

To: Bay Area UASI Approval Authority

From: Mary Landers

**Date:** April 11, 2013

Re: Item #7: RCPT Debris Management Project Report

### **Background:**

In 2008, the Bay Area received \$1.5 million dollars from the Regional Catastrophic Preparedness Grant Program to develop a Debris Management plan for the region. The award was based on the concept that the Bay Area would utilize the City of Los Angeles' existing Debris Management plan in the development of the Bay Area plan. In the FY 09 grant cycle, funds were utilized to validate the region's new plans. In addition to validating the other six plans developed with FY 08 funds, the Bay Area also conducted debris management plan validation activities between the Bay Area and Los Angeles and developed a crosswalk to highlight the similarities and differences between the plans. Further, a first-ever statewide Debris Management Workshop was held and "Just in Time" training was developed for all 12 Bay Area UASI Operational Areas and three core cities.

**Summary:** Two, one day Plan Validation Workshops were held in Los Angeles on January 8-9, 2013. Although the City of Los Angeles has a Debris Management Plan, the County of Los Angeles does not; therefore, the workshops were presented and pertain only to the City's plan. These workshops were designed to validate response and recovery operations; how the City's debris management information is shared; and the way various LA agencies interact with the City's Emergency Operations Center. In addition to the approximately 35 representatives from a number of Los Angeles City Departments, the Bay Area also sent 4 observers. Following these workshops, a Summary and Recommendations Report was issued (Appendix A).

The City of Los Angeles' Debris Plan was determined to be significantly different from the Bay Area plan in its level of detail. The main suggestions from the report included:

- Plans should provide references to their existing support information (i.e. facility locations, and evacuation routes);
- Create checklists for tasks by both debris management operation and department or agency;

- Pre-identify sites for the transfer, processing, and disposal of debris as well as its collection and demolition;
- Create public information announcements;
- Clarify the role and responsibilities between all Los Angeles City departments
- Maintain the plan through frequent exercises and updates

Since it is likely that the City of Los Angeles and the cities and counties of the Bay Area will be called upon to provide each other with Mutual Aid in the event of a catastrophe, it is important that the similarities and differences of each plan. Therefore, an LA/SF Bay Area Crosswalk report was prepared (Appendix B). Key areas of both plans are divided into 4 areas (Overview, Roles/Responsibilities, Debris Management Operations, Supporting Information) and laid out in a table format for ease of review.

Subsequent to the two Los Angeles Workshops, a statewide Debris Management Workshop was conducted on January 31, 2013 at URS headquarters in Oakland. This four hour workshop was attended by 58 representatives from cities, Operational Areas, and state and federal agencies.

The workshop consisted of a general presentation summarizing catastrophic planning scenarios involving debris management operations and three panel discussion modules that discussed private property debris removal and demolition from actual events (including representatives from both New York and New Jersey; state and federal presentations covering debris operations' support when multiple OAs are affected; and a facilitated discussion of issues following an earthquake scenario.

Key suggestions and recommendations from the workshop included:

- Develop and formalize operational procedures for a state-level Debris Management Task Force that is scalable to the incident;
- Use the Incident Command System (ICS) structure to manage debris operations;
- Develop outreach to private property owners to explain policies like curbside pick up programs, the need to photograph sites prior to debris removal, and the development of ways to mitigate impacts of private property debris removal;
- Implement property debris removal and demolition operations as soon as possible after the event;
- Consider alternative contracting mechanisms to secure debris removal contractors prior to the incident.

Following this workshop, a Summary and Recommendations Report was issued (Appendix C).

The final component of this contract was the development of "Just in Time" Training CDs. The CD is comprised of 5 modules of instruction, a plan maintenance module, appendices, and all local plans. It is designed to allow for an overview of key components of the regional Debris Management Plan. The full course takes approximately six hours to complete; however, each module can be reviewed separately, as needed. One hard copy of each of the summary reports and a CD has been made available for each OA and core city. The summary reports are also available electronically.

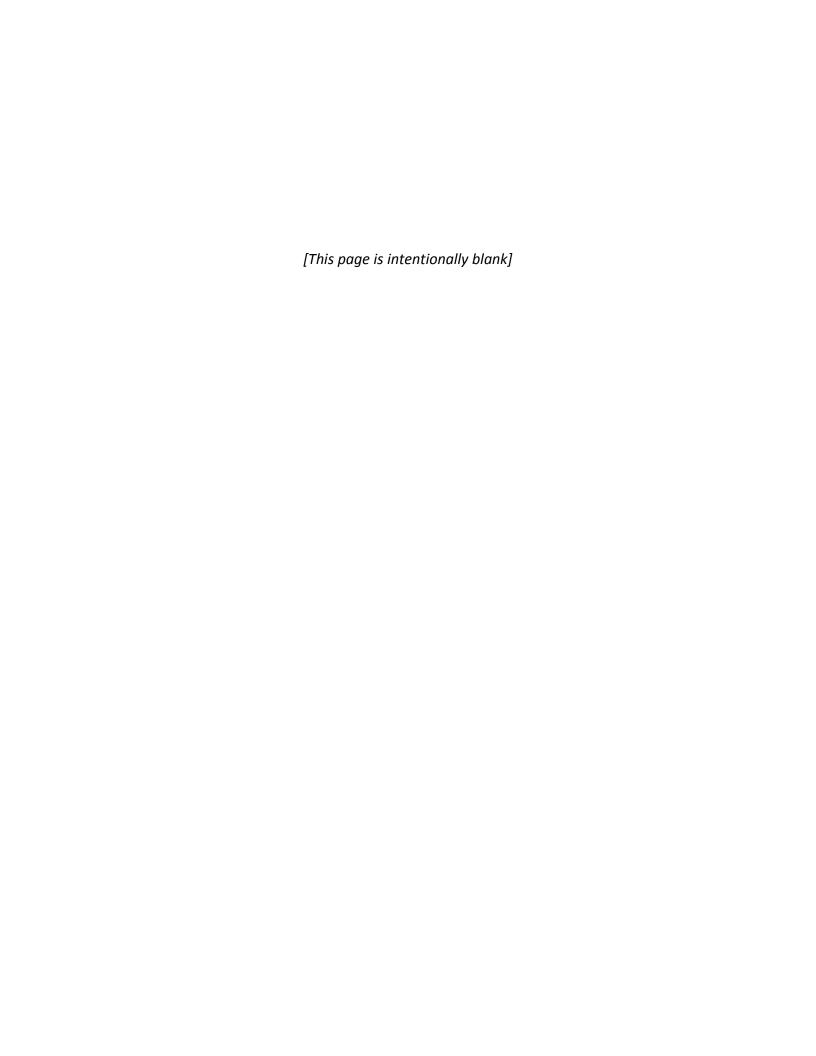
# APPENDIX A LOS ANGELES DEBRIS WORKSHOP



# City of Los Angeles Debris Management Plan VALIDATION WORKSHOP SUMMARY AND RECOMMENDATIONS REPORT

February 2013





### **ADMINISTRATIVE HANDLING INSTRUCTIONS**

The title of this document is the City of Los Angeles Debris Management Plan: Validation Workshop Summary and Recommendations Report.

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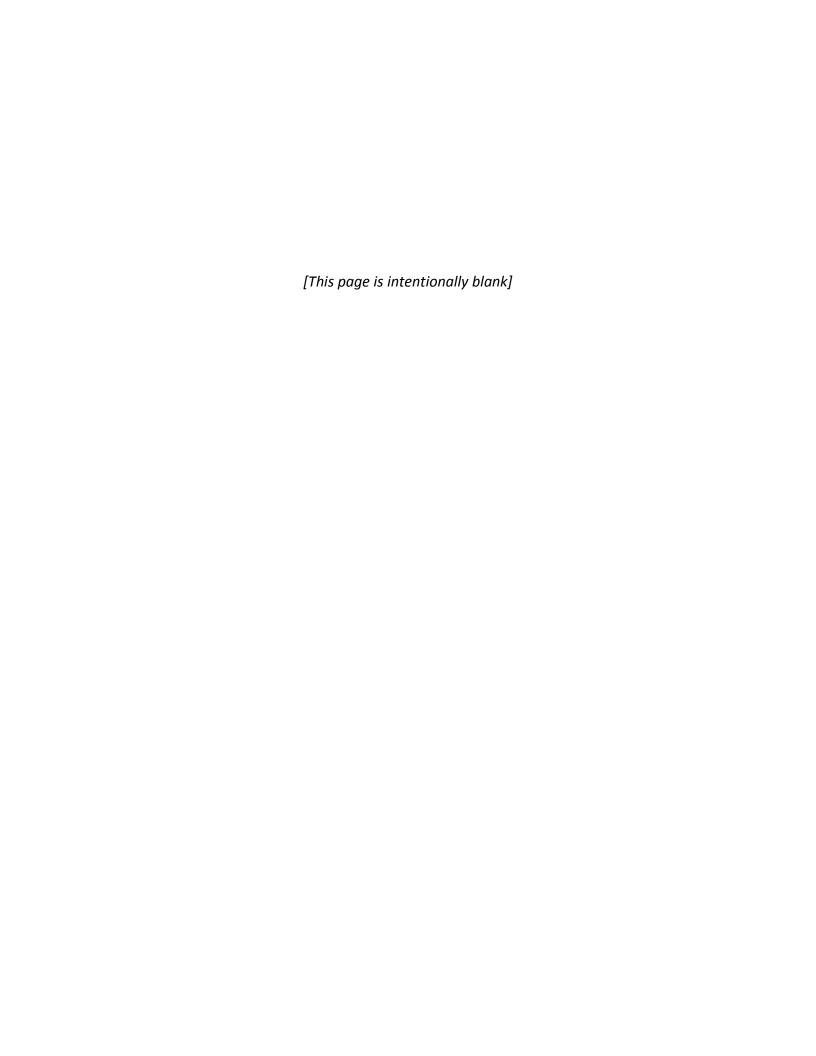
At a minimum, the attached materials will be disseminated only on a need-to-know basis and when unattended, will be stored in a locked container or area offering sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.

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### **EXECUTIVE SUMMARY**

### **OVERVIEW**

The City of Los Angeles Debris Management Plan (Plan) was developed to provide a framework for City government and other entities to clear, remove, reduce, recycle, and dispose of debris generated within city limits during a public emergency. This Plan unifies the efforts of City organizations to develop a comprehensive and effective approach to:

- Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, staging, reduction, recycling, processing, and disposal of debris caused by a major debris-generating event.
- Establish the most efficient and cost-effective methods to resolve disaster debrisremoval staging, reduction, recycling, processing, and disposal issues.
- Mitigate potential health hazards from hazardous debris materials.
- Implement and coordinate private-sector debris removal, recycling, and disposal contracts to maximize cleanup efficiencies.
- Expedite debris removal, recycling, and disposal efforts that provide visible signs of recovery for resumption of government services.
- Coordinate partnering relationships through communications and pre-planning with local, State, and Federal agencies that have debris management responsibilities.
- Develop the tracking and documentation procedures required to allow the reimbursement of debris removal, recycling, and disposal efforts resulting from a disaster.
- Develop a preventative program along with a monitoring and enforcement program to minimize fraudulent activities.

### **WORKSHOP OBJECTIVES**

The objectives of this workshop were to accomplish the following through participant input and discussion:

- Validate response and recovery operations, including situational awareness and damage assessment; debris clearance priorities; debris clearance operations; staging, processing, and disposal sites; debris removal; debris processing and disposal; safety assessments and demolition; and documentation and closeout.
- Validate the process in which debris management information will be shared horizontally among the Debris Management Center (DMC) and its positions.
- Validate the process by which the DMC interacts with the Emergency Operations Center (EOC).

