Los Angeles Regional Recovery Guidance for Emergency Planners

September 6, 2012

Disclaimer: This Regional Recovery Guidance for Emergency Planners is advisory. It is meant to assist in recovery planning, but it is not meant to fulfill all legal requirements or duties. Nothing in this document alters or impedes the ability of local, State, Tribal, or Federal chief executives, their government agencies, or their internal organizations to carry out their specific authorities or perform their responsibilities under all applicable laws, executive orders, and directives. This Guidance document is not intended to alter the existing authorities of individual municipal or county agencies and does not convey new authorities upon any local, State, Tribal, or Federal official.

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I. RECORD OF CHANGES

Changes to this Regional Recovery Guidance for Emergency Planners should be recorded in the following record of changes table. A copy of each Guidance document should be kept as reference.

Date	Section/Page	Description of Change	Changed By

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II. EXECUTIVE SUMMARY

This document, *Los Angeles Regional Recovery Guidance for Emergency Planners*, is intended to serve as a resource for jurisdictional planning efforts and presents an all-hazards approach for conducting recovery planning in the Los Angeles regional area. This document outlines strategies, procedures, recommendations, and organizational structures that may be used when developing jurisdictional or interjurisdictional recovery plans and/or implementing a coordinated recovery effort within the operational areas of the Los Angeles regional area.

The accompanying Recovery Annex Template is a tool for city and county agencies to use when developing the recovery functional annex supporting their emergency operations plan (EOP).

This document provides guidance on the following critical processes:

- It identifies planning principles that cities can use when developing recovery plans, emphasizing consistency with the recently released National Disaster Recovery Framework (September 2011).
- It identifies functional roles and responsibilities cities can use to adapt to their own specific jurisdictional organization to manage recovery operations.
- It explains the relationships between Emergency Functions (EFs)/Emergency Support Functions (ESFs) used during response and Recovery Support Functions (RSFs) and the transition from response to recovery.
- It emphasizes a 'whole-of-community' approach to recovery planning and provides recommendations for incorporating community-based organizations and private-sector partnerships in the recovery process.
- It provides detailed planning guidance for each of the six RSFs necessary for successful recovery following a catastrophic event:
    - Community Planning and Capacity Building RSF
    - Economic RSF
    - Health and Social RSF
    - Housing Recovery RSF
    - Infrastructure Systems RSF
    - Natural and Cultural Resources RSF

This is a living document that should regularly be updated to reflect changing operating environments and standards. Edits and comments should be coordinated through the Los Angeles Operational Area Critical Incident Planning and Training Alliance for incorporation into this document.[1]

[1] For further information regarding the Alliance, see http://catastrophicplanning.org. Accessed on September 1, 2012.

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III. ACKNOWLEDGEMENTS

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- Access Services
- American Red Cross Los Angeles Region
- Area Housing Authority of the County of Ventura
- California Department of Conservation
- California Department of Fish and Game
- California Emergency Management Agency (California Office of Emergency Services)
- California Grocers Association
- California State University System
- City of Long Beach Department of Health and Human Services
- City of Los Angeles Department of Public Works
- City of Los Angeles Department of Recreation and Parks
- City of Los Angeles Department of Water and Power
- City of Los Angeles Emergency Management Department
- City of Los Angeles Fire Department
- City of Los Angeles Housing Department
- City of Los Angeles Office on Disability
- City of Los Angeles Unified School District
- City of Ontario Office of Emergency Management
- City of Pasadena Department of Public Health
- City of Riverside Office of Emergency Management
- City of San Bernardino Police Department
- City of Vernon Health & Environmental Control Department
- Community Development Commission of the County of Los Angeles
- Emergency Network Los Angeles
- Frank D. Lanterman Regional Center
- J. Paul Getty Trust
- Loyola Marymount University, Department of Public Safety
- Los Angeles County Animal Care and Control

- Los Angeles County Chief Information Office
- Los Angeles County Community Development Commission
- Los Angeles County Department of Children and Family Services
- Los Angeles County Department of Health Services
- Los Angeles County Department of Health Services/Emergency Medical Services Agency
- Los Angeles County Department of Mental Health
- Los Angeles County Department of Public Health
- Los Angeles County Department of Public Health/Veterinary Public Health
- Los Angeles County Department of Public Social Services
- Los Angeles County Department of Public Works
- Los Angeles County Department of Regional Planning
- Los Angeles County Metropolitan Transportation Authority
- Los Angeles County Office of Emergency Management
- Los Angeles County Sheriff's Department
- Los Angeles Fire Department Historical Society
- Los Angeles Maritime Museum
- Los Angeles Public Library
- Los Angeles World Airports
- Municipal Water District of Orange County
- Orange County Health Care Agency
- Orange County OperationOC
- Orange County Sheriff's Department
- Orange County Sheriff's Department's Emergency Management Bureau
- Orange County Social Services Agency
- Port of Los Angeles
- Riverside County Department of Public Health
- San Bernardino County Department of Behavioral Health
- San Bernardino County Department of Public Health
- San Bernardino County Fire Department Office of Emergency Services
- San Diego County, Office of Emergency Services
- Services Center for Independent Living
- Southern California Edison
- U.S. Army Corps of Engineers

- U.S. Coast Guard
- U.S. Department of Housing and Urban Development
- U.S. Geological Survey
- U.S. Small Business Administration
- University of California Riverside
- Ventura County Health Care Agency
- Ventura County Human Services Agency
- Ventura County Sheriff's Office of Emergency Services
- W. W. Grainger, Inc.

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I. INTRODUCTION

A. Overview

The Regional Recovery Guidance for Emergency Planners (Guidance) is a planning resource to enhance recovery from a major or catastrophic natural or manmade disaster. This Guidance document is based on the premise that successful recovery and reconstruction depends on systematic pre-disaster planning for the restoration of services, housing, and economic vitality.

The California Emergency Services Act focuses on creating emergency organizations and authorities for preparing, planning, training, and responding to emergencies. State and Federal financial and service programs exist to support local governments, businesses, nonprofit organizations, and individuals in recovery from Governor-proclaimed and President-declared emergencies and disasters. However, no specific statutory requirements exist for local recovery planning and organization. The adoption of the Standardized Emergency Management System (SEMS) creates a standardized structure for emergency response organizations. The use of existing emergency response organizations, authorities, and SEMS during recovery simplifies the transition from response to recovery and ensures an organized approach to recovery.

B. Purpose

This Guidance is a resource to support the planning process for disaster recovery in the Los Angeles region. This document includes planning considerations and strategies; planning tools and templates; information, lessons learned, and best practices; and State, Federal, and other assistance available for recovery operations. Links to various documents and organizational websites are also provided to connect readers to additional information.

The importance of recovery is exemplified in past disasters and the time and effort necessary to support local communities and areas to become more resilient, mitigate known risks, and take the opportunity to redevelop, revitalize, and rebuild. In using this Guidance document, priorities must be set for each recovery effort, including restoring family autonomy, providing essential public services, identifying residual hazards, planning for mitigating future hazards, recovering costs associated with response and recovery efforts, and permanently restoring public and private property.

Extensive coordination during pre-disaster plan development will expedite recovery and help mitigate effects of future disaster. For example:

1. Community planning involvement can help ensure long-term plans for development are considered when placing temporary housing and when leveraging planned development with recovery funding and construction.

2. Coordination among mitigation agencies can ensure that placement of temporary housing avoids areas with other hazard risks and that implementation of recovery activities returns the community to stronger than pre-disaster conditions.

3. Law enforcement requirements may need to be redistributed to cover any new housing placements and monitor damaged areas.

C. Situation

1. The region is vulnerable to a wide range of hazards that threaten communities, businesses, government, and the environment. Table 1, taken from the 2010 State of California Multi-Hazard Mitigation Plan, identifies disaster incidents, casualties, and California EMA costs by type. [2] (Cal EMA is changing to California Office of Emergency Services [OES], so Cal OES will be used in the rest of this document except when referencing document titles.)

Table 1: Hazards

Disaster Type	Emergencies Through 2009	State Emergency Proclamations Through 2009	Federal Disaster Declarations Through 2009	Deaths Through 2007*	Injuries Through 2007*	Cal OES-Administered Costs Through 2007*
Wildfire	166	70	115	97	1,504	$2,092,991,622
Flood	130	121	45	292	759	$4,813,564,327
Earthquake	21	19	12	193	18,962	$8,059,421,902
Agricultural	18	17	0	0	0	$389,895,974
Freeze	9	8	4	0	0	$1,025,734,520
Landslide	9	8	1	24	0	$51,967,236
Economic	7	6	2	0	0	$33,587,001
Civil Unrest	6	6	1	85	3,331	$167,722,732
Drought	8	8	0	0	0	$2,686,858,480
Hazardous Material	5	3	0	0	0	0
Wind	3	3	0	0	0	$82,100
Air Disaster	2	2	0	364	2	0
Facility	2	2	0	0	0	$654,897
Road Damage	3	3	0	0	0	$396,521
Tsunami	2	2	1	12	0	$10,000,000
Invasive Species	1	1	0	0	0	0
Snow	1	1	0	0	0	$1,122,549
Tornado	1	1	0	0	0	0
Heat	0	0	0	136	--	--
Total	394	281	181	1,203	24,558	$19,333,999,861

Source: Cal OES database

* Estimates through 2009 are not yet available from standard Cal EMA sources

[2] California Emergency Management Agency. (2010). *2010 State Hazard Mitigation Plan*. Sacramento, CA. http://hazardmitigation.calema.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp. Accessed on July 11, 2012.

2. A U.S. Geological Survey report asserts that the San Andreas Fault has the high probability (59% in the next 30 years) of generating at least one magnitude 6.7 or larger earthquake. There is a 46% chance of one or more quake of magnitude of 7.5 or greater in the next 30 years in the southern half of the State of California.[3]

3. The five-county region of Los Angeles, Orange, Riverside, San Bernardino, and Ventura includes the most populous county in the country and the largest county in terms of geographic area. Within the region, there are approximately 18 million people, more than 35,000 square miles, and more than 185 individual cities or government jurisdictions.

4. Planners should also consider demographic or statistical information that might be unique and important to recovery approaches and programs (percentage of renters, under-insured populations, populations with disabilities and others with access and functional needs, populations that are transportation-dependent, infrastructure systems and access to critical services if transportation routes are impacted, etc.).

D. Scope

Following a major disaster, recovery efforts should begin from the beginning of the disaster and run parallel to response operations. This Guidance document is designed to address activities that occur once the initial response phase begins and ends and through the end of the recovery phase. Residual response operations will be expected to continue as the separate recovery process is initiated and sustained through time. Recovery can take from a few weeks to several years or decades, depending on overall disaster impacts. Recovery planning involves all aspects of short- and long-term recovery, from the time when most response activities have demobilized through the time when most of the region is back to a state of normalcy (see Figure 1).

[3] U.S. Geological Survey. (2008). *Forecasting California's earthquakes: What can we expect in the next 30 years*? Washington, DC. http://pubs.usgs.gov/fs/2008/3027/fs2008-3027.pdf. Accessed on July 12, 2012.

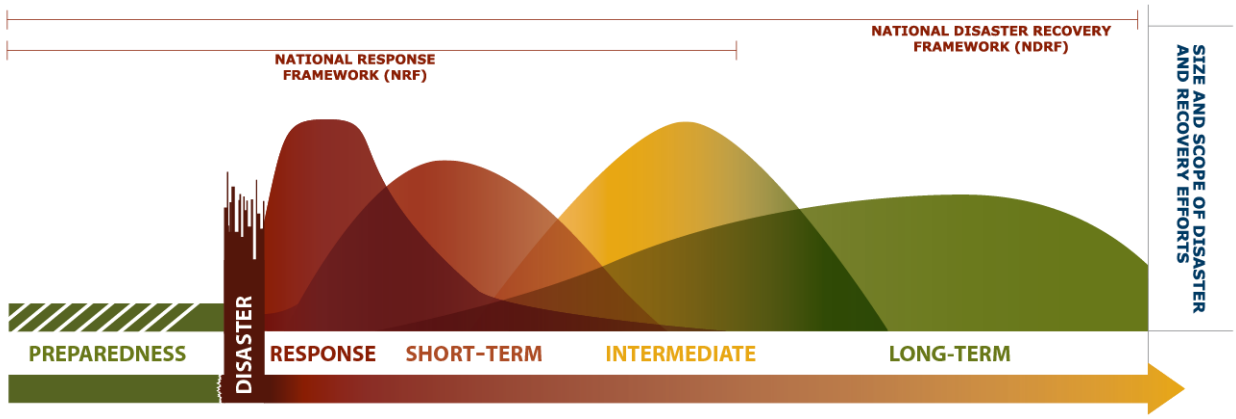

Figure 1: Recovery Timeline

E. Horizontal and Vertical Plan Integration

There are some horizontal timeline components that tie together response, recovery (specifically long-term recovery), and continuity.

Response plans describe a jurisdiction's primary emergency response departments; that department's emergency tasks; and the resources required, including human, material, and mutual aid.

Continuity plans focus on the essential functions within a department or jurisdiction, analyze levels of down time and the impact to the unit at each level, and establish acceptable contingency plans for alternate work locations and alternate processes or methods to continue to provide the essential functions of that department or jurisdiction.

Recovery plans provide guidance to ensure the effective transition from continuity operations back to normal operations as a coordinated effort. This applies whether the transition to normal operations will be to the original facility, an interim facility, or a new or rebuilt facility and will continue if multiple transitions for a single facility or department are required.

Recovery plans may reference the applicable components of a continuity and/or response plan, but the recovery plan should not include response or continuity elements. The recovery plan has a relationship to the continuity plan in that it enhances and ultimately takes ownership of the transition from continuity operations to returning to normal operations.

From a vertical standpoint, a recovery plan should integrate not only with the State Recovery Plan but also with the recently released National Disaster Recovery Framework (NDRF) and the National Response Framework (NRF) Emergency Support Function (ESF) #14 Annex for Long-Term Community Recovery. These contain key guidance and processes that will be followed by Federal entities in cooperation with State and local governments.

This Guidance document is intended as general guidance and is not inclusive of all possible needs, options, or situations. It should serve as an aid to the recovery planning process but not replace current local plans, procedures, etc. It is meant to expand upon this existing base of knowledge and standards.

F. Key Recovery Plan Terminology

1. EFs/ESFs are critical mechanisms to coordinate functional capabilities and resources provided by Federal departments and agencies and certain private-sector and nongovernmental organizations (NGOs). They represent an effective way to bundle and funnel resources and capabilities to local, Tribal, State, and other responders. These functions are coordinated by a single agency but may rely on several agencies that provide resources for each functional area. The ESF mission is to provide the greatest possible access to capabilities of the Federal Government regardless of which agency has those capabilities.[4]

2. Recovery Support Functions (RSFs) comprise NDRF's coordinating structure for key functional areas of assistance. Their purpose is to support local governments by facilitating problem solving, improving access to resources, and fostering coordination among State and Federal agencies, nongovernmental partners, and stakeholders. The RSF objective is to facilitate the identification, coordination, and delivery of Federal assistance needed to supplement recovery resources and efforts by local, State, Tribal, and Territorial governments and private and nonprofit sectors. An additional objective is to encourage and complement investments and contributions by the business community; individuals; and voluntary, faith-based, and community organizations. These RSF activities assist communities with accelerating the process of recovery, redevelopment, and revitalization.

3. Preparedness includes all preparedness activities: plans being written, partnerships formed, regulatory and legislative actions pursued, emergency actions outlined, etc. This phase can be very effective in shaping the speed, direction, and efficiency of the recovery process.

