

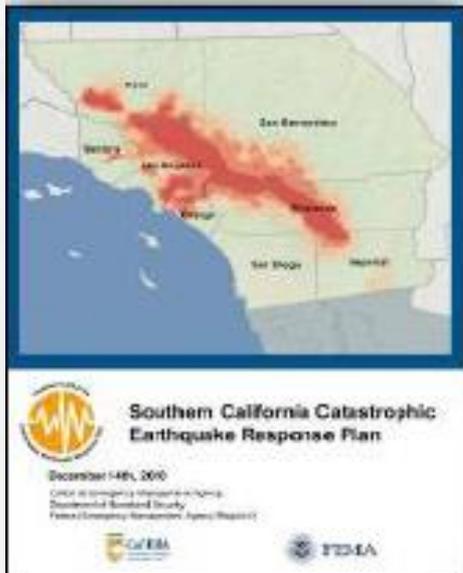


Catastrophic Response Planning

Southern California Catastrophic Earthquake Response Plan



Joint State / Federal / Private Sector
Collaborative Planning Effort



NASEO

Discussion Based TTX Informational Briefing

September 30, 2016

Multi-Agency Coordination

NASEO

National Association of
State Energy Officials

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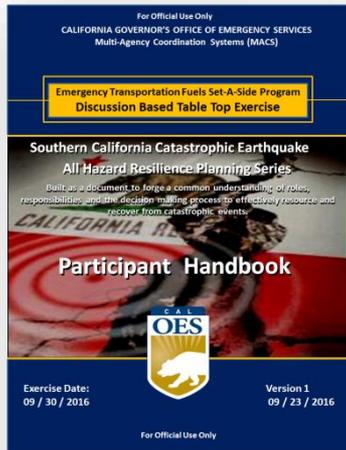


Catastrophic Response Planning

Southern California Catastrophic Earthquake Response Plan



Under the Cover of Your Participant Handbook



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Appendices A-Maps, B-Hot Wash Process, C-Glossary



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Agenda

- Welcome and Introductions
- Exercise Objectives to Improve Core Capabilities
- Background - Southern CA Earthquake Risk
- Operational Planning Overview/Scenario
- Major Impacts
- SOC Initial Planning Objectives
- Information Collection Plan/Situational Awareness
- Direct Impacts to Western States Fuel Flow
- Fuel Infrastructure Damage
- Multi-Agency Coordination Group Decision Making Process
- Open Discussion to the MAC Decision Making Process
- Public and Private Partnerships
- Best Practices and Lessons Learned
- Hot Wash
- Adjourn



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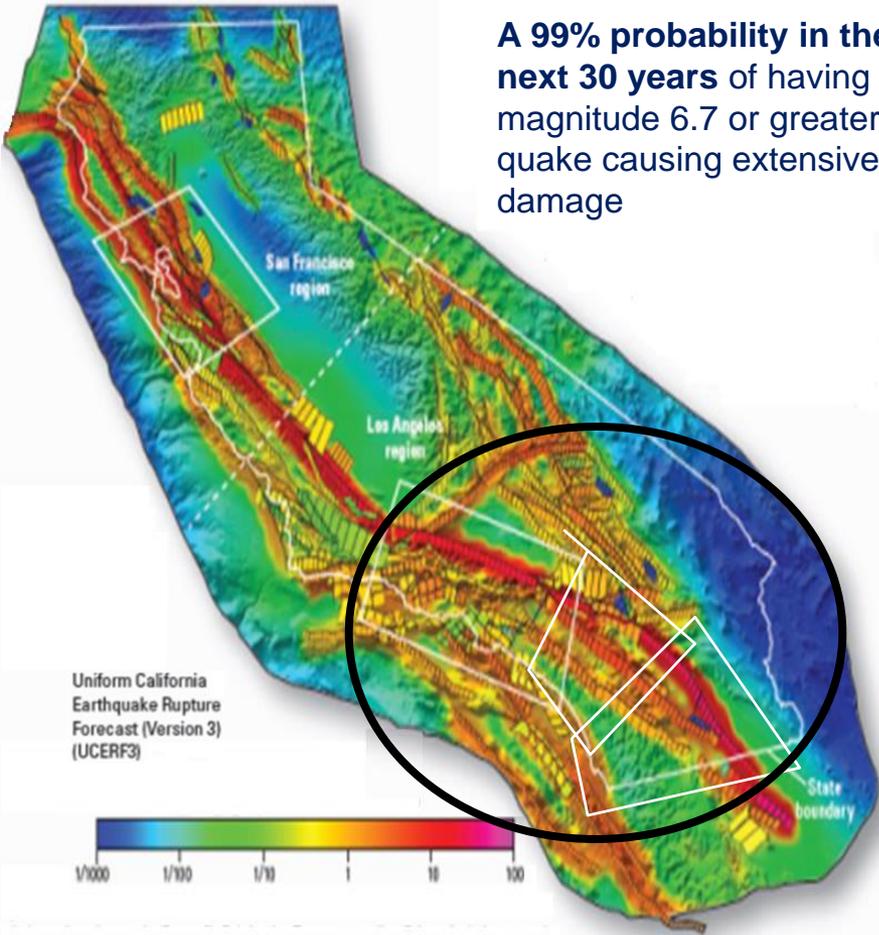


