



Emergency Fuel – Planning for Preparedness

November 14, 2018

About WaterISAC

- What is an ISAC?
- Nonprofit, est. 2002
- ***Mission:*** To help water sector utilities reduce risks from cybersecurity, physical security and natural disasters
- Members: Utilities and state and federal government in U.S., Canada, Australia and New Zealand.

Water/Wastewater Sector Partnership



American Water Works
Association



ASSOCIATION OF
METROPOLITAN
WATER AGENCIES



NACWA

A Clear Commitment to America's Waters



National Association
of Water Companies



NATIONAL
RURAL WATER
ASSOCIATION

NRWA *America's Largest Utility Membership*



THE
Water
Research
FOUNDATION



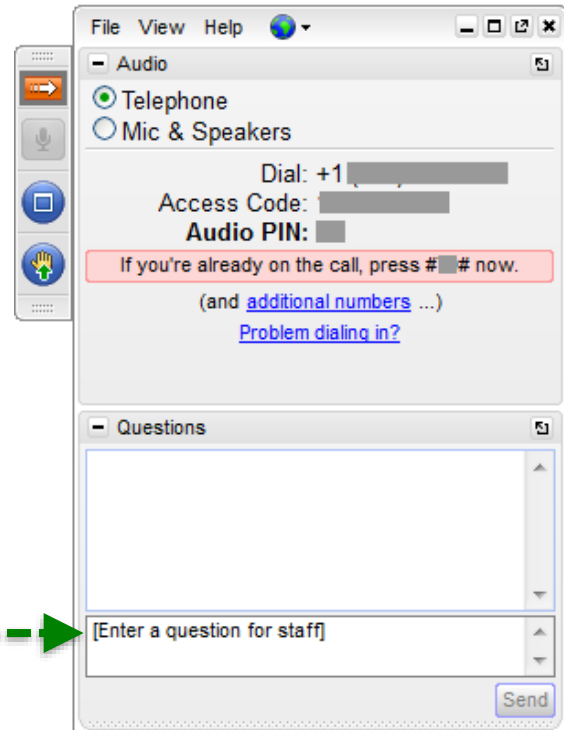
Water Environment
Federation®
the water quality people®

Services for Members

- Threat advisories and analysis
- Best practices and tools
- Searchable chem/bio databases
- Access to SMEs
- 24/7
- Shared via portal, e-mail, webinars
- **30-day Free Trial Membership available.**

Poll Question

How to Ask a Question



Type and send -->

National Association of Water Companies (NAWC)

- NAWC is the voice of the regulated water industry

Safety, Security & Environmental Committee

- The mission of the NAWC Safety, Security & Environmental Committee is to ensure that NAWC effectively conveys the leadership and proven compliance track record of regulated water and wastewater utilities as well as their exemplary performance in exceeding the industry's voluntary standards.
- Share best practices and insights regarding how to improve their own records for safety, physical and cyber security, public health and environmental compliance
- Develops and cosponsors industry-wide webinars in partnership with WaterISAC that focus on relevant safety, security or environmental issues of significance to drinking water and wastewater utilities.

Presenters

- Kendra Rose, CORIX Group of Companies (moderator)
- Jim Wollbrinck, San Jose Water
- Justin Cochran, California Energy Commission
- Ryan Hanretty, California Fuels and Convenience Alliance

