



The CUPA's Role in Public Health Assessment During Oil Spills

Rachel Fabian, OSPR

Kathleen Jennings, OSPR

Darwin Cheng, Orange Co. Health Agency

Trisha Johnson, Contra Costa Health Haz Mat

TH-12

March 23, 2023



25th California Unified Program
Annual Training Conference

March 20 – 23, 2023

Schedule

- **Public Health Assessment Unit: Concept & Workgroup Update**
Rachel Fabian, PhD and Kathleen Jennings, PhD | CA DFW, OSPR
- **Through the Lens of the Local CUPA: Pipeline Poo547 Oil Spill**
Darwin Cheng, JD, REHS | Orange Co Health Agency, EH
- **Think Globally, Act Locally: The CUPA's Role in Oil Spill Response and Beyond**
Trisha A. Johnson, MS | Contra Costa Health Haz Mat programs





Public Health Assessment Unit: Concept & Workgroup Update

Rachel Fabian, PhD

Kathleen Jennings, PhD

Office of Spill Prevention & Response (OSPR)

California Department of Fish & Wildlife

CUPA Conference | March 23, 2023

Outline

- Public Health Assessment Unit (PHAU) concept
- Implementation at Pipeline P00547 Incident
- RRT IX PHAU Workgroup Update

Public health exposure routes during marine oil spills



BTEX

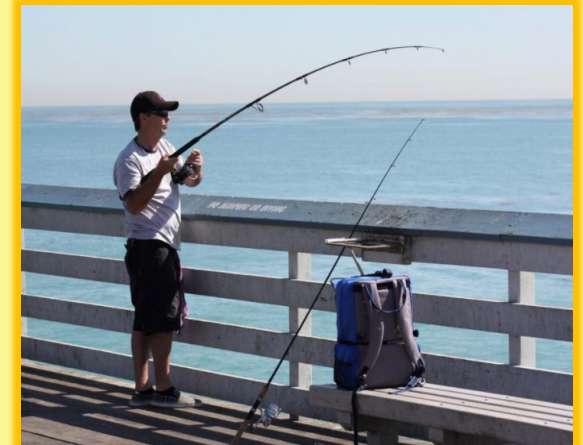
H₂S

Other VOCs

AIR



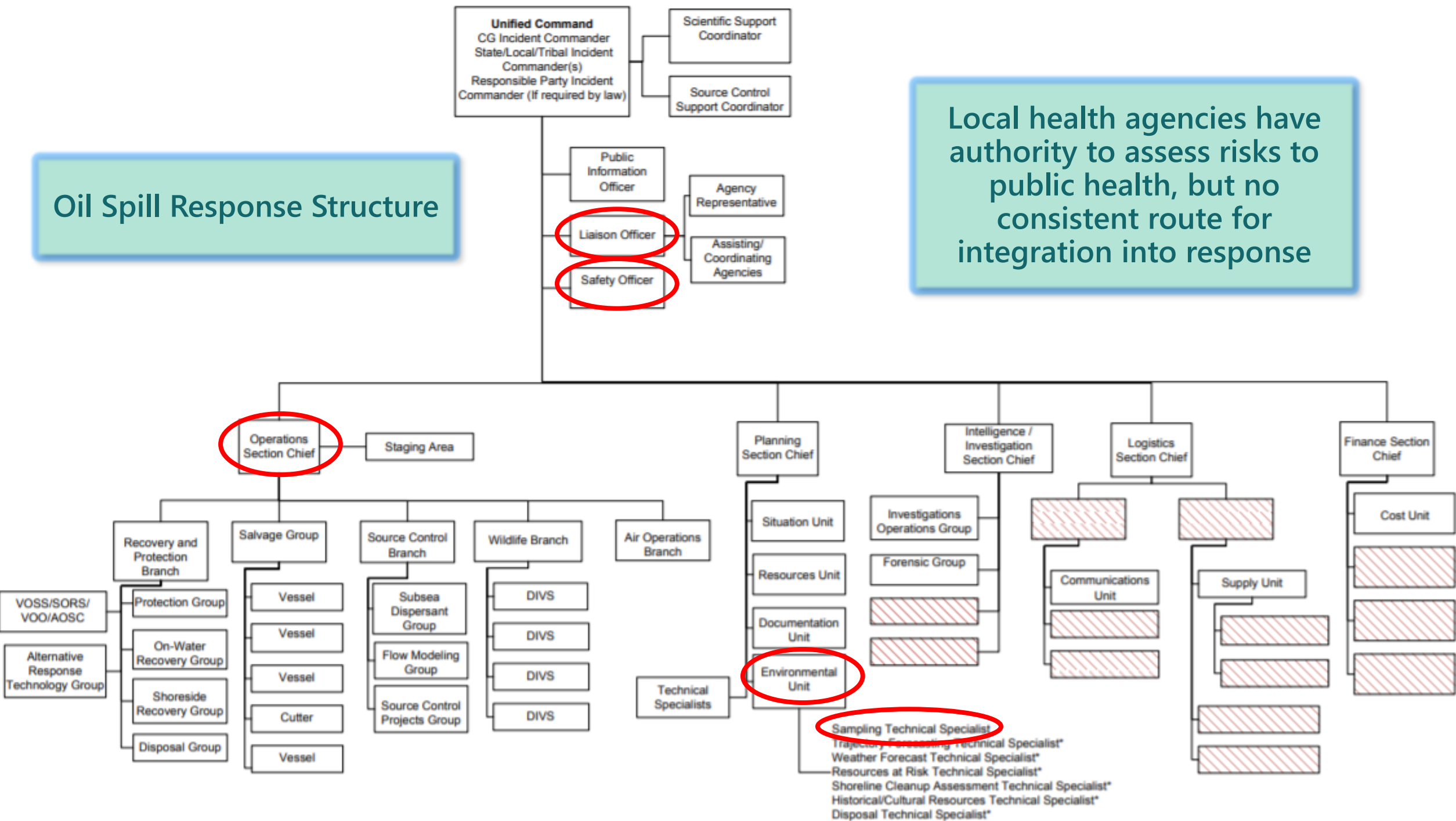
BEACH
RECREATION



SEAFOOD

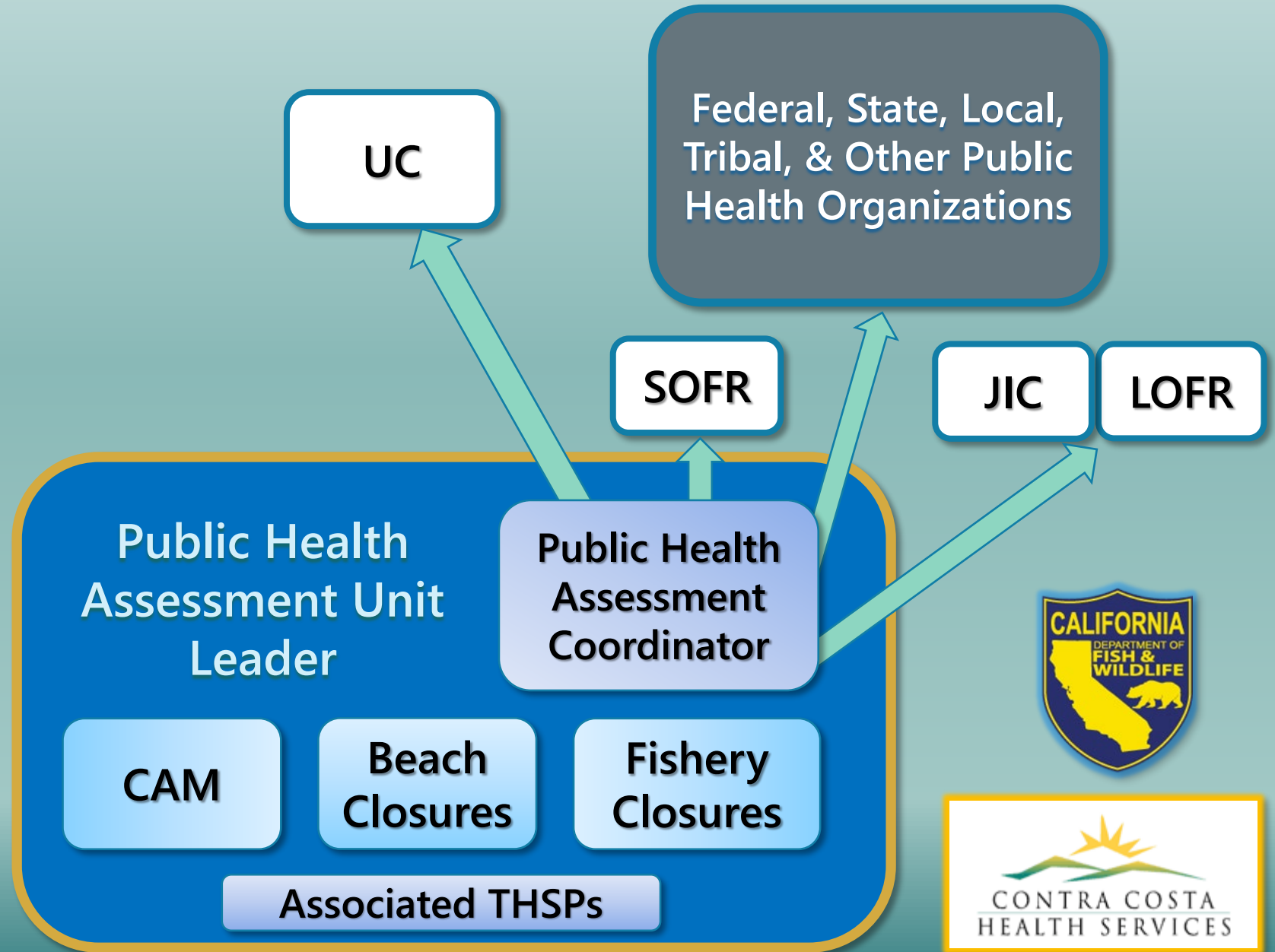
Oil Spill Response Structure

Local health agencies have authority to assess risks to public health, but no consistent route for integration into response



PHAU Concept

- Fills coordination gap between response & public health agencies
- Located in Planning Section
- Adaptable subunit structure



Pipeline P00547 Huntington Beach, CA

- Spill reported 10/2 as discharge >100,000 gallons
- Orange County Public Health Health Officer issued health advisory for residents exposed to oil on 10/3



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





Pipeline P00547

Intense public and stakeholder interest:

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



PHAU Objectives

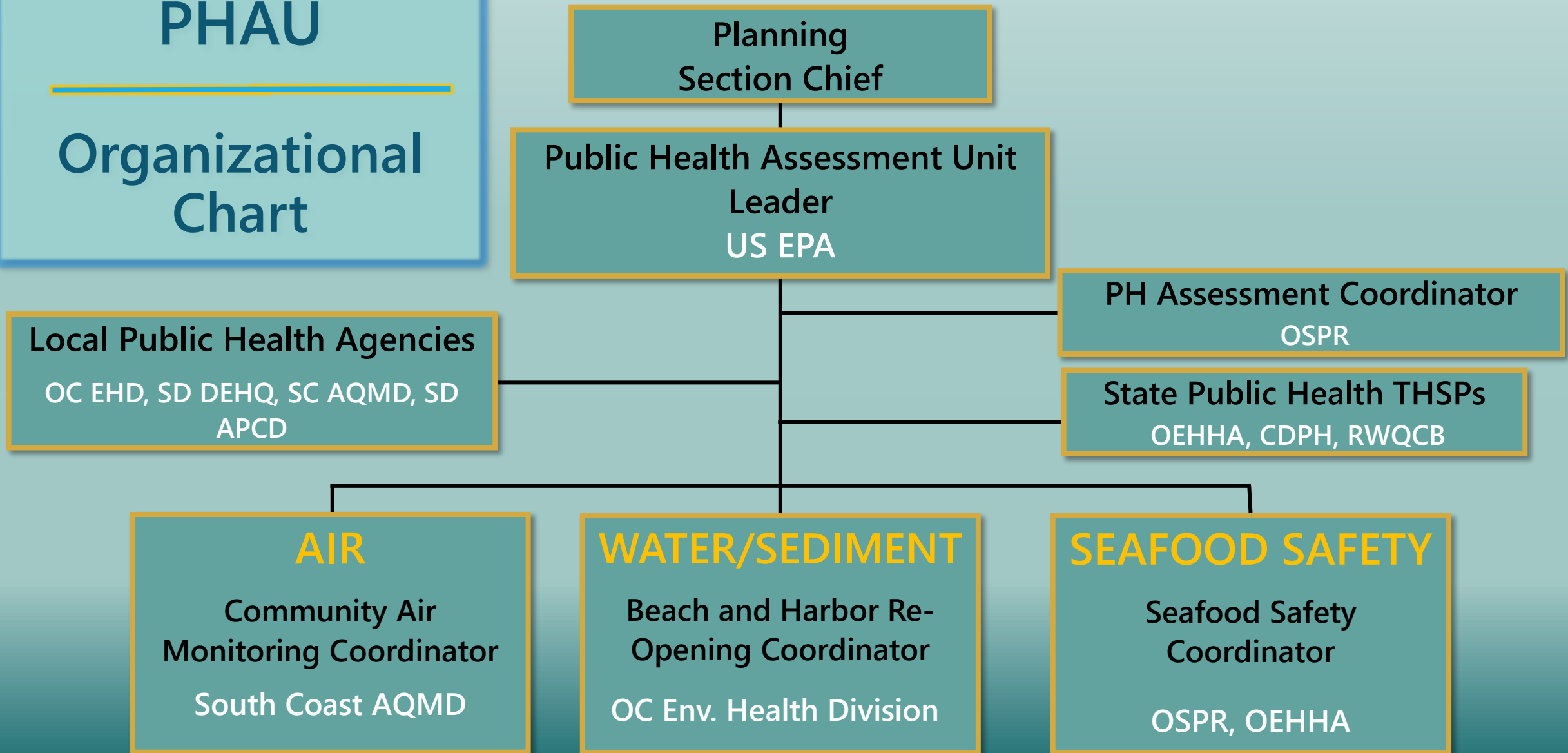
- Coordinate efforts of local, state, & federal public health agencies
- Ensure that sampling methodologies & action levels are appropriate to inform public health decisions

- Serve as the central point of information sharing & messaging regarding public health within the ICS structure; provide information through Liaison & JIC



Pipeline P00547 PHAU

Organizational Chart



Successes & Best Practices

- Sampling results were meaningful for public health decisions
- Participation in Liaison calls provided stakeholder support
- Expanded to include San Diego County
- State public health agencies provided consultation & support
- Air surveillance results supported efficient resource allocation

Takeaways & Next Steps

- Would be most effective if implemented earlier
 - Codify PHAU in agency planning documents
- Novelty → opportunities to build shared expectations
 - Training sessions/outreach, exercise PHAU
- State & federal agencies should prepare to support locals, as resources differ
 - Work with agencies to build public health capacity for oil spill response



PUBLIC
HEALTH

Regional Response Team IX - PHAU Workgroup

LOCAL

Orange County
Environmental Health

South Coast Air
Quality Monitoring
District

Contra Costa
County Health
Services

STATE

California Department of Public
Health (CDPH)

CalEPA: Office of Environmental
Health Hazard Assessment (OEHHA)

CalEPA: Air Resources Board (CARB)

State Water Resources Control
Board (SWRCB)

Office of Spill Prevention &
Response (OSPR)

FEDERAL

US Environmental
Protection Agency
(USEPA)

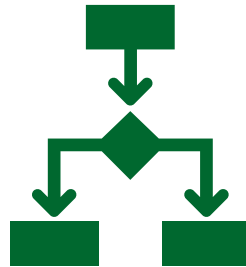
United States Coast
Guard (USCG)

Deliverables

Workgroup



Scope & Objectives



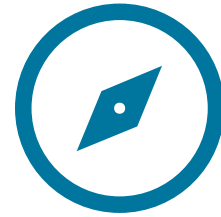
Decision Tree



**Communications
Protocols**

Deliverables

Community Air
Monitoring



Sampling Plan
Templates



Agency Roles &
Coordination

Water & Sediment



Action Levels &
Methodologies

Fisheries Closure

Deliverables

Planning & Outreach



**Training &
Practice**



**Agency & Stakeholder
Outreach**

Deliverables

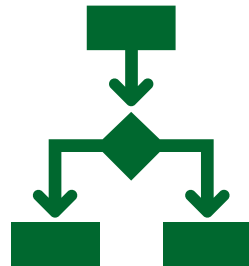
Workgroup



Scope & Objectives



**Communications
Protocols**



Decision Tree



RCP Language



Thank You!

Contact Information

Rachel Fabian, PhD

Spill Management Team Coordinator

Rachel.Fabian@wildlife.ca.gov

(916) 616-0355

Kathleen Jennings, PhD

Environmental Response Branch Chief

Kathleen.Jennings@wildlife.ca.gov

(707) 372-0103



CUPA's Role in Public Health Assessment Unit Huntington Beach Oil Spill P00547

Through the lens of the Local CUPA





The Situation



The Team



The Work



10-2-2021 Huntington Beach, CA

**OES Notification of a major crude oil
release offshore**

**Orange County Health Hazmat &
Huntington Beach Fire Hazmat responded
to assess the impact**

**The County Health Officer &
Environmental Health Assistant Director
were at the city Command Post**



INITIAL REPORT WAS BAD!

3,500 barrels or
~147,000 gallons
of crude oil

Oil Production
“Platform Elly”







INITIAL CHALLENGES

- LOW LIGHT CONDITION
- LACK OF INFORMATION



MORE

ON BEACH OFFICIAL
PACIFIC AIRSHOW CONTINUED

CHALLENGES

Oct 31
Pacific Airshow
Saturday, October 2nd
10AM
Hulu

For information about the U.S. Coast Guard and City of Huntington Beach regarding

Oct 3

HUNTINGTON BEACH OFFICIALS CANCEL OCT. 3 PACIFIC AIRSHOW CITING OIL SPILL

(Huntington Beach, CA) Oct. 3, 2021 – The City of Huntington Beach has cancelled today's airshow citing an oil spill impacting coastal Orange County.