### **KEY ISSUES**

The following report summarizes key issues that were discussed at the two workshops. Analysis of key issues in this report is limited to items that were discussed in the workshop or that were received as written comments. This report is not inclusive of all comments received but focuses on higher-level issues that pertain to recommendations for revision of the Plan.

The Bay Area Urban Area Security Initiative (UASI) would like to thank the many participants for their involvement in the workshops, especially the City of Los Angeles departments and agencies that participated in both sessions. Their participation created an opportunity to discuss some of the issues in greater depth and to create consistency for some of the Plan revision recommendations. Highlights of key suggestions for revisions to the Plan include:

- Reference to existing supporting information.
- Creation of checklists for tasks by debris management operation.
- Creation of checklists for tasks by department/agency.
- Pre-identification of transfer, processing, and disposal sites; debris removal collection and demolition methods; and public information announcements.
- Clarification of the role and responsibilities of the Debris Management Team (DMT), including its relationship with the EOC and the City of Los Angeles Board of Public Works.
- Maintenance of the Plan so that it is exercised and updated often.

### **WORKSHOP SUMMARY**

### **Workshop Name**

City of Los Angeles Debris Management Plan: Validation Workshop

### **Workshop Dates**

Tuesday, January 8, 2013, and Wednesday, January 9, 2013

### Duration

8:00 am-12:00 pm

### Location

500 East Temple Street, Los Angeles, CA 90021

### Sponsor

City of Los Angeles Department of Public Works

### Program

Bay Area Urban Area Security Initiative Regional Catastrophic Preparedness Grant Program

### Mission

To update a plan that addresses debris management operations for the City of Los Angeles

### **Workshop Planning Team Leadership**

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### **Participating Organizations**

### City of Los Angles:

Bureau of Contract Administration
Bureau of Engineering
Bureau of Sanitation
Bureau of Street Services
Department of Building Safety
Department of General Services
Department of Public Works
Department of Transportation
Fire Department
Port of Los Angeles/Harbor Department
Police Department

### **Number of Participants**

18 participants (January 8, 2013) 24 participants (January 9, 2013)

### Other:

Bay Area Urban Area Security Initiative
City of Oakland Public Works
City of San Jose Office of Emergency Services
County of Contra Costa Public Works
Department
Los Angeles Department of Water and Power
Los Angeles World Airports
San Francisco Public Works Department

### **ANALYSIS OF ISSUES**

### **OBJECTIVE 1**

Validate the response and recovery operations, including situational awareness and damage assessment; debris clearance priorities; debris clearance operations; staging, processing, and disposal sites; debris removal; debris processing and disposal; safety assessments and demolition; and documentation and closeout.

### **KEY SUGGESTIONS**

Objective 1 was analyzed at the two workshops with the following recommended modifications or suggested additional content:

- Reference existing information that may be relevant to debris management operations, such as a list of critical facilities and evacuation routes kept on file with the City of Los Angeles Emergency Management Department.
- Discuss how and what type situational awareness will be gained and by whom.
- Discuss how and what type of damage assessments will be conducted and by whom.
- Identify additional disposal options, including transfer stations, potential debris management sites (DMS)/temporary debris storage and reduction (TDSR) sites, and outof-region landfills.
- Further define the residential debris-removal process, including curbside sorting and specific hazmat drop-off sites.
- Discuss how and what type of safety assessments will be conducted and by whom.
- Discuss demolition, including emergency demolition and private-property demolition.
- Discuss debris management contracting, including the role of the City of Los Angeles Board of Public Works.
- Describe documentation needed for State and Federal reimbursement.
- Describe the rules, regulations, and authorities that affect debris management operations.

### **ANALYSIS**

Section VII, Response and Recovery Operations, should explain the overall debris management approach of the City of Los Angeles to an emergency situation (i.e., what should happen, when, and at whose direction). Therefore, tasks for the following debris management operations should be described:

- Situational awareness and damage assessment.
- Debris clearance priorities.
- Debris clearance operations.

- Debris removal.
- Staging, processing, and disposal.
- Safety assessments and demolition.
- Documentation and closeout.

It should be noted that the debris management operations identified above vary slightly from those identified in Objective 1.

### RECOMMENDATIONS

- Revise the structure of Section VII, Response and Recovery Operations.
  - Briefly describe debris management operations for each of the two debris management operational phases.
    - For Phase I, Initial Response Operations, describe the following:
      - Situational awareness and damage assessment
      - Debris clearance priorities
      - o Debris clearance operations
    - For Phase II, Recovery Operations, describe the following:
      - o Debris removal
      - Staging, processing, and disposal
      - Safety assessments and demolition
      - Documentation and closeout
- For each debris management operation described, include a table/checklist of tasks to be managed and coordinated within the EOC, within a Bureau Operations Center (BOC) or Department Operations Center (DOC), or by a supporting department.
- Include tasks identified in Section VIII, Debris Removal Process, into Phase II, Recovery Operations - Debris Removal.
- Include tasks identified in Section XIV, Documentation, into Phase II, Recovery Operations Documentation and Closeout.
- Develop Plan appendices to support Section VII, Response and Recovery Operations.
  - Contracts (previously Section X, Contracts).
    - Identify (or include information on how to obtain a list of) existing on-call debris contractors within the City of Los Angeles.
    - Detail the procurement process by the City of Los Angeles Board of Public Works for post-disaster debris contracts.
  - Authorities, Regulations, and Requirements.
    - Include a list of local, State, and Federal authorities, regulations, and requirements that may affect debris management operations.

- Plans and Supporting Information.
  - Reference existing local, regional, State, and Federal plans and other supporting information that may be relevant to debris management operations.
- Specialized Debris Operations (previously Section VIII, Specialized Debris Options).
  - Describe debris management operations for debris that requires specialized handling, removal, and/or disposal. Specialized debris includes chemical, biological, radiological, and nuclear-contaminated debris; vehicles and vessels; hazardous material debris; putrescent debris; and household hazardous waste debris (currently identified in Section IX, Household Hazardous Wastes Removal).
- Disposal Options.
  - Identify large-capability transfer stations within City limits as well as out-ofregion landfills. For each site, include location, contact information, and necessary permits to use these sites.
  - DMS/TDSRs (previously Section XI, Temporary Debris Storage and Reduction Sites).
  - Discuss site set-up, operation, and close-out procedures.
  - Identify, screen, and list potential DMS/TDSRs to be used by the City of Los Angeles. Any DMS/TDSRs identified in an appendix should be marked "draft" and kept on file only.
- Demolition.
  - Describe emergency demolition procedures.
  - Describe private property demolition procedures, including wide-scale private property demolition.

### **OBJECTIVE 2**

Validate the process in which debris management information will be shared horizontally among the DMC and its positions.

### **KEY SUGGESTIONS**

Objective 2 was analyzed at the two workshops with the following recommended modifications or suggested additional content:

- Assign the role of the Debris Manager to an existing Department of Public Works (DPW) position before an emergency or disaster.
- Consider breaking out the role of the Debris Manager into two positions: Response and Recovery.
- Develop roles and responsibilities for each member of the DMT.
- Include health and safety officers as part of the DMT.

### **ANALYSIS**

A DMT generally consists of departments and agencies that coordinate debris management operations. However, for jurisdictions that have a robust EOC, such as the City of Los Angeles, a separate DMT may not be necessary. Debris management functions may be better addressed within a jurisdiction's existing authorities, such as within the EOC using the Incident Command System.

### **RECOMMENDATIONS**

- Create a Debris Management Unit within the Public Works Division of the Operations Section of the EOC.
  - Identify Debris Management Unit tasks and define them within the City of Los Angeles EOC Procedures Manual.
  - Task the Debris Management Unit with overseeing an ad hoc Debris Task Force.
  - Establish protocols for the Debris Management Unit to function within DPW BOC or to become a stand-alone entity to complete long-term debris management operations.
- Create a Debris Task Force.
  - Determine how and when the Debris Task Force will be activated by the Operations Section, as described in the 2006 City of Los Angeles Emergency Operations Master Plan and Procedures Manual.
  - Determine which departments and agencies will be represented on the Task Force.
  - Identify specific debris management issues and the departments and agencies that will need to be represented on the Task Force to address each issue.

### **OBJECTIVE 3**

Validate the process by which the DMC interacts with the EOC.

### **KEY SUGGESTIONS**

Objective 3 was analyzed at the two workshops with the following recommended modifications or suggested additional content:

- Identify whom the Debris Manager reports to at the EOC.
- Describe how the roles and responsibilities of the DMT differ from those within the EOC or the DPW BOC.

### **ANALYSIS**

Objective 3 has been addressed by the recommendations proposed in Objective 2.

### **OTHER**

Key suggestions that were brought up during the workshops, but are not directly related to any of the three objectives are listed as follows:

- Include tsunami as a potential hazard.
- Provide a mechanism for City of Los Angeles departments and agencies as well as
  proprietary departments that have a role in debris management operations to meet in a
  group setting to discuss debris management issues as needed during non-disaster
  periods.
- Provide separate lists for the debris management roles and responsibilities by debris management operation phases rather than debris management roles and responsibilities by department/agency.
- Identify the roles/responsibilities of the City of Los Angeles Board of Public Works for debris management operations.

### **ANALYSIS**

A tsunami is identified as a low-risk hazard in the 2011 City of Los Angeles Hazard Mitigation Plan. However, the document acknowledges that while a low risk, a tsunami could inundate coastal areas of the City of Los Angeles.

Debris management issues may arise or technical support may be needed during non-disaster periods. It would be useful to have dedicated group of those with a role in debris management operations meet to discuss and resolve such issues.

Although the response and recovery operations section of the Plan describes tasks by debris management operation, it would be useful to have a separate section of the Plan identify these same tasks by organization.

### RECOMMENDATIONS

- Describe tsunamis as a potential hazard in Section V, Potential Disaster Scenarios. Reference the 2006 Los Angeles County Operational Area Emergency Response Plan: Tsunami Annex in an appendix (Plans and Supporting Information).
- Establish a Debris Management Emergency Management Committee (EMC)
   Subcommittee to provide technical support to the EMC as needed during times of preparedness, planning, mitigation, and recovery.
  - Determine which departments and agencies will need to be represented on the Debris Management EMC Subcommittee.
- Change Section VI, Concept of Operations, to Section VI, Roles and Responsibilities.
  - Identify tasks for each of the following:
    - Debris Management Unit.

- Debris Task Force.
- Departments/agencies with a primary role in debris management.
- Departments/agencies with a supporting role in debris management.
- Proprietary departments.
- City of Los Angeles Board of Public Works.
- Move Section VI, Concept of Operations, Subsections F. Emergency Communications
  Plan and G. Health and Safety Plans and Procedures, to an appendix (Plans and
  Supporting Information).