4. Short-term recovery is defined as "any activity that will return vital life-support systems and critical infrastructure to minimum operating standards." This entails periods ranging from a few days to 6 months following a disaster.

5. Intermediate recovery is the phase of recovery when the most vital services have been restored, but life would not be characterized as

[4] Federal Emergency Management Agency. (2008). *National Response Framework*. Washington, DC.

having returned to normal. This period can range from months to years.

6. Long-term recovery is the process of returning all aspects of the community to "normal" functioning conditions and includes reconstruction of damaged or destroyed social, economic, natural, and built environments. The overarching focus of long-term recovery should be on building safely and wisely, reducing future hazards, and optimizing community improvements.

7. Resilience is the ability of communities to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies.[5]

G. Assumptions

1. A disaster may occur at any time with little or no warning, and response and/or recovery needs will exceed the capabilities of local and State governments, the private sector, and nonprofit organizations in the affected areas.

2. Response and short-term, intermediate, and long-term recovery activities will occur concurrently at different rates, which will create tension and a competitive demand for resources. This dynamic will be exacerbated when there are secondary hazards (e.g., an aftershock to an earthquake) and/or inadequate processes for prioritizing needs.

3. The jurisdiction will need to request assistance through mutual aid and/or from the operational area, the State of California, and the Federal Government in accordance with NRF and NDRF.

4. Private-sector entities will play a significant role in the repair of critical infrastructure. These entities will provide the primary workforce for many of the infrastructure recovery.

5. Voluntary organizations within and from beyond the region will play a major role throughout the affected areas by providing supplies and services. Many disaster relief organizations from other areas will send food, clothing, supplies, and personnel based on their perception of needs.

6. Many resources critical to the disaster recovery process will be scarce, and competition to obtain such resources will be significant. Participation from many agencies and organizations will be needed from response through the recovery phases.

7. A significant disruption in agricultural exports will have far-reaching economic effects as well as potential impacts to public health, both locally and regionally.

[5] Paraphrased from: U.S. Department of Homeland Security. (2008). *DHS Risk Lexicon*. Washington, DC.

8. Many response activities, such as security and law enforcement, will also need to transition into the recovery phase.

9. Many essential personnel with operational responsibilities will suffer damage to their homes and personal property, which will have effects well into the recovery phase. These personnel may suffer loss of or separation from family members or concern for their well-being. The impacts to personal lives or security will affect their ability to serve in their operational capacities. Higher than normal distress or psychological impacts will occur and will influence staffing availability and resources.

10. Providing residents with tools to help them rebuild and recover on their own, wherever possible, will help keep the population active and likely reduce overall feelings of helplessness.

11. Past disasters have shown that the longer an affected population is displaced or removed from their community, the less likely it will return to that community. After 1 year, the rate of return quickly drops off to less than 10 percent of those still living outside the community return.[6, 7] The economic loss of prolonged population displacement, including lost tax revenue, compounds the problems incurred during the recovery process.

12. Community planning, redevelopment, and mitigation plans will help guide the long-term rebuilding and strategy for community recovery.

13. The following immediate and longer-term impacts are expected:

    a) Residential properties, business buildings, historical sites, correctional facilities, and government facilities will be severely damaged.

    b) Vital infrastructure such as water, electrical power, natural gas, oil, and sewer services will be compromised.

    c) Transportation infrastructure could be damaged and in limited operation. Vital motor vehicle arteries, rail corridors, and airports could be damaged, impassible, or inoperable.

    d) Communications infrastructure could be damaged, causing disruption in landline telephone, cellular telephone, radio, microwave, computer, and other communication services.

[6] Yasui, E. (2007). *Community vulnerability and capacity in post-disaster recovery: The cases of Mano and Mikura neighbourhoods in the wake of the 1995 Kobe earthquake*. (Doctoral dissertation). University of British Columbia, Vancouver. http://www.npo.co.jp/hanshin/ronbun/2007a.pdf. Accessed on July 11, 2012.

[7] Love, T. (2011). *Population movement after natural disasters: A literature review and assessment of Christchurch data*. Wellington, Australia: Sapere Research Group. http://www.srgexpert.com/Population%20movement%20after%20natural%20disasters%20-%20%20a%20literature%20review%20and%20assessment%20of%20Christchurch%20data.pdf. Accessed on July 11, 2012.

e) Banking and finance infrastructures could be damaged or compromised, which will have a devastating impact on the local, regional, State, and national economy and may hinder or slow the recovery process. From a local level, there will likely be cash-flow issues in accessing and depositing funds.

f) There will be a significant amount and variety of debris, which could far exceed the jurisdiction's normal debris removal and disposal capabilities.

g) Hazardous material will be exposed as a result of the damage and destruction of buildings and infrastructure or uncovered during repair and reconstruction efforts, causing severe environmental and public health concerns.

h) Residents and visitors will be displaced, requiring shelter and basic needs. Depending on the severity of the impact, government support and/or assistance for interim and/or permanent housing may be required.

i) Homeowners, rental property owners, and renters without insurance will require additional recovery assistance for the repair of their homes or in finding alternative housing.

j) Schools and daycare facilities will be closed for an extended period, causing a significant impact on the available workforce for jurisdictional departments, the private sector, and nonprofit organizations. This may ultimately hinder physical, governmental, and economic recovery.

k) People with disabilities and others with access and functional needs will require special considerations during recovery. According to the Federal Emergency Management Agency (FEMA), access and functional needs populations includes "populations whose members may have additional needs before, during and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision, and medical care."[8]

l) Household pets, service animals, and livestock will be displaced along with their owners and require care and shelter during recovery.

m) The affected population, including those with operational responsibilities, will likely experience a range of stress reactions, requiring a significant increase in demand for mental and behavioral health services well into the recovery period.

[8] Federal Emergency Management Agency. (2008). *National Response Framework*. Washington, DC.

n) Planning, development, and building codes—and the enforcement of those standards—will need to be evaluated to expedite recovery.

o) Vital records, which could include employment documentation, personal statements or notes, or medical records and notes, may be lost, damaged or destroyed, thus affecting eligibility for services and programs.

p) The affected jurisdiction may incur costs associated with recovery that exceed budgeted amounts and/or available cash flow.

14. Operational Constructs

a) In accordance with SEMS, the responsibility of recovery rests with the local jurisdiction and only extends to the operational area, the State of California, and the Federal Government when the need for resources, personnel, and coordination support exceeds the capabilities of the jurisdiction.

b) A lead governmental agency will be designated to coordinate and prioritize recovery activities on behalf of all jurisdictional departments and partner agencies.

c) Jurisdictions will ensure that people with disabilities and others with access and functional needs are able to access essential services by providing auxiliary aids and services and reasonable accommodation (for example, by providing a needed ramp to obtain a service). Furthermore, jurisdictions will provide the means for people with disabilities and others with access and functional needs to contact them to request those services and accommodations.

d) Planning for people with disabilities and others with access and functional needs should be integrated into all phases of disaster preparedness, response, and recovery.[9]

e) All activities should comply with Titles I, II, and III of the Americans with Disabilities Act (ADA) of 1990 and subsequent amendments.

f) Local jurisdiction departments and partner agencies are responsible for tracking their respective personnel and resource costs incurred by recovery activities in accordance with applicable regulations, standards, and requirements to

[9] Kailes, J. I. (2008). *Southern California wildfires after action report*. Pomona, CA. Prepared in partnership with the Access to Readiness Coalition, the California Foundation for Independent Living Centers, and the Center for Disability Issues and the Health Professions at Western University of Health Sciences. This after-action report offers 71 specific recommendations for strengthening and improving preparedness, response actions, and recovery efforts that are inclusive of people with disabilities and activity limitations.

obtain maximum reimbursement. These standards will vary based on the type of assistance or programs being provided.

g) The private sector and nongovernmental organizations will play an integral role in recovery efforts, especially those businesses that manage, maintain, or support critical infrastructure. Accordingly, significant coordination and outreach with those businesses will be required.

h) Federal and State response and recovery operations will be coordinated to ensure effective mobilization of resources to the impacted areas in the jurisdiction.

II. RECOVERY PLANNING PRINCIPLES

A. Recovery Continuum

Response activities are characterized as those immediate efforts necessary to save lives, protect property, and protect public health and safety. Response activities begin at the time of the incident and generally conclude when immediate threats have been eliminated, public safety agencies are no longer conducting widespread life-safety missions, mutual aid resources return to their respective jurisdictions, and displaced individuals and families have been sheltered.

Recovery activities may be initiated concurrently with or shortly after the commencement of response operations, even while immediate life-saving activities are in progress. See Table 2 for a comparison of response and recovery activities.

Table 2: General Comparison of Response and Recovery[10]

	Response	Short-Term Recovery	Intermediate/Long-Term Recovery
Incident contained?	No	Mostly or completely	Yes
Life-safety issues	Widespread concern	Remain a primary concern in some functional areas	No longer a widespread concern
Overall goals	Contain the incident and protect life safety	Provide interim support to people and businesses	Get the community to a "new normal"
Duration after the incident	A few days or at most weeks	Weeks or months	Months into years

B. Emergency Function/Emergency Support Function to Recovery Support Transition

As life-saving and life-sustaining requirements are met, recovery needs and issues will assume greater priority. The Federal Disaster Recovery Coordinator (FDRC) and RSF structure will coexist, interact and, when appropriate, build upon the ESF organizational structure and resources.

While they coexist, their relationship is primarily defined by information sharing and coordination of related activities. These activities will extend beyond the EFs/ESFs to other response and stabilization efforts. Information shared will support advance assessment teams and the development of mission scoping assessment reports (to be discussed later in more detail).

Table 3 provides an example of how relationships at the Federal level may develop between and among EFs/ESFs and RSFs. It is essential for RSFs

[10] Federal Emergency Management Agency. (2011). *National Disaster Recovery Framework*. Washington, DC

to connect with relevant EFs/ESFs to ensure information sharing and effective coordination. In practice, the many factors unique to each disaster and the stage of response and recovery operations will dictate the coordination demands between EFs/ESFs and RSFs. As EF/ESF mission objectives are met and begin to demobilize, ESF operations will integrate with RSF operations.

Table 3: Relationship between Emergency Support Functions and Recovery Support Functions

	Infrastructure Support RSF	Economic RSF	Housing Recovery RSF	Health and Social Services RSF	Community Planning and Capacity Building RSF	Natural and Cultural Resources RSF
ESF #1: Transportation	X	X				
ESF #2: Communications	X					
ESF #3: Public Works and Engineering	X	X				
ESF #4: Firefighting						
ESF #5: Emergency Management					X	
ESF #6: Mass Care, Emergency Assistance, Housing, and Human Services			X	X		
ESF #7: Logistics Management and Resource Support						
ESF #8: Public Health and Medical Services				X		
ESF #9: Search and Rescue						
ESF #10: Oil and Hazardous Materials Response						X
ESF #11: Agricultural and Natural Resources		X			X	X
ESF #12: Energy	X	X				
ESF #13: Public Safety and Security						
ESF #14: Long-Term Community Recovery	X	X	X	X	X	X

	Infrastructure Support RSF	Economic RSF	Housing Recovery RSF	Health and Social Services RSF	Community Planning and Capacity Building RSF	Natural and Cultural Resources RSF
ESF #15: External Affairs	X	X	X	X	X	X

There are milestones that may signal the shift from response to recovery and an increased demand for coordination and information sharing. Potential signals include EF/ESF demobilization, State initiation of its recovery plan or program, the State's announcement that its recovery has begun, when the State sets up its own recovery organizations, and upon determination that the recovery needs of impacted communities exceeds their internal capabilities.

The FDRC will monitor response operations and offer advice when those operations may have impact on recovery. The FDRC is responsible for establishing coordination protocols and liaisons with the relevant EFs/ESFs.

C. Core Planning Principles from the National Disaster Recovery Framework[11]

1. Individual and Family Empowerment

   A successful recovery is defined by the ability of individuals and families to rebound from their losses in a manner that sustains their physical, emotional, social, and economic well-being. The restoration of infrastructure systems and services is critical during recovery. It is vital that all individuals who make up the community are provided with the tools to access and use a continuum of care that addresses both the physical losses sustained and the psychological and emotional trauma experienced.

2. Local Leadership

   Successful recovery requires informed and coordinated leadership throughout all levels of government, sectors of society, and phases of the recovery process. It recognizes that local, State, and Tribal governments have primary responsibility for the recovery of their communities and play the lead role in planning for and managing all aspects of community recovery.

3. Preparedness Recovery Planning

   The speed and success of recovery can be greatly enhanced by establishment of the process and protocols prior to a disaster for coordinated post-disaster recovery planning and implementation. All stakeholders should be involved to ensure a coordinated and

[11] Federal Emergency Management Agency. (2011). *National Disaster Recovery Framework*. Washington, DC.

comprehensive planning process, and develop relationships that increase post-disaster collaboration and unified decision making.

a) An important objective of preparedness recovery planning is to take actions that will significantly reduce disaster impacts through disaster-resilient building practices.

b) Legislative policy priorities should be established and maintained to address recovery and reconstruction from a major disaster. Identify, prioritize, sponsor, and support legislation needed to implement the recovery plan. For example, the California Integrated Waste Management Act requires recycling or reuse of 50 percent of debris. Ensuring flexibility is available pre-disaster can help ensure repair and reconstruction can take place rapidly to retain community populations.

4. Partnerships and Inclusiveness

Partnerships and inclusiveness are vital for ensuring that all voices are heard from all parties involved in disaster recovery and that all available resources are brought to the table. This is especially critical at the community level where nongovernmental partners in the private and nonprofit sectors play a critical role in meeting local needs. Inclusiveness in the recovery process includes individuals with disabilities and others with access and functional needs, advocates for children, older adults, and members of underserved populations.[12] Sensitivity and respect for social and cultural diversity must be maintained at all times. Compliance with equal opportunity and civil rights laws must also be upheld.

5. Public Information

Clear, consistent, culturally appropriate, accessible, and frequent communication initiatives promote successful public information outcomes. Public information messaging helps manage expectations throughout the recovery process and supports the development of local, State, and Tribal government communications plans. This ensures stakeholders have a clear understanding of available assistance and their roles and responsibilities; makes clear the actual pace, requirements, and time needed to achieve recovery; and includes information and referral help lines and websites for recovery resources.

6. Unity of Effort

[12] The recovery efforts from Hurricane Katrina in the Broadmoor neighborhood serve as an example of this process successfully being implemented. See: Wilke, S. (2010–2011). *A Katrina 5th anniversary success story: Broadmoor*. Cambridge, MA: Belfer Center for Science and International Affairs. http://belfercenter.ksg.harvard.edu/publication/20487/katrina_5th_anniversary_success_story.html?breadcrumb=%2Fproject%2F54%2Fbroadmoor_project. Accessed on July 11, 2012.

A successful recovery process requires unity of effort, which respects the authority and expertise of each participating organization while coordinating support of common recovery objectives. Common objectives are built upon consensus and a transparent and inclusive planning process with clear metrics to measure progress.

7. Timeliness and Flexibility

   A successful recovery process upholds the value of timeliness and flexibility in coordinating and efficiently conducting recovery activities and delivering assistance. The process strategically sequences recovery decisions and promotes coordination; addresses potential conflicts; builds confidence and ownership of the recovery process among all stakeholders; and ensures recovery plans, programs, policies, and practices are adaptable to meet unforeseen, unmet, and evolving recovery needs.

