Capture

Road\_Hazard\_Quick\_Capture

Santa Cruz Septic History (centroid of parcel)

Major Parcel Shifts

Santa Cruz Permission Denied 2

Santa Cruz Parcel Universe

Santa Cruz Reference Parcels (offline)

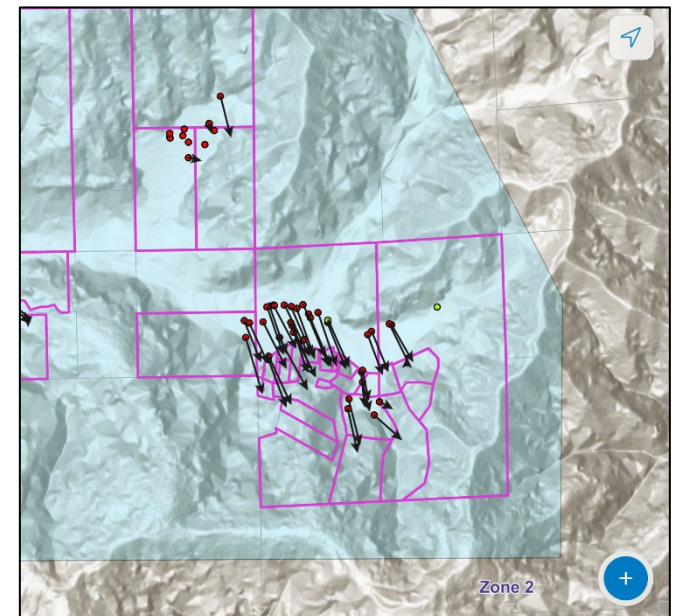
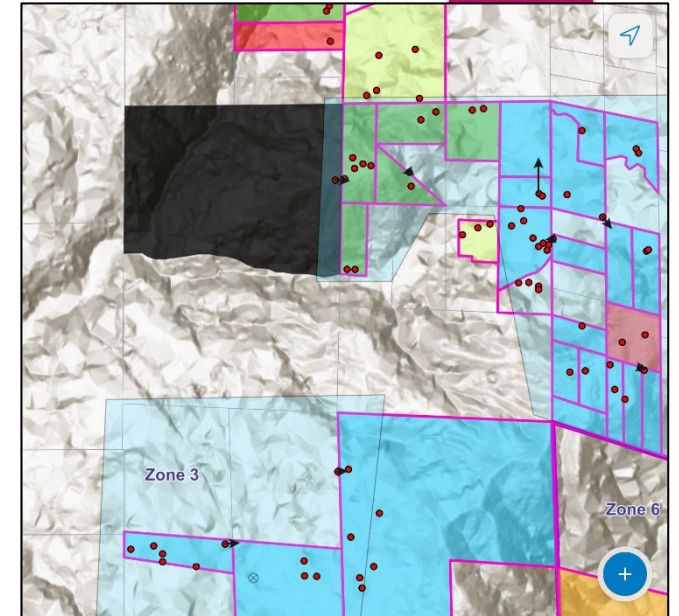
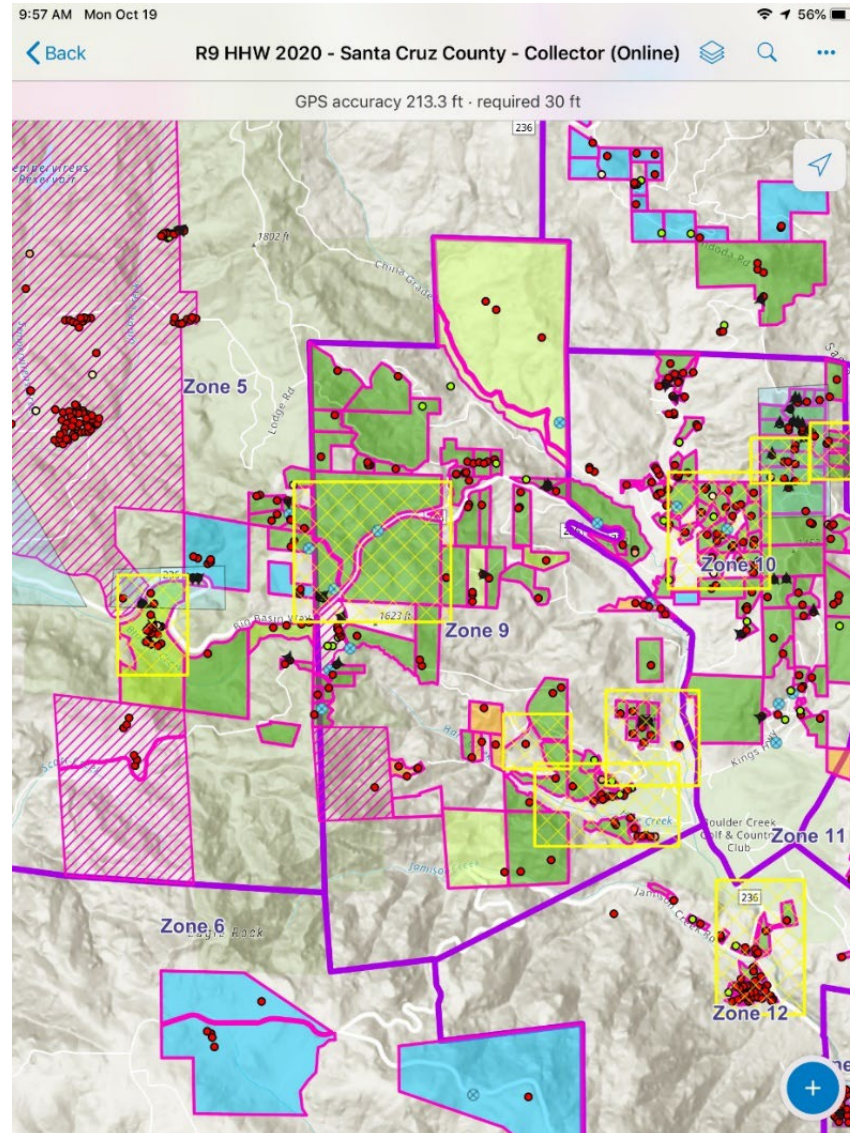
Operational Assessment Status (15min)