This year marked Pacific Airshow's triumphant return after the 2020 pandemic. With all three North American jet teams - the U.S. Navy Blue Angels, the Canadian Forces Snowbirds and the U.S. Air Force Thunderbirds - performing in the same show for the first time in 20 years, [Pacific Airshow](#) assembled the largest line up of military and civilian performers of any airshow in U.S. history. The city's public safety officials confirmed that 1.5 million people saw the show from Huntington Beach on Saturday alone, breaking every event attendance record in the city's history.

"We recognize that today's cancellation devastates our loyal fans and supporters of all ages. We share in that devastation," said Kevin Elliott, Airshow Director of Pacific Airshow. "Our team has worked tirelessly to put on the best airshow in U.S. history for our fans and our community. I think everyone understands that this cancellation was completely beyond our control. We were all set for another record-breaking day when the call came in."



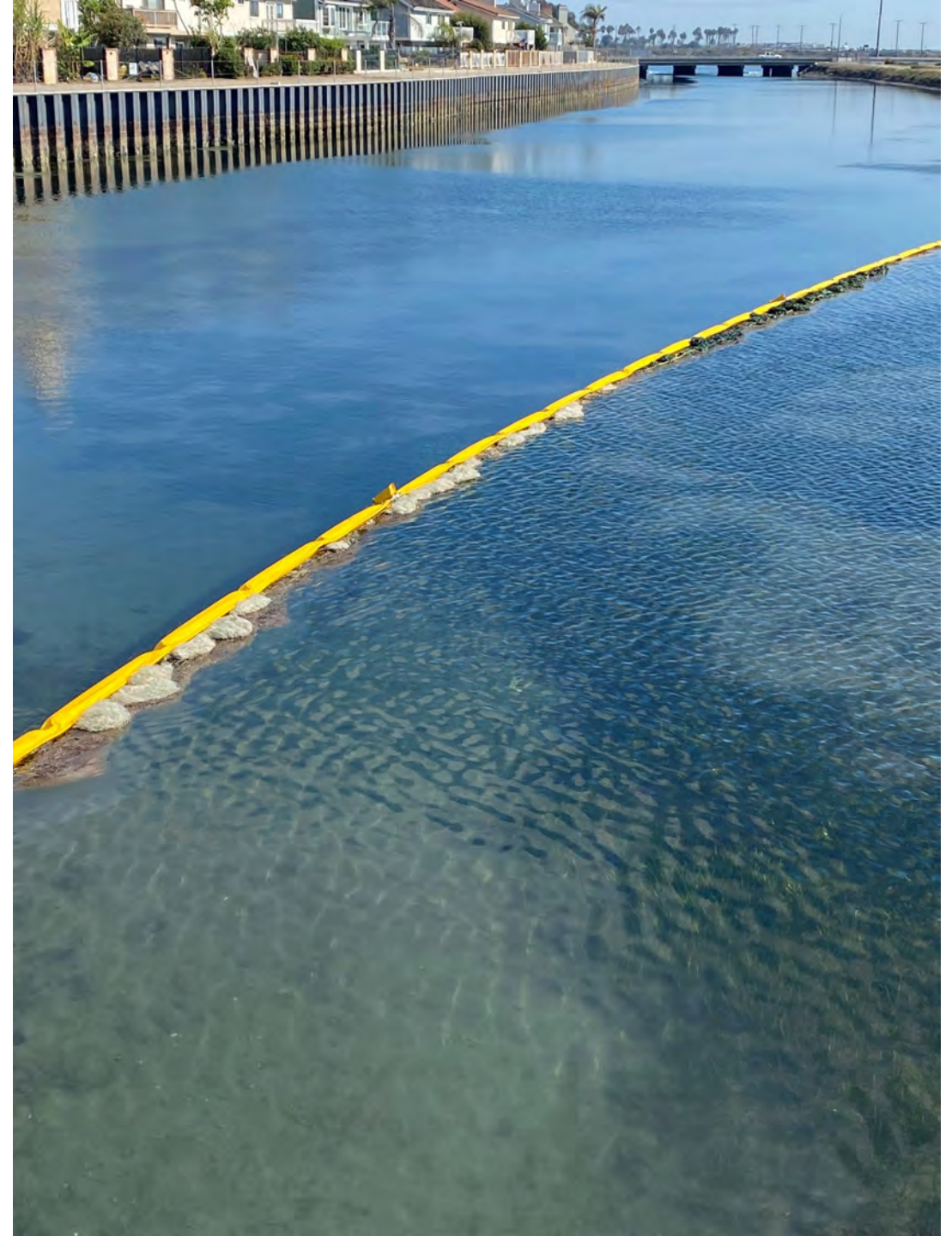
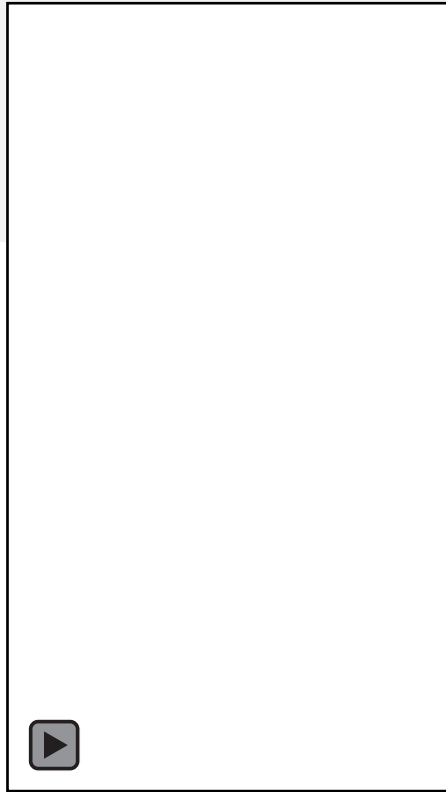
Pacific Airshow partnered with Hulu to broadcast Saturday's show live to millions of Americans. The six-hour broadcast of the entire show is available now to watch on streaming online here for [Hulu](#) subscribers and you can start a free 7-day Hulu trial [here](#).

