



Los Angeles
Department of
Water & Power



W-SMART 2011 Workshop

Emergency Response for LADWP's Water System

Presented on May 12, 2011 by:

James B. McDaniel, Senior Assistant General Manager – Water



Discussion Topics

- **LADWP Overview**
- **Primary Emergency Threats**
- **Response Team Structure**
- **Response Measures**
- **Partnerships**
- **Summary**



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Water & Power Systems Overview

Power Business

Number of Customers	1,434,425
Employees	6,303
Transmission Miles	3,655
Distribution Miles	11,031

Water Business

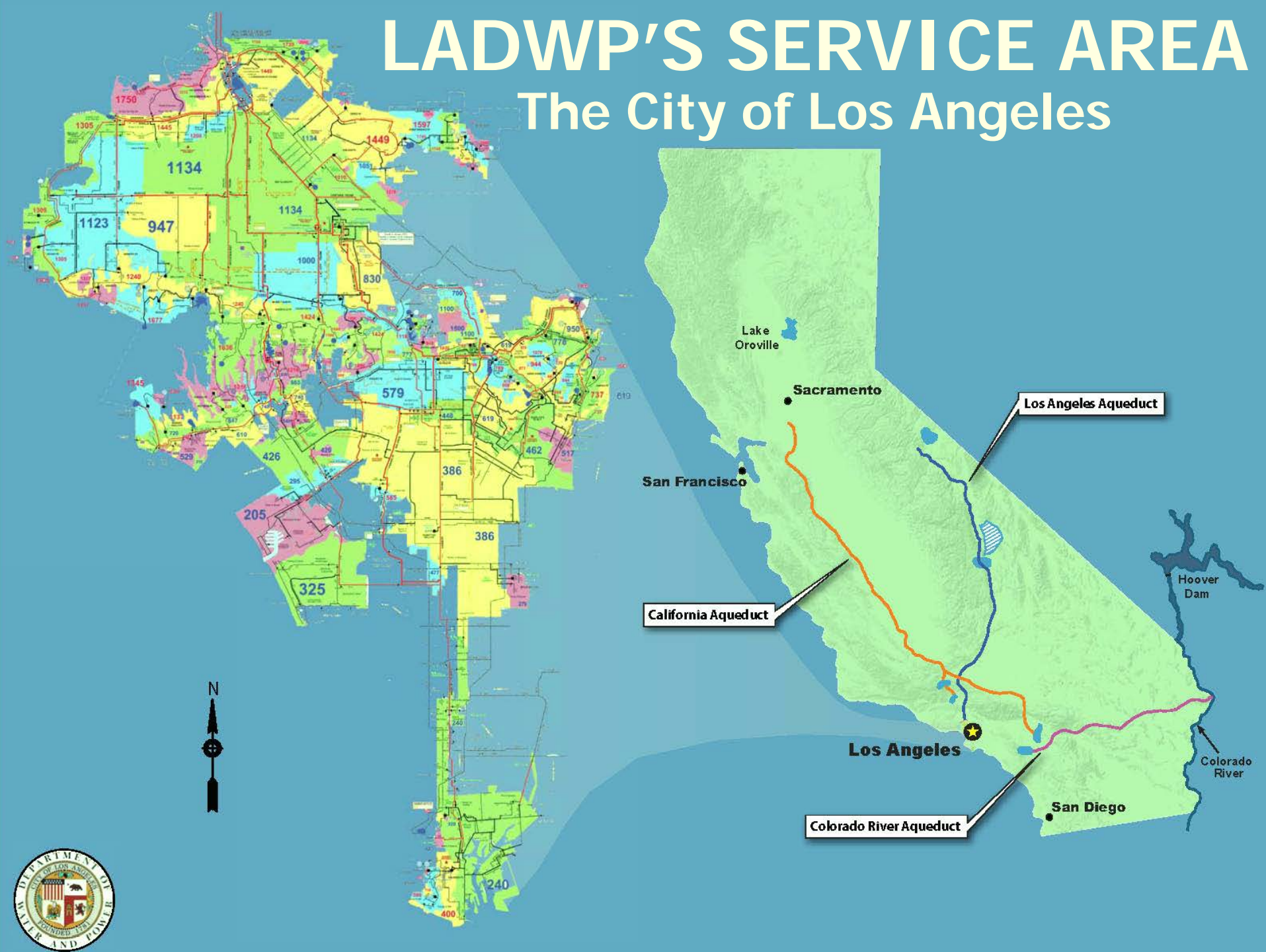
Number of Customers	665,976
Employees	3,188
Delivered Volume (million gallons)	199,000
Pipeline Miles	7,300