### **CONCLUSION**

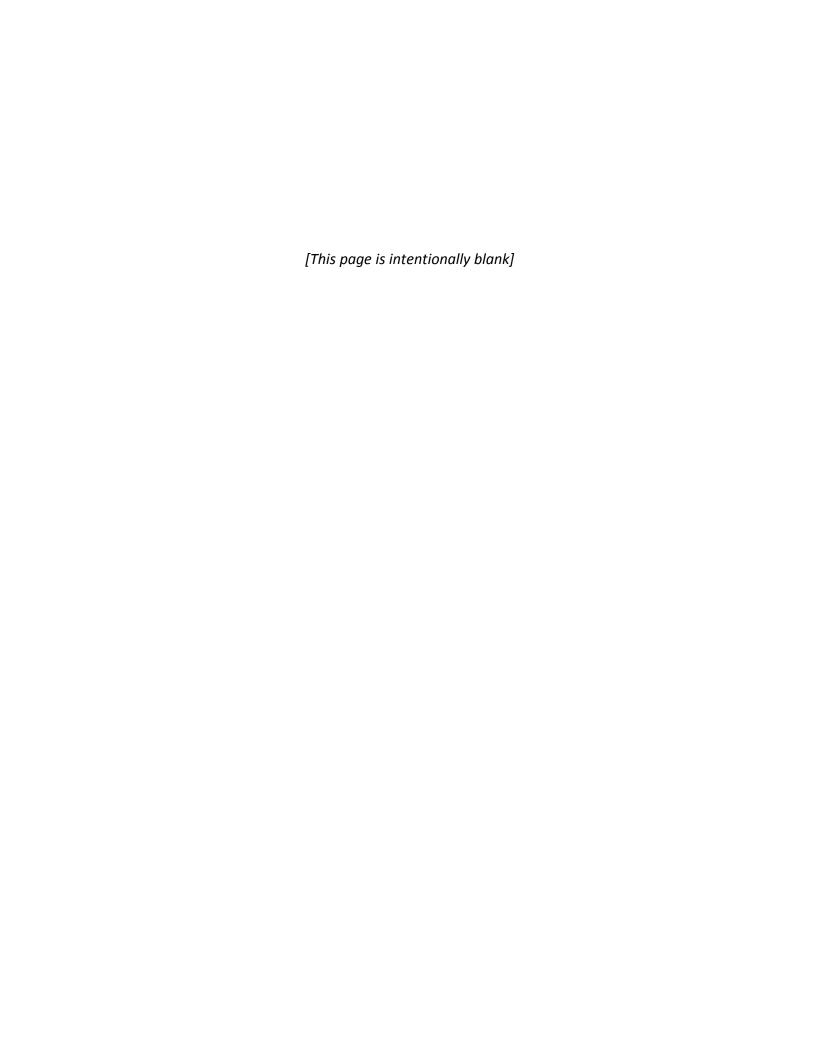
The workshops were a valuable tool for gauging the validity of the debris management concepts as presented in the Plan. Participation levels were high in both attendance and input. Overall, the concepts found in all of the objectives were validated but with several suggested modifications. The major topics of discussion are presented below along with proposed outcomes.

- Participants encouraged the expansion of the concept of operations. Recommendations
  were made to define each debris management task for each operation and to create
  appendices to support these tasks; these appendices would include contracts;
  authorities, regulations, and requirements; plans and supporting information;
  specialized debris operations; disposal options; and demolition.
- Participants provided input clarifying the DMT, especially its leadership (Debris Manager and Debris Coordinator) and its relationship with the other departments and agencies, including EOC, DPW BOC, and City of Los Angeles Board of Public Works. Recommended changes include the creation of a Debris Management Unit within the Public Works Division of the Operations Section of the EOC to address tasks and an ad hoc Debris Task Force to address specific debris management issues and ensure department and agency coordination.
- Finally, participants recommended that roles and responsibilities be further defined. A suggested format consists of developing task checklists for the Debris Management Unit, Debris Task Force, departments/agencies with a primary role in debris management, departments/agencies with a supporting role in debris management, proprietary departments, and the City of Los Angeles Board of Public Works. In addition, it was also suggested having those with roles in debris management operations meet during non-disaster periods; a Debris Management EMC Subcommittee could be developed to serve this purpose.



# **NEXT STEPS**

This report will be distributed to and reviewed by workshop participants. Comments should be made to Bob Garcia, <a href="mailto:Bob.Garcia@lacity.org">Bob.Garcia@lacity.org</a>. Updates to the Plan will be based upon the findings of this report and any final suggestions from the workshop participants.



# **ACRONYMS**

BOC Bureau Operations Center

DMC Debris Management Center

DMS debris management sites

DMT Debris Management Team

DPW Department of Public Works

DOC Department Operations Center

EMC Emergency Management Committee

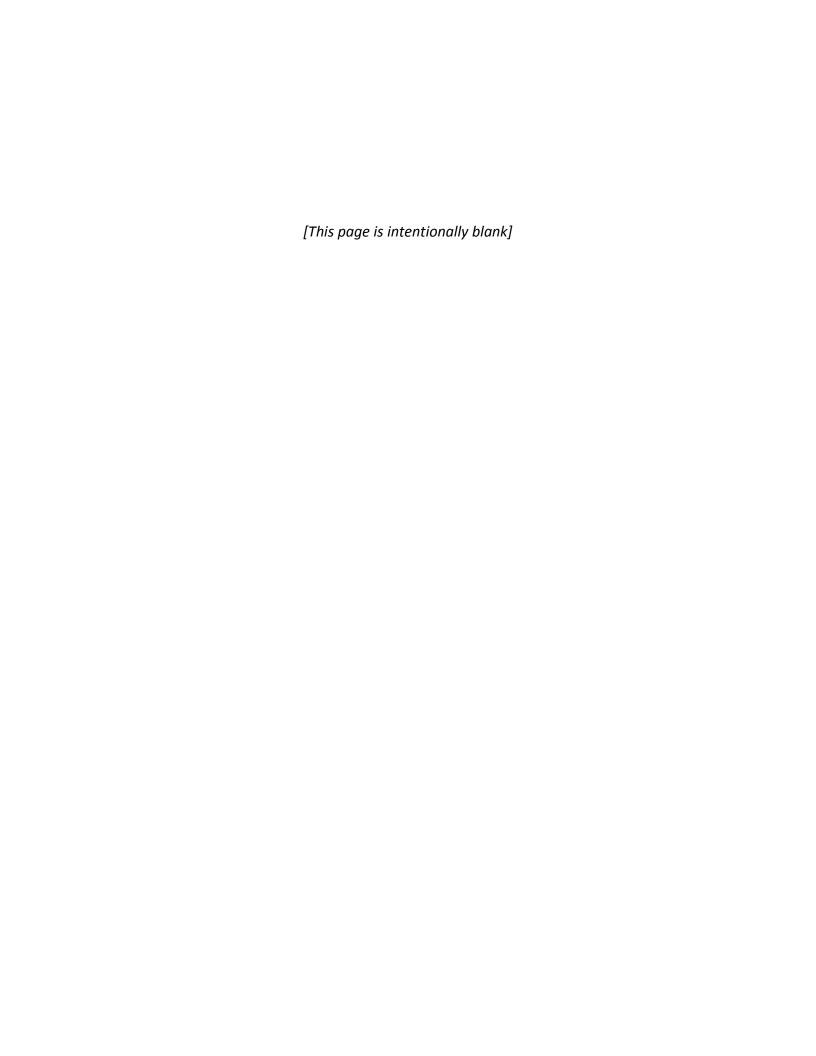
EOC Emergency Operations Center

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Plan City of Los Angeles Debris Management Plan

TDSR temporary debris storage and reduction sites

UASI Urban Areas Security Initiative



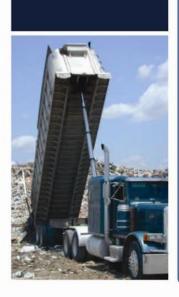
# APPENDIX B LOS ANGELES & SAN FRANCISCO DEBRIS PLAN CROSSWALK

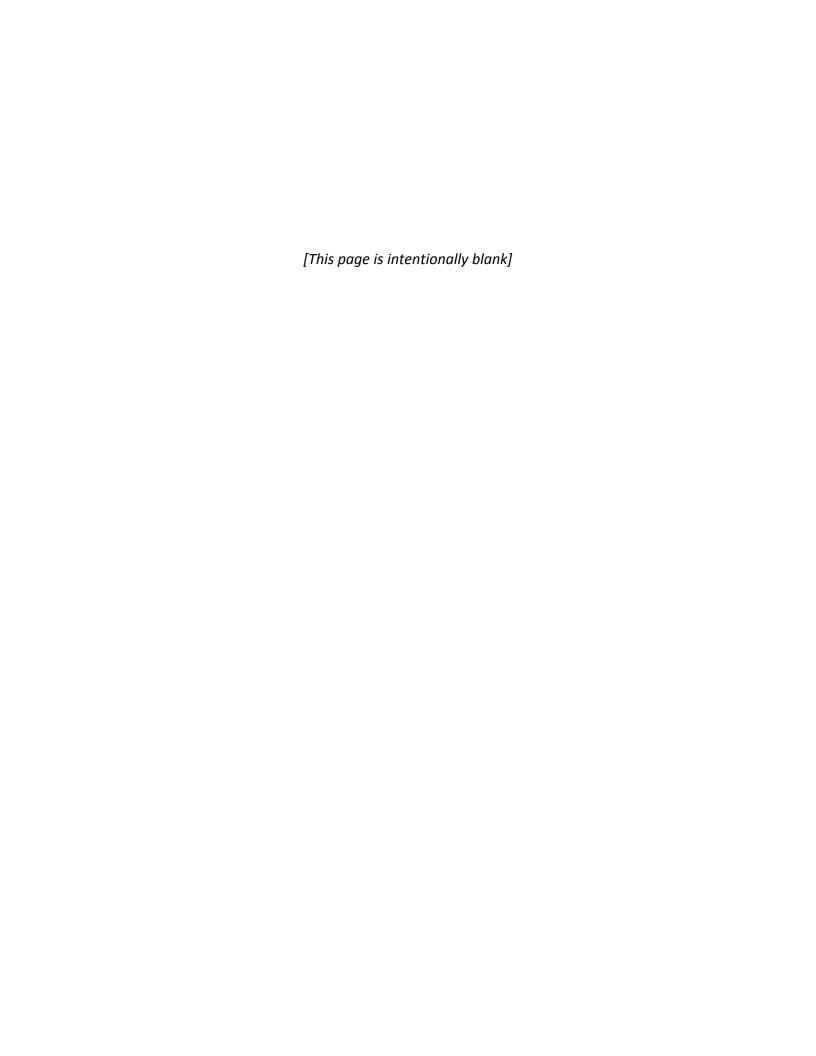


Regional Catastrophic Preparedness
Grant Program

CITY OF LOS ANGELES AND CITY AND COUNTY OF SAN FRANCISCO DEBRIS PLANS CROSSWALK – 2013

March 2013





### **ADMINISTRATIVE HANDLING INSTRUCTIONS**

The title of this document is "Statewide Debris Management Workshop: Summary and Recommendations Report, City of Los Angeles, and City and County of San Francisco Debris Plan Crosswalk - 2013." The information gathered in this Crosswalk is classified as "For Official Use Only (FOUO)" and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from Bay Area Urban Area Security Initiative (UASI), is prohibited.

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### **OVERVIEW**

As part of support to the Bay Area, Regional Catastrophic Preparedness Grant Program, URS Corporation (URS) conducted a review of the City of Los Angeles and the City and County of San Francisco Debris Management Plans. The review included a crosswalk that compared and contrasted several processes in these plans. This report describes the results of the crosswalk and highlights the need for collaborative planning among agencies and for plan development best practices to be shared with greater effectiveness.