8. Resilience and Sustainability

   A successful recovery process promotes practices that minimize the community's risk to all hazards and strengthens its ability to withstand and recover from future disasters, which constitutes a community's resiliency. A successful recovery process engages in a rigorous assessment and understanding of risks and vulnerabilities that might endanger the community or pose additional recovery challenges.

9. Psychological and Emotional Recovery

   A successful recovery process addresses the full range of psychological and emotional needs of the community as it recovers from the disaster through the provision of support, counseling, screening, and treatment when needed.

D. Factors for Recovery Success

The NDRF indicates that the following are factors that contribute to a successful recovery:[13]

1. Effective decision making and coordination
2. Integration of community recovery planning processes
3. Collaborative program and project management
4. Proactive community engagement, participation, and awareness
5. Well-administered financial acquisition
6. Organizational flexibility
7. Resilient rebuilding

[13] Federal Emergency Management Agency. (2011). *National Disaster Recovery Framework*. Washington, DC.

E. Recovery Metrics

Identifying, developing, and implementing metrics is important to measure and evaluate recovery activities. This process entails identifying and outlining the expected end state or requirements of elected officials, leadership, and the public. Then appropriate measurements toward achieving those end-states are developed and used as the criteria by which to evaluate process. The NDRF suggests three options:[14]

1. Baseline impact assessment, which provides a basis to define known community recovery issues to help understand the extent and dimensions of disaster impacts to chart a path to a realistic recovery end state. For example, a baseline impact assessment could identify that 5,000 families have been displaced and require new housing.
2. Desired outcome, which focuses on recovery impacts and overall results, not just a target number (e.g., number of families in permanent housing versus number of housing units constructed). For example, the desired outcome would be that the 5,000 families would be provided permanent housing, within 10 miles of their previous residences.
3. Cross-sector assessment, which tracks progress across all sectors, including housing, environmental, business, employment, infrastructure, access to essential health and social services, and overall community accessibility. For example, the 5,000 families displaced may also hold current jobs in essential services to recovery of businesses and infrastructure; rely on community health clinics; have a significant number of children that need educational facilities, and a percentage of which have access and functional needs.

All three options could be used together or separately, and all help planners consider different intricacies of the recovery process, and how to account for the progress being made in pursuing the desired end state.

F. Planning Process

This section, summarized from Comprehensive Preparedness Guide (CPG) 101, describes an approach for planning that is consistent with processes already familiar to most planners.[15] Although the specifics of CPG 101 are response-oriented, the general planning process is equally applicable to recovery planning. The goal is to make the planning process routine across all phases of emergency management. The process applies at all levels of government and allows private entities and NGOs to integrate with government planning efforts. The planning process that

[14] Ibid.
[15] Federal Emergency Management Agency. (2010). *Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101*, version 2.0. Washington, DC.

follows is flexible and allows communities to adapt it to varying characteristics and situations. Small communities can follow just the steps that are appropriate to their size, known risks, and available planning resources. At each step in the planning process, jurisdictions should consider the impact of the decisions made on training, exercises, equipment, and other requirements.

A good recovery plan can be defined as one that establishes a recovery task force and leading agency, lets stakeholders know their roles in disaster recovery, and identifies the recovery-financing program for which residents may be eligible. In addition, it informs people where recovery resources can be obtained, establishes agreement about long-term recovery goals, and integrates mitigation policy into the recovery process.

The community effort should be a collaboration between representative community members designated within a recovery committee and local, State, and Federal governments to support this committee.[16] The recovery committee oversees day-to-day operational activities of recovery with the support of government resources. Community stakeholders should periodically review the priorities and preferences identified by their community with a view toward a reconstruction with mitigation considerations beyond restoration or replacement. This may involve improvements or enhancements during reconstruction that are consistent with new community priorities and needs and not necessarily rebuilding. When developing recovery plans during the event, the coordinating body will serve as the leading force to ensure all possibilities are considered to:

1. Ensure grant applications for reimbursement and recovery projects are applied for on a timely basis and, when, possible that the projects include partnered projects between two or more agencies and mitigation projects for pre-disaster and disaster-caused hazards.
2. If possible, increase the functions' capacity and operations.
3. Expand the core group to ultimately include partners from applicable public, private, and nonprofit agencies as well as local, grass-roots, and religious organizations along with a well-represented contingent of impacted area citizens.
4. Efficiently and as quickly as possible transition from continuity operations back to normal operations.
5. Remain involved to ensure recovery plans are carried out to full completion.

[16] The recovery efforts from Hurricane Katrina in the Broadmoor neighborhood serve as an example of this process successfully being implemented. See: Wilke, S. (2010–2011). *A Katrina 5th anniversary success story: Broadmoor*. Cambridge, MA: Belfer Center for Science and International Affairs. http://belfercenter.ksg.harvard.edu/publication/20487/katrina_5th_anniversary_success_story.html?breadcrumb=%2Fproject%2F54%2Fbroadmoor_project. Accessed on July 11, 2012.

These items should be considered as the planning process begins.

Step 1: Form a Collaborative Planning Team

Experience and lessons learned indicate that planning is best performed by a team. Using a team or group approach helps organizations define the role they will play during recovery. Case studies and research reinforce this concept by pointing out that the common thread found in successful plan implementation is that participating organizations have understood and accepted their roles. In addition, members of the planning team should be able to understand and accept the roles of other departments and agencies. This approach helps establish a planning routine, so that processes followed before an incident occurs are the same as those used during and following an incident.

Step 2: Understand the Situation

Planners should start the problem-solving process by conducting research and analysis to understand the situation of the jurisdiction. The situation sections helps define the environment in which recovery operations will occur and identifies trends or indicators that will assist planners in determining the type of resources and support they will need during the recovery process. For example, if the jurisdiction identifies a large population that is renting their home, this could increase the need to provide rental assistance or quickly identify temporary housing options.

The first step of research focuses on gathering information about the jurisdiction's planning framework, potential risks, resource base, demographics, household pet and service animal population, and geographic characteristics that could affect recovery operations. Jurisdictions' hazard mitigation plans are an excellent resource for this step, as they are required to identify, catalog, and analyze all natural hazards that have the ability to impact the specified community. Jurisdictions should take additional steps to include human-caused and technological hazards.

The planning team should make extensive use of existing information about the jurisdiction. For example, the local planning and zoning commission or department may have extensive demographic, land use, building stock, and similar data. Building inspection offices maintain data on the structural integrity of buildings, codes in effect at time of construction, and the hazard effects that a code addresses. Local public works (or civil engineering) departments and utilities are sources for information on potential damage to and restoration time for the critical infrastructures threatened by hazard effects. The chamber of commerce may offer a perspective on damage to businesses and general economic loss.

Step 3: Determine Goals and Objectives

It will be important to maintain recovery objectives, goals, and targeted timelines by which key milestones in the recovery effort can be documented. Recovery goals may originate from essential functions identified in Continuity of Operations Plans (COOPs) and Continuity of Government (COG) planning but will continually evolve and change over the duration of recovery. Goals and objectives must be carefully crafted to ensure they support accomplishing the plan mission and recovery priorities. They must also clearly indicate the desired result or end-state they are designed to yield. This approach enables unity of effort and consistency of purpose among the multiple groups and activities involved in executing the plan.

a) Goals are broad, general statements that indicate the intended solution to problems identified by planners during the previous step. They are what personnel and equipment resources are supposed to achieve. They help identify when major elements of the recovery are complete and when the operation is successful. An example goal could be to provide housing to all of the displaced population within 6 months.

b) Objectives are more specific and identifiable actions carried out during recovery. They lead to achieving recovery goals and determining the actions that participants in recovery must accomplish. Translating these objectives into activities, implementing procedures, or operating procedures by responsible organizations is part of planning. As goals and objectives are set, and activities commence, planners may identify more requirements or changing priorities that will further refine the development of courses of action as recovery progresses. Sample objectives based on the above goal could include identifying current residences that could be inhabitable with minor repairs, identifying short-term housing options and assigning displaced residents to facilities, and determining plans for populations who need housing beyond a few months.

Step 4: Plan Development

This step is a process of generating, comparing, and selecting possible solutions for achieving the goals and objectives identified in Step 3. For each recovery task, some basic information is needed. Planners correctly identify a task when they can provide the following information.

a) Define the action

b) Identify the responsible agencies or organizations

c) Outline the timeline for completing the action

d) Determine how long the action will take and if there are any mandates or requirements for fulfilling it

e) Identify what tasks have to occur before the action can be taken and what tasks are waiting to be done until this task is completed

f) Determine the personnel or resources to complete the task

A sample task based on the above goal and objectives could be to assess residences with minor to moderate damage to determine repairs needed. The local housing department or building and safety officials would likely be responsible. They could provide an estimate of how many houses each staff could do in a day and determine how long it would take to complete them all. To complete this task, they would need an inventory of all residence classified as having minor or moderate damage. Once the assessment was complete, they could work with homeowners to take the necessary actions to make the houses habitable. They would then identify everyone who could be committed to the task and the assessment tools required to finish it.

Step 5: Plan Preparation, Review, and Approval

a) Write the Plan

The planning team develops a rough draft of the basic plan, annexes, or other parts of the plan as appropriate. The recorded results from Step 4 provide an outline for the rough draft. As the planning team works through successive drafts, members add necessary tables, charts, and other graphics. The planning team prepares and circulates a final draft to obtain the comments of organizations that have responsibilities for implementing the plan.

b) Review the Plan

Commonly used criteria can help decision makers determine the effectiveness and efficiency of plans. These measures include adequacy, feasibility, and acceptability. Decision makers directly involved in planning can employ these criteria, along with their understanding of plan requirements, not only to determine a plan's effectiveness and efficiency but also to assess risks and define costs. Some types of analysis, such as a determination of acceptability, are largely intuitive. In this case, decision makers apply their experience, judgment, intuition, situational awareness, and discretion. Other analyses, such as a determination of feasibility, should be rigorous and standardized to minimize subjectivity and preclude oversights.

c) Approve and Disseminate the Plan

Once the plan has been validated, the planner should present the plan to the appropriate elected officials and obtain official promulgation of the plan. Obtaining the senior official's approval through a formal promulgation documentation process is vital to gain the widest acceptance possible for the plan. It is also important to establish the authority required for changes and modifications to the plan. Once the senior official grants approval, the planner should arrange to distribute the plan and maintain a record of the people and organizations that received a copy (or copies) of the plan.

Step 6: Plan Implementation and Maintenance

a) Training

After developing a plan, it must be disseminated and managers must be required to train their personnel so they have the knowledge, skills, and abilities needed to perform the tasks identified in the plan. Training will identify additional necessary technical assistance or subject-matter expertise. Personnel should also be trained on the organization-specific procedures necessary to support those plan tasks.

In addition to training personnel and staff about county recovery plan operations, it is also imperative that all recovery staff and participants be trained in and understand the California SEMS.

It is important to include and educate elected officials in disaster recovery planning process and procedures. It is also important to remember to educate newly elected officials when local leadership staff changes. Roles, procedures, and priorities for officials change following a disaster and often require a different combination of skills than what officials are used to on a day-to-day basis. Job functions change, workloads increase dramatically, and the work involves new players, new terminology, and new organizational structures, such as Incident Command or the California SEMS. There will be increased public scrutiny and political pressure as officials try to maintain the daily functions of government.

b) Exercise and Validate the Plan

Evaluating the effectiveness of plans involves a combination of exercises and real-world incidents to determine whether the goals, objectives, decisions, actions, and timing outlined in the plan led to a successful recovery. Exercises provide

an essential means to validate recovery plans and procedures and evaluate skills and knowledge of recovery personnel.

c) Review, Revise, and Maintain the Plan

This step closes the loop in the planning process. It focuses on adding the information gained by exercising the plan to the research collected in Step 2 and starting the planning cycle over again. It is recommended that a recovery plan be updated annually, with a major update every 2–4 years. It might also be considered by the jurisdiction to coordinate the recovery plan update with the updating schedule of other county plans. This will ensure personnel and stakeholder participation while maintaining consistency across all documents.

The following components may be addressed on an annual basis:

(1) Review stakeholder membership and update as needed

(2) Document actions that have been completed

(3) Include new actions as recommended by the stakeholder group

(4) Determine if priorities need readjusting, review the actions previously scheduled to be implemented over the next year, and adjust implementation timeframe of actions accordingly

(5) Seek resources and funding for actions scheduled to be implemented in the next 2 years

(6) Compile a report of accomplishments for presentation to the appropriate local officials

The following components may be included in the 2- to 4-year major plan updates:

(1) Research new guidance on post-disaster redevelopment or new lessons learned

(2) Update vulnerability analysis if any new data are available, if necessary

(3) Update institutional capacity and plans assessments

(4) Research and update potential funding sources

(5) Review and revise issues, if necessary

(6) Reprioritize issues based on current assessments

(7) Update actions and add more if applicable

G. Other Planning Considerations

1. Jurisdictions should consider adding emergency support clauses to contracts that could serve a response or recovery role that would enable the jurisdiction to use the business or organization and their resources during an event.

2. Workforce availability and systems should be specifically identified in preparedness and recovery planning and include the following:

   a) Union and non-union workers and contractors

   b) Timekeeping and paycheck systems

   c) Properly licensed, trained, and certified staff, including requirements listed by position

   d) Organizational preparedness to ensure staff come to work

   e) Emergency Management Assistance Compact (EMAC) mutual aid for staffing

   f) Availability of retired employees

3. It is important to identify, as soon as possible, documentation requirements for receiving disaster assistance and properly accounting for it. Accurate and thorough completion of forms is a vital part of the recovery process.

4. Leadership should identify objectives, goals, and timelines for recovery during the planning stage. Timelines for recovery should be based on requirements and mandates placed on the process in cooperation with the impacts of the disaster. These timelines should be developed by, or in close cooperation with, the entity responsible for recovering and restoring, rebuilding, or repairing the impacted element. For example, timelines for power restoration should be coordinated with providers. While every incident is different, it is important to understand before the disaster what the goals will be and plan for and account for how they will be obtained. Even if an actual incident will likely be different or unpredictable, the process of planning in this manner will prepare all parties for whatever may occur.

5. Local jurisdictions should consider outreach and education to local communities, so that they understand that recovery in a catastrophic event will not likely result with populations returning to the same setting and lifestyle. There will be a “new normal,” and communities have the opportunity to shift what it will be, include, and look like.

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III. CRITICAL COORDINATION POINTS

A critical coordination point is a site or function that could affect those impacted by the disaster as response or recovery operations are underway. The recovery planning team should consider these sites or functions, the roles they play, and the need to integrate them into recovery activities.

A. Transition from Response to Recovery Operations

As soon as practical following a major emergency, a Recovery Plan should be implemented. The Recovery Plan may have multiple components but will include coordination with State and Federal officials and support of the local jurisdiction's efforts to identify, obtain, implement, and publicize available assistance programs for the public, private, and nonprofit sectors.

During the transition from response to recovery, the local jurisdiction may not be able to immediately replace response staff with those having specific recovery expertise. The jurisdiction will need to identify staff with the inspection, planning, and administrative skills necessary for recovery and return emergency response staff to their public safety duties as soon as possible. It is the responsibility of the outgoing staff to ensure smooth transition from response to recovery and full staffing of all necessary positions is maintained.

The incident command structure of planning, operations, logistics, and finance and administration should be established and operational for both response and recovery to oversee the transition from EFs/ESFs and RSFs.

B. Recovery Support Function Coordination

Specific internal critical coordination points have been suggested by local recovery stakeholders and include those listed in Table 4. These coordination points may occur in discreet phases of recovery or continually for the duration of certain recovery processes. This will better coordinate shared responsibilities and reduce interruptions in recovery.