Exercise Objectives to Improve Core Capabilities

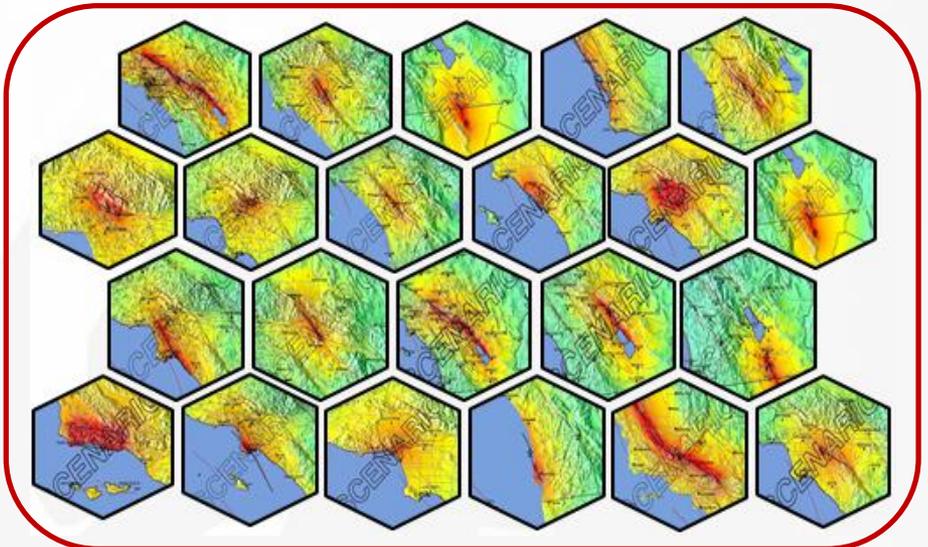
- **Planning** - Conduct a systematic process engaging appropriate stakeholders to meet defined goals and expectations.
- **Situational Assessment** - Provide all decision makers with relevant information regarding the nature and extent of the incident, cascading effects, and status of the response.
- **Operational Communications** - Ensure the capability to communicate with both emergency management, response and support functions (internal/external) and affected/impacted areas.
- **Operational Coordination** - Establish and maintain a coordinated operational structure that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Southern California Earthquake Probability

A 99% probability in the next 30 years of having a magnitude 6.7 or greater quake causing extensive damage