SJWC: Emergency Fuel Planning

November 14, 2018



Critical Infrastructure Web



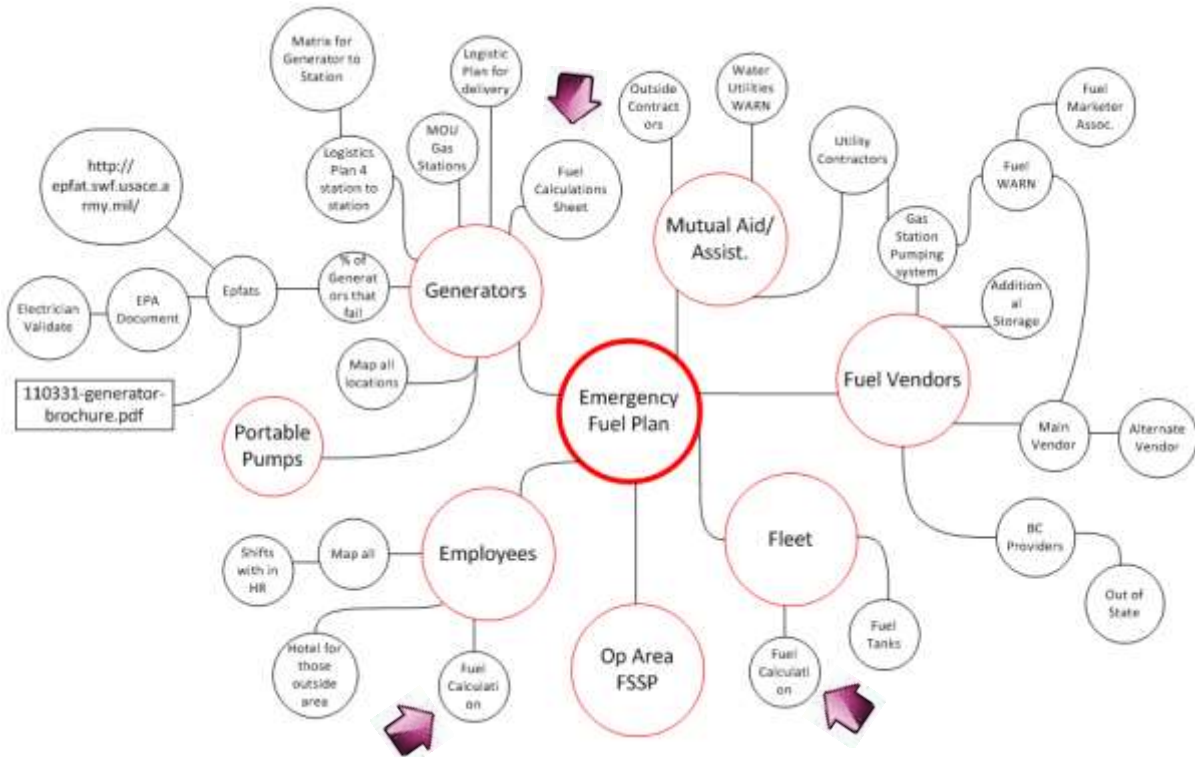
Challenge In Response and Recovery

- Fuel
- Parts
- Transportation
- Coordination
- Power
- Telecomm
- Food/Shelter

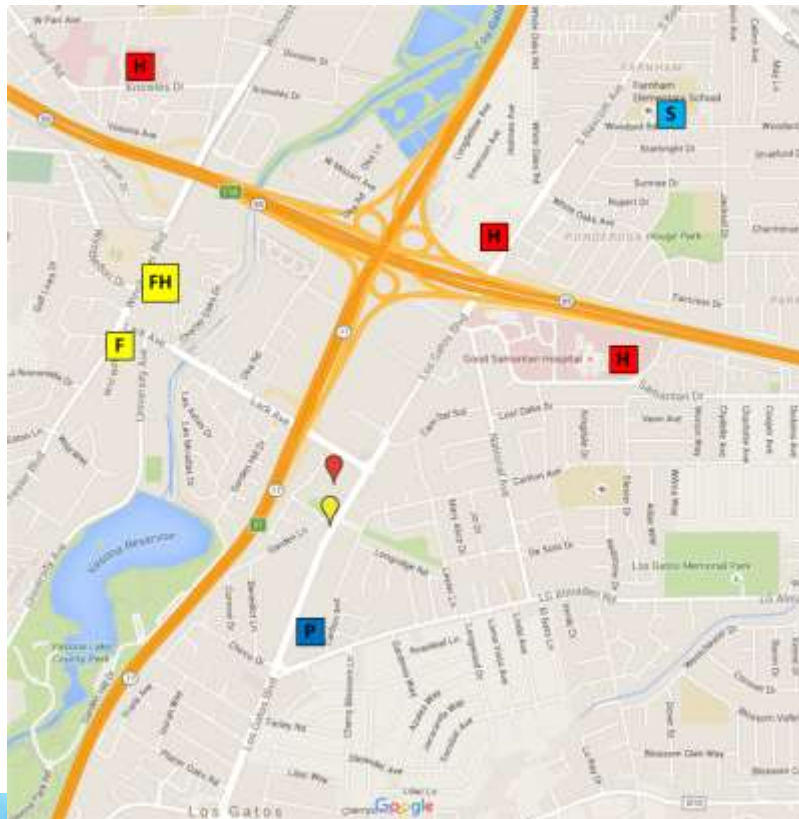
Water and Fuel Nexus

- No Cal – Martinez refinery
- Total water consumption – a little more than **3 billion gallons a year (BGY)**. Only about 2% is from well water, the rest is purchased from Contra Costa.
- So Cal – Carson refinery
- Total Water – a little less than **4.8 BGY**. **1.3 BGY** is well water and a little less than **1.6 BGY** is reclaimed water from West Basin. **1.9 BGY** is purchased from the CA water service company.
- So Cal – Wilmington refinery
- Total Water – about **1.9 BGY** per year. Going forward we hope to get about **1.5 BGY** from well water and the balance purchased from LADWP.