Understanding the plans of the likely supporting jurisdiction within the State for critical response operations such debris removal is essential because the City of Los Angeles and the cities and counties of the Bay Area are likely to be called upon to provide mutual aid to the other in the event of a catastrophic incident. This report provides an analysis that can be used by emergency operations center staff to quickly understand the key concepts and processes of the plans reviewed and support more effective integration of staff should the need arise.

The report is organized as a series of comparison tables:

- Table 1 Overview
- Table 2 Roles and Responsibilities
- Table 3 Debris Management Operations
- Table 4 Supporting Information



# DEBRIS MANAGEMENT PLAN COMPARISON CHART: TABLE 1 – OVERVIEW

Table 1 - Overview			
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan	
Objectives	<ul> <li>Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, staging, reduction, recycling, processing, and disposal of debris caused by a major debris-generating event.</li> <li>Establish the most efficient and costeffective methods to resolve disaster debris-removal staging, reduction, recycling, processing, and disposal issues.</li> <li>Mitigate potential health hazards from hazardous debris materials.</li> <li>Implement and coordinate private-sector debris removal, recycling, and disposal contracts to maximize cleanup efficiencies.</li> <li>Expedite debris removal, recycling, and disposal efforts that provide visible signs of recovery for resumption of government services.</li> <li>Coordinate partnering relationships through communications and preplanning with local, State, and Federal agencies that have debris management responsibilities.</li> <li>Develop the tracking and documentation of procedures required to allow the reimbursement of debris removal, recycling, and disposal efforts resulting from a disaster.</li> <li>Develop a preventative program along with a monitoring and enforcement program to minimize fraudulent activities.</li> </ul>	<ul> <li>Project the potential debris-related impacts of disasters, including catastrophic earthquakes.</li> <li>Identify City and County of San Francisco (CCSF) departments and agencies with roles in debris management operations and define their roles.</li> <li>Describe the resources required for debris management operations and mechanisms for integrating State, Federal, and contracted resources into debris management operations in the CCSF Operational Area.</li> <li>Describe the response and long-term recovery operations for debris management by the CCSF Emergency Operations Center (EOC) and relevant CCSF departments and agencies.</li> </ul>	

TABLE 1 - OVERVIEW		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan
Event Scenario	No event scenario	M 7.9 earthquake on the northern segment of the San Andreas fault and an M 7.05 earthquake on the entire length of the Hayward fault.
Integration with Other Planning Documents	Damage Assessment Annex to the City of Los Angeles Emergency Operations Master Plan and Procedures	<ul> <li>Emergency Support Function (ESF)         #3: Public Works and Engineering         Annex of the San Francisco         Emergency Response Plan</li> <li>The Regional Catastrophic         Earthquake Debris Removal Concept         of Operations, which is an incident-         specific subsidiary plan of the San         Francisco Bay Area Regional         Emergency Coordination Plan</li> <li>The San Francisco Bay Area Regional         Emergency Coordination Plan</li> <li>The San Francisco Bay Area         Earthquake Readiness Response:         Concept of Operations Plan</li> </ul>

## DEBRIS MANAGEMENT PLAN COMPARISON CHART: TABLE 2 – ROLES AND RESPONSIBILITIES

TABLE 2 – ROLES AND RESPONSIBILITIES			
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan	
Debris Management Organization	<ul> <li>A stand-alone Debris Management Team</li> <li>Debris Manager</li> <li>Debris Coordinator</li> <li>Representatives from up to 17 City of Los Angeles bureaus/departments</li> </ul>	<ul> <li>Construction &amp; Engineering Group of the Infrastructure Branch of the City's EOC Operations Support Section</li> <li>Construction &amp; Engineering Group Coordinator</li> <li>Debris Management Center Unit Leader</li> <li>Street Clearance Unit Leader</li> <li>Building Assessment Unit Leader</li> </ul>	
Departments and Agencies	<ul> <li>Los Angeles Fire Department</li> <li>Los Angeles Police Department</li> <li>Bureau of Engineering</li> <li>Bureau of Contract Administration</li> <li>Bureau of Street Services</li> <li>Bureau of Sanitation</li> <li>Bureau of Street Lighting</li> <li>Emergency Management Department</li> <li>Public Affairs Office</li> <li>Department of Building and Safety</li> <li>Planning Department</li> <li>Environmental Affairs Department</li> <li>Department of Transportation</li> <li>Office of City Administrative Officer</li> <li>Office of City Attorney</li> <li>General Services Department</li> <li>Personnel Department</li> </ul>	<ul> <li>ESF#3 Coordinating Department:         <ul> <li>Department of Public Works (DPW)</li> </ul> </li> <li>ESF#3 Supporting Departments:         <ul> <li>Department of Building Inspection (DBI)</li> <li>Department of Public Health</li> <li>Municipal Transportation Authority</li> <li>Public Utilities Commission</li> <li>Recreation and Parks Department</li> <li>Department of the Environment</li> </ul> </li> <li>Other departments and agencies:         <ul> <li>San Francisco Fire Department</li> </ul> </li> <li>San Francisco Police Department</li> </ul>	
Supporting Organizations	<ul> <li>Los Angeles Department of Water and Power</li> <li>Port of Los Angeles</li> <li>Los Angeles World Airports</li> </ul>	<ul> <li>San Francisco International Airport</li> <li>San Francisco Port Authority</li> <li>Treasure Island Development Authority</li> </ul>	



## DEBRIS MANAGEMENT PLAN COMPARISON CHART: TABLE 3 – DEBRIS MANAGEMENT OPERATIONS

TABLE 3 – DEBRIS MANAGEMENT OPERATIONS		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan
Damage Assessment/ Situational Awareness	<ul> <li>Under the direction of the Debris Manager, the General Services Department and Building of Engineering will mobilize staff into Damage Assessment Teams to:         <ul> <li>Assess and map the types of debris and the locations of the debris after a disaster.</li> <li>Relay damage assessment information to the Debris Management Center.</li> </ul> </li> </ul>	<ul> <li>The GEC Unit Leader will coordinate formal windshield surveys of buildings, roadways, street structures, public facilities, and utilities with ESF #3 departments.</li> <li>The Street Clearance Unit Leader will collect road impairments and route damage information from the DPW DOC, other relevant CCSF DOCs, and the MTC EOC, and provide information to the CEG Coordinator.</li> </ul>
Debris Clearance Priorities	The Debris Manager/Mayor/EOC will prioritize debris clearance based on activities that protect lives, public health and safety, such as evacuations and sheltering, fire-fighting, utility restoration, and clearing roads of hazards.	The CEG Coordinator will work with DPW and other ESF #3 departments to develop EOC Incident Action Plan (EAP) debris clearance priorities, including clearing debris for fire response and search and rescue missions and along DPW priority routes that link critical facilities.
Debris Clearance	Under the direction of the Debris     Manager, the Bureau of Street     Services will push debris from the     traveled way to the right-of-way or     curb to open emergency evacuation     routes and roadways to critical     facilities and affected     neighborhoods.	DPW will clear debris according to the EAP debris clearance priorities and/or DPW priority routes.

TABLE 3 – DEBRIS	TABLE 3 – DEBRIS MANAGEMENT OPERATIONS		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan	
Debris Removal	Under the direction of the Debris Manager, the Bureau of Sanitation will remove debris through multiple, scheduled passes of each critical site, location, or rights-of-way for debris, thus allowing residents to segregate and place debris at the edge of the rights-of-way.	<ul> <li>The CEG Coordinator will work with DPW and other ESF #3 departments to develop EAP debris removal priorities that support the city's overall objectives.</li> <li>DPW will in coordinate with the Debris Management Center Unit Leader to determine and carry-out debris removal operations (e.g., curbside/ROW removal, bin collection sites, and private property debris removal) to maximize Public Assistance Program eligibility and recycling.</li> </ul>	
Debris Disposal	<ul> <li>Under the direction of the Debris Manager, the Bureau of Sanitation will:         <ul> <li>Approve processing and disposal sites for debris, although these sites have not identified in the plan.</li> <li>Advise residents on how separate waste and debris to the maximum extent practicable to allow for maximum recycling and minimal disposal at landfills.</li> </ul> </li> </ul>	<ul> <li>The CEG Coordinator will work with DPW and other ESF #3 departments to develop staging, processing, and disposal priorities, including minimizing use of landfills and increasing reuse and recycling options.</li> <li>DPW will work with the Department of the Environment to identify permitted active landfills and transfer-processing facilities and CCSF-registered mixed C&amp;D facilities to accept debris and confirm facility use with the Debris Management Center Unit Leader.</li> <li>DPW will work the EOC Infrastructure Branch to identify potential debris management sites and verify site use with relevant department/agency and site location.</li> </ul>	

Table 3 – Debris Management Operations		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan
Safety Assessments	Under the direction of the Debris Manager, the Department of Building and Safety will conduct safety assessments.	<ul> <li>The CEG Coordinator will work with DBI and other ESF #3 departments to develop EAP safety assessment priorities, including Immediate Response, Short-Term Recovery, and Long-Term Recovery phases as identified in the CCSF Guidelines for Organizing Post-Disaster Safety Inspections.</li> <li>DBI will conduct rapid safety assessments of public and private buildings and all CCSF buildings according to the EAP safety assessment priorities.</li> </ul>
Demolition	Under the direction of the Debris Manager, the General Services Department will manage and direct the demolition process for private and public structures at the request of the Department of Building & Safety (no coordinated large-scale demolition projects noted in this Plan).	<ul> <li>The CEG Coordinator will work with DBI and other ESF #3 departments to develop EAP demolition priorities.</li> <li>DPW will demolish impacted CCSF buildings and structures according to the EAP demolition priorities as well as any building that DBI has declared to be a public nuisance and has requested DPW to demolish.</li> </ul>



## DEBRIS MANAGEMENT PLAN COMPARISON CHART: TABLE 4 – SUPPORTING INFORMATION

TABLE 4 – SUPPORTING INFORMATION		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan
Contracts	<ul> <li>Overview of contracting information, including: reasonable costs; types of contracts; ineligible contracts; types of contractors.</li> <li>Description of current LA Department of DPW contracts.</li> </ul>	Identification of 102 CCSF DPW pre- qualified emergency debris clearance work contractors.
Authorities, Regulations, and Requirements that Affect Debris Management	<ul> <li>Plan notes that environmental, health and safety, and disposal plans and procedures should be followed (although no specifics provided).</li> </ul>	Tab A identifies 17 local, 5 regional, 23 state, and 12 federal authorities, regulations, and requirements.
Debris- Generating Events	6 types of hazard events: earthquake; fire; flood; mudslide; civil unrest; and weapons of mass destruction.	11 types of hazard events: ground shaking; ground failure; tsunami; flood; landslide; wildfire; wind; reservoir failure; urban conflagration; hazardous materials; weapon of mass destruction.
Public Information	Description of how the Public Affairs     Office will develop a public     management information plan and     coordinate this plan with other public     information agencies.	Overview of San Francisco's debris management media relations and public information for ESF# 15 Joint Information System.
Public Assistance Program Guidance	Overview of general eligibility issues.	Overview of general eligibility issues.
Critical Facilities and Infrastructure	General criteria; including police stations, fire stations, hospitals, EOC, public schools, utilities.	<ul> <li>Map of DPW windshield survey emergency lifeline routes.</li> <li>Map of Caltrans roadways and lifeline routes.</li> <li>Map of Highway system ramps.</li> </ul>

TABLE 4 – SUPPORTING INFORMATION		
Subject Matter	Los Angeles Debris Management Plan	City and County of San Francisco Disaster Debris Management Plan
Transfer/ Processing Facilities and Landfills	Link to transfer/processing facilities within city limits.	<ul> <li>List/map of permitted active large-volume transfer/processing facilities within a 100-mile radius of San Francisco.</li> <li>List/map of permitted active solid waste landfills within a 100-mile radius of San Francisco.</li> <li>List/map of out-of-region transfer/processing and disposal facilities accessible by rail.</li> <li>List/map of on-passenger rail facilities.</li> <li>List/map of port facilities.</li> </ul>
Debris Management Sites	Description of debris management site set-up, operation, and close-out procedures.	Sites screened and selected during planning process; kept on file with CCSF DEM (confidential information).