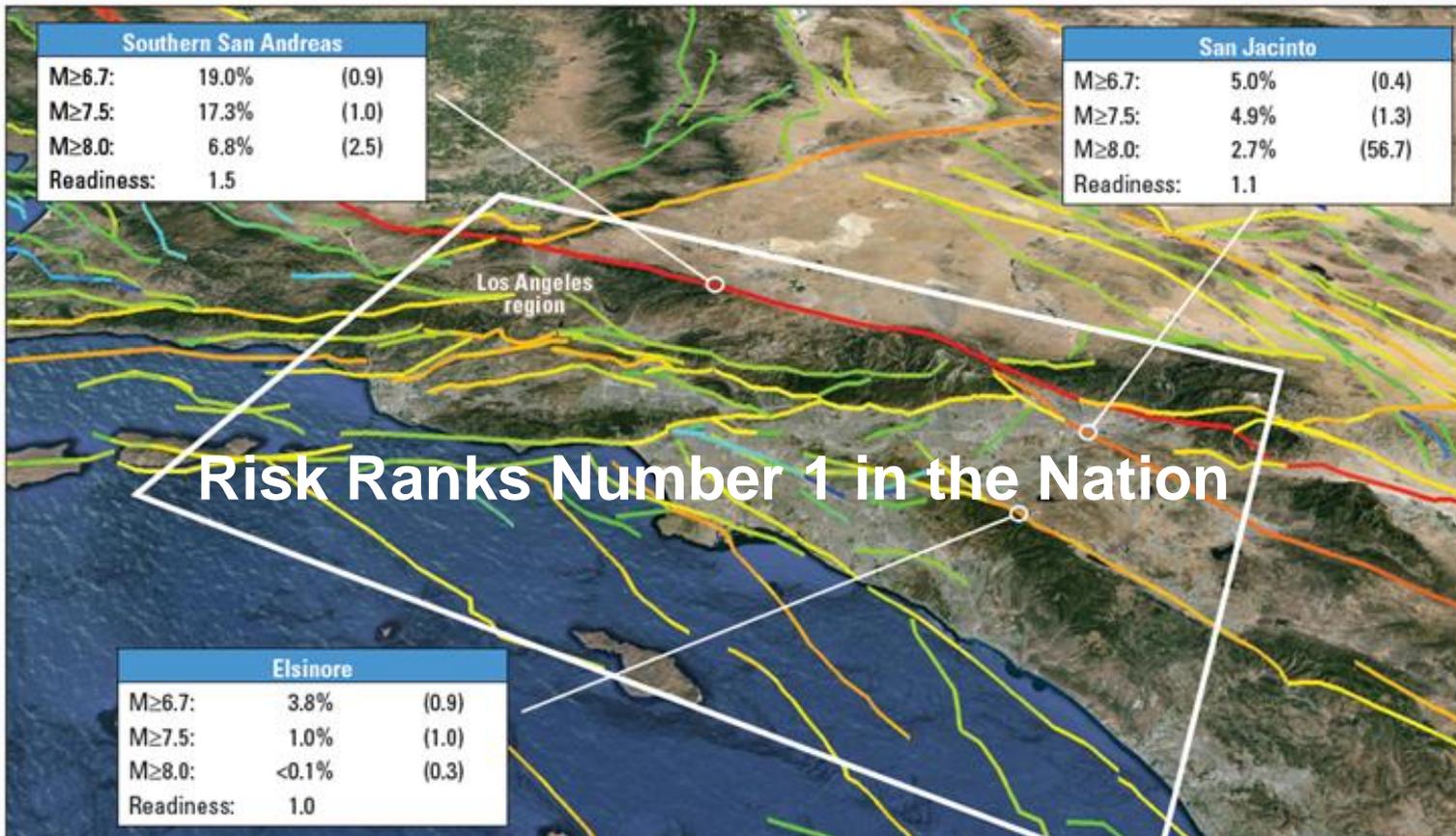
22 Ground Motion Prediction Models



Southern California Complex Fault System

Background - Southern CA Earthquake Risk

Planning strategy based on a range of earthquake risks in Southern CA.





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Operational Planning Overview Scenario

200 miles

7.8M Southern San Andreas Earthquake

Salton Sea Epicenter

Twelve OA's Directly Impacted:

- Imperial County
- Inyo County
- Kern County
- Los Angeles County
- Orange County
- Riverside County
- San Bernardino County
- San Luis Obispo
- San Diego County
- Santa Barbara County
- Tulare County
- Ventura County

LEGEND

Earthquake points

- 3 <= Mag <= 5
- 5 < Mag <= 7
- 7 < Mag

Shakemap (Intensity)

- I (Not Felt-Clear)
- II - III (Weak)
- IV (Light)
- V (Moderate)
- VI (Strong)
- VII (Very Strong)
- VIII (Severe)

Fault Rupture Approximately 200 miles

Image © 2008 DigitalGlobe
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Major Impacts

1,800 deaths

53,000 injuries

300,000 buildings significantly damaged (1 in 16)

1,600 ignitions requiring a fire engine, 1,200 exceed capability of first engine response

542,000 individuals require mass care and shelter, to include those with access, functional and other special support needs. This includes 10% (50,000+) toddlers and infants

2.5 million individuals shelter-in-place and need basic resource support (e.g., food and water)