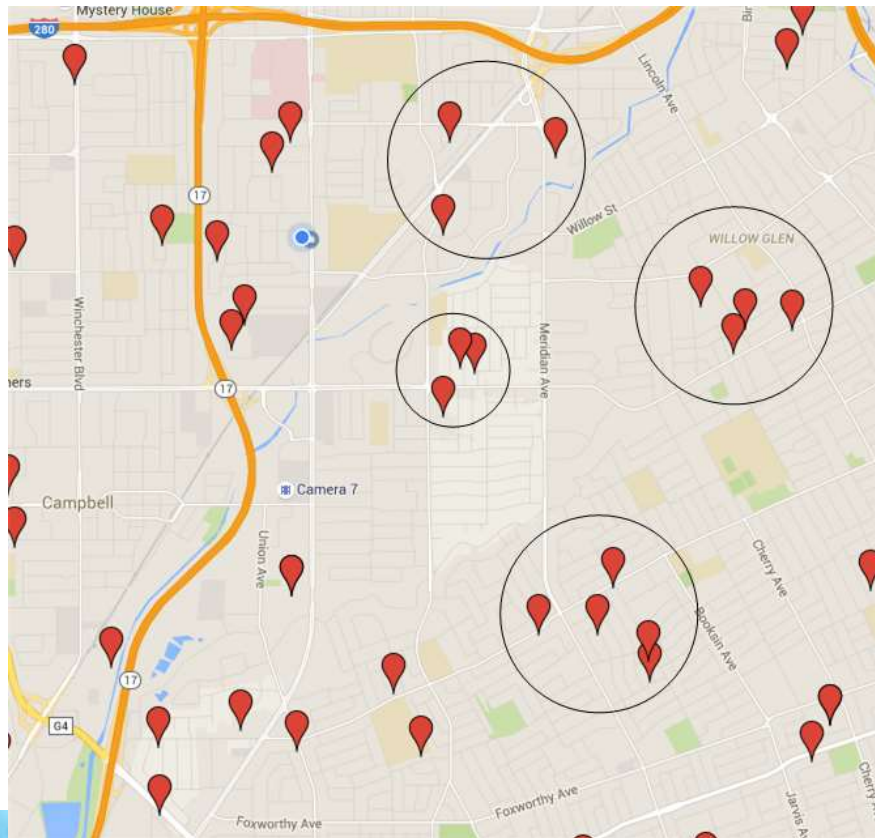
Key Components



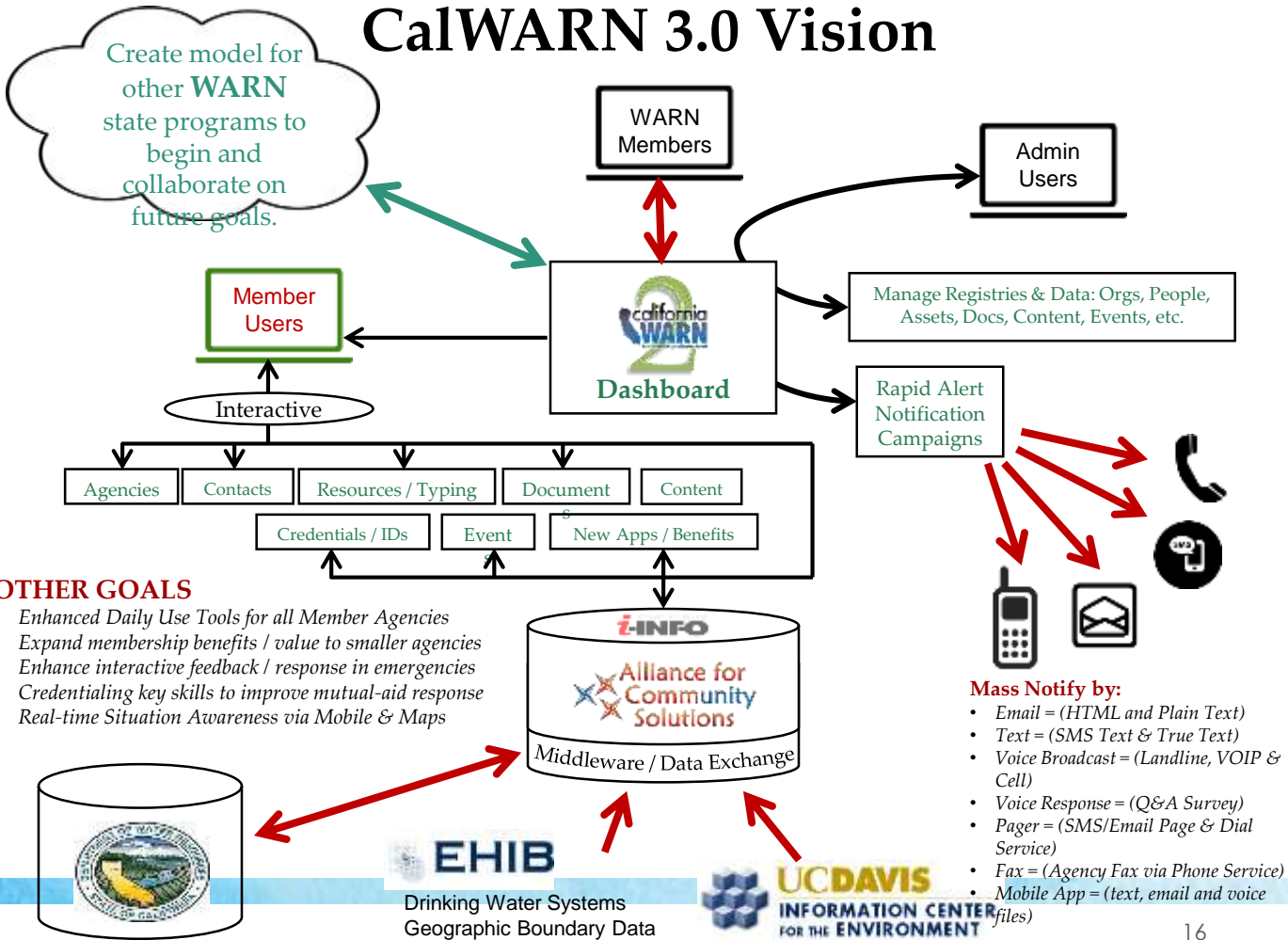
SJWC Fuel Plan - County



Employee Carpooling



CalWARN 3.0 Vision



Create model for other WARN state programs to begin and collaborate on future goals.

Member Users

WARN Members

Admin Users

Dashboard

Manage Registries & Data: Orgs, People, Assets, Docs, Content, Events, etc.

Rapid Alert Notification Campaigns

Interactive

Agencies

Contacts

Resources / Typing

Document

Content

Credentials / IDs

Event