# APPENDIX C LOS ANGELES DEBRIS WORKSHOP

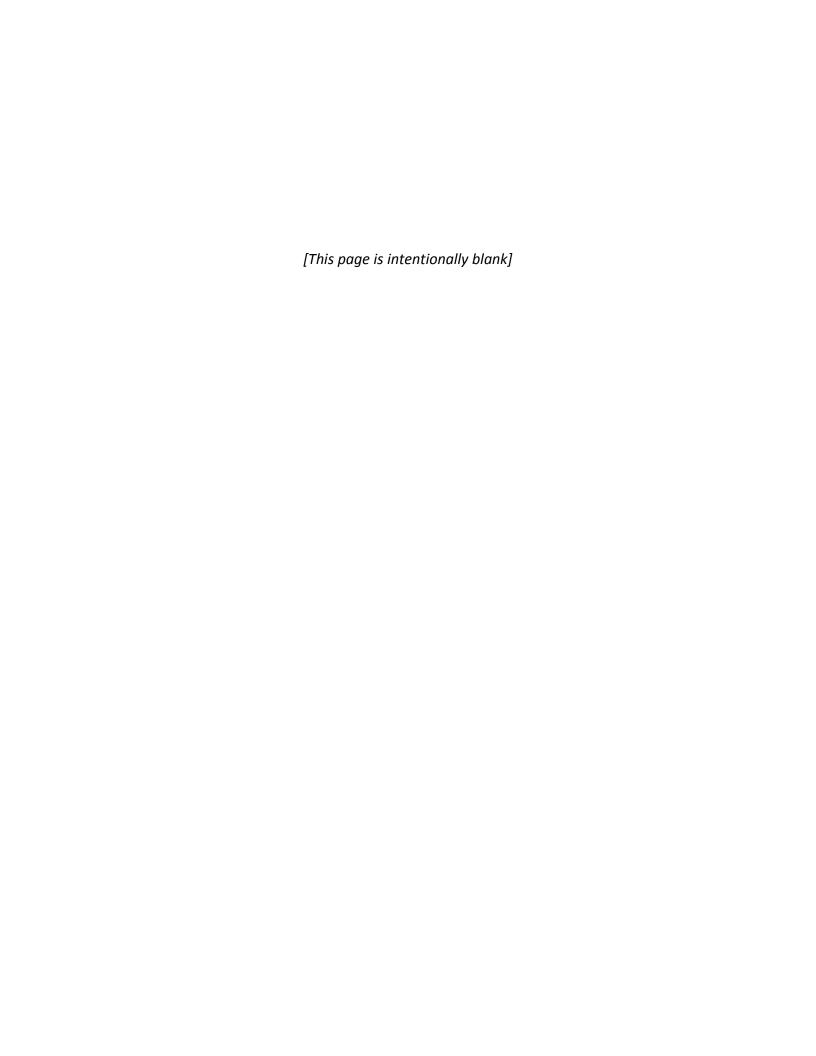




## STATEWIDE DEBRIS MANAGEMENT WORKSHOP JANUARY 31, 2013 SUMMARY AND RECOMMENDATIONS REPORT

FEBRUARY 15, 2013

Bay Area Urban Areas Security Initiative Regional Catastrophic Preparedness Grant Program



## ADMINISTRATIVE HANDLING INSTRUCTIONS

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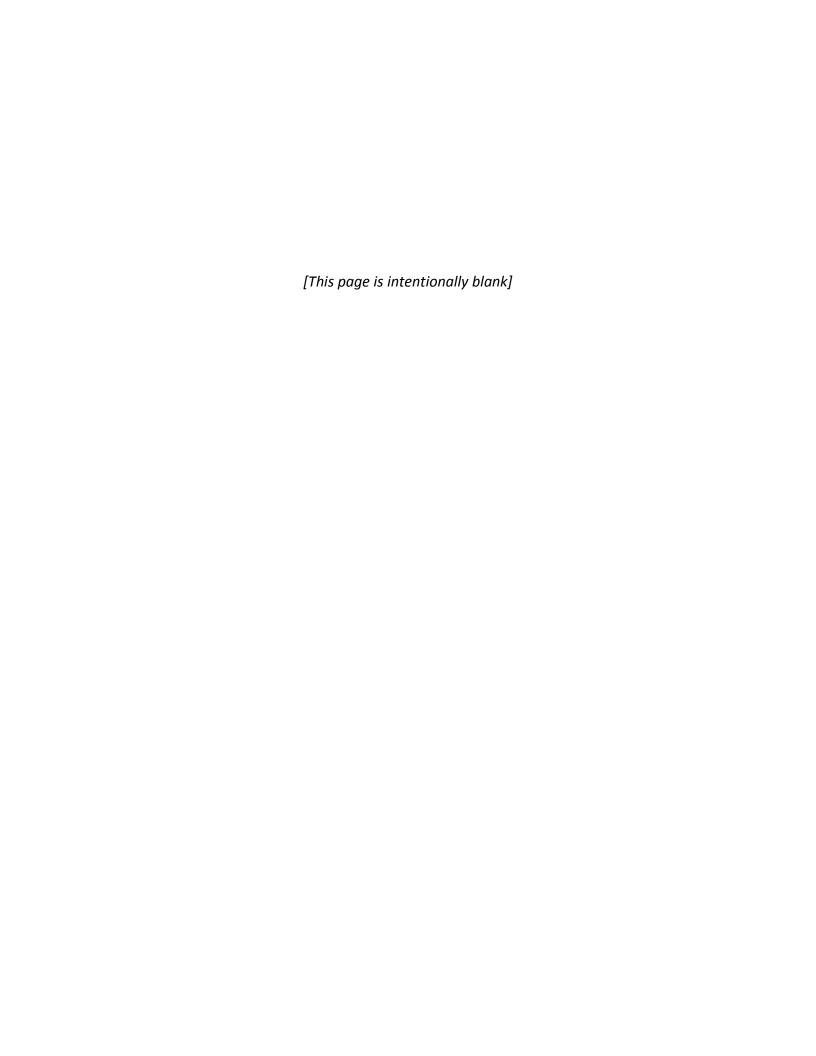
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## **EXECUTIVE SUMMARY**

## **OVERVIEW**

The purpose of the Statewide Debris Management Workshop is to validate key concepts of debris management in response to a large-scale or catastrophic disaster event. In addition, the Workshop provided an understanding of the nature and scale of debris removal operations following a disaster.

The Statewide Debris Management Workshop was a four-hour discussion-based workshop that analyzed coordination mechanisms for regional and statewide debris operations following events that could overwhelm the available resources of local jurisdictions, Operational Areas, and the region. This workshop was developed in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP). To guide the workshop purpose, scope, and activities, the workshop planning team selected five capabilities from the Department of Homeland Security Target Capabilities List (2007), including:

- Planning (Common Target Capability)
- Information Sharing and Dissemination (Common Target Capability)
- Environmental Health (Response Mission Area)
- Restoration of Lifelines (Recovery Mission Area)
- Economic and Community Recovery (Recovery Mission Area)

The workshop consisted of a general presentation summarizing catastrophic planning scenarios involving debris management operations, followed by three modules organized as follows:

- 1. The first module, a panel of experts reviewed issues having to do with private property debris removal and demolition from the South Lake Tahoe Angora Fire (2007), San Diego Cedar Fire (2003), and the San Diego Witch Creek Fire (2007).
- In the second module, speakers from state and federal agencies presented how state and federal agencies provide support to debris operations affecting multiple Operational Areas.
- 3. The third module was a facilitated open discussion of issues that occur following the occurrence of a scenario earthquake event. This discussion built on some of the information and issues presented during the previous two modules.

### WORKSHOP OBJECTIVES

The objective of the Statewide Debris Management Workshop, conducted on January 31, 2013, was to accomplish the following through participant discussion:

- Review local government best practices and lessons learned.
- Develop a better understanding of State/Federal support to large-scale debris operations.

- Analyze and discuss the purpose, roles, and responsibilities of the statewide Debris Management Task Force.
- Review and discuss unique issues related to private property debris removal and demolition.
- Discuss concerns related to operating regional debris management sites.
- Review and discuss topics regarding out-of-region or out-of-state disposal facilities.

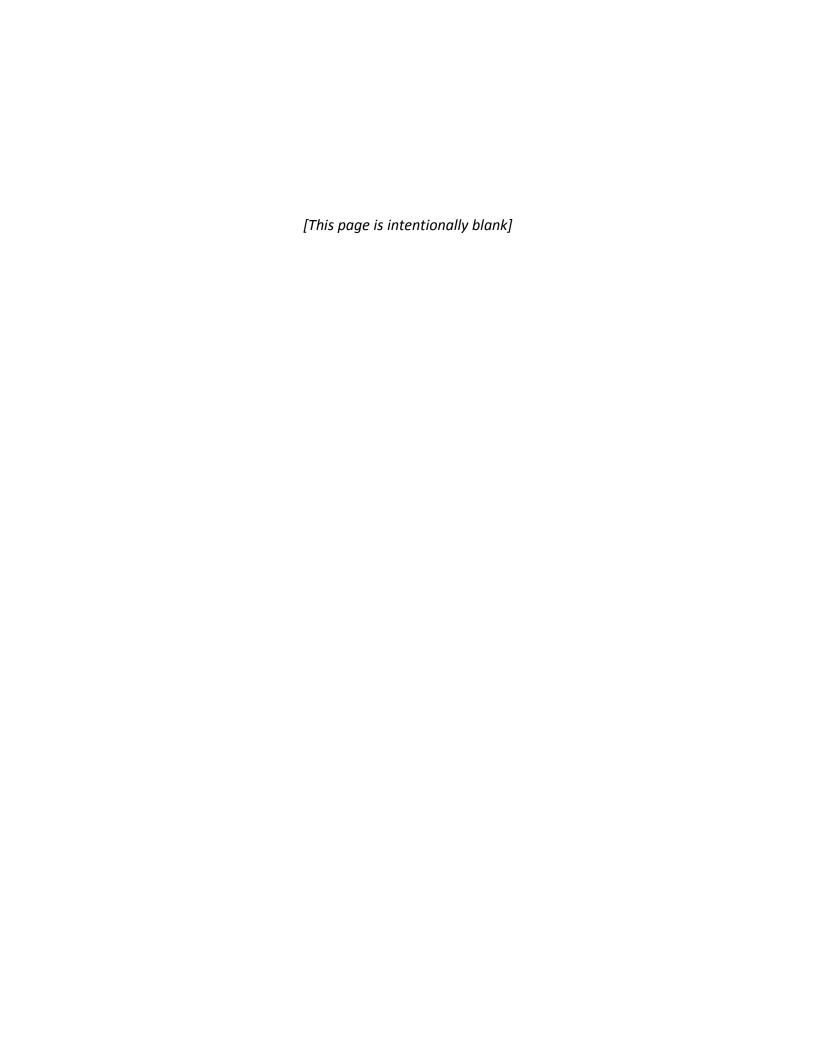
## **KEY ISSUES**

This section summarizes key issues that workshop participants discussed during the workshop. Analysis is limited to key issues that workshop participants discussed or sent as written comments with a focus on significant concepts that are pertinent for jurisdiction/agency emergency management decision-makers. Workshop highlights, including debris removal lessons learned, challenges, and key suggestions are listed below.