Operational Zones



# Specialty Layers

- Drone Imagery
- Permission Denied
- Parcel Shifts





# STORYMAP



COLLECTION

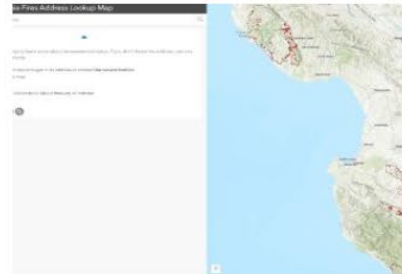
## 2020 California Fires

This StoryMap Collection is a landing page that contains the overview StoryMap, Address and Parcel Lookup Tool, and StoryMaps for all counties included in EPA's 2020 California Fires Response.

[Get started](#)



1 2020 California Fires



2 2020 California Fires Address and Parcel Lookup



3 Butte County



4 Fresno County



5 Madera County



6 Monterey County





# Assessment, Removal, Decontamination









# Types of Household Hazardous Waste





# Signs mark completed properties





# UNMANNED AERIAL VEHICLES







## VIRTUAL

- ESF10 Coordinator
- Planning
  - Resources
  - Situation Unit
- Logistics
- Finance
- Community Involvement

## FIELD

- Incident Commander
- Operations
- Safety/Medical
- Data (hybrid)
- Liaison (hybrid)
- PIO (hybrid)



- Activity
- Chat
- Teams
- Calendar
- Calls
- Files
- ...
- Apps
- Help

**Teams**

Your teams

- R9 Emergency Response
- 2020 California Fires

**General**

**0.0 REOC**

- 0.1 Senior Leadership (RIC)
- 0.2 Meeting Schedule
- 0.3 Final Documents
- 1.1 Safety Officer KLP
- 1.2 Public Information Officer K...
- 1.3 Liaison Officer KLP
- 1.4 Data Support Coordinator ...
- 10.0 Hotwash
- 2.0 Operations Section Chief KLP
- 3.0 Planning Section
- 4.0 Finance Section Chief KLP
- 5.0 Logistics Section Chief KLP

Join or create a team

**General** Posts Files Orientation Video 3 more +

Meet

### Orientation Video - EPA R9 Virtual ICP

156 views · 1 like · 0 comments

**3.0 Planning Section** Posts Files Whiteboard (Virtual) To Dos 1 more +

Loesel, Matthew 7:12 AM  
Yes, we are going to work on getting those metrics on the Story map as well.

Mitschele, Becky 9/18 8:17 AM  
Let's meet every morning at 8:15 am and then this is line to use during the day.