New Apps / Benefits

i-INFO
Allance for Community Solutions
Middleware / Data Exchange

EHIB
Drinking Water Systems
Geographic Boundary Data

UC DAVIS
INFORMATION CENTER
FOR THE ENVIRONMENT

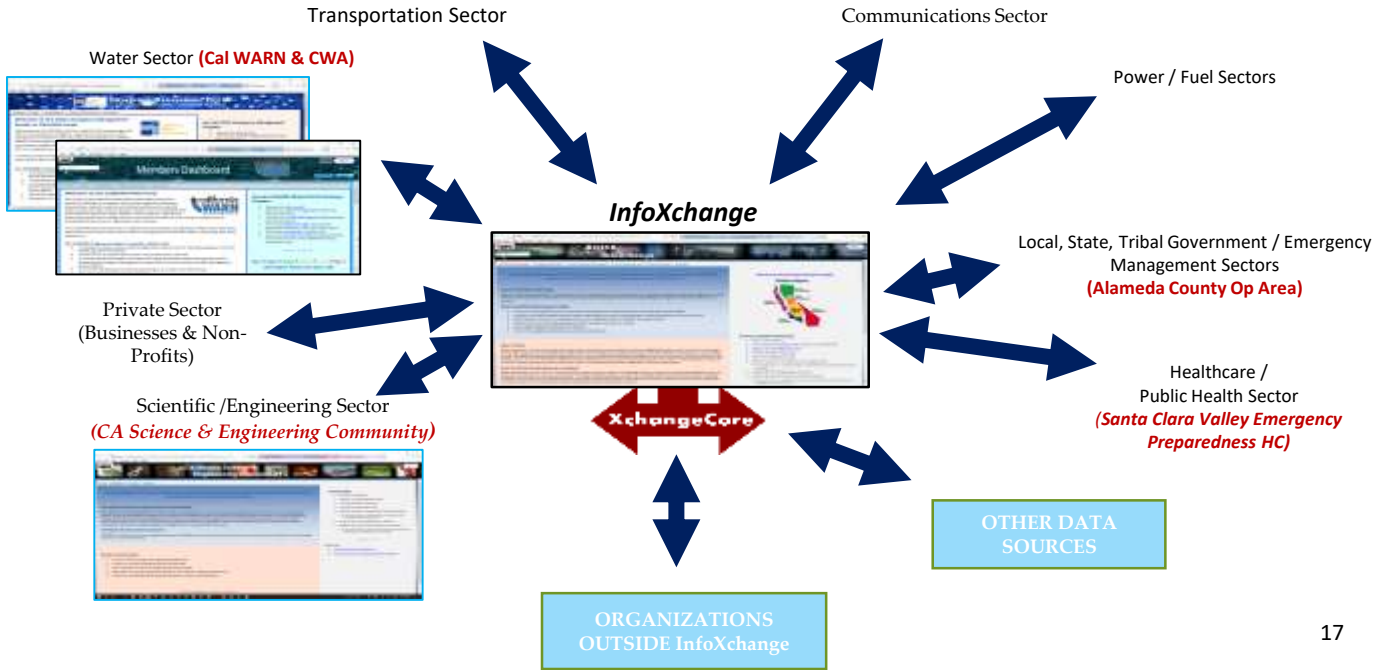
- Mass Notify by:**
- Email = (HTML and Plain Text)
 - Text = (SMS Text & True Text)
 - Voice Broadcast = (Landline, VOIP & Cell)
 - Voice Response = (Q&A Survey)
 - Pager = (SMS/Email Page & Dial Service)
 - Fax = (Agency Fax via Phone Service)
 - Mobile App = (text, email and voice files)