In one example, the Health and Social Services RSF should coordinate with the Infrastructure RSF regarding the determination of extent of damage to public water systems. As another example, the Health and Social Services RSF and the Natural and Cultural Resources RSF should coordinate regarding:

1. Health risks and strategies regarding hazardous materials, waste, water, food and air quality, and vector control
2. Identification of facilities that have public health permits and internal coordination to expedite the monitoring process
3. Notification and guidance to the public on health concerns with potable water supply

4. Identification and mitigation of potential recovery obstacles during the response phase (also coordination with the Infrastructure RSF)

In addition, all RSFs need to coordinate the prioritization of vendors for restoration and recovery and the use of volunteers and NGOs.

Table 4: Internal Critical Coordination Points

	Comm	Eco	HSS	Hous	Infra	NCR
Permitting for land use	**L**			S		
Construction permits	**L**	S	S	S	S	S
Business recovery funding	S	**L**				
Disaster insurance	S	**L**		S		
Business licensure	S	**L**				
Business recovery centers	S	**L**	S			
Health facilities inspection	S	S	**L**		S	S
Vector control			**L**			S
Public health/environmental health (potable water, food, shelter, air quality)			**L**		S	S
Public health surveillance/disease control/vital statistics (animals and humans)	S		**L**			S
Permitting and reconstruction of health facilities	S	S	**L**		S	S
Mental/behavioral health services	S		**L**			
Medical services including mass surge	S		**L**		S	
Social services	S		**L**	S		
Child services and education	S		**L**	S	S	S
Services for older adults	S		**L**	S		
Animal services, care and management	S		**L**	S		S
Mass Fatality Services	S		**L**		S	S
Reunification of displaced populations	S		**L**			
Workforce support	S	S	**L**	S		
Shelter, food, and water	S		**L**	S	S	
Safety assessment (residential)				**L**	S	
Permitting for residential dwellings			S	**L**	S	
Sanitation/public works			S		**L**	S
Debris management, sorting of solid and liquid waste, removal, clearance, staging/storage, processing/transfer, burning, recycling or other disposition			S		**L**	
Agriculture and food		S	S		**L**	

	Comm	Eco	HSS	Hous	Infra	NCR
Energy, power and utilities generation, sources and distribution (fuel, diesel, gasoline, compressed natural gas, oil, etc.)	S	S			**L**	S
Water supply, treatment, and distribution			S		**L**	S
Storm water drainage			S		**L**	S
Flood control surveying, mitigation, and restoration					**L**	S
Wastewater usage, drainage, and disposal			S		**L**	S
Telecommunications		S			**L**	
Transportation, roads, bridges, airports, mass transit, paratransit, ports and harbors	S	S	S		**L**	
Government facilities	S		S		**L**	S
Educational facilities	S		S		**L**	
Sanitation			S		**L**	S
Emergency services	S		S		**L**	
Safety and security					**L**	
Financial infrastructure		S			**L**	
Commercial infrastructure			S		**L**	
Nuclear reactors, materials, and waste			S		**L**	S
Defense industrial base					**L**	
Postage and shipping	S	S			**L**	
Safety assessment/Building safety inspection (non-residential)			S		**L**	
Healthcare infrastructure	S	S	S		**L**	
Demolition			S		S	**L**
Waste management, solid and liquid waste, and hazardous Waste disposal			S		S	**L**
Threatened and endangered species and their habitats			S		S	**L**
Surface water (lakes, rivers, intertidal areas, and wetlands)			S		S	**L**
Floodplain management			S		S	**L**
Air quality			S		S	**L**
Groundwater quality			S		S	**L**
Historical preservation	S	S		S	S	**L**
Key: L (Lead Agency/Co-Lead), S (Supporting Agency)						

D. Regional Partners

Good intergovernmental relations and communication are a vital part of recovery for these reasons:

1. Resources available from other jurisdictions may be essential to the jurisdiction's recovery.
2. Coordinated, consistent, and timely public information increases public confidence, credibility, and faith during a period of confusion and instability.
3. The jurisdiction has responsibility to provide support to impacted jurisdictional departments and agencies and act as the communication and coordination point for recovery issues.

Coordination with external jurisdictions and partners can occur in a variety of ways, including:

1. Sharing information through periodic conference calls, situation reports, briefings, and other verbal and electronic means of communication
2. Exchanging liaison officers with other jurisdictions to ensure the sharing of information
3. Exchanging authorized agency representatives who are empowered to make decisions and commit resources with other jurisdictions
4. Coordination between long-term recovery committees
5. Establishing joint coordination entities such as multi-agency coordination centers
6. Establishing joint operations through unified and area commands or other command structures

IV. RECOVERY CONCEPT OF OPERATIONS

A. General Information

As soon as possible, the California Office of Emergency Services (Cal OES) Director, operating through the State Coordinating Officer, will bring together representatives of city, county, State and Federal agencies and the American Red Cross to coordinate assistance programs and establish support priorities. FEMA will establish teleregistration to initiate the process of receiving local, State and recovery assistance.

Cal OES and FEMA may also open Disaster Recovery Centers (DRCs) staffed by representatives of local, State, and Federal government agencies, private service organizations, and others as appropriate. DRCs provide a "one-stop" service where the affected population can obtain information necessary to apply for recovery assistance.

Once the Response Phase is over and life-safety issues have been stabilized, a Recovery Coordination Center in the jurisdictional emergency operations center (EOC) will coordinate initial recovery operations of jurisdictional departments and provide information, liaison, and recovery coordination between State and Federal agencies, impacted cities, and other agencies that are part of the County's emergency organization.

One of the primary issues during recovery will be resource prioritization and coordination. All operations should occur in accordance with SEMS guidance and direction for intergovernmental cooperation.[17] Planners should work with RSF disciplines and functions to identify the resources that will be the highest priority after an incident.

Depending on the nature and severity of the emergency, the jurisdiction may activate an Office of Recovery to address the mid- and long-term recovery of jurisdiction government. The Office of Recovery will develop and implement a strategic plan for restoration of government services to the public by:

1. Coordinating and removing barriers to physical restoration of government facilities and infrastructure
2. Identifying and assisting departments to aggressively seek all available funding sources (legislation, grants, claims reimbursements, etc.)
3. Making recommendations on restoration priorities
4. Coordinating and assisting to remove barriers to social recovery of the affected population

[17] For further information regarding intergovernmental coordination for the State of California, see California Code of Regulations, Title 19. Public Safety, Division 2. Office of Emergency Management, Chapter 1. SEMS. Section 2409, part 1, Sections C & D.

5. Coordinating and assisting to remove barriers to economic development, redevelopment, and new development

Recovery is often divided into several phases to emphasize transitions and allow planners to understand the differences in approaches along the continuum. The phases are preparedness, post-event short-term, post-event intermediate, and post-event long-term.

B. Multi-Agency Coordination

Multi-agency coordination (MAC) is a process that allows multiple agencies and jurisdictions to work together more efficiently and effectively. MAC occurs on a regular basis whenever personnel from different agencies interact for preparedness, mitigation, response and recovery activities. MAC may be pre-planned with established protocols or occur on an ad hoc basis, depending on nature and scope of the emergency. Cooperating agencies that pre-establish operational procedures and protocols in advance can enhance coordination during emergencies. This can identify and mitigate potential recovery obstacles after the response phase.

Primary functions supported by a MAC system include situation assessment, information sharing, incident prioritization and resource allocation, and support of interagency activities.

C. Preparedness

Preparedness includes all preparedness activities: plans being written, partnerships formed, regulatory and legislative actions pursued, emergency actions outlined, etc. These are the actions that should be taken or considered in pre-disaster conditions to anticipate the challenges of disaster recovery and establish systems and resource that will mitigate impact or enable transition from one phase of recovery to the next. This phase can be very effective in shaping the speed, direction, and efficiency of the recovery process. It is most hindered by not knowing the specific incident and consequences that will emerge once the damage is determined. Jurisdictions will find it beneficial to keep current inventories of resources and capabilities, by type and quantity, along with contact information where possible. Establishing a pre-disaster baseline of county resources will be critical for the county to determine its resource gaps and unmet needs that may be met by mutual aid with adjacent counties and the State or by the Federal government.

D. Short-Term Recovery

Short-term recovery is defined as “any activity that will return vital life-support systems and critical infrastructure to minimum operating standards.”[18] This entails periods ranging from a few days to 6 months

[18] Fairfax County Office of Emergency Management. (2011). *Fairfax County Pre-Disaster Recovery Plan (Draft)*. Fairfax, VA.

following a disaster. The key objectives of short-term recovery are to restore the community to a functioning if not pre-disaster state. There will be pressure to resume essential services and pay prompt attention to residents' needs and requests. Emergency repairs and minor reconstruction may occur during this period.

In some cases, plans may include secondary service agencies that can be brought in (such as through mutual aid) to provide services during a prolonged disruption. Continuity of operations, business continuity, and continuity of government plans are often developed to enable short-term recovery priorities. Generally, activities include preliminary damage assessment/safety assessment, debris removal, temporary relocation of residents and businesses, immediate restoration of services, temporary financial relief to the affected population, immediate abatement of extreme hazards, and crisis counseling to the affected population.

Short-term recovery typically overlaps with both emergency response and intermediate recovery.

During short-term recovery, emergency actions may be taken to address specific conditions, such as suspension of evictions, requests for utilities to provide bill relief, waivers of permit fees for damage repairs, the need for temporary housing and business space, changed or altered traffic patterns, and extended and expanded mass care services.

E. Intermediate Recovery

In the intermediate phase of recovery, the most vital services have been restored, but life would not be characterized as "back to normal." This period, which can range from months to years, is a time in which large numbers of displaced persons may still be living in temporary housing; businesses are once again open, but they may be operating from temporary facilities; transportation arteries may be open, but they are not fully restored; government, private and nonprofit sectors, and individuals may have applied for grants and loans but have not received the money; etc. Behavioral health services become paramount during this time as the affected population experiences the stresses related to coping with the ongoing disaster effects.

Intermediate recovery typically overlaps with both short-term and long-term recovery.

F. Long-Term Recovery

Long-term recovery is the process of returning all aspects of the community to "normal" functioning conditions, and includes reconstruction of damaged or destroyed social, economic, natural, and built environments. The overarching focus of long-term recovery should be on building safely and wisely, reducing future hazards, and optimizing community improvements. All efforts should guide the impacted community toward self-sufficiency, sustainability, and resilience. Long-

term recovery and reconstruction takes many months to many years to accomplish. Tasks involve reconstruction of damaged buildings; permanent reestablishment of public, private, and nonprofit services; economic rebound; long-range planning for hazard mitigation and land use; and treatment of physical and psychological injuries.

G. Activation

Implementation of your recovery plan and operations should be considered as soon as an incident occurs. Recovery activities may be initiated concurrently with or shortly after the commencement of response operations, even while immediate life-saving activities are in progress.

The determination to formally transition to recovery should be made by chief elected officials and emergency response and recovery leadership, using the following criteria as a guide:

1. Immediate life-safety concerns associated with a disaster incident have been contained.
2. The demand for normal and emergency services on governmental and/or nongovernmental entities exceeds the capability of these entities because of ongoing or unmet needs from the response phase or because of new needs.
3. The situation is expected to persist for an extended period of time.
4. The jurisdiction has declared a local state of emergency, requested the Governor declare a state of emergency, and requested the President for a declaration of emergency or disaster under the Stafford Act.
5. The above activation criteria notwithstanding, certain recovery concepts and organizing principles outlined may be applicable for incidents of varying scale and scope.

H. Transition from Response to Recovery Operations

There are ongoing activities that will continue from response into recovery operations. These should be properly considered and evaluate to maintain and continue the mission.

1. Perimeter Control

This task will need to be continued beyond the initial response phase depending on the level of damage and type of impact. Planners should consider the personnel and resources, either active or passive, which will be required to fulfill this. For example, protecting the population from hazardous situations or securing critical infrastructure.

2. Re-entry

   The reentry phase commences after a disaster has passed and officials deem it safe for residents to return to their impacted communities.

3. Case Management

   This is the transition from mass care to recovery/casework.

4. Safety Assessments

   It is the responsibility of the local jurisdiction to conduct safety assessments and determine if the extent of damage is beyond the capabilities of local resources.

   Requests for assistance should be made as soon as feasibly possible. Based on the initial damage estimate (IDE), a Preliminary Damage Assessment (PDA) will be used when pursuing Federal assistance to determine the impact and magnitude of damage and the resulting unmet needs of local agencies following a disaster. The PDA will consist of a team of local, State, and Federal representatives.

   Once a PDA is conducted, Cal OES uses the information to determine whether further assistance can be requested. In all disasters, Cal OES Individual Assistance staff can assist local representatives in identifying the need to establish a Local Assistance Center (LAC) and specific resources to assist the community in its recovery efforts.

5. Local Assistance Centers

   Local government may consider activating LACs to provide a centralized location for services and resource referrals for the unmet needs of the affected population. State funding may be available for eligible LAC operations.

   Historically, LACs have proven to be a key factor for a successful recovery. LAC characteristics generally include a resource facility for recovery information, services, and programs; community-based service facilities; management by local government; and staffing by NGOs or local, State, and Federal government, as appropriate.

As seen in the earthquake damage in Christchurch, New Zealand, in 2011, certain areas may have restricted entry for an extended time. The incident commander, in consultation with technical experts, should determine the level of access to damaged residences and businesses. This could include immediate return, delayed return once a more thorough assessment is done, limited return to gather keepsakes and necessities, or no return due to unsafe conditions.

6. Family Assistance Centers[19]

   Family Assistance Centers (FACs) provide two types of benefits for families of victims: information and certain services. The informative benefit includes notifying families of the status of the victim (e.g., whether the victim is a decedent, has been transported to a hospital, or is still missing). This also includes the provision of updates regarding incident recovery efforts.

   Services provided at FACs include providing emotional support, spiritual care, and health and social services.

7. Disaster Recovery Centers

   DRCs facilitate recovery for individuals and businesses and are operated generally under the umbrella of FEMA's Individual Assistance programs. The nature and requirements of a particular disaster will determine which services are provided through the DRC and how long they will be provided.

8. Business Recovery Centers

   Business recovery centers are one-stop shops set up to provide local, State, and Federal resources and services for businesses after a catastrophic event.

[19] Los Angeles County Operational Area. (2010). *Family Assistance Center Plan Development Project: Executive Summary*. http://constantassociates.com/wp-content/uploads/2011/10/FAC-Website-Exec-Sum.pdf. Accessed on July 30, 2012.

V. ROLES AND RESPONSIBILITIES

A. Organization

The NDRF strongly recommends that State governors and local government and Tribal leaders, as part of their disaster recovery plans, appoint Local Disaster Recovery Managers (LDRMs) and State/Tribal Disaster Recovery Coordinators (SDRCs/TDRCs) to lead disaster recovery activities for the jurisdiction.

In large-scale disasters and catastrophic incidents where a Federal role may be necessary, the SDRC and/or TDRC are the primary liaison to the FDRC. Depending on the severity of the incident and anticipated scope and duration of disaster recovery efforts, the SDRC may fill the Recovery Coordinator role under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). However, after large-scale disasters or catastrophic incidents, States are encouraged to create a separate position to ensure recovery activities are well managed while extended response and short-term recovery activities continue.