267,000 displaced household pets

4,500 rescues

\$213 billion estimated damages



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State Operations Center (SOC) Initial Planning Objectives E+2 hrs

1. Support the safety and security of all first responders and the public.
2. Provide support to health and medical services for survivors as required.
3. Conduct rapid needs assessment to prioritize and execute patient evacuation and movement.
4. Reduce hazards by suppressing fire and contain hazardous materials.
5. Conduct rapid needs assessment to provide and execute patient evacuation and movement.
6. Conduct rapid needs assessment for critical infrastructure/key resources.
7. Conduct rapid needs assessment to provide mass care and accessible shelter operations to include animals.
8. Develop robust incident management organizations to optimize lifesaving operations.
9. Conduct mass fatality operations.
10. Develop and implement a joint strategic information communications plan to disseminate and create accessible and actionable public messaging.
11. Identify, prioritize and conduct debris removal and clearance operations.
12. Prioritize and re-establish critical lines of movement (multimodal).
- 13. Establish emergency power and fuel lines of supply.**
14. Conduct rapid needs assessment to identify critical environmental risks and impacts.



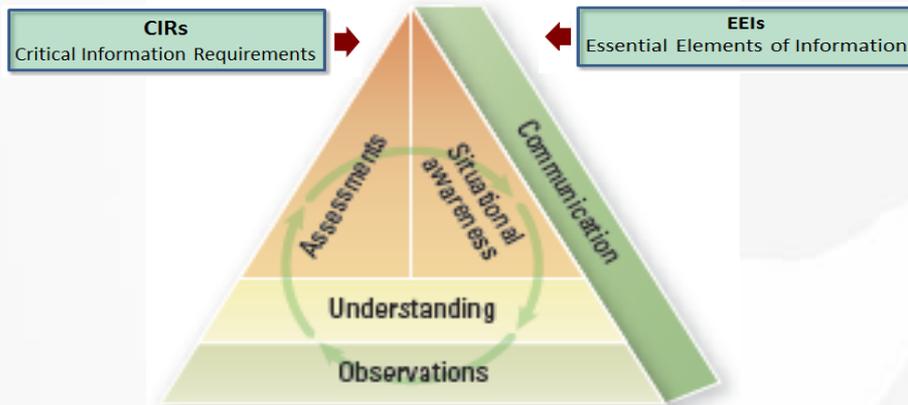
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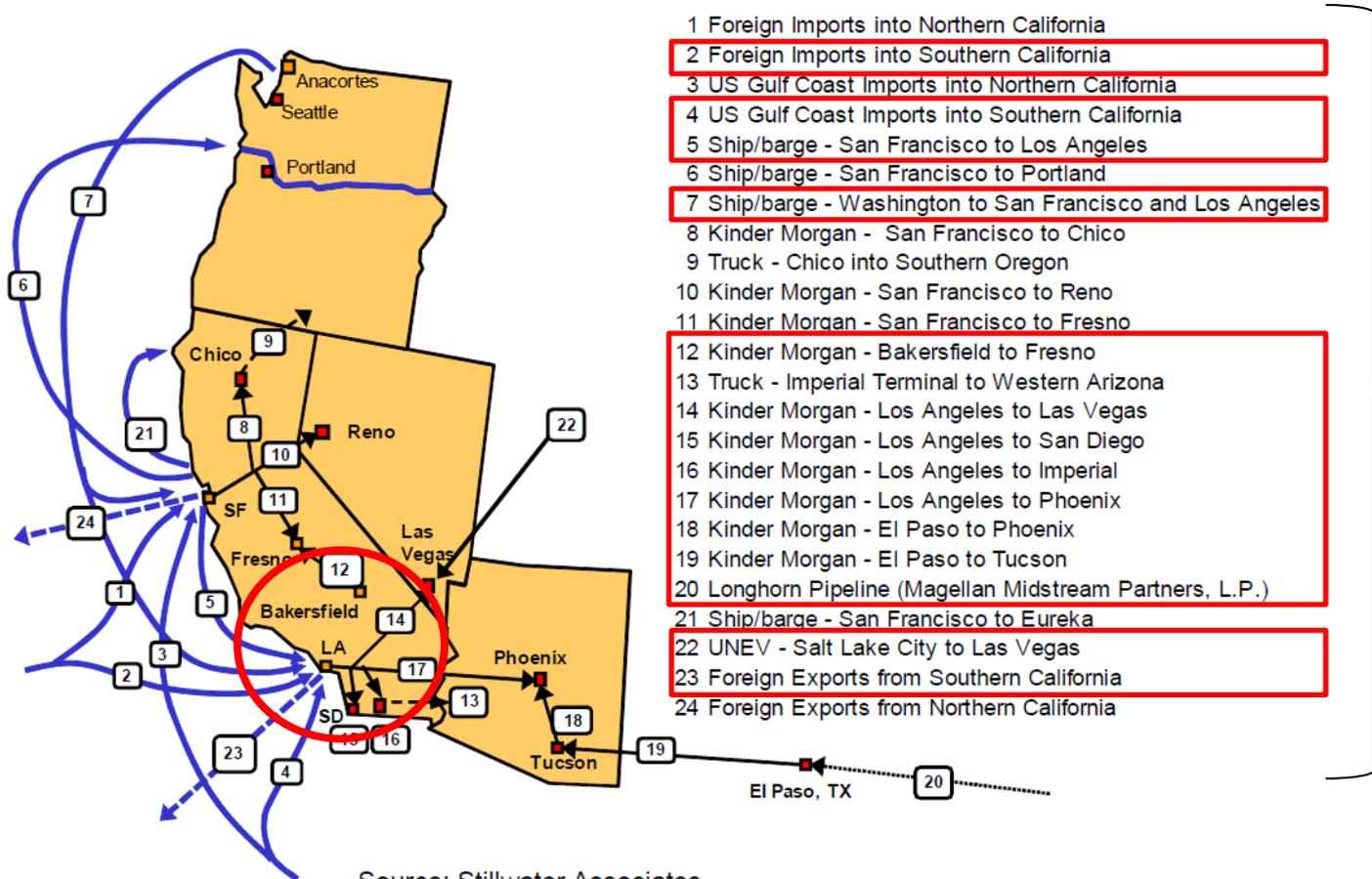
SOC Information Collection Plan