OTHER GOALS

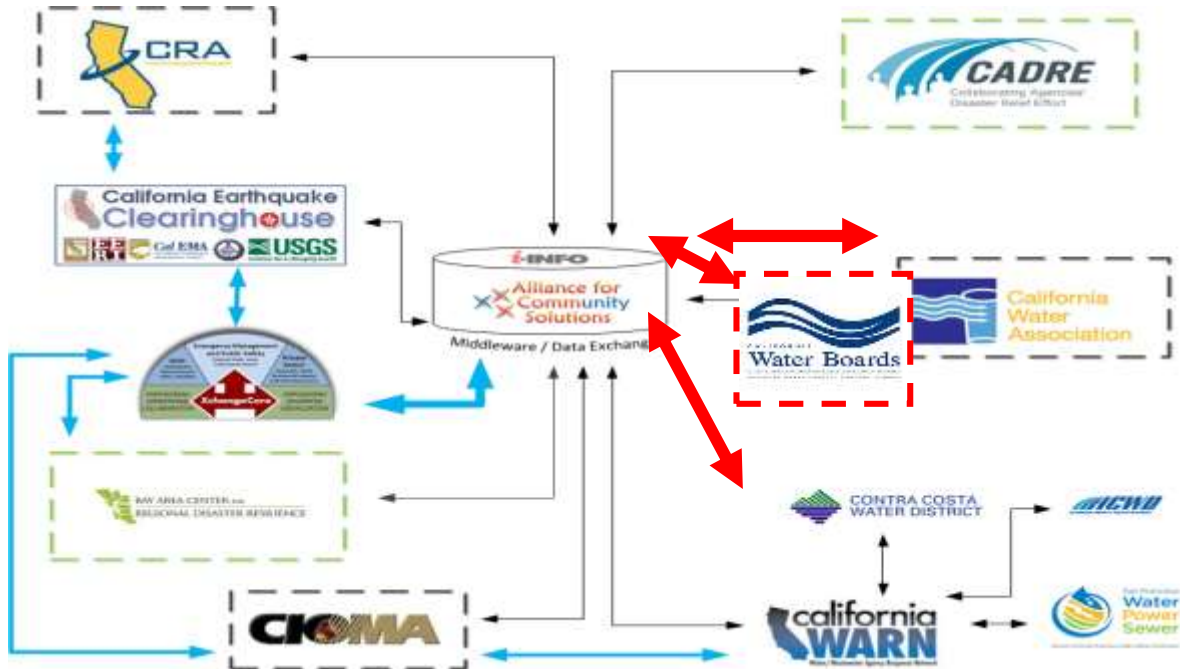
- Enhanced Daily Use Tools for all Member Agencies
- Expand membership benefits / value to smaller agencies
- Enhance interactive feedback / response in emergencies
- Credentialing key skills to improve mutual-aid response
- Real-time Situation Awareness via Mobile & Maps



Existing and Potential Communities of Interest



The Great Mutual Assistance Network



Contact

Jim Wollbrinck

Manager of Security and Business Resiliency

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www.sjwater.com

Poll Question



California Energy Commission's Emergency Support Role – Fuel Set Aside Program

**Emergency Fuel Planning Webinar
2018**

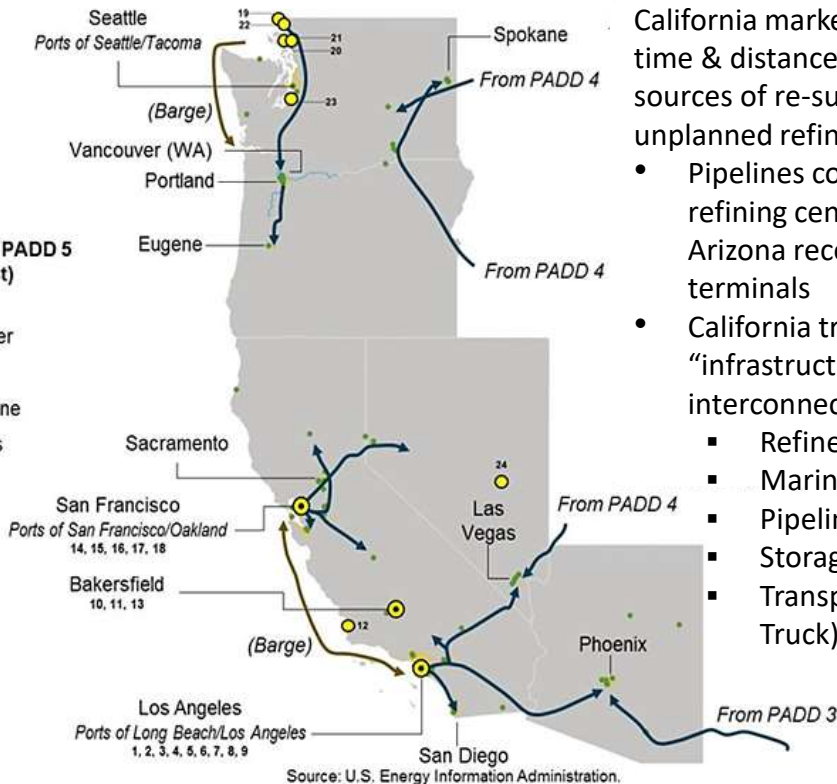
*Justin Cochran, Ph.D.
Nuclear Policy Advisor &
Emergency Coordinator
California Energy Commission
Justin.Cochran@energy.ca.gov*