- Lessons learned from previous debris management operations that helped to facilitate recovery include:
  - Develop and maintain a debris management plan.
  - Convene the key players in debris management immediately following a catastrophic disaster.
  - Use personal protective equipment (PPE) at all times when working around ash, regardless of whether or not the government classifies it as hazardous.
  - Treat large-scale debris removal as a single, unified project.
  - Conduct a property line survey and photograph sites prior to debris removal.
  - Include regulatory agencies as early as possible in the debris removal process.
  - Establish pre-existing agreements with owners to use properties as temporary staging areas.
- Challenges that jurisdictions faced during previous debris management operations include:
  - No debris management plan in place prior to the incident.
  - No exercise and validation of existing debris management plans prior to the incident.
  - No pre-event plan to identify where jurisdictions should locate debris management sites
  - Use of volunteers; many debris removal tasks involve specialized training, such as the handling of hazardous materials.
  - Private property owners removing debris without using PPE.
  - No coordination or planning for a regional debris management site.
  - Lack of space for regional and local debris management sites.

- Disposal of special materials during curbside pick-up, such as hazardous materials (HAZMAT), e-waste, and explosives.
- Lack of knowledge regarding state and federal eligibility criteria for debris removal operations.
- Limited funding for debris removal operations.
- Debris management suggestions and recommendations included:
  - Develop and formalize operational procedures for a state-level Debris Management
     Task Force that is scalable to the incident.
  - Explain curbside pickup programs for private property owners.
  - Photograph sites prior to removing debris.
  - Implement fencing and other creative alternatives to mitigate the impacts of private property debris removal.
  - Consider alternative contracting mechanisms to secure debris removal contractors prior to the incident.
  - Use the Incident Command System (ICS) structure to manage debris operations.
  - Implement private property debris removal and demolition operations as soon as practicable—the earlier the better.

The Bay Area Urban Area Security Initiative (UASI) would like to thank the many participants for their involvement in the workshop, especially Cal EMA and the panel members/subject matter experts: Jim Calacal, Sylvia Castillo, Steve Gutkin, Melinda Stehr, Mark Wingate, Glen Young, Todd Thalhammer and the New York OEM – Debris Task Force representatives. Their participation created an opportunity to pass on lessons learned through firsthand experience and discuss some of the issues in greater depth.



## **WORKSHOP SUMMARY**

## **Workshop Name**

Debris Management Statewide Workshop

## **Workshop Dates**

Thursday, January 31, 2013

## **Duration**

8:30 a.m. - 1:00 p.m.

### Location

URS Office, Oakland, CA

## **Sponsors**

**URS** Corporation

## **Program**

Bay Area UASI Regional Catastrophic Preparedness Grant Program

### Mission

To validate key debris management concepts in response to a catastrophic disaster.

## **Workshop Planning Team Leadership**

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## **Participating Organizations**

Bay Area UASI
County of Monterey
Cal EMA
County of San Mateo
CalRecycle
City and County of San Francisco
City of Belmont
County of Solano
County of Solano
County of Solano

City of Belmont County of San Francisco County of Santa Crity of Belmont County of Solano County of Sonoma

City of Oakland Department of Toxic Substance Control

City of San Carlos FEMA, Region IX

City of San Diego New Jersey Office of Homeland Security &

City of San Jose Preparedness

City of San Mateo New York OEM – Debris Task Force

City of San Ramon Sacramento Office of Emergency Services
County of Alameda San Francisco Fire Department

County of Contra Costa San Francisco Police Department

County of Del Norte Town of Moraga

County of Kern United States Army Corps of Engineers

County of Los Angeles United States EPA, Region IX

## **Number of Participants**

58 participants

County of Marin

## **ANALYSIS OF ISSUES**

## OBJECTIVE 1: REVIEW LOCAL GOVERNMENT BEST PRACTICES AND LESSONS LEARNED.

## **KEY ISSUES**

- The New Jersey Office of Emergency Management (OEM) shared key lessons, both
  positive and negative, that local jurisdictions and agencies can use to improve their own
  debris management after a catastrophic disaster. Hurricane Sandy lessons learned are
  included in the following list:
  - Convening all of the key emergency personnel in the same room facilitated debris management operations after Hurricane Sandy, which cleared an estimated 3.6 million cubic yards of debris.
  - The State Environmental Protection Agency and Department of Transportation activated a Federal/State/Municipal Coordination Task Force to coordinate multijurisdictional debris operations.
  - The New Jersey OEM had an emergency debris management plan prior to Hurricane Sandy, which facilitated emergency response. The plan helped but was not robust enough to meet the demands of the incident.
  - The New Jersey OEM used parking lots to set up the six initial temporary storage areas following Hurricane Sandy.
  - Jurisdictions should hire the right contractors from all over the country to assist with the debris removal operation.
- The New York OEM shared similar experiences and lessons learned based on their experience with Hurricane Sandy, as noted below:
  - It is important to have pre-existing agreements with owners for use of their property as a temporary debris staging area. This is especially true in New York City, where open space is limited. These agreements can be difficult to obtain, but are critical to have in place prior to a catastrophic disaster.
- Emergency personnel should wear personal protective equipment (PPE) at all times
  when working near ash, regardless of whether or not the government officially classifies
  it as a hazardous material after testing.
  - This rule can be a challenge to enforce with individual property owners that begin sifting through ash on their property without PPE.
- It is difficult to integrate volunteers to assist in the debris management effort since many clean-up tasks require specialized training, especially when dealing with HAZMAT.
- Workshop participants discussed the City of San Bruno's response effort for the 2010 pipeline explosion. Key points are discussed below:

- The City of San Bruno consulted with an arborist, to coordinate an efficient treeremoval program that targeted only those trees that posed a danger to the public.
- The City of San Bruno did not complete a property line survey, which would have reduced time and cost of recovery efforts.
- The workshop participants discussed challenges associated with siting debris management sites and meeting the various regulatory hurdles, including California Environmental Quality Act (CEQA).
  - Rather than fight regulatory hurdles to select potential debris management sites prior to an incident, jurisdictions should simply catalogue site requirements and regions where they would likely site them. Following a major disaster, regulatory agencies can often expedite approval of officially siting these locations. The state and other agencies tend to be more flexible with regulations after an event as occurred than they would be during normal operations. A Governor's state of emergency proclamation allows for the suspension or waiver of various rules for emergency response operations.
- Large cranes used for debris removal can cause vibrations that may trigger unstable
  debris piles to collapse. Jurisdictions and agencies should consider using smaller cranes
  instead to reduce shaking, particularly when search and rescue operations are
  underway.

## **ANALYSIS**

Lessons learned, both positive and negative, from previous disasters were a focal point of this workshop. The group discussed recent debris removal experiences from the Angora Fire (2007), San Diego Fires (2003 and 2007), Hurricane Sandy (2012), and the San Bruno pipeline explosion (2010). This discussion and issues that surfaced will increase participant awareness and response when facing similar debris management issues in their respective jurisdictions.

### RECOMMENDATIONS

Key recommendations for Objective 1 include the following:

- Develop and maintain a debris management plan.
- Provide PPE for debris removal crews who work near ash and hazardous materials.
- Pursue pre-existing agreements with property owners for temporary debris staging areas.

## OBJECTIVE 2: DEVELOP A BETTER UNDERSTANDING OF STATE/FEDERAL SUPPORT TO LARGE-SCALE DEBRIS OPERATIONS.

## **KEY ISSUES**

 Private property debris removal and demolition may be necessary to eliminate health and safety hazards, eliminate damage to improved public or private property, or facilitate the economic recovery of a community. This type of operation can be challenging and difficult and is not without financial risk for communities. Private property debris removal and demolition operations require close coordination with property owners, insurance companies, and federal and state authorities, and an effective oversight and monitoring system for contractors engaged in the work.

- Include regulatory agencies as early as possible in the recovery process. Although regulatory agencies may seem to slow down emergency activities early in the recovery effort, including them during the "front end" of the recovery effort will save a great deal of time and money by avoiding mistakes and missteps before they happen.
- Operational Areas want the State to designate regional debris sites and a plan to coordinate the regional debris sites. Since the sites are privately owned; how will the State Debris Management Task Force or a Multiagency Coordination Group (MACG) select, monitor, and close private facilities?
- Operational Areas asked if California Emergency Function (CA-EF) participation should include local government and non-government entities, as well as the relevant State agencies. Participants expressed the desire to have an effective system for information sharing and coordination at the regional level. Local leadership wants to ensure that a Debris Management Task Force or MACG is an operating part of the Standardized Emergency Management System (SEMS) system once activated, with clearly defined operational procedures and protocols. Can a State Debris Management Task Force coordinate regional operations? There is not a clear map of how local governments are to be integrated, or communicate with CA-EFs for debris issues OAs aren't clear about how a State Debris Management Task Force or EFs fit ICS and SEMS.

## **ANALYSIS**

State and Federal agency panelists in the workshop clarified participant understanding of support to large-scale debris operations. OA representatives, however, expressed some concern that State-led EFs (CA-EFs) may not clearly coordinate regional operations because there does not appear to be a place for local governments within the CA-EF structure. Further, there were concerns that the State Debris Management Task Force lacks a formalized structure for coordination (addressed in more detail below).

## RECOMMENDATIONS

- Identify and include all regulatory agencies early in the debris management process.
- CA-EF 3 and CA-EF 8 documentation should be updated to address regional coordination.
- Expand CA-EF participation to include key stakeholders who may not be State or Federal agencies.

## OBJECTIVE 3: ANALYZE AND DISCUSS THE PURPOSE, ROLES, AND RESPONSIBILITIES OF STATEWIDE DEBRIS MANAGEMENT TASK FORCE.

### **KEY ISSUES**

- State agencies should define and document the structure of the State Debris Management Task Force.
- A State Debris Management Task Force should be scalable to the size of the incident.
- Cal Recycle representatives recommended that a MACG be formed, rather than a Debris
  Management Task Force. The concept fits with ICS and SEMS. A MACG is scalable and
  includes those participants who are directly relevant to the issue and who can make
  decisions regarding resources.

## **ANALYSIS**

Although the participants agreed with the National Incident Management System (NIMS) / SEMS concept that all emergencies are local, they discussed the extent of influence that a State Debris Management Task Force would have on a local debris removal program following a catastrophic incident. The staffing and leadership of the State Debris Management Task Force requires clarification. Participants agreed that the Debris Management Task Force should be flexible enough to expand and contract depending on the size of the incident.

## RECOMMENDATIONS

Key recommendations for Objective 2 include the following:

- A State Debris Management Task Force should be created after a catastrophic incident to lead a coordinated response that effectively addresses critical debris issues that affect a region.
- Clearly define and document the structure, roles and responsibilities, and processes and products of the State Debris Management Task Force.
- Ensure that the State Debris Management Task Force remains flexible and scalable.