Each piece of data is gathered and synthesized together to create usable information (Hot Sheet/Situation Report (SITREP), Executive Summary or ArcGIS Map Journal Common Operational Picture (COP). Each emergency functional element should continually obtain feedback on the information reported or disseminated to ensure that the information being provided is accurate and useful.



SOC Essential Elements of Information (EElS)	
Disaster Area EEI:	<ul style="list-style-type: none"> • Boundaries of the disaster area • Access points to the disaster area • Jurisdictional boundaries • Social, economic, and political impacts • Hazard-specific information • Seismic and/or other geophysical information • Weather conditions and forecasts
Assessment EEI:	<ul style="list-style-type: none"> • Predictive modeling impact projections • Initial needs and damage assessments • Status of communications systems • Status of transportation systems and critical transportation facilities • Status of operating facilities • Status of critical facilities and distribution systems • Status of energy systems • Status of critical resources and resource shortfalls
Response and Recovery EEI:	<ul style="list-style-type: none"> • Status of emergency or disaster declarations • State Emergency Function (EF)/Federal Emergency Support Function (ESF) activations • Major issues/activities of ESFs, EFs, and other functional areas • Key state and federal personnel and organizations • Remote sensing activities • Federal Coordinating Officer (FCO)/State Coordinating Officer (SCO) priorities • Recovery program statistics • Donations and volunteers • Status of upcoming activities and events • Status of efforts under other federal emergency plans and authorities

Direct Impacts to Western States Fuel Flow



Immediate Impacts to 15 Fuel Flow Distribution and/or Conveyance Systems

Source: Stillwater Associates.



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Situational Assessment - Fuel Infrastructure Damage

- Chevron El Segundo Operating ALL other Refineries are DOWN.
- Terminals are DOWN
- Significant damage to SoCal pipeline infrastructure (leaks, fires, etc.)
- For Southern California resource <40% of on-site inventory is available or accessible (dependent on status of the power infrastructure)
- UNEV Pipeline is down that supplies 60,000 barrels per day impacting Nevada, Utah, and Arizona (down time estimates 42 days).
- Northern California resources at the time of the event are the only reliable source of inventory for 7 days.
- Key delivery options will be impacted by road situation around the disaster area.