PADD 5 – Western States Isolated

Product Supply – PADD 5 (West Coast)

- = Bulk Terminal
- = Refining center
- = Refinery
- = Product Pipeline
- = Product Flows
- = Urban Areas



California market isolated by time & distance from alternative sources of re-supply during unplanned refinery outages.

- Pipelines connect California refining centers to Nevada & Arizona receiving distribution terminals
- California transportation fuel “infrastructure” consists of interconnected assets
 - Refineries
 - Marine terminals
 - Pipelines
 - Storage tanks
 - Transportation (Rail & Truck)





Petroleum Interdependencies

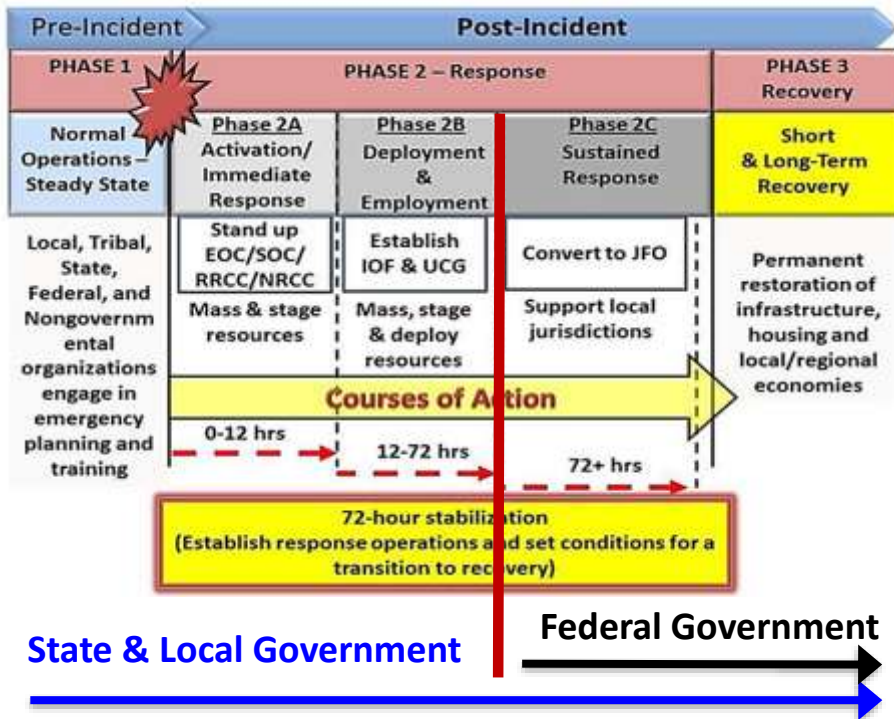
- California refineries depend on various outside services to sustain operations
 - Source water for process steam
 - Wastewater discharge handling requirements
 - Natural gas to augment still gas fuel production
 - Hydrogen from merchant producers
 - Acid deliveries for operation of alkylation facilities
- Retail fuel stations provide majority of gasoline and diesel fuel to the private sector – need electricity & telecom
- Road, Rail, Pipeline, and Port damage disrupt transportation corridors

Catastrophic Event = Abnormal Operations

Production, Distribution, Dependent Supply Chains, and Supporting Infrastructure **Disrupted or Broken!**



Simplified State Emergency Response Operations Timeline



First 12 – 24 Hours

- Assess damage
- *Identify* sector impacts
- *Identify* mitigation actions
- Communication & Coordination
- Prioritize Resources
- Identify Key Resource Allocation Targets
- Deploy Resources...



Fuels Set Aside Program (FSAP)

California statutes and Governor's Emergency Declaration authorizes the Energy Commission to hold "control and coordination" of petroleum stocks in California

- Formal Fuel Set-Aside Program (FSAP) for Emergency responders
 - life and property
- Role of the Energy Commission: mediate communication between entities with *fuel needs* and entities with *fuel stock*
 - Coordinates with key partners to ensure critical fuel supplies get to where they are needed most
- Liquid transportation fuels, not electricity or natural gas
 - Gasoline & diesel fuel, Civilian and military jet fuel

Critical Fuel Planning Considerations

Storage Capacity, Burn Rates, Alternate Paths to Resupply,
Established Emergency Communications, Key Partners

Identify specific needs for short term & sustained operations!