**LADWP's Operations Extend Across Seven States,
Affecting Four Million People**



LADWP'S SERVICE AREA

The City of Los Angeles



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Primary Emergency Threats

- Natural Threats
 - earthquakes, fire/wildfire, extreme heat, storms
- Man-Made Threats
 - hazardous materials releases, interruption of infrastructure
- Criminal Activity Threats
 - civil disturbance, acts or threats of terrorism, insider threats/sabotage



Primary Emergency Threats

- Public Health Threats
 - Pandemic influenza
- Non-Structural Hazards
 - employee safety, facility/equipment survivability
- Department Preparedness Vulnerabilities
 - vulnerabilities within our own emergency preparedness plan



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Response Team Structure

- National Incident Management System (NIMS) compliant
- Incident Command System (ICS)
 - ❖ Command
 - ❖ Operations
 - ❖ Planning
 - ❖ Logistics
 - ❖ Finance/Administration



Response Team Structure

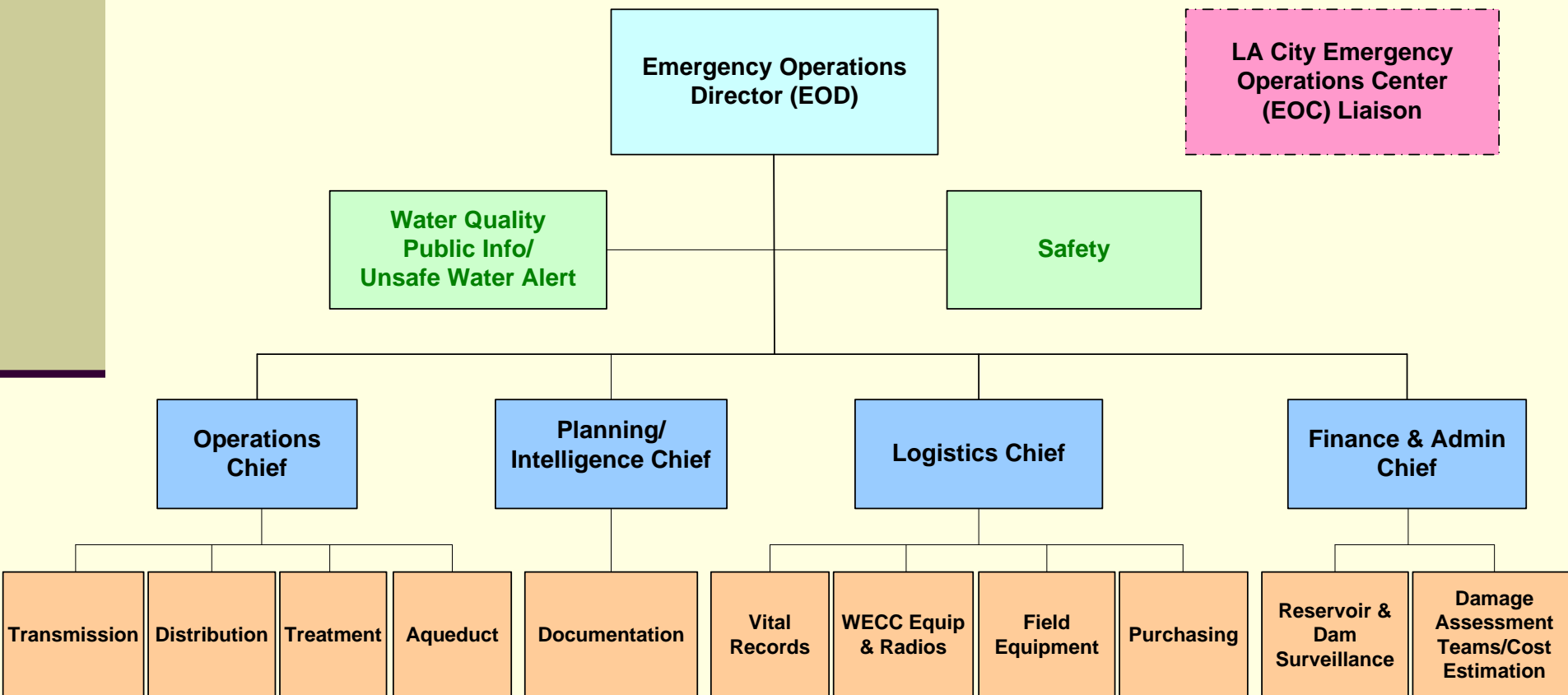
- Water Emergency Command Center (WECC)
 - ❖ centralized command for emergency response
 - ❖ team made up of Water System employees
 - ❖ multiple reporting locations based on situation