B. Local Recovery Organization

1. Jurisdictions should consider having a separate recovery manager or lead with the authority and backing equivalent to the Incident Commander in response.
2. Jurisdictions should also consider implementing a recovery incident command structure such as the one for response that identifies specific recovery branches and needs. For example, when considering infrastructure, building inspections and permits, utilities, transportation, demolition and debris, and other personnel may be required.
3. The formation of a coordinating body such as a working group that is representative of the stakeholders involved in the projects in recovery will be an essential first step for the community. This coordinating body may be a group of people that is organized prior to a major disaster event so that they already have developed a working relationship and are familiar with each other's recovery needs, or it may be a group that has been identified in the recovery plan by department and position. Tasks of this coordinating body during a major, presidentially declared disaster event requiring the activation of this Regional Recovery Plan include the following:
   a) Before a disaster, the group should meet to form relationships and contribute to drafting the post-disaster recovery plan and RSF annexes.
   b) After a disaster, one of the first actions of the coordinating body would be to request FEMA technical assistance in the form of the following:

(1) Long-term recovery planning via activation of ESF #14, Long-Term Community Recovery

(2) Development of impact analyses along with accompanying recommendations

(a) Data may be obtained through response and continuity staff

(b) If EOCs/departmental operations centers (DOCs) are still operational, data such as damage/safety assessments, financial, and workforce reports can be requested

(3) Recovery planning in terms of the activation of the six RSFs

C. State Recovery Organization

Within Cal OES, the Recovery Branch is responsible for managing disaster recovery and providing assistance to local governments and individuals impacted by disasters. The Recovery Branch ensures that State and Federal support are provided in an efficient and timely manner throughout the recovery process. It acts as the grantee for federally funded disaster assistance programs and as grantor for the California Disaster Assistance Act (CDAA) program and coordinates recovery assistance for individuals, businesses, and the agricultural community. The Recovery Branch provides technical support to reduce the costs and streamline the process of future recovery efforts. In addition, it ensures that proposed recovery projects are reviewed for environmental concerns and that historical preservation activities are considered.

In support of these responsibilities, the Recovery Branch performs extensive liaison activities with local, State, and Federal agencies; legislators; various voluntary and nonprofit organizations; and the public. It emphasizes recovery preparedness through the coordination of recovery planning efforts, the development of recovery training programs, and the involvement in emergency management exercises and drills.

State agencies that may have recovery roles include the following:

1. California Coastal Commission
2. California Department of Fish and Game
3. California Department of Housing and Community Development
4. California Department of Transportation (Caltrans)
5. California Department of Water Resources and State Commission on Dam Safety
6. California Office of Emergency Services
7. California Environmental Protection Agency

8. California Occupational Safety and Health Administration
9. California Seismic Safety Commission
10. Housing and Community Development Commission
11. Public Utilities Commission
12. Regional Water Quality Control Board
13. South Coast Air Quality Management District

D. Federal Recovery Organization

When a disaster exceeds the capacity of State and Tribal resources or affects Federal property, other areas of primary Federal jurisdiction, or national security interests, the Federal Government may use NDRF to engage necessary and available department and agency capabilities to support local recovery efforts when there is a Presidential Disaster Declaration.

The Federal Government's supporting role is especially important during the early weeks after a large-scale disaster or catastrophic incident when many local, State, and Tribal governments are overwhelmed with response and relief efforts. The duration and extent of Federal support is determined in part by the scale and enduring impacts of the disaster. The Federal Government's disaster recovery management and support systems must be scalable and adaptable so changes can be made quickly and effectively to meet the needs of the specific disaster.

The Federal Government also plays an important role in providing accessible information to the public and all stakeholders involved in recovery, including information about Federal grants and loans with potential applications to recovery. In coordination with local, State, and Tribal communicators, the Federal Government is responsible for ensuring that information is distributed as well as understood, so that the public, Congress, the private sector, and all stakeholders are informed and aware of the process and realistic expectations for recovery.

From the Federal perspective, a successful recovery optimizes the return on Federal investment. This includes reducing future risk from hazards and increasing resilience while adopting courses of action consistent with national laws and policies. The Federal Government requires that all recipients of Federal assistance comply with civil rights obligations under Section 504 of the Rehabilitation Act, Title VI of the Civil Rights Act of 1964, and the Age Discrimination Act of 1975. Government agencies also play roles as employers and need to have their own plans to protect and assist their employees during emergencies.

While disaster-impacted jurisdictions must necessarily and immediately focus on emergency response activities, the decisions made very early after a disaster influence recovery. In large-scale disasters and catastrophic incidents where a Federal role may be necessary, the FDRC

is a focal point for incorporating recovery and mitigation considerations into the early decision-making processes. The FDRC monitors the impacts and results of such decisions and evaluates the need for additional assistance and adjustments where necessary and feasible throughout the recovery.

In these situations, the FDRC works as a deputy to the FCO for all matters concerning disaster recovery. The FDRC is responsible for facilitating disaster recovery coordination and collaboration among Federal, Tribal, State, and local governments; the private sector; and voluntary, faith-based, and community organizations. The FDRC collaborates with and supports the LDRM, the SDRC, and/or the TDRC to facilitate disaster recovery in the impacted State or Tribal area.

The responsibilities of the FDRC require an understanding of pre-disaster recovery planning as well as post-disaster recovery leadership and coordination. Since each community is unique in terms of its size, population, and challenges, the development of effective recovery efforts will need to be crafted to fit each individual region's risks and needs. Therefore, it will be extremely helpful to the success of an FDRC to have pre-established relationships with persons at the Federal, Tribal, State, and local levels and the private and nonprofit sectors.

In large-scale disasters and catastrophic incidents when it may be necessary to deploy the FDRC in partnership with the State, the FDRC's post-disaster responsibilities may include:

1. Developing a strategic approach for coordinating Federal assistance and policies
2. Working with the impacted community to establish relevant recovery measures
3. Promoting inclusiveness in recovery
4. Facilitating the development of a unified communications strategy
5. Coordinating Federal assistance to support community recovery planning
6. Working with the impacted community to incorporate mitigation and resilience-building measures into recovery plans and implementation
7. Coordinating RSF operations and activities (the FDRC consults with RSF field coordinators to conduct a recovery impact assessment and recommend activation of the appropriate RSFs, the objective being to focus Federal resources on the most pertinent recovery needs and to promote partnerships between the Federal Government and stakeholders at the local, State, and Tribal levels)

8. Facilitating Federal funding streams and solutions to assistance gaps and overlaps, the intent being to maximize the benefit from Federal funds that an impacted community is qualified to receive; help prevent recovery delays; resolve rule and regulatory conflicts to the extent possible; and help eliminate possible duplication of assistance in coordination with local, State, and Tribal recovery coordinators
9. Reinforcing the importance of compliance with Federal civil rights laws when using Federal funds

Federal agencies that may have a role in recovery include the following:

1. Federal Emergency Management Agency
2. Federal Highway Administration
3. U.S. Army Corp of Engineers
4. U.S. Department of Agriculture
5. U.S. Department of Commerce
6. U.S. Department of Health and Human Services
7. U.S. Department of Housing and Urban Development
8. U.S. Department of the Interior
9. U.S. Department of Justice
10. U.S. Department of Labor
11. U.S. Department of the Treasury
12. U.S. Small Business Administration

E. Nongovernmental Organizations[20]

The nonprofit sector plays a vital role in the overall recovery of impacted communities. Nonprofit entities include voluntary, faith-based, and community organizations; charities; foundations; philanthropic groups; professional associations; and academic institutions. The formidable value of the work of these stakeholders resides in pre-disaster community engagement, recovery planning, case management services, volunteer coordination, behavioral health and psychological and emotional support, technical assistance and training, and financial support, housing repair and construction that meets accessibility/universal design standards, and project implementation.

Many organizations originate from or create satellite locations in the impacted community to continue to mobilize support and provide services. Particularly in a large-scale or catastrophic disaster, they play a critical role in the implementation of an inclusive, locally led recovery organization

[20] Federal Emergency Management Agency. (2011). *National Disaster Recovery Framework*. Washington, DC.

and process during the transition as Federal and State recovery support recede and local leadership and community recovery organizations complete the mission.

Nonprofit organizations are also critical for ensuring participation and inclusion of all members of the community who may be at increased risk both pre- and post-disaster Many nonprofit entities act as advocates for or assistance providers to a wide range of members of the community, such as people with disabilities and others with access and functional needs, children, older adults, individuals with limited English proficiency, and other underserved populations. It is crucial that these individuals and families receive preparedness education and training, timely recovery information, participate in the recovery process and understand, and have access to resources to achieve recovery.

Typically, nongovernmental organizations are integrated into the EOC or existing command and control structure through the relevant voluntary organizations active in disaster (VOADs). Larger nonprofit organizations may be direct jurisdictional partners with seats in the EOC.

F. Private Sector[21]

The private sector plays a critical role in establishing public confidence immediately after a disaster. When the private sector is operational, the community recovers more quickly by retaining and providing jobs and a stable tax base. If local leadership and the business community work together before a disaster and develop a conceptual recovery plan, the public is more likely to be optimistic about the community's ability to recover post-disaster.

In addition, the private sector owns and operates the vast majority of the Nation's critical infrastructure, such as electric power and financial and telecommunications systems. These entities play a major role in the recovery of a community or region as a whole.

It is critical that disaster recovery officials recognize the importance of partnership and create coordination opportunities during pre-disaster planning with private sector leaders. The resources and capabilities of the private sector, including utilities, banks, and insurance companies, can play an important role in encouraging mitigation and creating greater resilience in a community. For example, local banks can create products to encourage individuals and businesses to be financially prepared for disasters and work with small businesses to develop business continuity plans. Insurance companies can educate community members on risks, reach out to underserved populations and work with local, State, and Tribal governments to find ways to provide coverage for families and businesses in the community.

[21] Ibid.

The private sector should, however, be integrated into the EOC or existing Command and Control structure to ensure that resources, personnel, and prioritization is properly coordinated.[22]

[22] Federal Emergency Management Agency. (2006). *Federal Emergency Management Agency Region VI Hurricane Preparedness Tabletop Exercise, 17–18 May 2006, After-Action Report*. Washington, DC. https://www.llis.dhs.gov/member/secure/detail.cfm?content_id=18700. Accessed September 1, 2012.

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VI. COMMUNITY PLANNING AND CAPACITY BUILDING RSF

A. Overview

The core recovery capability for community planning is the ability to effectively plan and implement disaster recovery activities, engage the whole community to achieve objectives, and increase resilience. *Community* can be described as an environment that includes and integrates all public, nongovernmental, and private-sector capabilities and resources for recovery. As defined by the National Preparedness Goal,[23] *resilience* is the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies.

The Community Planning and Capacity Building RSF unifies and coordinates expertise and assistance programs from across the Federal Government to aid in restoring and improving the ability of State, Tribal, and local governments to organize, plan, manage, and implement recovery. The RSF assists States in developing a pre- and post-disaster system of support for their communities, emphasizes integration of hazard mitigation throughout the continuum of pre- and post-disaster recovery planning and implementation, and serves as a forum for helping to integrate nongovernmental and private-sector resources into public-sector recovery planning processes.[24]

The formation of a coordinating body such as a working group that is representative of the stakeholders involved in the projects in recovery will be an essential first step for the community. This working group may be organized prior to a major disaster event so that its members already have developed a working relationship and are familiar with each other's recovery needs, or it may be identified in the recovery plan by department and position. Tasks of this working group during a disaster event should include the following:

- Ensuring grant applications for reimbursement and recovery projects are applied for on a timely basis and that the projects include, when possible, partnered projects between two or more agencies and mitigation projects for both pre-disaster and disaster-caused hazards
- Expanding the core group to ultimately include community partners from applicable public, private, and nonprofit agencies; local, grassroots, and religious organizations; and a well-represented contingent of impact-area citizens
- Requesting FEMA technical assistance as one of the first actions of the coordinating body. Examples of that technical assistance could include:

[23] U.S. Department of Homeland Security. (2011). *National Preparedness Goal*, 1st edition. Washington, DC.
[24] Definition from the Federal Emergency Management Agency *National Disaster Recovery Framework* Community Planning RSF informational sheet.

- Development of the impact analyses along with accompanying recommendations
  - Data may be obtained through response and continuity staff.
  - If EOCs/DOCs are still operational, data such as safety assessments/damage assessments, financial reports, and workforce reports can be requested.
- Long-term community recovery planning (activation of ESF #14)
- Recovery planning in terms of activation of the Community Planning and Capacity Building RSF

▪ Strategizing, advising, and developing recommended implementation actions

The community effort should be collaboration between representative community members designated within a recovery committee and local, State, and Federal governments to support this committee. The recovery committee oversees day-to-day operational activities of recovery with the support of government resources. Community stakeholders should periodically review the priorities and preferences identified by their community with a view toward recovery with mitigation considerations beyond restoration or replacement. This may involve improvements or enhancements during reconstruction that are consistent with new community priorities and needs. When developing recovery plans during the event, the working group will serve as the leading force to ensure all possibilities are considered to:

▪ Increase the function's capacity and operations, if possible

▪ Efficiently and as quickly as possible transition from continuity operations to normal operations

▪ Remain involved to ensure recovery plans are carried out to full completion

▪ Maximize recovery grants and programs available

▪ Have clear and open channels of communication with the community, including a variety of delivery methods and types of messages for mass communication during the processes of recovery such as:
  - Continual outreach and education to agencies to gain their investment and interest
  - Maintaining momentum of communication to public using all types of media outlets and accessible formats
  - Maintaining communication with policy makers and politicians
  - Effective use of social media (Twitter, Facebook, etc.) and daily newsletters

- Identifying and using natural social gathering points where information can be disseminated to the public whereby:
  - Specific questions and answers from the public can be received and addressed directly
  - Sharing of messages derived from and directed toward the community can be accomplished
  - Coordination and consistency of messaging with surrounding jurisdictions can be implemented

B. Structure, Roles, and Responsibilities

1. The committee will identify the needs of the affected population and the support services available. Agencies and organizations should be prepared to leverage resources and capabilities available to flexibly meet the identified needs. This could be nontraditional applications of staff time or use of available resources.

2. Community planners should become familiar with local, regional, and State planning resources, including professional expertise and assistance programs, especially within their local jurisdictions.

   a) Ensure that there is no duplication of effort by coordinating the needs and resources.

   b) Negotiate and determine which nonprofit organization plays what role and how that is communicated to the public.

   c) Establish and maintain temporary housing for displaced populations and temporary housing for workers employed in reconstruction projects.