## OBJECTIVE 4: REVIEW AND DISCUSS THE UNIQUE ISSUES RELATED TO PRIVATE PROPERTY DEBRIS REMOVAL AND DEMOLITION.

## **KEY ISSUES**

- The participants discussed several curbside debris pickup issues, as noted below:
  - Jurisdictions should clearly define and communicate a curbside debris pickup timeline to avoid picking up damaged property demolition and remodel related construction debris.
  - Curbside pickup crews should be trained with proper protocols to deal with potentially dangerous trash that could be mixed in with the debris, including ammunition, firearms, or explosive devices.

- Jurisdictions should develop programs to sort the debris for items such as e-waste and recyclable items.
- It will be a challenge to segregate the responsibilities of contractors providing regular garbage service from the responsibilities of contractors picking up incidentrelated debris.
- The participants discussed several private property debris removal issues, as noted below:
  - Generally, jurisdictions and agencies cannot enter private property for debris removal unless the debris poses a public health and safety threat.
  - Prior to conducting private property debris removal operations, jurisdictions should photograph the site for liability purposes.
  - Jurisdiction's and debris removal companies should encourage the use of fencing and other creative alternatives to physically removing debris from private property when feasible. This can reduce the cost and time associated with debris removal operations.
  - If not controlled, private property debris can block access to public infrastructure, such as underground utilities.
  - Public messaging is needed to explain proper handling of HAZMAT.

## **ANALYSIS**

Private property debris removal and demolition is a sensitive issue for jurisdictions and property owners. Generally, jurisdictions should avoid entering private property to remove debris without approval properly drafted right-of-entry agreement, unless the debris poses a safety threat to the public. Participants agreed that jurisdictions can lower the cost of debris removal operations by implementing creative solutions (e.g., fencing) and establishing a limited curbside debris removal timeframe. However, for large concentrations of debris on private property, a government-coordinated program may be the best approach.

## **RECOMMENDATIONS**

Key recommendations for Objective 4 include the following:

- Photograph private property debris removal sites, prior to beginning debris removal operations.
- Use creative alternatives to remove debris, such as temporary fencing, when feasible.
- Define a debris pickup period soon after the disaster, and communicate the timeframe to the public via public service announcements.
- Ensure that debris removal crews are properly trained on removal of HAZMAT, including ammunition, firearms and explosives.
- Ensure that debris removal crews are properly trained on removal of environmentally sensitive materials, including recyclable items and e-waste.

## OBJECTIVE 5: DISCUSS CONCERNS RELATED TO OPERATING REGIONAL DEBRIS MANAGEMENT SITES.

### **KEY ISSUES**

- A major issue in siting a regional debris management site is the lack of space, particularly in the bay area and other metropolitan locations.
- CalRecycle, with support from Cal EMA and California Environmental Protection Agency, would be an appropriate agency to identify a regional debris management site, since local jurisdictions would have difficulty proposing locations outside of their control and each jurisdiction would not necessarily volunteer for their landfills filled with debris.
- Debris management planners should be strategic in using operating landfills or closed landfills, so that disposal of disaster debris does not consume many years of capacity for a large metropolitan area.

## **ANALYSIS**

While participants generally agreed that establishing regional debris management sites is beneficial, it was unclear where these sites should be located. Large metropolitan areas, such as the San Francisco Bay Area are densely developed and have little open space to accommodate a regional debris management site. Large metropolitan areas should also think strategically about using limited landfill space to dispose of disaster debris to maximize future capacity.

## RECOMMENDATIONS

A key recommendation for Objective 5 includes using the Regional Emergency Operations Center (REOC) to assist with making regional landfill decisions.

## OBJECTIVE 6: REVIEW AND DISCUSS TOPICS REGARDING OUT-OF-REGION OR OUT-OF-STATE DISPOSAL FACILITIES.

### **KEY ISSUES**

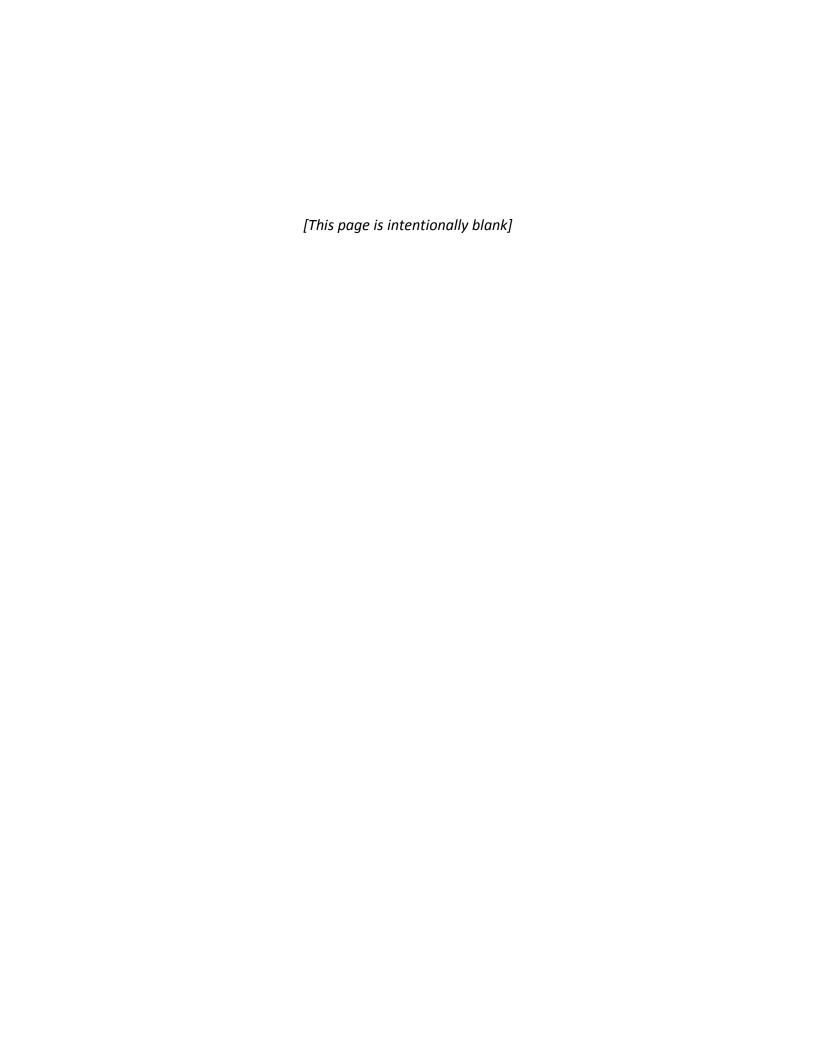
 Major metropolitan areas, such as the San Francisco Bay Area, that are densely developed will need to consider how to transport debris outside of the region.
 Agreements for use of out of region debris management sites prior to a catastrophic disaster will support more effective debris management operations.

## **ANALYSIS**

Workshop participants agreed that establishing out-of-region debris management sites in advance of a disaster is paramount. However, establishing these agreements may be challenging for jurisdictions since debris management sites are generally not desirable land uses. Many large jurisdictions, such as New York City, already have established out-of-region or out-of-state trash disposal programs. These programs can serve as a starting point for future out-of-region or out-of-state debris management sites.

## **RECOMMENDATIONS**

A key recommendation for Objective 6 includes using the REOC to assist with making regional disposal decisions.



## **ADDITIONAL ISSUES/GAPS**

## **KEY ISSUES**

Workshop participants discussed the following key issue that is unrelated to any of the six objectives above:

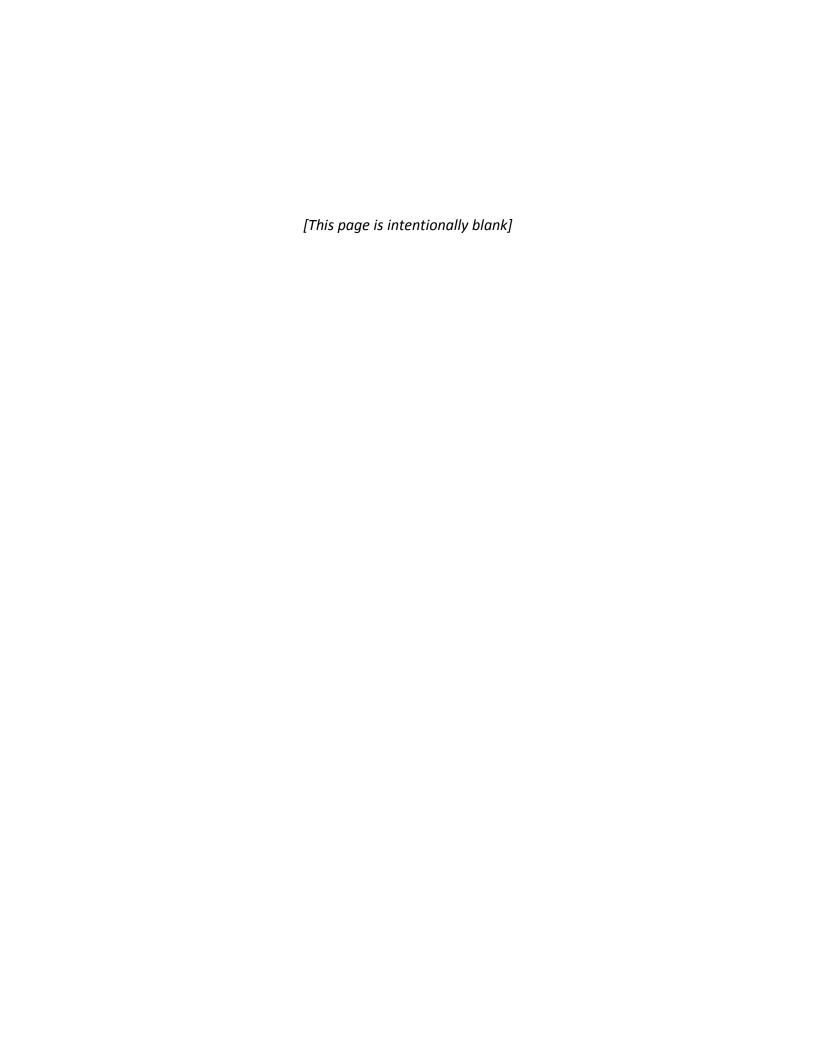
 Jurisdictions can have difficulty responding quickly to debris removal operations because they do not have the proper contract vehicles in place. Jurisdictions can expedite contracting with debris removal companies by pre-qualifying contractors, predrafting contracts, or executing pre-event contracts. Contracts vary in terms and conditions, but the scope of work generally covers a geographical area and defines a cost per volume/weight of debris removed, rather than fixed fee. Jurisdictions may use a time and materials contract for the first 70 hours after the event to facilitate debris removal. FEMA may extend the time period for catastrophic events.

## **ANALYSIS**

The chaos following a catastrophic disaster will likely make it challenging to quickly identify and contract with debris removal vendors, unless jurisdictions comprehensively prepare for managing engagement with debris removal companies prior to an incident.