"Our team is working through the challenges this cancellation presents and we will have more information soon. We appreciate the outpouring of support from the community and our fans," added Elliott.

For information about the U.S. Coast Guard and City of Huntington Beach efforts regarding the oil spill, please visit the city website at <https://www.huntingtonbeachca.gov/>



The next morning...





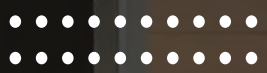
Infrared image from the helicopter



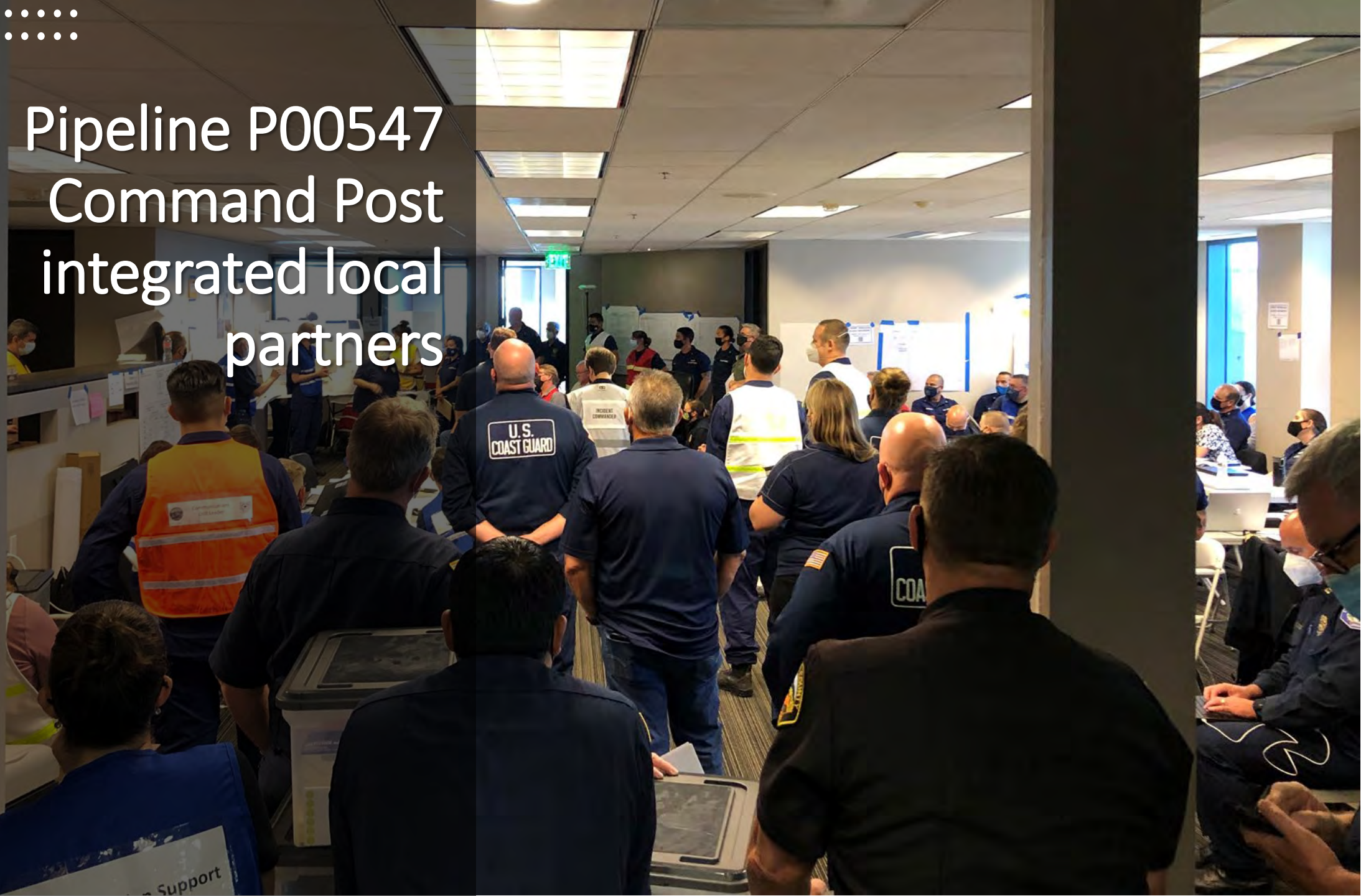
What are the problems?

- Does CUPA have the authority to close ALL the beaches?
- How to be communicate with all of city partners?
- What about the air monitoring?
- What about the water quality?
- What about the coastline?
- Who can we help for assistance?





Pipeline P00547 Command Post integrated local partners



Support

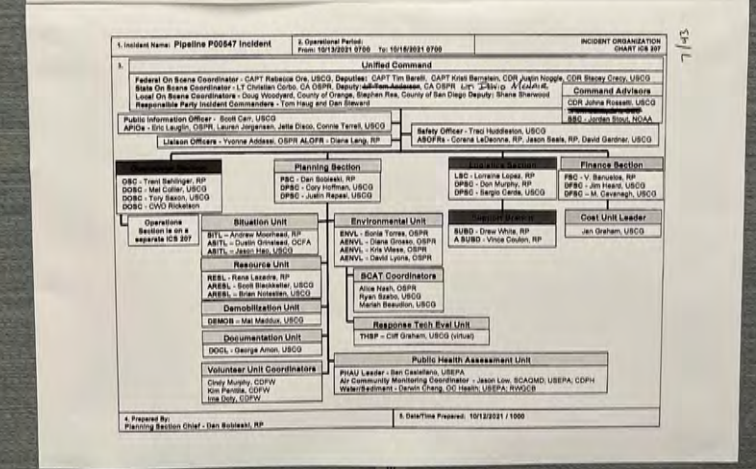
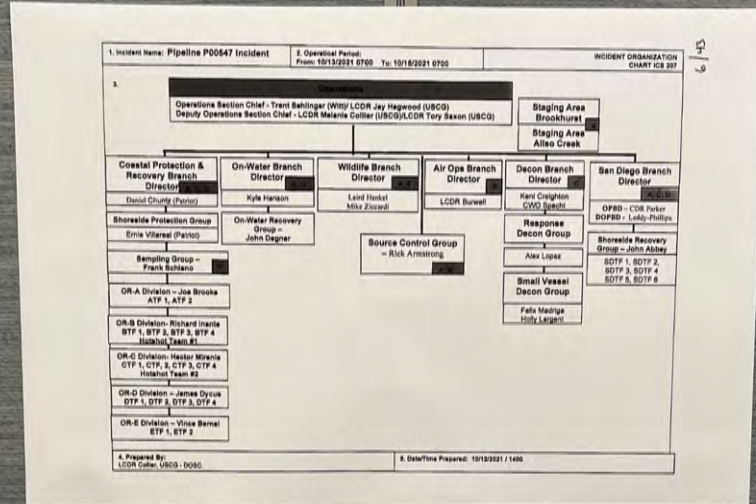
PUBLIC HEALTH ASSESSMENT UNIT WAS FORMED!