Proactive Readiness Goals: Transportation Fuels Working Group

Fuels Working Group – Improve preparedness for response to a catastrophic event in California

Core Members: State and Federal agencies with authority/oversite and invitations for Private Sector, State Agency, & Local government participation

Purpose: Identify specific goals and work solutions

Areas of Focus:

- Identify key interdependencies
- Quantify fuel demand & geographic scope for emergency needs
- Alternative fuel sources for Emergency Response activities
- Strategies for maximizing fuel delivery from outside California
 - Alternate routes of resupply and time factors
- Fuel supply inside impacted zones
 - Trapped first responders & critical resources





Proactive Readiness Goals: Petroleum Waivers

- Likely scenario = insufficient transportation fuel supplies to meet normal demand following a catastrophic earthquake
 - Steps will need to be undertaken to increase fuel supply & decrease demand
- Waivers provide an ability to maximize alternative sources of transportation fuel supplies and minimize delivery timelines
 - Contingent on rapid approval of various fuel specification, logistics, and emission limit waivers from federal, state, and local entities
 - Fuel Quality waivers
 - Logistics waivers (Jones Act – use of foreign marine vessels)
 - Emission limit waivers (emergency generator continuous use)
 - Decreased fuel demand activities (odd-even rationing)

Critical Fuel Planning Considerations

Emergency Contacts, Response/Recovery Coordination, & Minimal
Operational Needs

Identify needs for Emergency Operational Cycle & Recovery Plan!



Thank You

California Energy Commission
Emergency Coordinator Contact

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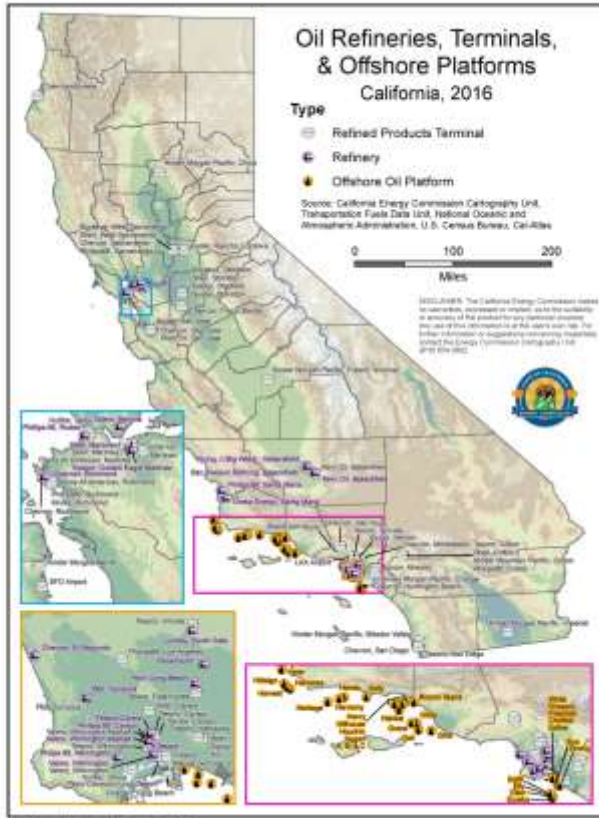
Poll Question