Response Team Structure

WATER EMERGENCY COMMAND CENTER (WECC)

Organization Chart



Response Team Structure

- Emergency Operations Center
 - ❖ multi-agency response coordination



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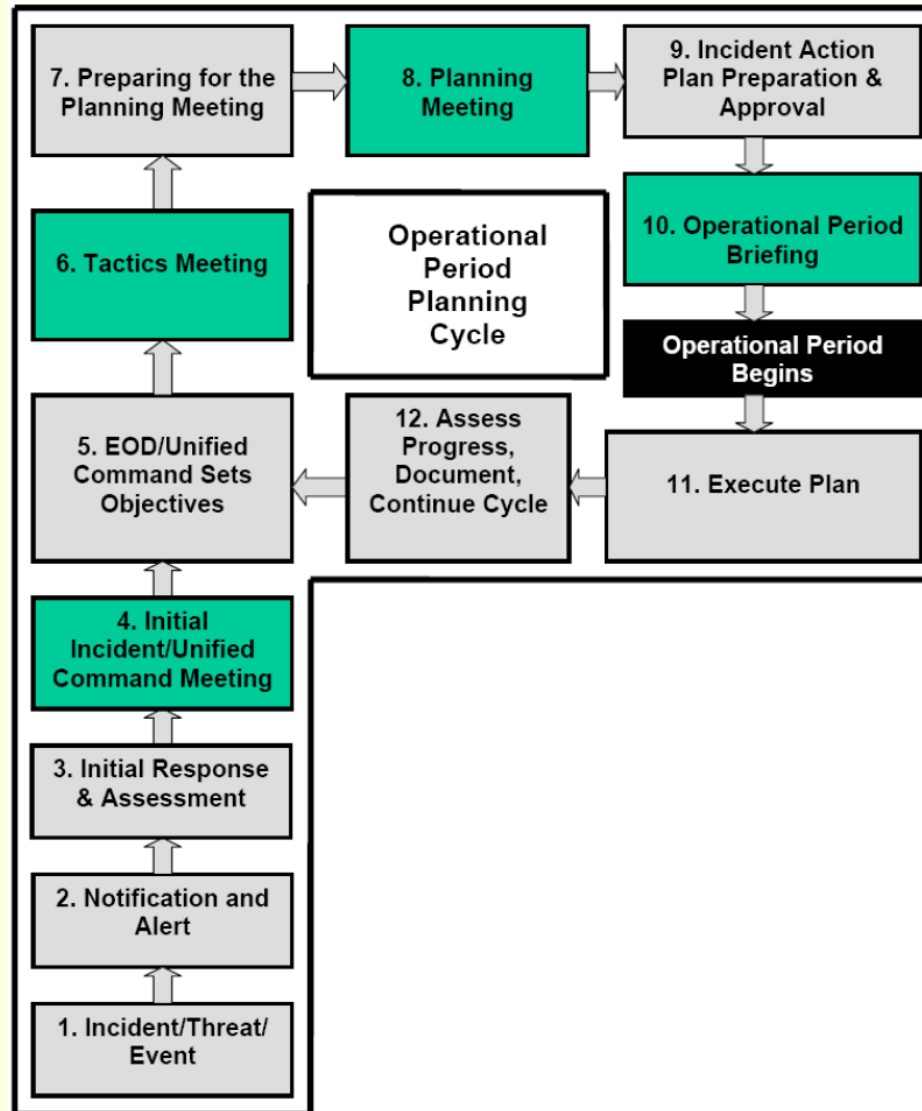


Response Measures

- Two phases for emergency response management
 - ❖ Phase I Assessment of Disaster
 - ❖ Phase II Response and Recovery
- Planning “P” process used in response operations
- Incident Action Plan states objectives, strategies, and supporting activities for operating period



Planning "P"



Response Measures

- Prioritization of effort is key due to limited resources; generally these are:
 - ❖ Life safety
 - ❖ Incident stabilization
 - ❖ Protection of environment and property
- Lessons learned from past experience are very valuable, as the emergencies tend to have a repeat nature