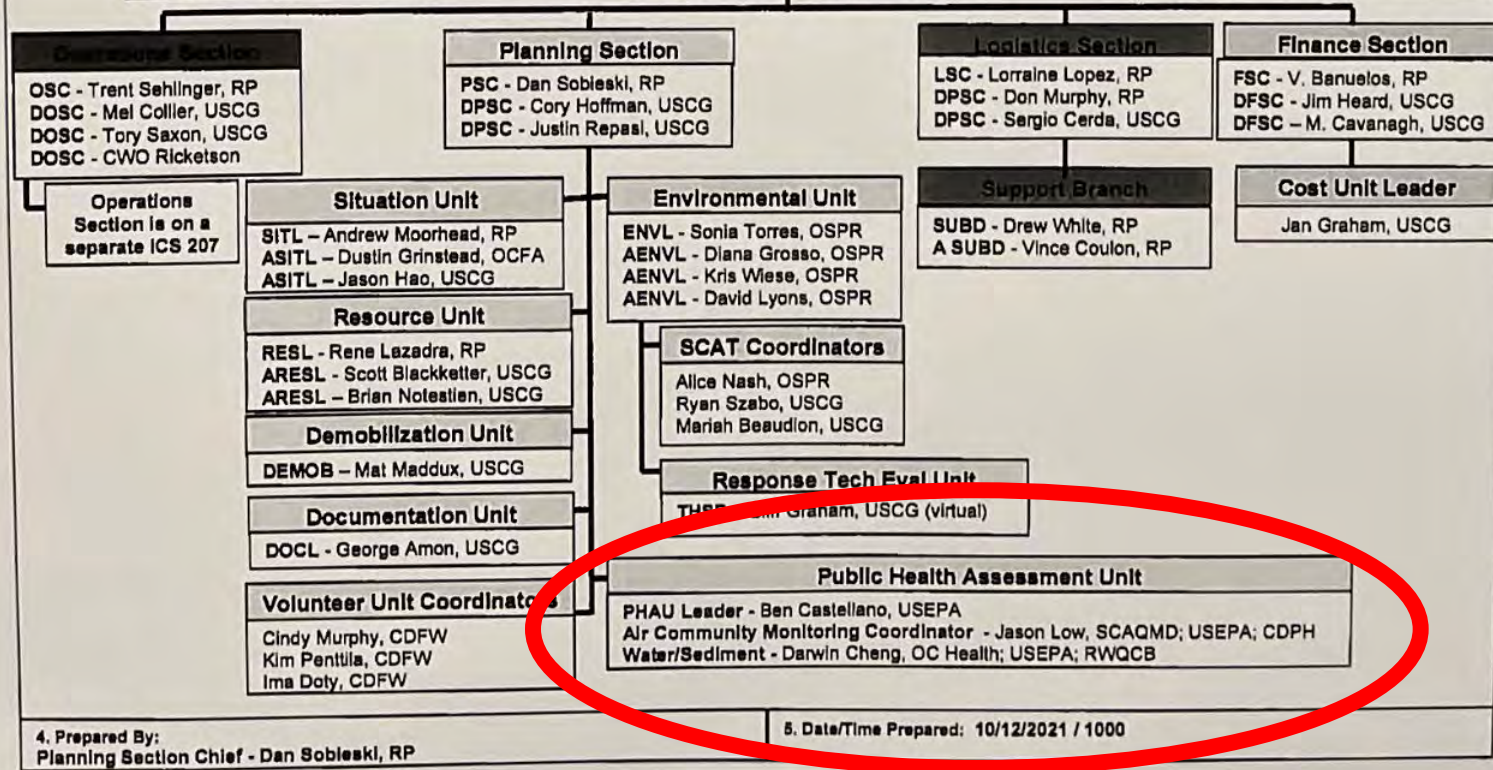


INCIDENT COMMAND SYSTEM & PHAU

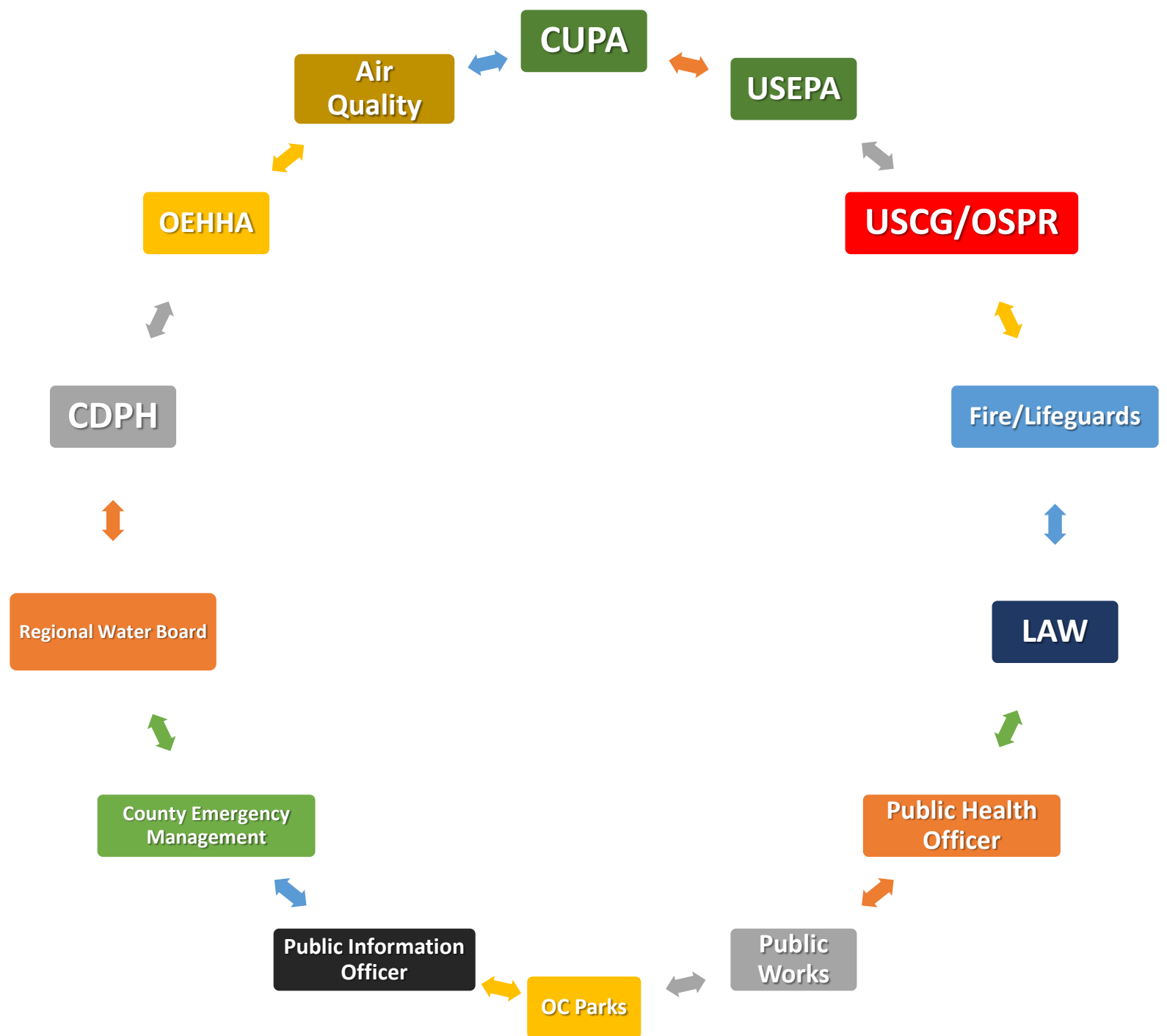
ORGANIZATION CHART

ICS-207





It takes a village to manage an oil spill!



Beach Closures for most of Orange County

- **Assess jurisdictional control of the beach locations**
- **Work with various cities & Lifeguard depts**
- **Assist the Public Information Officer and the Health Officer with Public Health warnings and messaging**
- **Coordinate air/water/sediment sampling with CTEH (Contractor)**
- **And the oil plume is traveling down to San Diego...**

Crude Oil Recovery







~ 70 sampling
locations between Orange
County & San Diego in a
week-long period

- Ocean water samples
- Sediment samples





CAUTION
OIL SPILL
RESIDUE
MAY BE
PRESENT
AVOID
CONTACT

The Waiting Game...

- **Coordinating with OEHHA on data analysis**
- **Managing expectations?**
- **Re-opening the beaches?**