Planning Line/Huddle  
Occurs every work day (Mon-Fri) @8:15 AM

Meeting ended: 40m 20s

Henry, Karen 8:52 AM Edited  
**It's IAP day - whoo hoo! submit your specific deliverable to the IAP submission folder (OP\_8) pinned on the Planning Channel by 14:00.**

Pease, Amanda 10:37 AM  
Henry, Karen; Chavez, Luke; McDowell, Justin - FYI, I uploaded an updated 207 for the next org chart into the RESL Working Folder/207 folder. There are a couple notes for you all on formatting and exact timing of the change. Please let me know if you have any questions for me (and copy anyone else as appropriate). 204's/215 are in progress!

Chavez, Luke 10:39 AM  
Thanks Amanda. We'll go take a look and let you know what questions of clarification we might have.

@ + name = McDowell, Justin + Channel Name = 3.0 Planning Section @ + Team Name = 2020 California Fires

4:50 / 8:52



# USEPA R9 DISASTER RESILIENCE TEAM

- Recovery Coordinator: Scott Stollman, [stollman.scott@epa.gov](mailto:stollman.scott@epa.gov), 415-972-3729
- Mitigation Coordinator: Suzanne Marr, [marr.Suzanne@epa.gov](mailto:marr.Suzanne@epa.gov), 415-972-3468
- Preparedness & Response Coordinator: Bill Jones, [jones.bill@epa.gov](mailto:jones.bill@epa.gov), 619-806-6737





**QUESTIONS?**

# Necessity of PHAU

- Spill reported October 2; reported max potential 25,000 discharge ~~>100,000~~ gallons
- Spill coincided with Great Pacific Airshow.
- **Orange County Health Officer issued health advisory for residents exposed to oil on 10/3**



# Necessity of PHAU

- Municipalities, park districts began closing beaches and harbors on 10/3
- CDFW issued a fishery closure on 10/3, expanded on 10/5 and 10/7



# Necessity of PHAU

- Intense public and stakeholder interest:
- What was being done to assess potential impacts?
- How were the response and agencies gathering data to inform health-protective decisions around re-opening?



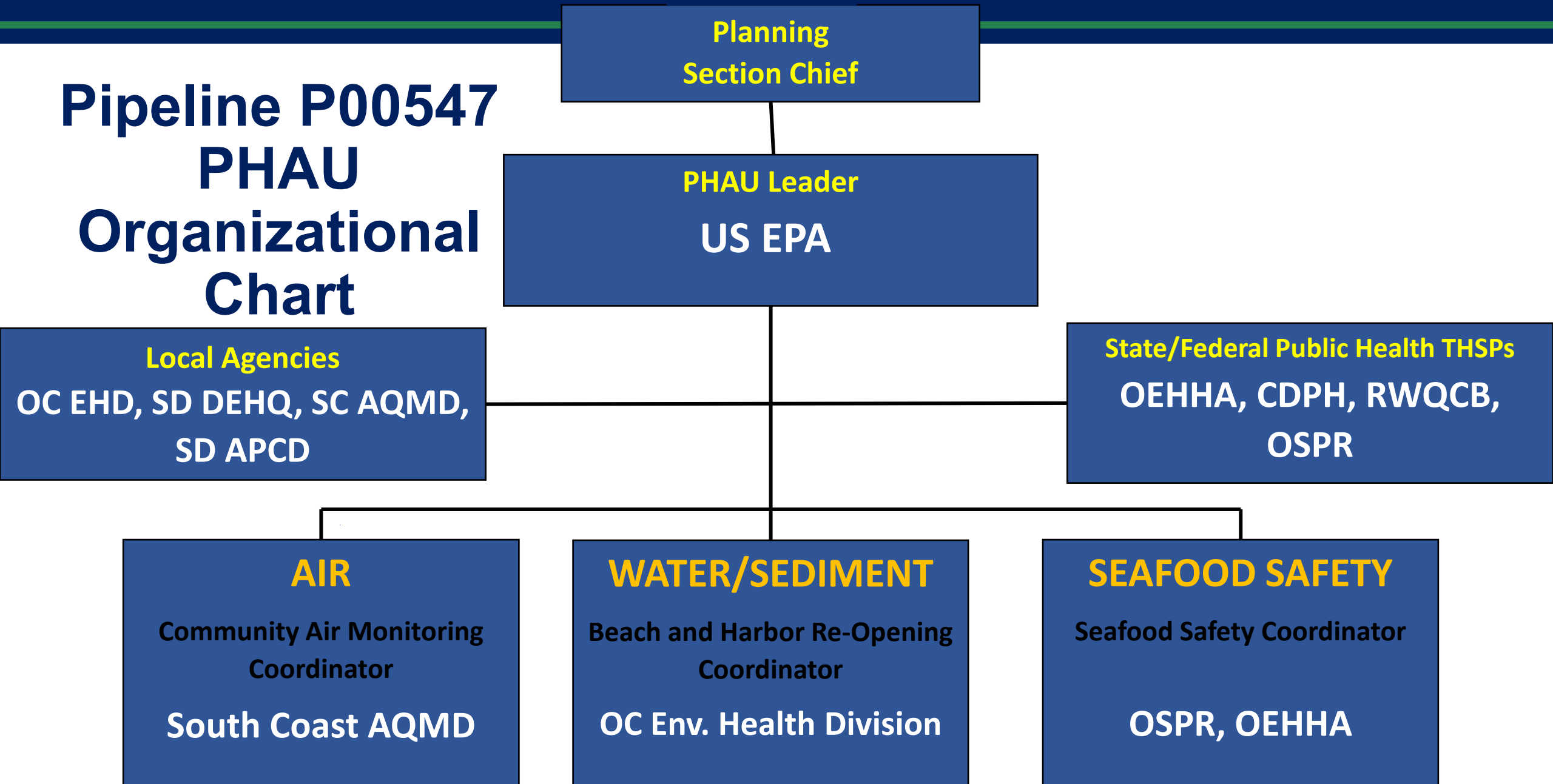
# Support for Unified Command Objectives