3. Tasks and Responsible Agencies

   a) Unification and Coordination

      (1) Primary: NGOs, social services

      (2) Support: Community-based organizations, community emergency response team (CERT), emergency management

   b) Pre- and Post-Disaster Support Systems

      (1) Primary: Emergency management

      (2) Support: American Red Cross, CERT, Response Corps, crisis response teams

   c) Integration of Nongovernmental and Private-Sector Resources

      (1) Primary: Emergency management, NGOs, voluntary organizations such as local VOADs

(2) Support: Voluntary organizations, private-sector organizations, chambers of commerce

d) Community Planning and Capacity Building

(1) Primary: Planning departments

(2) Support: Private-sector representatives, voluntary organizations, NGOs, emergency management

e) Technical Assistance

(1) Primary: Public and social services

(2) Support: American Red Cross, voluntary organizations

4. Examples of agencies and organizations that support unmet needs[25] include the following:

a) Local government

(1) Planning and Zoning

(2) Vital records in Registrar's Office and Public Health

(3) Taxes

(4) Permitting

(5) Public, social, or human services for all residents

b) Nonprofit organizations/VOADs[26]

(1) Housing

(2) Animal services

(3) Community clinics

c) Persons with disabilities and others with access and functional needs

d) Public schools, colleges, and universities

e) Animal services

f) Utility companies

g) Private sector and businesses

h) State government

i) Federal government

j) International government consulates

5. Examples of unmet needs in recovery may include the following.[27]

[25] Unmet needs generally refer to those whose needs are not met by government support or services.
[26] Many nongovernmental organizations do not require identification for those requesting support or services.

a) Accessible, affordable housing and transportation

b) Service animals' and household pets' living arrangements, including healthcare and supplies

c) Mental health/behavioral health counseling and services

d) Long-term housing availability

e) Accommodation of services for people with limited English proficiency

f) Replacement of medical supplies or durable medical equipment

g) Children and adults with disabilities and others with access and functional needs

h) Populations with unmet needs who tend to "fall through the cracks" in public assistance programs or who can no longer qualify or participate in assistance programs post-disaster

C. Unification and Coordination

Create a long-term recovery committee that addresses long-term needs should be in place and identified according to the goals and priorities of the reconstruction projects identified through community discussion in the local jurisdiction. The committee should identify priority projects and assess timelines and benchmarks of success in attaining their goals and objectives.

Determine the committee based on community needs. Given the range of jurisdictions and differences in sizes, functions, or needs, this committee could differ greatly in number of representatives or agencies to include. The committee should be comprised of stakeholders and representatives from such groups as churches, schools, voluntary organizations, faith-based organizations, local or municipal government, housing authorities, financial or budgetary departments, and healthcare providers.

The committee should also consider existing plans and existing resources.

D. Community Capability and Needs Toolkit[28]

Community members may consider developing a set of strategies pre-disaster that their community leaders and organizations can use as a shared process in a more cohesive approach to build resilience in their communities. This process may include informational materials on preparedness; hands-on training in engaging the community; and introducing assessment tools to determine the community's risks, location

[27] See the Los Angeles Operational Area *Mass Care Guidance* (2010) for further information concerning sign language, cots, access and functional needs, and ADA-compliance at www.catastrophicplanning.org. Accessed September 1, 2012.

[28] Adapted from Los Angeles County Community Disaster Resilience Project (LACCDR). http://www.laresilience.org. Accessed September 1, 2012.

of existing resources, and unique strengths of their community. Relationships formed in preparedness may be the foundation for continued collaboration post-disaster in the recovery period. Collectively, these components of a community-based strategy can be formulated into a practical toolkit useable by community members in preparedness to accomplish the following:

1. Develop emergency response procedures for neighborhoods, such as evacuation, sheltering in place, and recognizing property damage.
2. Introduce psychological first aid training for lay persons to reduce disaster-induced stress and promote effective coping strategies.
3. Develop active community involvement in disaster preparedness activities and recovery planning with participation of responder agencies, community and faith-based organizations, community leaders, stakeholders, and community residents.
4. Develop a two-way capacity of community engagement between formal responding agencies and community leaders not necessarily currently involved in preparedness, response, or recovery training.
5. Develop a broad base of community-level workers, including voluntary responders, nurses, school staff, and other, more informal community case workers and volunteers to support resiliency at the ground level in communities.
6. Identify locations of local neighborhood-based resources (referred to as "asset mapping" or "community mapping") and promote networking opportunities using social media.[29] This can assist in identifying existing infrastructure, areas where planning needs can be prioritized based on population needs, and sources from which additional resources can be procured. Community mapping may also assist each jurisdiction in understanding how it connects to county, region, and State resources. Examples of community assets include:[30]
    a) Health-related institutions and services
    b) Social/public venues and recreation venues
    c) Governmental agencies and emergency services
    d) Education-related institutions and services

[29] Examples include Map Your Neighborhood, www.Healthycity.org, and https://NextDoor.com.
[30] U.S. Department of Health and Human Services MedMap tool, available at https://medmap.hhs.gov.

E. Community Planning Support Systems

1. Preparedness:

a) Coordinate specific tasks and activities with other RSFs who may share responsibility or support.

b) Coordinate resources already used within community-based organizations, faith-based organizations, social service agencies, public resources, and government agencies. In addition, there are community resources that are more group-specific or specialized, such as foreign consulates, pet-owner groups, regional centers, and food pantries.

c) Consider developing a volunteer and donation management plan.

d) Encourage development of a human resources contingency plan to reduce the impact of the loss of key personnel in business operations.[31] This may consist of elements such as:

(1) Risk management goals

(2) Risk assessment

(3) Business impact analysis

(4) Risk management strategies

e) Promote business continuity planning to nongovernmental organizations, local businesses, vendors, and community partners.

f) Educate local agencies and organizations on recovery funding and financing resources, including community, State, and Federal supports that are familiar with area needs and the community. Consider convenient mediums through which to communicate this, such as local business centers and web sites. This is discussed in more detail in the Economic RSF section.

g) Educate local jurisdictions about resources (other than funding) that may be needed from State or Federal agencies, including the roles of those agencies in recovery.

h) Coordinate with jurisdictions in regular meetings to determine existing agreements or partnerships that could be accessed or leveraged.

[31] Marshall, M. I., & Alexander, C. (2005). *Planning for the unexpected: Human resource risk and contingency planning*. West Lafayette, IN: Purdue University Cooperative Extension Service. http://www.extension.purdue.edu/extmedia/EC/EC-736-W.pdf. Accessed on June 20, 2012.

i) Create a local community-based resource directory in conjunction with the county recovery plan to include both public and private entities and their actual support services and capacities.

j) Establish cooperative agreements or plans of cooperation beforehand and have a form in place to correctly and effectively document the process. (See Appendix 3: Sample Cooperative Agreement for an example of a plan of cooperation.) These should include what documentation will be needed to capture costs and contributions, as well as clarification whether a governmental agency or NGO will manage this plan of cooperation (POC).

k) Have access to and awareness of the types of volunteers and credentialing processes, as well as volunteer hours that count toward matching reimbursement. Consider private-sector staff and their ability to volunteer and consider potential liability, availability, exclusions, or other limitations that using private-sector employees could bring.

l) Review existing volunteer management plans to understand the types of volunteers and stipulations for their use.

m) Ensure that permitting agencies and departments within local governments develop and maintain their own business continuity plan, particularly record keeping, to better clarify what assets are on the ground prior to a disaster so that post-event permitting can be accomplished in an orderly manner.

n) Determine criteria for balancing post-event work priorities between safety/damage assessment, hazard evaluation, fast-track permit review, and routine development application review activities, with emphasis on public safety.

o) Determine the possible role of disaster assistance and insurance in offsetting repair and rebuilding fee costs.

p) Prepare ordinances and/or legislation that provide for deferral of locally generated and State-imposed development and building permit fees, subject to a fee schedule and backed by liens and assessments, taking into account possibility of sliding fee scales based on factors such as differential damage levels and/or revenue potential and including appeal criteria for hardship situations.

(1) Permitting agencies may work with the County Register-Recorder to establish a lien-recording process so recovery projects can be reviewed and

approved without waiting for fee issues due to hardship to be resolved.

q) Develop and provide computer information systems and pertinent technology support to support fast-track permit review procedures. This will enhance overall service and may be used for fast-track permitting procedures when needed.

r) Assess local, State, and Federal regulatory issues that may inhibit construction such as building codes (e.g., earthquake building standards) and recommend strategies to address any problems.

2. Recovery

a) Ensure a community planning and capacity-building representative is on the recovery committee.

b) Identify and prioritize at-risk populations for reunification and restoration of services, including persons with disabilities and others with access and functional needs.

c) Address people with disabilities and others with access and functional needs and integrate accommodation with all aspects of post-disaster planning and activities.

d) Provide effective management of donations, including acquisition of warehouse space, and partnership arrangements. There are advantages to contributions that count toward local matching donations, including less bureaucracy and less time for State and Federal grant systems to activate. These donations could be used toward reconstruction and community rebuilding. Considerations for contributions that may count toward local matching donations include volunteer hours and donations and human capabilities and resources.

e) If necessary, initiate a fast-track repair permit ordinance. If an ordinance is not needed, the County Board of Supervisors, City Council, or department directors may make pertinent decisions concerning fast-track repair permits.

f) Establish and coordinate separate groups or individuals within each department to work exclusively on post-event disaster recovery and reconstruction activities.

g) Establish a recovery campaign to encourage community involvement in the beginning of the recovery phase and an organized process to receive regular input from the community through multiple phases of recovery.

h) Address those populations that require additional support services for daily living, those with unmet needs, and those who continue to be at risk.

i) Post-disaster plan should be considered an opportunity to build upon the known areas designated for improvement.

j) Revise the community-based resource directory to reflect changes and newly discovered resources for future preparedness planning.

k) Take a proactive rather than reactive approach to reconstruction issues and opportunities through the implementation of the recovery and reconstruction plan and, if necessary, the creation and implementation of a post-event strategic plan to guide reconstruction efforts. If necessary, form a long-term reconstruction task force or recovery committee to prepare and coordinate the implementation of a post-event strategic recovery plan. An emphasis should be placed on the active involvement of local planning and redevelopment agencies.

F. Functions vs. Processes in Community Planning

Establish clear delineation between recovery functions, and the processes needed to support those functions throughout recovery.

1. Functions

a) Support the re-establishment of commerce

b) Support public safety/security of residents and workforce

c) Support public health, medical care, and mental/behavioral health services

d) Support food, housing, and shelter

e) Promote continuity of government and business continuity

f) Promote mitigation and reconstruction activities

g) Support community services

h) Support mass fatality services

i) Reunite populations with their families, children, household pets, and other animals

j) Re-establish parks, recreation centers, and entertainment for communities

2. Processes

These processes require extensive public education and careful communication for successful implementation after a disaster.

a) Building and safety inspection
   (1) Public health surveillance
   (2) Public works operations
   (3) Security/law enforcement procurement
   (4) Utilities restoration and monitoring
   (5) EOC management and oversight
   (6) Additional building inspectors procurement

b) Community redevelopment efforts
   (1) Maintain VOAD participation
   (2) Involve faith-based organizations and the private sector
   (3) Solicit community input during plan development to ensure buy-in
   (4) Review 5- to 10-year community development plans during reconstruction
   (5) Identify what State and Federal resources are available, including coordination with the State for use of the National Guard and/or the U.S. Army Corps of Engineers (USACE), if necessary
   (6) Determine overarching priorities, including everyday priority services such as schools, grocery stores, gas stations parks, recreational areas, and other community activities and venues
   (7) Include a timeline and goals, with metrics and benchmarks
   (8) Consider innovative redevelopment where possible rather than automatically rebuilding what was previously there
   (9) Communicate recovery plans early to legislators, policymakers, politicians, and the public, including providing information about the status of reconstruction and rebuilding processes and plans
   (10) Consider existing community resiliency activities and planning and long-term jurisdictional planning or zoning documents
   (11) Consider lessons learned or after-action report for recovery in preparedness and recovery

(12) Conduct internal reviews of progress being made and feedback mechanisms to further improve the ongoing recovery efforts

VII. ECONOMIC RSF

A. Overview

The core capability for economic recovery is the ability to return economic and business activities to a state of health and develop new economic opportunities that result in a sustainable and economically viable community after a disaster or emergency. Economic recovery is a critical and integral part of recovery. Disasters damage not only property but also entire markets for goods and services. The speed and effectiveness of returning a community to self-sufficiency and vitality depend upon adapting quickly to changed market conditions, reopening businesses, and/or establishing new businesses. Businesses employ workers, provide for community needs and services, and generate revenue, allowing the community—both its members and the government—to provide for itself.

Considerable Federal funds are contributed to local, State, and Tribal economic recovery and other areas of recovery that necessarily strengthen the economy. The attraction of outside investment and the role of the private sector cannot be understated as foundational in a community's economic recovery. The Economic RSF facilitates and enables that role by leveraging Federal resources, information, and leadership. Informed management must accompany this capital investment to ensure its most effective use and compliance with all applicable Federal laws and regulations. This involves coordinating Federal recovery programs and integrating them with private-sector efforts, including those of nongovernmental organizations, private voluntary organizations, nonprofit organizations, investment capital firms, and the banking industry.

This function facilitates the progression from direct Federal financial assistance to community self-sustainment. Importantly, the economic element works closely with local community leadership who direct long-term economic recovery efforts. This requires the sustained engagement of possibly months or years by RSF leadership with the leadership of disaster-impacted jurisdictions. A complex undertaking, this RSF engages many entities using government assistance as seed money. These actions encourage reinvestment and facilitate private-sector lending and borrowing necessary for vital markets and economies to function. Effective economic recovery following a disaster is positively influenced by pre-disaster private-sector and community planning, including mitigation actions that increase community resilience.

When coupled with informed decisions by local officials, this RSF provides the confidence-building necessary for economic recovery.[32]

[32] *National Disaster Recovery Framework* Economic RSF informational sheet.

B. Roles and Responsibilities

1. Overall Lead: Emergency Management
2. Primary: Community Development Commission, Department of Housing and Community Development, local and regional planning representatives, economic development departments, community colleges, and technical/trade schools
3. Support: Finance departments, economic development councils/commissions, public works, power and water, waste removal
4. Private-sector organizations, including chambers of commerce, business associations, unions, banks, workforce development entities, specialized technical assistance providers, large corporations, small and minority-owned business assistance organizations, and building associations

C. Workforce Development and Workforce Skill Set Identification, Training, and Allocation

1. Identify the type of workforce that the jurisdiction would like to attract to the area and what the associated skills for the workforce would be.
2. Identify appropriate training, cross-training, and education requirements.
   a) Identify Workforce Investment System[33] representatives and community colleges that can help identify priorities and design approaches pre-disaster and implement approaches post-disaster.
3. Develop a list of contacts that can provide workforce development services and potentially a list of common skills or classes that are available and could be leveraged after an incident.
4. Identify potential out-of-State resources that may not have proper California credentials but could be accepted and vetted based on their credentials from other jurisdictions. This process will need to be expedited and considered in advanced to enhance recovery operations.
5. Conduct long-term assessments of businesses in the area to identify needs to retrain the workforce.
6. Identify workforce skills beyond those that are just used in day-to-day positions.

[33] California Workshop Investment Board. For information on the State Workforce Investment System, see http://www.cwib.ca.gov/local_boards.htm. Accessed on September 1, 2012.

a) Consider implementing a jurisdiction-wide, voluntary site where people could register their skills and availability to serve roles during recovery.

b) Coordinate with the Health and Social Services RSF to work with those in shelters to identify their skills and use them appropriately.

7. Explore the development of a system to coordinate job placement. This would include the use of private and nongovernmental employment agencies that specialize in staffing full and part time employees. Such a system may include “help wanted” websites, job fairs, and employment booths located at shelter sites.

8. Identify essential services that are important to the core workforce and execution of private and public organizations and prioritize areas to prepare and train available workforce.

9. Identify a plan to transition workforce needs from immediate short-term recovery options to intermediate and longer term approaches.

10. Determine if there are union regulations that need to be considered for workforce allocation and job placement.

D. Workforce Support Elements

1. Coordinate workforce transportation.

2. Coordinate with the Housing RSF to ensure workforce housing and support services.

3. Coordinate with the Health and Social Services RSF to ensure appropriate child care and dependent care services are available.

4. Work with the private sector to identify methods to logistically support the workforce if employees cannot go to work.

5. Planners need to consider regional public workforce sharing. A majority of the public workforce may live a significant distance from their normal work locations. Consider establishing agreements between the involved jurisdictions to share employees who may live outside their work jurisdiction.