Ryan Hanretty

Executive Director

California Fuels and Convenience Alliance

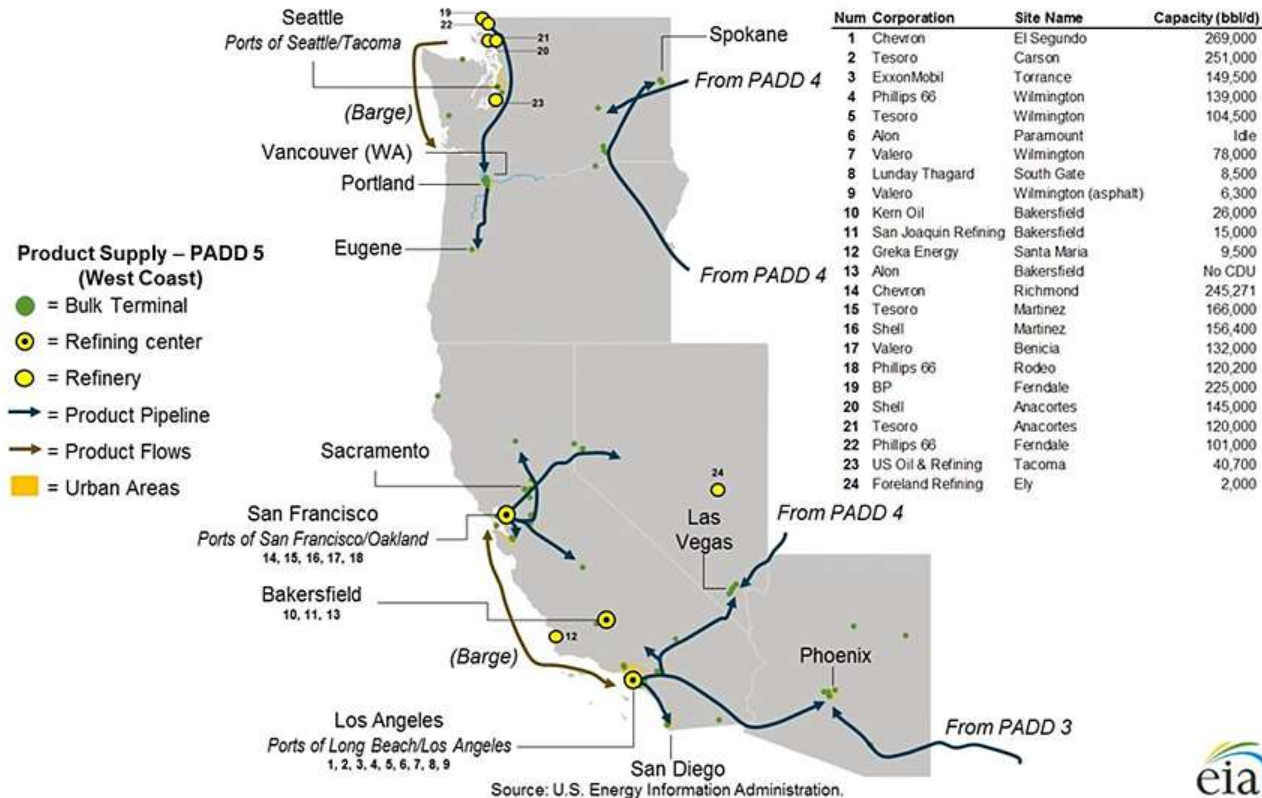
California's Refiners



- 12 refineries produce transportation fuels that meet California standards
 - 42.4 million gallons per day gasoline
 - 10.1 million gallons per day diesel fuel
 - 10.6 million gallons per day jet fuel
- 8 smaller refineries produce asphalt and other petroleum products
- Important source of transportation fuel to neighboring states
 - NV 85 percent, AZ 35 percent
- Processed 1.612 million barrels per day of crude oil during 2016

Western States Isolated

Figure 1. West Coast petroleum product supply map



FUEL & CONVENIENCE SUPPLY CHAIN

How CFCA fuels the economy and every community in California

CIPA & WSPA

CFCA - Small family- & minority-owned businesses



WHO WE SERVE:



Fuel Marketers and Convenience Stores

Industry Numbers

- Over 100 Fuel Marketers in California
- About 12,000 Gas Stations/Convenience Stores
- And this doesn't include cardlocks (unmanned fueling stations)

Industry Role

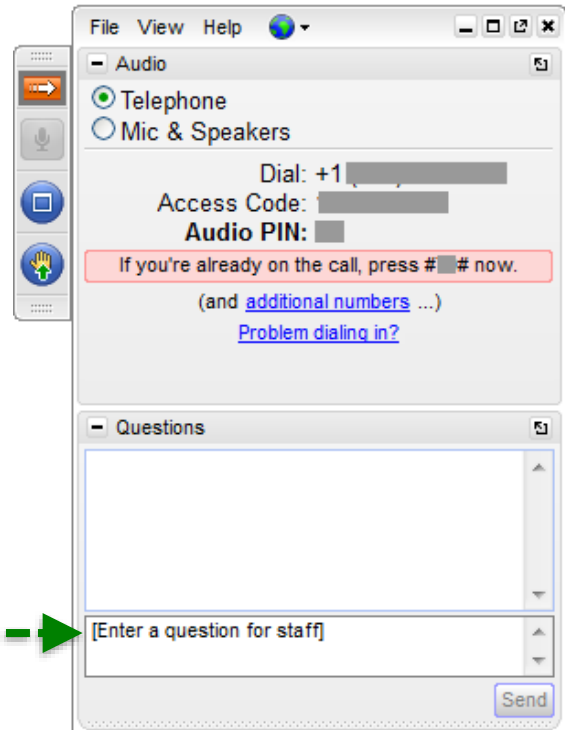
- Our industry is full of logistics experts for moving liquid fuel to where it is needed most.
- Fuel Marketers will enter into MOUs with municipalities and other businesses to provide fuel in an emergency scenario.
- Decades of experience setting up safe fueling locations, as we do this with every wildfire that is fought here in California.
- Marketers own trucks, contract with trucking companies, and have relationships with convenience store owners, refineries, and other folks (Ag, fleets, etc.) that have tanks of fuel.
- Convenience stores have tanks, bulk facilities that we own store fuel, and these locations will be where a short supply will be found in the immediate wake of disaster.

Know Your Fueling Needs

- Know your fuel needs and prepare before you need fuel.
- After an emergency, a run on fuel is a very likely scenario.
 - CFCA and government agencies will coordinate to move fuel where it is needed.

CFCA should be a resource to connect with our industry in your area. We are happy to help and emergency planning has become a large focus for our industry these past few years.

How to Ask a Question



Type and send -->

Thank You

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