Questions?



Think Globally, Act Locally: The CUPA's Role in Oil Spill Response and Beyond

Trisha Johnson, Contra Costa Health Haz Mat



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Think Globally, Act Locally

The CUPA is . . .

- **Public Health**
 - On the front lines

- **A critical response partner**
 - Force-multiplier
 - Local source of Haz Mat knowledge and resources



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A couple of questions for the audience:

- Does your agency or program have a response function?
- In a word or short phrase . . .
what is **PUBLIC HEALTH**?



What is Public Health?



“The science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals.”

- CEA Winslow, 1920



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Environmental Health

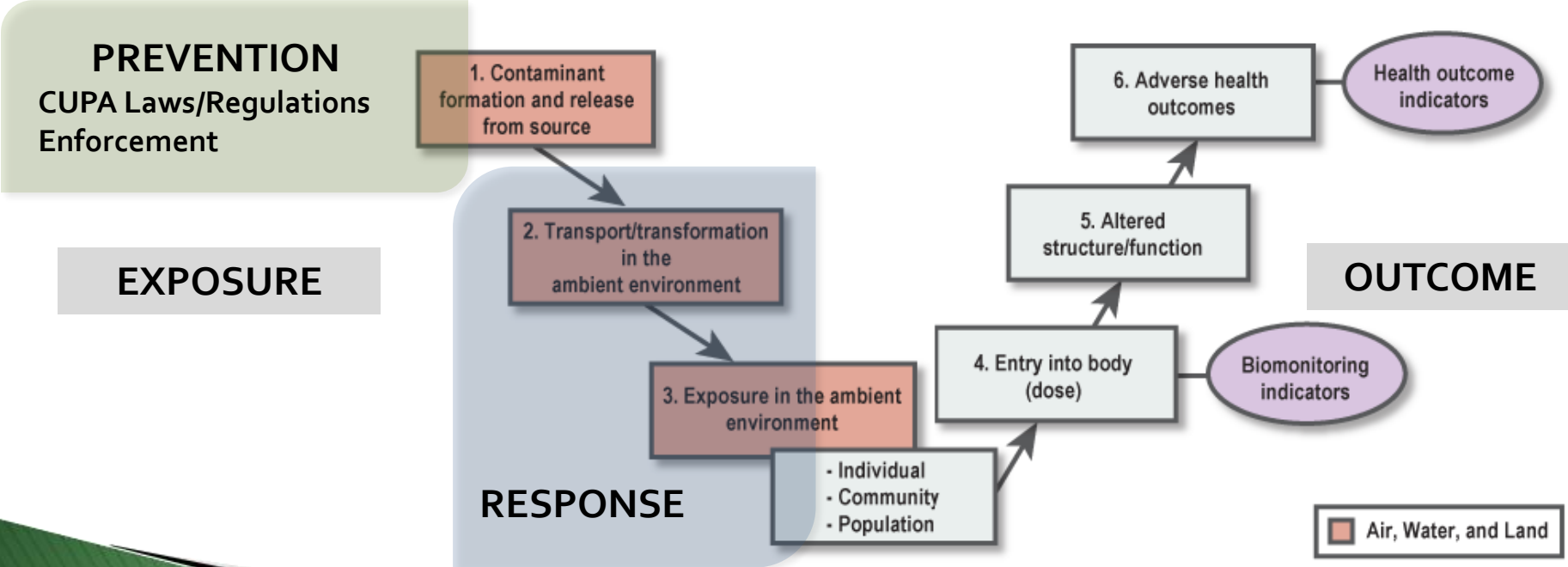
- Branch of Public Health
- Environment has great influence on health.