6. Entrepreneurial and Business Development and Continuity

a) It is important that initiatives to promote entrepreneurs and businesses are in place. There are local and regional Small Business Development Center systems that can support business development.

b) Promote employment of area residents and small businesses in recovery efforts. Work with small businesses to show the benefit of properly preparing and readying themselves for recovery efforts. It is more efficient to show

the positive benefits rather than negative reinforcement. Consider tying this to financial incentives to support the implementation of this effort.

7. Coordinate with local, State, and Federal entities to ensure that goals and objectives are integrated.

8. Identify a plan for revitalizing the community with small and new businesses, as they create the new normal in recovery.

9. Consider the "what ifs" and "new normal" to implement in the event of a catastrophic incident and the impact associated with businesses, transportation, housing, social services, etc., and the required zoning and other statutory requirements.

    a) Coordinate with the Community Planning RSF to correct and rezone for obsolete locations in terms of parking availability, street layout, etc. There is an opportunity to correct previous areas for improvement.

    b) Identify areas before the disaster that would be prime ones for rezoning after a disaster. Work with local planning departments to see if general plans currently contain this information.

    c) Determine necessary hazard mitigation actions to be taken.

10. Consider providing programs (i.e., business incubators) that nurture the development of entrepreneurial companies, helping them survive and grow during the start-up period by providing support services and resources. Virtual incubators can be used to deliver the same services through electronic means.

11. Identify necessary licenses and regulations for certain industries and approaches to mitigate these issues by offering short-term waivers or other methods to bring businesses back online.

    a) Consider waiving fees and fast tracking the permitting process to enhance business recovery.

    b) Ensure that proper measures are implemented to assure that contractor price gauging does not occur. Implement messaging to the public on how to report violations.

12. Identify essential businesses that are necessary for other business to open that should receive priority for reopening. For example, the banking system to ensure cash flow and availability; local building supplies stores to help business repair; grocers who will provide food to the affected population.

13. Consider assessing current businesses in the jurisdictions to determine which are still operating, which had to close, which needs help to reopen, and what opportunities exist to support new

businesses either in areas that have closed or where there is a specific need.

14. Assist the private sector with developing business continuity plans and industry cooperative agreements to ensure resiliency and redundant approaches to bringing resources into the impacted area.

    a) Stress supply-chain management as an element of private-sector continuity planning.

        (1) Identify priority resources needed, even if priorities change based on the incident and the progression of recovery efforts.

        (2) Identify suppliers within the jurisdiction that can provide or supply resources.

        (3) Replenish familiar and necessary food items immediately to help the recovery and establish a sense of normalcy.

    b) Consider planning with small businesses in the area that could work with large retail stores (usually national chains, commonly known as “big box stores”) and benefit from their supply chains.

15. Identify where planning and training events will or should be held for stakeholders and partner agencies. Small Business Development Centers and LACs are some of those locations where events could be held.

    a) Ensure the private sector is integrated into this effort to identify resources to leverage.

    b) Ensure businesses are aware of the types of resources to aid in recovery and rebuilding post-disaster.

    c) Conduct a workshop to educate the public about the safety/damage assessment and qualification process for State and Federal assistance.

    d) Collaborate with businesses in identifying and understanding required forms for safety/damage assessment.

    e) Educate on the standardized process for recording and submitting safety/damage assessments.

E. Community-Wide Economic Development Plans

Economic development plans encourage regional and community economic recovery and resiliency.

1. Identify what community economic interdependence means to each jurisdiction. This needs to include the concept that economic

viability is not simply jurisdictionally based. There is an extended sphere of influence that has a regional, State, and possibly national impact.

2. Identify what authorities, regulations and standards apply, what can be mandated, what needs to be considered by the businesses and population, and by what process they will be presented.
    a) Coordinate with zoning departments to identify permitting processes that could be expedited, amended, or waived to increase business recovery and identify resources that could make the process work faster.
    b) To prevent stalling the rebuilding and recovery process, jurisdictions must streamline the permit application and review system. In particular, officials should consider setting up a centralized and integrated office that reviews plans, schedules inspections, makes decisions on applications, and issues permits. This "one-stop shop" model promotes efficiency and expediency.[34]
3. Structure the plan to address various levels of businesses, including large multinational businesses, mid-sized businesses, and small businesses.
4. Identify which type of businesses your community would like to attract or expand upon within your community, and how this can be accomplished.
5. Consider whether government facilities and essential services should be relocated to enhance economic investment and development to increase accessibility to those services. This would increase business convenience.
6. Consult with local organizations and agencies to identify existing plans and processes that currently address the topic and provide necessary coordination elements.
7. Consider implementing recovery-planning areas that mirror current service areas to develop plans in a collaborative or regional manner.
8. Coordinate economic support with the Infrastructure RSF.
    a) Identify business-essential supply routes and utility connections. If there are critical routes, plan, review and consider if additional business-essential supply routes need to be incorporated.

[34] Cho, G., Koestler, R., & Morales, L. *L.A. Lives: Advance Economic Recovery Framework*. Cambridge, MA: Harvard Kennedy School. http://www.catastrophicplanning.org/products/harvard_report.pdf. Accessed on August 10, 2012.

b) Assess and develop situational awareness of the supply route needs and necessary prioritization. Some key recovery resources are fuel, building supplies, food, and medical resources.

c) Evaluated and revise distribution routes and long-term redevelopment planning to increase efficiency and resiliency.

9. Work with businesses to identify necessary logistical and staffing resources to return to operational status. This includes staff, generators, water, and associated support elements such as fuel.

10. Facilitate the reestablishment of essential commercial services (food, pharmaceuticals, banks, etc.) and necessary utilities in locations near population concentrations. Planners should consult with how the business recovery center (BRC) concept in Section G can be applied to accomplishing this mission (see Business Recovery Centers section).

a) Maintain a liaison with trade associations of essential commercial services to determine requirements for establishing temporary business location (shelters, utilities security, etc.). Perhaps develop an emergency planning task force within those organizations.

b) Develop a plan identifying whom to contact to establish temporary essential commercial service business locations after the emergency.

(1) Businesses should ensure that suppliers are open to alternative locations.

(2) Coordinate with recovery efforts to identify priority locations.

c) Develop emergency building provisions for commercial use with appropriate time and use limitations. Consider what planning code elements need to be addressed and waived.

(1) Streamline the process for temporary and transitional business to open and serve the affected population.

(2) Prepare implementation processes and enforce ordinances.

d) Implement processes and procedures for reestablishing commercial services following a disaster.

e) Identify support needs for businesses and supporting logistical requirements.

f) Determine who will support these efforts: public, private, nongovernmental organization.

g) Assess and evaluate the needs of the jurisdictions.

h) Work with local chambers of commerce and others to provide information and briefings to local businesses on recovery programs and support options.

11. Encourage government agencies and the private sector to collaborate on returning the public infrastructure and the jurisdiction's services to more resilient pre-event levels.

a) Conduct community engagement on the benefits and changes that would strengthen the resiliency of the community with a more viable economy. Consider the long-term impacts of rebuilding, expansion, secondary and tertiary uses.

b) Identify sources of funding to support recovery. Potential sources can be found in Appendix 8: Federal Recovery Programs, Appendix 9: State Recovery Programs, and Appendix 10: Recovery Program Information Matrix.

(1) Identify grant programs that could be leveraged to maximize or enhance this process.

(2) Identify available funding and donations from private and nongovernmental organizations that could support these efforts.

c) Identify sources of technical assistance in rebuilding and strengthening the infrastructure.

d) Develop procedures for identifying services that could be contracted, transferred, or temporarily deferred.

e) Organize and implement ongoing training for a cadre of subject-matter experts in State and Federal programs who can be called upon to expedite effective approaches to financial matters after a major disaster. Training should be validated through regular validation exercises.

f) Explore creating disaster recovery assessment districts where appropriate.

g) If necessary, recommend that the chief elected official and the local government issue jurisdictional debt to finance public reconstruction and recovery projects.

h) If essential jurisdictional services are rendered inoperable, implement procedures for contracting, transferring, or deferring the execution of these services through COOPs, COG plans, and/or continuity of business plans as appropriate.

i) Assess the need for cooperative agreements that could support the execution of essential services identified by the jurisdictions or region.

j) Implement a request for waivers or an expedited permitting process to enhance the recovery process and execution of projects.

k) Implement outreach to the private sector to educate the public about available disaster recovery programs and how to access the support.

F. Disaster Recovery Areas

The U.S. Small Business Administration (SBA) and FEMA provide important short-term resources and expertise after a disaster. These need to be matched by a local mechanism to address recovery over a longer period.

After a disaster, a survey by Building and Safety and Planning departments of each local jurisdiction would be done to assess the damage. These surveys can be used to establish the boundaries of the Disaster Recovery Area.

Within a Disaster Recovery Area, the local jurisdiction would have the authority to:

- Acquire property for new development, if necessary through eminent domain
- Enter into disposition and development agreements for private development
- Fund public infrastructure improvements and public facilities
- Retain tax increment and use the revenue stream to pay indebtedness (called tax increment financing)

To accomplish this, State law may have to be amended to allow local jurisdictions (cities and counties) the authority to create Disaster Recovery Areas. Jurisdictions wishing to do this would have to follow legislative protocol to change the laws for a pre-event and seek emergency decrees for post events.

The designation of a Disaster Recovery Area needs to be for a term long enough to retire indebtedness used to improve the area. The power of eminent domain is also desirable, since new development will have to conform to current building codes and may require larger sites to accommodate onsite parking. With eminent domain, local governments would be required to compensate property owners at the fair market value of their properties. Relocation benefits would also be provided in accordance with State and Federal regulations such as the Uniform Relocation Act.

G. Business Recovery Centers

BRCs are one-stop shops set up to provide local, State, and Federal resources and services for businesses after a catastrophic event. Because their services are tailored to address business needs, they typically are established separately from FEMA disaster recovery centers to avoid confusion with individuals needing information about disaster assistance programs.

The area requiring a BRC is initiated by the Governor's Office.

1. BRCs are often established by a local economic development organization (EDO) in cooperation with local, State, and Federal partners. Representation includes SBA, local business leaders, bank officers, chambers of commerce, workforce development entities, specialized technical assistance counselors, and other local organizations that provide financial or technical assistance to small businesses.

2. Action Steps

   a) Establish a BRC as quickly as possible. One to 2 weeks after a disaster has been found to be very effective.

   b) Select an appropriate location. Locations are typically established in the most heavily impacted areas to provide close access to affected businesses. Planning should consider whether the location is free or requires payment and, if payment is required, who is responsible for it.

   c) Reach out to local, State, and Federal partners for a multitude of representation from private, nonprofit, and government service providers. Counselors should be prepared to educate businesses on various financial and technical assistance services available as well as provide guidance in the application process for Federal loans.

   d) Develop a marketing and promotion campaign to advertise the BRC's location and services, including the coordination of the various EDOs within the affected area to advertise to their own networks of businesses.

   e) Establish a hotline that business owners can call to get information about the center and its services.

   f) Facilitate communication between industries through BRCs.

   g) Provide the relevant recovery materials in various languages to assist major demographic groups in your community.

   h) Disseminate an outreach survey at the BRC for local business owners to complete to gather intelligence on the event's economic impact to the area and determine what

programs or information they need in the short- and long-term recovery period.

i) Consider holding workshops at the BRC on specific or common issues.

j) Consider providing mental and behavioral health services for the service providers at the BRC. Providers may be overwhelmed by the tribulations of business owners impacted by the event.

k) Be prepared to keep the BRC open anywhere from a few months up to a year. Various forms of funding will need to be addressed. Planners should review Appendix 8: Federal Recovery Programs, Appendix 9: State Recovery Programs, and Appendix 10: Recovery Program Information Matrix, which summarize available recovery programs.

H. Adapted Strategies

It is important to remain cognizant of and adapt to changing market conditions when reopening businesses and/or establishing new businesses.

1. Identify key private companies, insurers, community leaders, trade associations, and lenders. Work with lead agencies (including the local chamber of commerce) to identify private companies, insurers, and lenders that might be crucial to disaster recovery due to their providing recovery-crucial goods or services or due to their relative size, position, relation to key business sectors such as government and tourism, or employment base in the local economy. Such information will be useful for jurisdictions in developing their emergency operations plans and post-disaster economic recovery priorities.

2. Coordinate with and encourage businesses to develop partnership assistance networks.

a) Coordinate with business associations, local city officials, and chambers of commerce or similar organizations to identify, develop and support business continuity planning efforts.

b) Some medium- and small-sized companies may be overwhelmed post-disaster by damages or disruptions to workforce, supply chains, or markets. The ability to restart or sustain services may exceed the business's capacity. By collaborating with nearby businesses with similar services or with businesses in an area less affected by the disaster, small businesses can leverage their workforce and assets to restart or sustain operations.

3. Promote private-sector resiliency and continuity through education and outreach.
    a) Businesses may experience a surge in needs or demand for services and products that exceed their current workforce capabilities. During recovery, this is of particular concern for retail commodities-distribution companies that provide essential or recovery-critical supplies such as staple foods, pharmaceuticals, fuels, and building supplies.
    b) Identify conflicting expectations of resources availability and allocation and work to de-conflict needs.
    c) Ensure that the concept of catastrophic disaster is properly explained and reinforced to strengthen the private sector's understanding of the impacts to their businesses.
    d) Within the region, there are many critical, high-priority assets and economic centers that are vital to the recovery of the region and beyond. Some of these industries include ports, rail, transportation arteries, and utilities.
4. Leverage local businesses with recovery capabilities.
    a) This could include nontraditional use of resources to complete recovery missions. For example, flower delivery trucks could be used to distribute small amounts of commodities over short distances.
    b) It is important to ensure that these local businesses are eligible to complete local, State, and Federal contract work by registering with existing systems.
    c) Assess skills and capabilities of local businesses that correspond with recovery missions
    d) Identify pre-existing cooperative agreements that could be executed.
5. Assist businesses to reestablish normal activities and operations as quickly as possible.
    a) Identify the need for special disaster recovery areas and potential for accompanying legislative action or modification of State rules to enact these procedures after a catastrophic incident.
    b) Identify revenue replacement sources such as user, refuse collection and occupational license (payroll tax) fees and their potential impact on the private sector and, where feasible, draft enabling ordinances for all revenue-generating departments.

c) Leverage existing processes and procedures, including BRCs, to identify, educate, and assist businesses in applying for disaster assistance and insurance claims.

d) Develop processes and procedures to establish business hotlines or other information sources or open existing hotlines.

e) Establish programs to support businesses in identifying and using alternative structures and sites for disrupted businesses. Facilitate pre-event planning and streamlining processes for use and approval of these sites (crosswalk with infrastructure and housing groups).

f) Encourage private businesses in developing cooperative agreements amongst themselves by providing technical assistance, as requested. It is important to coordinate with all types of business, small, medium and large. For example, outreach can be conducted through the local chambers of commerce.

g) Implement tax and fee deference plan.

h) Determine funding sources that could be reprogrammed or reallocated to support businesses reopening.

i) Identify and assist businesses in applying for Federal and State disaster assistance through information lines and SBA.

j) Activate business hotlines.

k) Implement existing cooperative agreements between private business, and assess the need for additional agreements.

6. Prepare a pre-event strategy for recovery areas that become tax increment financing districts to support the disaster recovery effort.[35] Coordinate effort with appropriate local and State agencies to identify implementation approaches.