- Ensure the safety of public and response personnel.
- Effectively keep elected officials, stakeholders, and public abreast of health and safety info and progress of response efforts.
- Maximum support to stakeholder engagement.
- PHAU proposed to UC on 10/5 to support these objectives





# Pipeline P00547 PHAU Organizational Chart

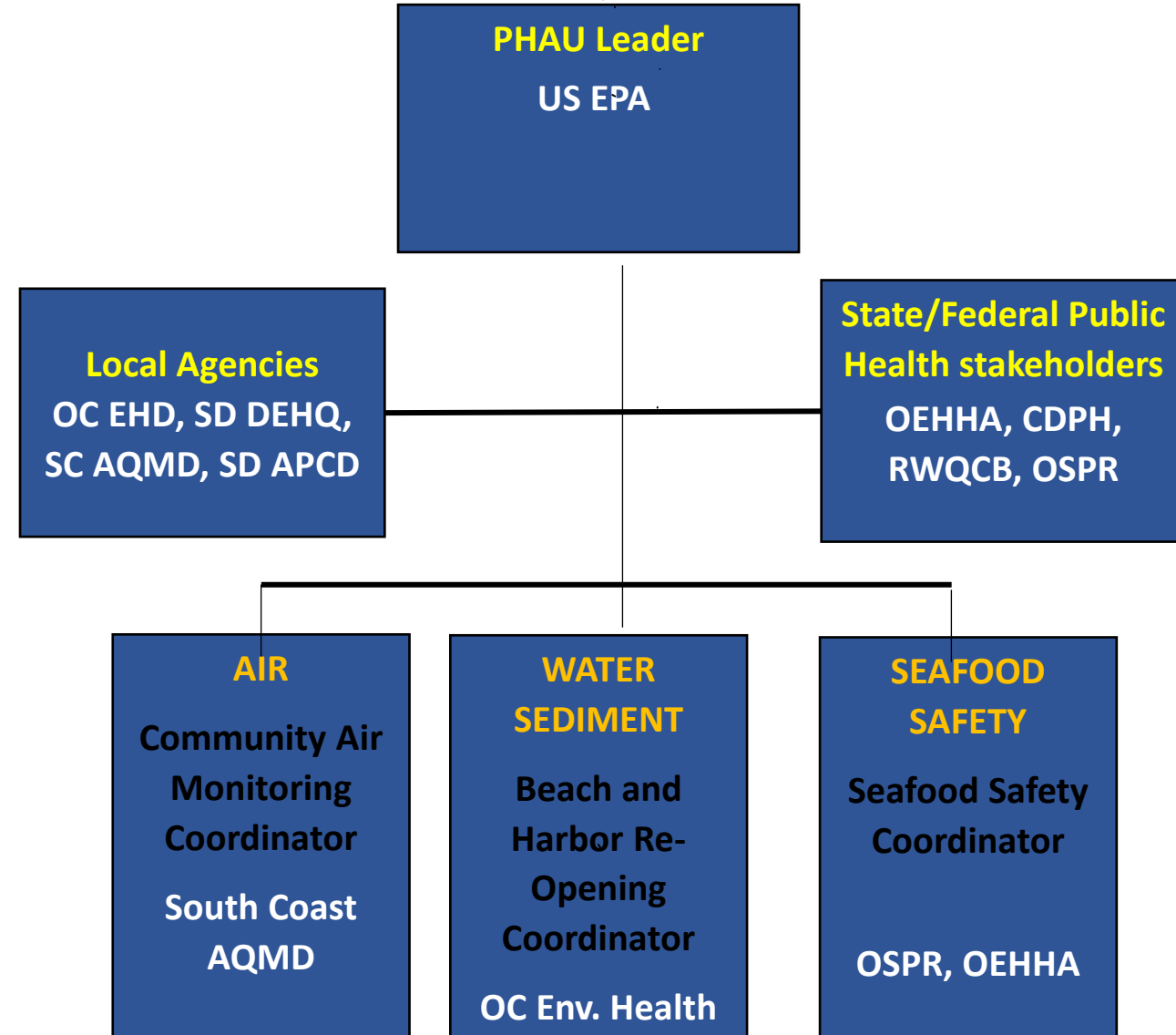




**Planning  
Section Chief**

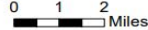
# PHAU Function

- US EPA unit leader provided technical expertise; drafted plans, approved contractor-created plans; etc.
- OEHHA and CDPH provided consultation for water/sediment, air results; OEHHA issued statements to inform UC, assist PHAU determinations re: beach exposure risks
- OSPR provided unit coordination; served as Seafood Safety subunit coordinator with OEHHA
- Local agencies worked directly with contractor (in Safety) for air and water/sediment plans to ensure they would → usable PH data; filled key coordinator roles in Air and Water/Sediment subunits; interpreted data; contributed to reports; etc.
- RWQCBs provided input into sampling locations and methods





Real-Time, Radio-Telemetering, and Analytical Air Monitoring Locations  
Pipeline P00547 Oil Spill Response | October 4, 2021 06:17 PDT - October 7, 2021 05:00 PDT



Project: 115143  
Client: Patriot Environmental  
City: Huntington Beach, CA  
County: Orange



COORDINATE SYSTEM: NAD 1983 UTM Zone 11N DATUM: North American 1983 LAST UPDATED: 10/7/2021 1:52:56 PM

# Air Subunit

- > 80 air samples from 12 locations in Orange County analyzed
- 5 air samples from 4 locations in San Diego County analyzed
- Roaming air measurement surveys along coast in both counties



# Water/Sediment Subunit

- Water and sediment sampled at 54 sites in Orange County from 10/8 to 10/10
- 44 sites in San Diego County from 10/10 to 10/12