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Fuels – Multi-Agency Coordination Group Decision Making Process

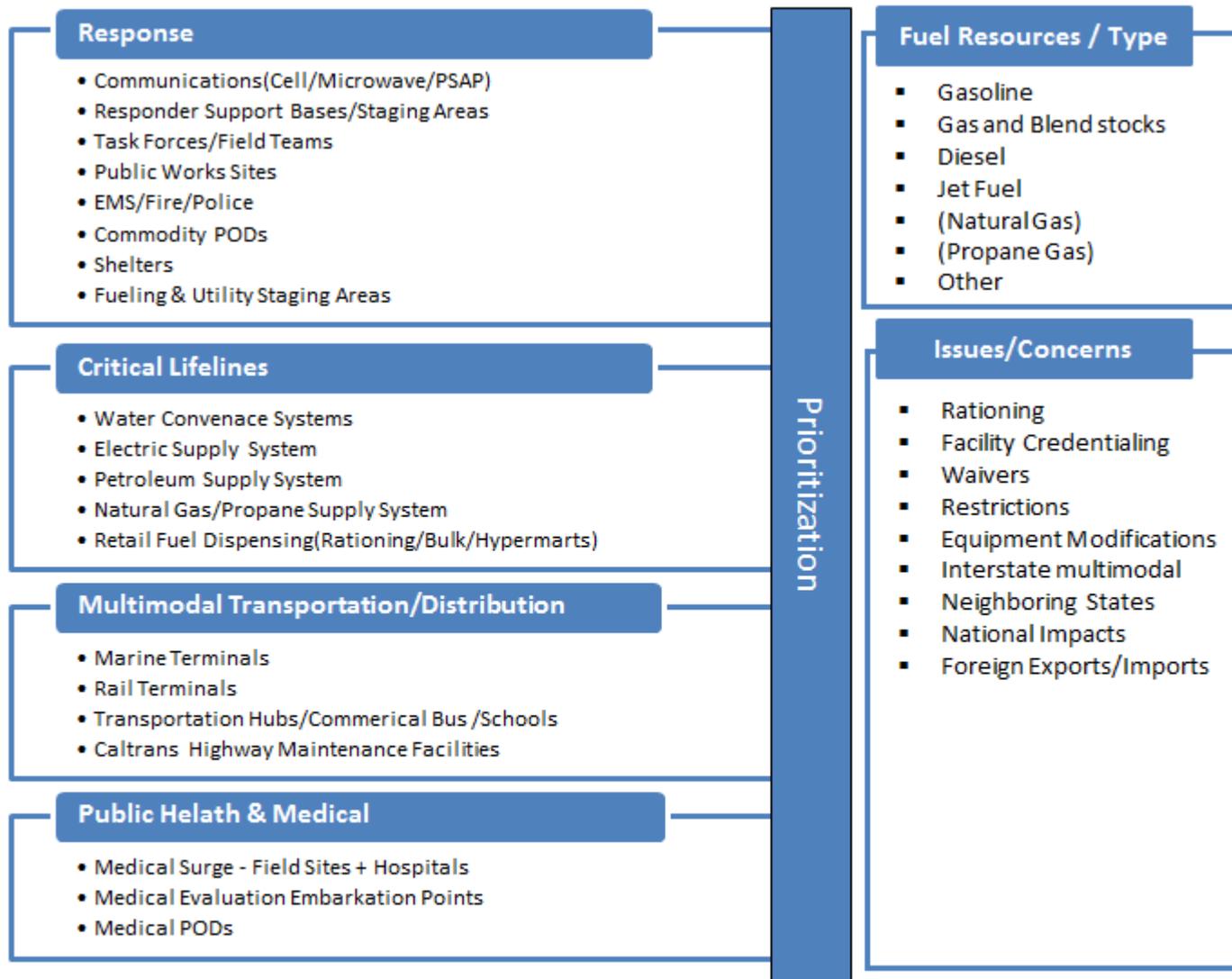
MAC Group Functions

- 1. Provide Situation Assessment**
 - Gather decision support information
 - Maintain Situational Awareness and a Common Operational Picture
- 2. Incident Priority Determination**
 - Look at timely resumption strategies to free up critical fuel resources
- 3. Critical Resource Acquisition and Allocation Based on Operational Need**
 - Determine specific IC/UC resource capabilities and needs
 - Determine resource availability (outside of the impacted area)
 - Anticipate future resource needs and develop strategies and contingency plans
 - Determine need for and designate responder support bases/utilities staging areas
- 4. Reevaluate Incidents Support Based on the Following Factors:**
 - Life threatening situations
 - Real property threatened
 - High damage potential
 - Incident complexity
- 5. Communicate and conduct integrated and effective planning & coordination:**
 - Provide MACS components with timely communication of “Decisions”
 - Initiate and fill liaison positions to facilitate communication as needed
 - Coordinate with elected and appointed officials (as required)
 - Provide summary information coordination