It has everything to do with CUPAs!



Environmental Public Health Paradigm



Accessed March 4, 2023 and modified from <https://www.epa.gov/report-environment/human-exposure-and-health>.

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The Nature of Haz Mat Incidents

- When prevention fails . . .
- Potential to adversely impact public health



EF 10 – Hazardous Materials & Oil Emergency

- **Cal/EPA is lead agency**



- Support from Boards, Departments, and Offices (BDOs)
- Primary and supporting state, local, federal, and tribal agencies, and other stakeholders

- **Interface with partners of federal equivalent ESF 10**

- US EPA is lead agency
- Department of Homeland Security/US Coast Guard



EF 10 – Hazardous Materials & Oil Emergency

- Core Functions: "Mitigate, prepare for, respond to, and recover from threats to public health and safety, property or the environment, caused by actual or potential oil and hazardous materials incidents."
 - Hazardous materials release detection, assessment, or mitigation
 - Hazardous waste or debris removal
 - Public health protection
 - Regulatory/enforcement assistance

Accessed March 14, 2023 and modified from
<https://www.sfgate.com/bayarea/article/Figuring-cost-of-oil-spill-will-take-years-3231621.php>



Cosco Busan Oil Spill

Chronicle / Kurt Rogers

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NIMS and SEMS

- **National Incident Management System**
 - Federal response framework
 - “top-down”
- **Standardized Emergency Management System**
 - California-specific response framework
 - “bottom-up”



Starts and Ends with the Locals

The 5 Levels of SEMS



Accessed March 7, 2023 from <https://www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/planning-preparedness/standardized-emergency-management-system/>.

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Oil Spill Response: Unified Command

- NIMS-SEMS nexus
- Local Government On Scene Coordinator (LGOSC)
 - Unified Command position (with FOSC, SOSC)
 - San Francisco Bay Area & Delta Area Contingency Plan, Section 2000
 - Santa Barbara County
- Prioritize local needs, including public health, and coordinating local resources
- However, not often that Health gets a seat at the table
- Competing interests



An Opportunity for CUPAs

- “Bottom-up” framework
 - CUPAs in position to initiate response chain
 - A robust response chain is dependent on immediate recognition
- EF 10
 - CUPAs as local partners in oil spill and Haz Mat response
 - Establishes responsibilities, capabilities, and capacities
 - Local Haz Mat knowledge



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CUPA Roles in the PHAU

- AIR → Community Air Monitoring
- WATER/SEDIMENT → Beach and Harbor Closures
- FOOD → Seafood Safety (Environmental Health)
- **RISK COMMUNICATION**
- Others:
 - Environmental Sampling
 - Shoreline Cleanup Assessment Team (SCAT)



What do CUPAs bring to the fold?

- **Haz Mat expertise**
 - Regulatory
 - Response
- **Proximity to Health Officer**
 - Decision-making
 - Risk communication
- **Network**
 - Local Emergency Planning Committee (LEPC)
 - Resources: regulatory and response partners, industry contacts, community ties



Get Involved

- **Area Committee Meetings**
- **Local Emergency Planning Committee (LEPC)**
- **Participation in tabletop or functional exercises**
 - Oil spill, Haz Mat
 - All-hazards



Build Your Network

Establish or strengthen relationships with:

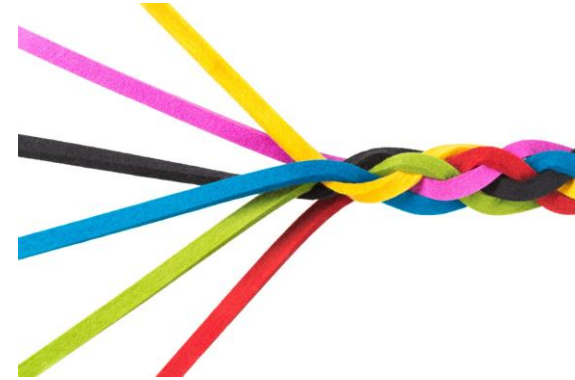
- Health Officer
- Emergency management
- Regional, state, and federal response partners
- Public Information Officer



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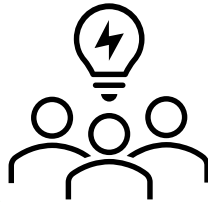
Strengthen Knowledge Base

- Environmental Response to Oil Spills (EROS) Training
- ICS training (to at least 300 and 400)
- Be familiar with local and regional response plans
- Risk Communication, media training



Vision for the Future

- Formalize public health assessment into the National Contingency Plan
- Apply PHAU in an all-hazards context
- Public Health is immediate consideration
- Improved Risk Communication



CUPAs are a big part of this future



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The Call



**“In our silos, we can get things done.
But when we step back and reach out
and reach across, miracles can
happen.”**

- Amy Edmondson



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Any Questions?

Trisha A. Johnson, MS
Contra Costa Health Services Haz Mat Programs
Trisha.Johnson@cchealth.org