# Seafood Safety Subunit

## SEAFOOD SAFETY

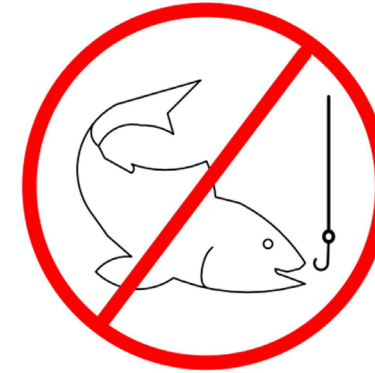
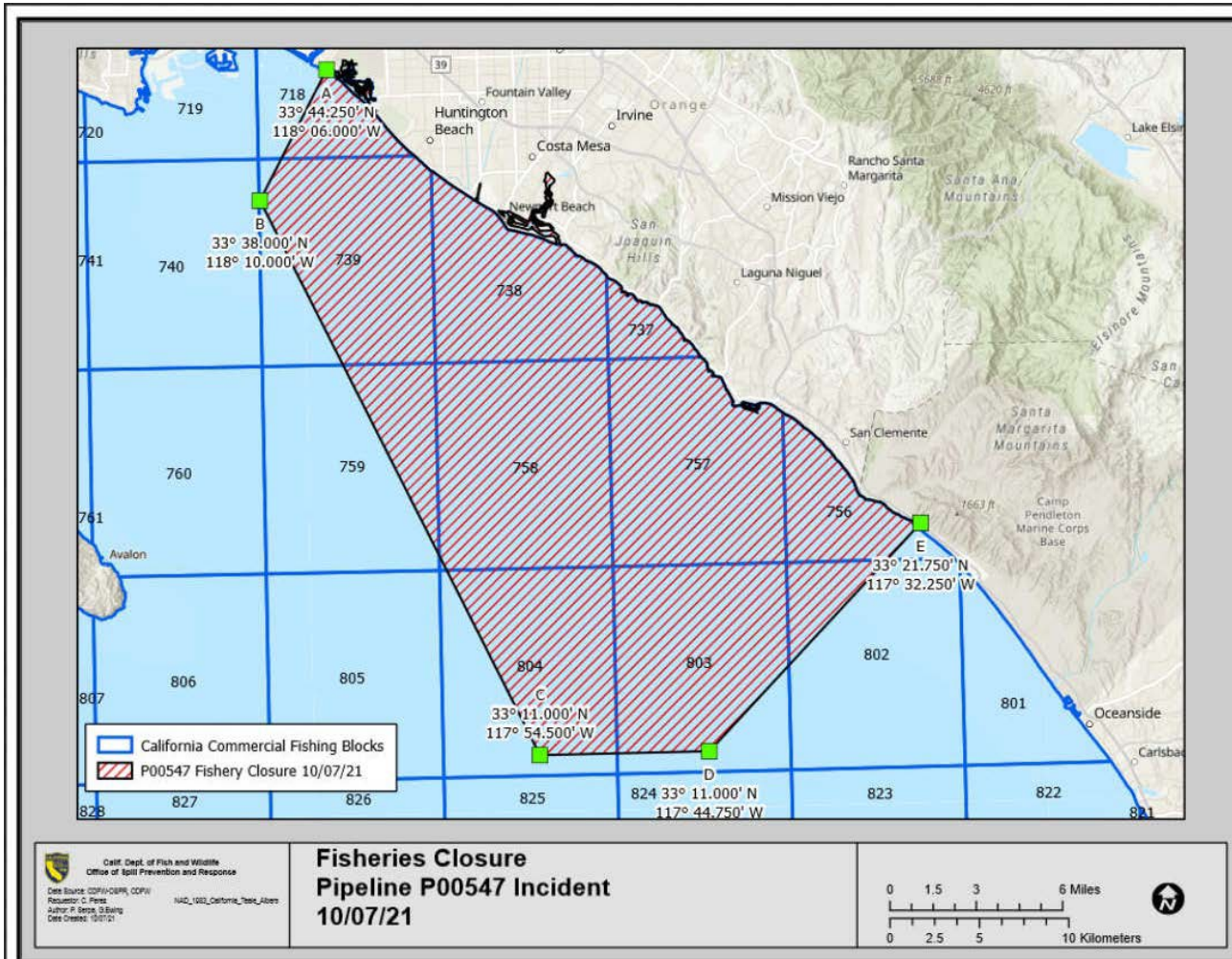
Seafood Sampling  
Coordinator

OSPR

OEHHA

- OSPR was subunit lead in coordination with OEHHA
- Drafted Seafood Safety Sampling and Analysis plans for nearshore and offshore species
- Established protocols were developed by OEHHA
- Seafood Safety typically coordinated through EU, subunit moved to EU after PHAU demobilized

# Seafood Safety Subunit



**This area temporarily closed to all fishing**

**Esta zona está temporalmente cerrada a todo tipo de pesca**

**Khu vực này tạm thời đóng cửa đối với tất cả các hoạt động câu cá**

**ບົດການຫາປາ, ຫາຫອຍທຸກຊະນິດໃນເຂດນີ້ຊົ່ວຄາວ**

**该区域暂时禁止所有捕鱼活动**

**該區域暫時禁止所有捕魚活動**

**Pansamantalang sarado ang lugar na ito sa lahat ng pangangisda**



# PHAU Deliverables

- Produced plans: Emergency Water and Sediment Sampling and Analysis Plan, Source Sampling Plan, Onshore Seafood Safety Sampling and Analysis Plan, PHAU Data Use Plan, PHAU Virtual Transition and Demobilization Plan
- Approved contractor-led plans for air monitoring and sampling; environmental sampling and analysis
- Data summaries and reports internal to response
- PHAU final reports on sampling distributed through Liaison



# Key Takeaways

- Integrated local agencies into the response; input to sampling plans so data were meaningful to public health decisions and advisories
- Coordination of plans, data interpretation, and messaging supported UC objectives; provided basis for Orange County Health Officer to issue advice that beaches were safe for recreational use
- Participation of health agencies in Liaison calls with agencies, elected officials, and NGOs provided transparency and assurance that appropriate agencies were overseeing sampling efforts to inform public health questions
- Effectiveness of PHAU maximized if implemented earlier







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