Using Lessons Learned



Using Lessons Learned

- **Capable personnel needed** -
Develop a robust and adequately trained response team
- **Communication is extremely important** – develop clarity and redundant communicating systems
- **Practice helps when the real thing comes** – perform tabletop and field exercises



Using Lessons Learned

- Implement chain of command **AT INCIDENT SITE** including :
 - ❖ Incident Commander
 - ❖ Public Information Officer
 - ❖ Liaison Officer
 - ❖ Security and Safety Officers
- Public Information Emergency Response (**PIER**) system used to communicate incident response status



Incident Command System

February 1, 2011 Main Break

792 8308 -OEM

LORETTA BRAZIL

Incident Commander
Senior Staff Member

BILL MORGAN

PIO - Public Affairs
Liaison Officer- OEM
Security - Security Services
Safety Officer - Division Safety Rep

BROOKS BAKER
LORETTA BRAZIL
STEVE NELSON

KEVIN KUBZALS - CLAIMS

ROBERTO GALVEZ

Operations
Superintendent

Planning and Intel
Waterworks Engineer
Distribution Engineering /
TL Construction Support

Logistics
Waterworks Engineer
Construction Support

Finance and
Administration
Principal Clerk Utility

JAMIE
CASTRELLON

FERNANDO
CANO

M. MILLER

DEBRA PERALTA

PIER Notification System

- **Timely** – e-mail notification sent as soon as problem reported
- **Relevant** – covers the when, where, who what, and how of event
- **From start to end** – trouble order closed when complete

From: internal@piersystem.com [mailto:internal@piersystem.com]
Sent: Thursday, October 14, 2010 5:29 AM
Subject: PIER System Survey Response Notification

1. **Trouble Order Number:**
1208045
2. **Business Group:**
Western District
3. **Date of incident:**
10/14/10
4. **Time of incident:**
3:35 am
5. **Are media on site?**
Yes
6. **Location/address of break:**
755 Lillian Wy
7. **Major Cross Street:**
Waring Av
8. **Size of main:**
6"
9. **Type of main:**
Cast Iron
10. **Description of break:**
Water Main Leak
11. **Action taken:**
Crew will make repairs at 6:30 am
12. **Injuries?**
No injuries observed
13. **Property damage?**
No
14. **Describe damage to property, if any:**
None
15. **Extent of street damage:**
None
16. **Street closure required?**
No
17. **Describe street closure and anticipated duration, if needed:**
None
18. **Estimated date and time of service repair/restoration:**
10/14/10 at aprox 12:00 Noon
19. **Area and number of customers affected:**
Aprox 20
20. **Type of customers affected:**
Residential Multiple Family
21. **Boil Water notice required?**
No
22. **Incident Commander:**
Mr. T. Smith
23. **Phone number:**
213 761-2816
24. **Responsible Manager:**
Mr. B. Cook

CommandPro

Automated Incident Management System

- NIMS and ICS based--important for coordination, effectiveness and compliance
- Automates documentation
- Improves coordination and information flow
- Can be used for large and small events



Response Measures – Water Bladders









Response Measures – Mobile Emergency Response Post



Mobile Emergency Response Post

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Response Measures – Mobile Water Quality Lab









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Partnerships

- California Water/Wastewater Agency Response Network (Cal WARN)
 - ❖ statewide emergency response assistance for public and private water and wastewater utilities
 - ❖ functions in coordination with the California Office of Emergency Services
- California Mutual Aid Laboratory Network (CAMAL Net)
 - ❖ Consortium of federal, state, and local public water utility laboratories
 - ❖ Provides for laboratory surge capacity



Partnerships

- Member Agency Response System with the Metropolitan Water District (MWD)
 - ❖ Response coordination to resume post emergency delivery of local water supply
 - ❖ Made up of participating MWD member agencies
- Mutual Assistance Agreement - East Bay Municipal Utilities District
 - ❖ Direct agreement between LADWP and EBMUD
 - ❖ Utilizes advantages of similarities and geographical separation between agencies



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Summary



- ❖ Emergency response preparedness is an ESSENTIAL task of every organization that provides public service
- ❖ Capable personnel, effective communication, and proper training are keys to emergency response success
- ❖ An effective incident command structure will expedite response and continuity of operations
- ❖ Partnerships are very helpful, especially in significant, widespread catastrophes

Thank you.

Questions?