## RECOMMENDATIONS

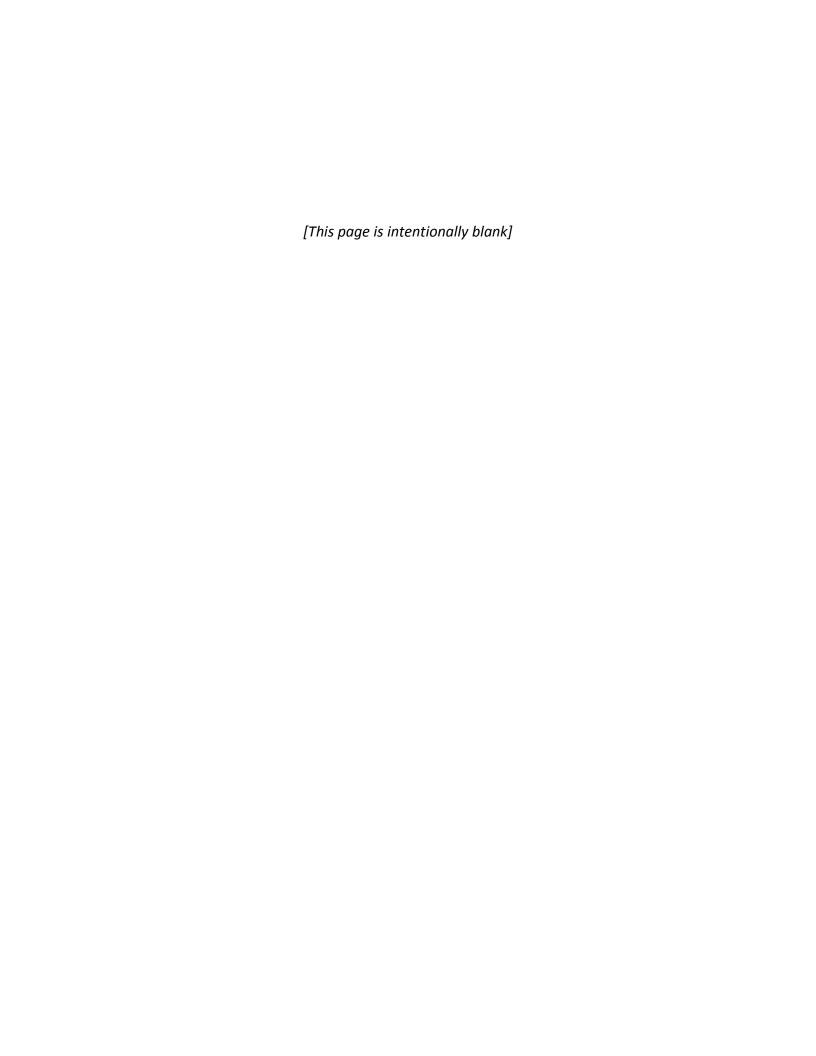
A key recommendation for this additional key issue includes expediting a contract with debris removal companies in advance of the actual disaster.



## CONCLUSION

Debris management planning at the local, regional, State, and Federal levels facilitates recovery following a large debris generating disaster. Increasing awareness of past debris successes and challenges serves to benefit other jurisdictions and agencies tasked with debris management operations. Debris management issues that jurisdictions and responsible agencies face include:

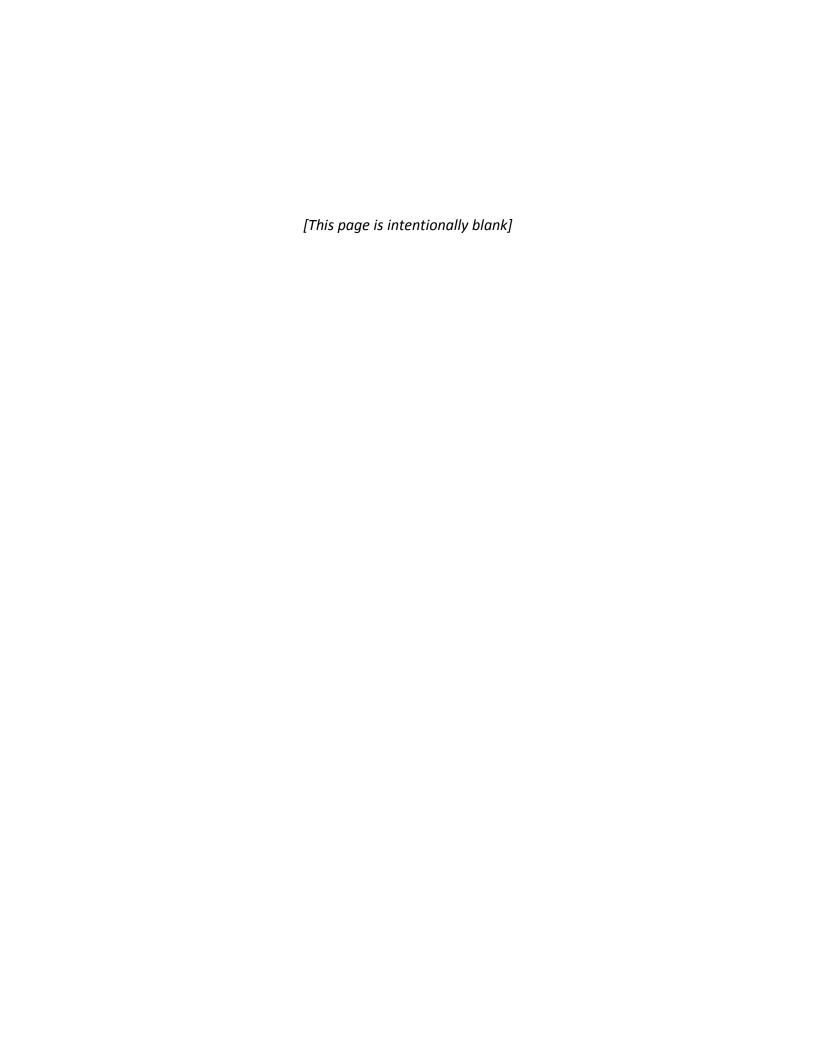
- Clarifying the roles and responsibilities of a statewide Debris Management Task Force; initiating private property debris clearance; and siting regional, out-of-region, or out-of-state debris management sites.
- Workshops participants made several key recommendations to improve debris
  management after a disaster. These included, developing and maintaining a debris
  management plan, pursue agreements with debris clearance companies by prequalifying before the disaster, updating CA EF-3 and CA EF-8 to address regional debris
  coordination, clearly defining the role of a statewide Debris Management Task Force.
- Workshop participants discussed issues and risks associated with private property debris
  removal and developed several recommendations, including photographing sites prior
  to debris removal, developing creative solutions (e.g., fencing), defining and
  broadcasting curbside debris pickup sites as soon after the disaster as possible, training
  debris clearance crews on proper handling of explosives and dangerous materials.
- The workshop participants focused on challenges associated with siting regional debris
  management sites and developed several recommendations. These included lack of
  space for a regional debris management site, determining the appropriate agency to
  locate a regional debris management site, and using landfills strategically.



## **NEXT STEPS**

This report will be distributed to and reviewed by workshop participants. This report has been distributed to and reviewed by workshop participants.

This report will be presented to the Bay Area UASI as the Statewide Debris Management Workshop Summary and Recommendations Report.



## **ACRONYMS**

Cal EMA California Emergency Management Agency

Cal Recycle California Department of Resources Recycling and Recovery

CEQA California Environmental Quality Act

EF Emergency Function

FEMA Federal Emergency Management Agency

FOUO For Official Use Only

**HAZMAT** Hazardous Materials

HSEEP Homeland Security Exercise and Evaluation Program

ICS Incident Command System

MACG Multi-agency Coordination Group

NIMS National Incident Management System

OA Operational Area

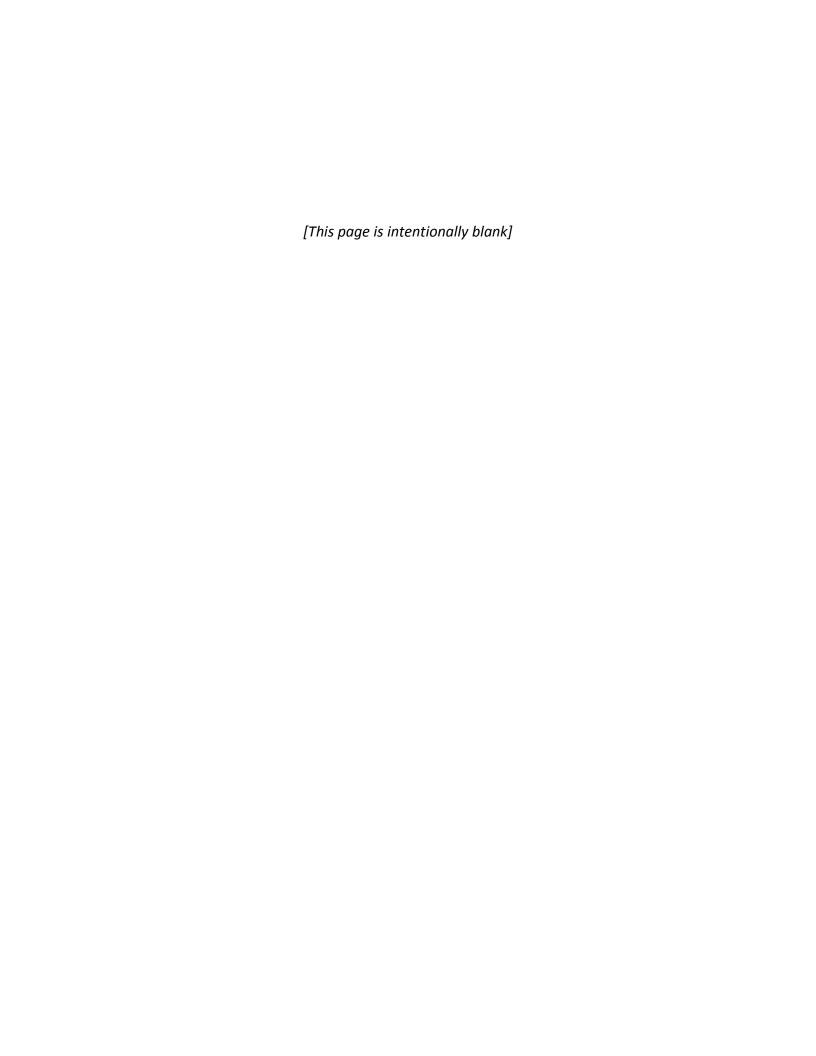
OEM Office of Emergency Management

PPE Personal Protective Equipment

REOC Regional Emergency Operations Center

SEMS Standardized Emergency Management System

UASI Urban Area Security Initiative



## **APPENDIX A: WORKHOP EVALUATION FORM**

## **EVALUATION SUMMARY – JANUARY 31, 2013**

## **Respondents by Agency:**

Bay Area UASI

Cal EMA

CalRecycle

City and County of San Francisco

City of Belmont

City of Concord

City of Oakland

City of San Carlos

City of San Diego

City of San Jose

City of San Mateo

City of San Ramon

County of Alameda

County of Contra Costa

County of Del Norte

County of Kern

County of Los Angeles

County of Marin

County of Monterey

County of San Mateo

County of Santa Clara

County of Santa Cruz

County of Solano

County of Sonoma

Department of Toxic Substance Control

FEMA, Region IX

Sacramento Office of Emergency Services

San Francisco Fire Department

San Francisco Police Department

Town of Moraga

United States Army Corps of Engineers

United States EPA, Region IX

## Part I: Workshop Content and Organization

Scale: 5—strongly agree 4—agree 3—neutral 2—disagree 1—strongly disagree

Assessment Factor	Average Rating
The workshop was well structured and organized	4
The workshop was plausible and realistic	4
The PowerPoint presentation helped the participants understand and become engaged in the discussion	4
The facilitator(s) was knowledgeable about the material, kept the workshop on target, and was sensitive to group dynamics	5
The Workshop Manual was a valuable tool throughout the exercise	4
Participation in this workshop was appropriate for someone in my position	4
The participants included the right people in terms of level and mix of disciplines	5
The break-out groups were a valuable tool for discussion	N/A