Incident
Commands
and/or
Unified
Commands

Supports
As Needed

Fuels Multi-Agency Coordination Group Prioritization Process



Phase 2a : E+ 24 hrs Immediate Response

Phase 2b : 24-72 hrs Deployment

Phase 2c : 72+ hrs Sustained Response

Phase 3 : Recovery E 96+

Long Time Recovery E+ 20 Days

Back to Normal Distribution



Catastrophic Response Planning

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Exercise Objective:

- Examine the organizational continuous process of managing emergency transportation fuels set-a-side prioritization and allocation activities effectively.
- Tigger discussion on identifying problems and possible solutions related to southern California fuel shortage.

Discussion: Initial Actions & Questions

- Review and discuss Day-1 Fuel situation (CEC personal provide fuel impact to critical infrastructure/vital lifelines and possible escalating failures).
- Discuss prioritization requirements for the next operational period IAP.
 - Response
 - Critical Lifelines
 - Multimodal Transportation/Distribution
 - Public Health and Medical
- Discuss Pre-Scripted Mission Assignments (PSMAs) for emergency fuels allocation to impacted areas (Response, Critical Lifelines, Transportation/Distribution, Public Health and Medical) issues and concerns.
- Discuss the Public Information Office (PIO) plan for handling the media.



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Public and Private Partnerships

Benefits to establishing concrete relationships

- Lists Key contact information for both entities
- Encourages private sector to participate in planning process
- Encourages private sector to participate in exercises
- Allows information flow between government & private sector
- Sets foundation for pre and emergency contracts

Example: Relationship between CalOES and CUEA



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Best Practices and Lessons Learned

➤ Best Practices: Catastrophic Events

- Energy Restoration Task Force (TF) at the request of the president, addressed both power and fuel issues eliminating roadblocks and identifying choke points in power and fuels distribution systems.
- Energy Restoration Task Force (TF) expedited the waiver process.
- State/Federal Leadership with direct Chief Executive Officer (CEO) involvement aided in the restoration process and situational awareness.
- Expanded mutual aid assistance to support scope and complexity of the incident.

➤ Improvement:

- Information and communications (Situation Awareness - SA) of fuel supplies (lack of current/real time information significantly impeded governments' ability to respond).
- Credentialing of personnel resources to meet operational needs.
- Restoration time lines (synchronized between government, industry and public).
- Access to critical sites that need restoration and critical resources (power/fuel/tech-spt).
- Utilities - Power, Oil and Gas restoration in parallel sequence matching up to operational priorities (looking at identifying regional interdependencies between Power/Oil/Gas).
- Develop real time monitoring at all points from well/refinery/pipeline to wheel.
- Decision making process that is clear and regularly communicated through the IAP process.



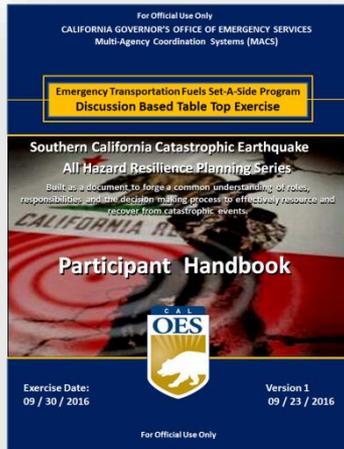
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Emergency Transportation Fuels Hot Wash Format

- Primary focus is to allow open and honest discussion about exercise design and sharing individual experience, best practices and lessons learned.
- Below are three questions to enhance overall effectiveness and improve organizational resiliency.



- 1** Are the current policies and procedures adequate to mitigate this type of incident?
- 2** What are the immediate concerns/issues that need to be addressed?
- 3** What are the key takeaways/lessons learned from this TTX?

Closing Comments: Please fill out the Participant Feedback Form located in the back of your Participant Handbook Leave your form on the front table as you depart.

Ref: Page 55 – Participant Handbook.



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Questions



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Multi-Agency Coordination