7. Work with appropriate State, local, Federal, and private entities to facilitate the availability of a cash flow to provide essential services. The Community Disaster Loan Program can support local jurisdictions in meeting the needs of essential services after an incident. It "provides funds to any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax

[35] "Tax increment financing" refers to the financing procedure used by many local governments for redevelopment and improvement projects on existing structures. The cost of the improvements is assessed to future tax revenues by each taxing unit that levies taxes against the property. Definition from: http://www.investorwords.com/8715/tax_increment_financing.html#ixzz23qGManwg. Accessed on August 17, 2012.

and other revenue. The jurisdiction must demonstrate a need for financial assistance to perform its governmental functions."[36]

I. Employment Initiatives

Promote business initiatives to employ workers and generate revenue.

1. Promotional and outreach efforts to bring revenue back into the area post-event and drive public perception for long-term recovery.
2. Identify employment-related tax breaks at the local, State, or Federal level.

J. Management Plans

1. Establish efficient plans for the effective appropriation, management, administration and execution of funds.
2. Identify local disaster recovery coordinator to support efforts. Consider implementing a regionally coordinated effort.
3. Develop recovery approach and plan for oversight and management of recovery efforts.
   a) Consult existing local jurisdictional plans for developing, redeveloping, or providing long-term strategic planning.
   b) Educate executives as part of recovery and long-term jurisdictional planning efforts.

[36] Federal Emergency Management Agency. (2010). *Community Disaster Loan Program*. Washington, DC. http://www.fema.gov/government/grant/fs_cdl.shtm. Accessed on April 20, 2012.

VIII. HEALTH AND SOCIAL SERVICES RSF

A. Overview

The core recovery capability for health and social services is the ability to restore and improve the health and social services amongst governmental, private, and nonprofit providers to promote the resilience, health, independence, and well-being of the whole community.[37]

Federal agencies for the Health and Social Services RSF include the following:

- Coordinating Agency: U.S. Department of Health and Human Services (DHHS)
- Primary Agencies: Corporation for National and Community Service, U.S. Department of Homeland Security (DHS) (FEMA, National Protection and Programs Directorate, and Office of Civil Rights and Civil Liberties), U.S. Department of Justice, U.S. Department of Labor, U.S. Department of Education, U.S. Environmental Protection Agency, U.S. Department of Veterans Affairs
- Supporting Organizations: U.S. Department of Transportation, SBA, U.S. Department of the Treasury, U.S. Department of Agriculture (USDA), U.S. Department of Veterans Affairs, American Red Cross, National Voluntary Organizations Active in Disaster (NVOAD)

Outcomes for the Health and Social Services RSF include:

1. Restoration of the capacity and resilience of essential health and social services to meet ongoing and emerging post-disaster community needs
2. Encouragement of mental/behavioral health systems to meet the needs of affected individuals, response and recovery workers, and the community
3. Promotion of self-sufficiency and continuity of the health and well-being of affected individuals, particularly the needs of children, older adults, people with disabilities and others with access and functional needs, people from diverse origins, people with limited English proficiency, and underserved populations
4. Assistance in the continuity of essential health and social services, including schools and education
5. Reconnection of displaced populations with essential health and social services
6. Protection of the mental/behavioral and physical health of the general population, and response and recovery workers from the longer term effects of a post-disaster environment

[37] Adapted from *National Disaster Recovery Framework* Health and Social Services RSF factsheet.

7. Promotion of clear communications and public health messaging to provide accurate, appropriate, and accessible information, including the use of multiple mediums, languages, and alternative formats and accessibility to underserved populations

B. Operational Considerations in Health and Social Services

The overall goal of this RSF is to restore health and social services in the general population to the highest possible level comparable to the level of services prior to the disaster.

Within jurisdictions in each operational area there are five major subsets to consider: mental and behavioral health, public health, medical (EMS and healthcare services), environmental health, and social services. Each health and social service activity involves major organizations and serves different elements of the affected populations' needs. Each discipline will have specific responsibilities within their agencies and departments during recovery leading to a return to normal operations. Overarching missions in each discipline should be effectively coordinated and integrated where possible to make a smooth transition forward in recovery. For each discipline, certain mission-essential functions identified in the response phase may overlap into recovery missions long after the initial incident. Examples include disease surveillance, stress management, and medical surge.

In addition, for the purposes of this guide, planners should consider that pets and animals are common in households and that environmental health hazards to humans will also be hazardous to their many pets and animals. This includes initial exposure to health hazards post-event and new hazards released or discovered during reconstruction. This includes clean water, food, shelter, air, and continued access to healthcare. Furthermore, due to the close personal relationship between humans and their service animals and pets, as well as the ownership of livestock and other animals including exotics, efforts should be made to have parallel recovery activities for both humans and animals.

Prioritizing overarching health and social service functions toward restoration and sustainment will be a constant theme throughout the recovery period. Resource needs for both personnel and physical resources and the logistics of moving them to where they are needed during recovery will be a key determinant of successful recovery operations. Pertaining to medical and health resource-requesting, plans should include coordination with the Medical and Health Operational Area Coordination (MHOAC) programs within each operational area and regionally through the Regional Disaster Medical and Health Coordination Program (RDMHC). Specific process and details are outlined in the California Department of Public Health: *Public Health and Medical*

Emergency Operations Manual.[38] This system will more efficiently acquire medical resources that are needed and avoid duplicating efforts by multiple requesting organizations.

The overall effectiveness of health and social services recovery efforts can be facilitated through use of activity timelines based on priorities and available resources. This may be done with worksheets, charts, maps, or diagrams that show the progression of recovery activities as various services are restored. In addition, feedback from both the public and private sectors and the general community should be used to measure and improve recovery efforts throughout each timeline. Explore the possibility of integrating access to services across mental and behavioral health and social services, including animal health services through LACs using public, private, and nonprofit participation. Always integrate planning for persons with disabilities and others with access and functional needs into all phases of preparedness and recovery activities.

Community efforts should be inclusive of other organizations and agencies, including public, private, and nonprofit organizations coordinate with their local and regional Voluntary Organizations Active in Disaster (VOADs) throughout recovery as priorities and needs evolve throughout recovery timelines. Since NGOs have a variety of forms, it may be more useful to categorize their functions and current capabilities, particularly in support of recovery activities rather than what type of organization they are (i.e., private nonprofit organization [PNP], foundation, for-profit, etc.). Planners should pre-identify and update regularly a listing of nongovernmental agencies, which describes their support activities in recovery using existing memorandums of understanding (MOUs), and cooperative agreements in each jurisdictional area. Note that for addressing people with disabilities, one NGO cannot address all of the different disabilities that will need accommodation. In addition, each of the health and social service functions should integrate how they will address both children and adults with disabilities within their respective function. An example of a worksheet that can be used as a template is shown in Table 5. Each health and social service agency or function in this RSF should be listed separately with the appropriate NGOs identified by jurisdiction and their specific support services or current capabilities designated in a worksheet as a reference in drafting a plan.

[38] California Department of Public Health. (2011). *California Public Health and Medical Emergency Operations Manual*. Sacramento, CA.

Table 5: Health and Social Services Functions Worksheet

Health and Social Services Functions	Nongovernmental Organizations	Support Services Provided by Nongovernmental Organizations
Mental/Behavioral Health Public Health Environmental Health Medical Services Social Services People with Disabilities[39] Access and Functional Needs Animal Services, Educational Services Child Services Adult Services Mass Fatality Services (or Management)	Fill in this list by function(s). (This list of NGOs should reflect actual local and regional organizations in written agreements within each jurisdiction's operational area for each HSS function.)	Fill in this list by function(s). (This list of services should be detailed enough to allow the planner to indicate specific functions/duties that the NGO can support for each HSS function.)

C. Roles and Responsibilities

The roles and responsibilities listed below have been divided by function noting the tasks that should be considered under each and the organizations that could serve primary or support roles. These lists should serve as a starting point for jurisdictions to consider their current structure and organizations for planning purposes.

1. Food Products and Facilities

Table 6 shows the lead and support regulatory agencies for emergencies in California involving different types of food products and facilities.[40]

Table 6: Lead and Support Regulatory Agencies

Facility Type or Food Product	LHD/EHD	CDPH FDB	CDFA	USDA	FDA
Retail Food Facilities	L	S			
Bottled/Hauled Water and Ice Manufacturers	S	L			
Food and Beverage Manufacturers/Processors	S	L (CA)			L imported
Produce	S Retail	L (CA)	S (CA)		L imported

[39] There are many different types of disabilities. There is no single NGO that can address all of the different disabilities. In addition, each of these health and social service "functions" must integrate how they will address children and adults with disabilities within their respective function.
[40] California Department of Public Health. (2011). *California Public Health and Medical Emergency Operations Manual*. Sacramento, CA.

Facility Type or Food Product	LHD/EHD	CDPH FDB	CDFA	USDA	FDA
Dairy Products	S	S	L (CA)		L imported
Shell Eggs	S	S	L (CA)	L	
Meat and Poultry	S	S	L (co-lead)	L	
Seafood and Shellfish	S	L (CA/All shellfish)			L
Key: L (Lead Agency/Co-Lead), S (Supporting Agency), CA (produced in California), LHD (local health department), EHD (environmental health department), CDPH FDB (California Department of Public Health, Food and Drug Branch), CFDA (California Department of Food and Agriculture), USDA (U.S. Department of Agriculture), FDA (U.S. Food and Drug Administration). CFDA regulates meat and poultry processors that are exempt from USDA regulations (e.g., processors that sell exclusively to retail chains).					

2. Human and Animal Water Safety

   The regulatory agency responsible depends on whether it is a small- or large-water system (see Table 7).

Table 7: Water Systems

Type	Definition	Regulatory Agency
Public (large) water system	System with 15 or more service connections or that serves more than 25 individuals	CDPH or local primacy agency in 35 counties
Small water system	System with 5–14 service connections that does not regularly serve more than 25 individuals	Local Health Officer or Agency designated by Local Health Officer

3. Human and Animal Shelter Health and Safety

   a) Human shelters (primary): Environmental Health (inspections)

   b) Human shelters (support): Public health nurses (i.e., Community Health Services in Los Angeles County Department of Public Health, American Red Cross, Functional Assessment Service Team, VOADs, Emergency Management, Ombudsperson

   c) Animal shelters (primary): Animal Care/Control, Animal Services (assuming that these are existing and/or temporary shelters that animal control has set up; this may vary in other jurisdictions that do not have a local animal control authority)

   d) Animal shelters (support): Veterinary Health, local health departments (which may include Environmental Health or other health agencies), California Veterinary Medical Reserve Corps (CAVMRC), Veterinary Medical Assistance Teams (VMATs), local CERT, Small Animal Response Team (SmART), Large Animal Response Team (LART), Equine Response Team (ERT), Departmental Air Rescue Team

(DART). Also consider NGOs such as Noah's Wish, Pet Safe Coalition, Best Friends, and local and national Societies for the Prevention of Cruelty to Animals (SPCAs)

4. Human and Animal Disease Surveillance[41]

   a) Primary: Local health department which may be led by environmental health (vector management-type agencies), Communicable Disease Control Programs (Acute Communicable Disease Control, Epidemiology, Tuberculosis Immunization Program, etc.)[42]

   b) Support: Medical and Health Operational Area Coordinator (MHOAC) Program, Regional Disaster Medical and Health Coordinator (RDMHC) Program, California Department of Public Health (CDPH), California State Warning Center, local Federal Bureau of Investigation office, law enforcement, Local Emergency Service Agency (LEMSA), Incident Command/DOCs/EOCs, Joint Emergency Operations Center (if activated), Laboratory Response Network (LRN)[43] County Toxics Epidemiology, County Poison Control, Community Health Services Program, Division of Communicable Disease Control, CDC, hospitals in the county[44]

5. Communications and Public Health Messaging

   a) Primary: Lead DPH program(s): Health Education, Office of External Relations and Communications

   b) Support: Local Health Department/State Health Department, Education, County 2-1-1, Emergency Management (particularly the Joint Information Center), county or jurisdictional Mental/Behavioral Health, county/city fire department, Law Enforcement, CDC, county or local EMS Agency (LEMSA)

6. Healthcare Facilities (Hospitals and Skilled Nursing Facilities)[45]

   a) Primary: CDPH Licensing and Certification (Health Facilities Division), Office of Statewide Health Planning and Development (OSHPD), LEMSA, local health department

[41] Ibid.
[42] The State of California also conducts select surveillance data that may pertain to specific local and regional areas if this is not a "natural disaster event."
[43] The Laboratory Response Network (LRN) is a network of local, State, and Federal laboratories that provides the infrastructure and capacity to respond to biological and chemical terrorism and other public health emergencies. For further information, see http://www.bt.cdc.gov/lrn. Accessed on August 27, 2012.

[45] California Department of Public Health. (2011). *California Public Health and Medical Emergency Operations Manual*. Sacramento, CA.

b) Support: Public Safety and Local Emergency Management, MHOAC Program, Region IX Office of the Centers for Medicare and Medicaid Services (CMS), CDPH Radiologic Health Branch (for radiological/radioactive safety), county government (inspection for healthcare facilities not within the county), local ombudsperson (support and coordinate patient evacuation and relocation), local agency responsible for code enforcement (for intermediate care facilities)

7. Social Services and Associated Programs (see Table 8)

Table 8: Social Services and Associated Programs

Type of Service in "Social Services" or Related Services for Populations	Primary	Support Agencies
Adult services (includes adult protective services)	Adult Protective Services within Community and Senior Services (CSS)	Department of Public Social Services (DPSS), California DSS
Children and family services (includes foster care, child protective services)	Department of Children and Family Services (DCFS)	DPSS, Calif. DSS
CalWORKs	DPSS	Calif. DSS
CalFresh (formerly food stamps)	DPSS	Calif. DSS
Medi-Cal	DPSS	Calif. DSS
Greater Avenues for Independence (GAIN)	DPSS	Calif. DSS
General Relief Opportunities for Work (GROW)[46]	DPSS	Calif. DSS
General relief assistance	DPSS	Calif. DSS
In-home supportive services (IHSS)	DPSS	Calif. DSS, CSS
Regional centers	DSS Community Care Licensing	Calif. DSS
Independent living resources	Department of Developmental Services	
Food delivery services	CSS (Meals on Wheels Program)	
In-home care provider registries and providers	DPSS	Calif. DSS
Senior centers	CSS	Department on Aging
Child and minor services (child care, education) foster homes	Children and Family Services, Calif. DSS	

[46] A program implemented by the County of Los Angeles.

Type of Service in "Social Services" or Related Services for Populations	Primary	Support Agencies
Child development programs (Head Start)	Los Angeles County CEO's Office of Child Care in Service Integration Branch, or local jurisdictional equivalent	

D. Assisting People with Disabilities and Others with Access and Functional Needs

The affected population will likely include individuals who need additional or specialized assistance, such as people who have disabilities or live in institutionalized settings, fragile older adults, children, individuals of diverse cultures limited English proficiency, or those who need transportation assistance. Some persons in the community may need access to communication for the deaf and hard of hearing such as qualified interpreters, or auxiliary aids and services for the visually impaired.[47] FEMA, via the NRF and CPG 301, and the California Office for Access and Functional Needs (OA) describe access and functional needs populations as people whose members may have additional needs before, during, and after an incident in five functional areas: communication, medical care, maintaining independence, supervision, and transportation.[48] Local government terms may differ from Federal terms. In addition, local jurisdictions may employ different strategies for identifying and addressing the needs of people with disabilities and other access and functional needs during the response phase of the emergency.

People with acute medical needs are often directed or transferred to hospitals, while people with less acute medical needs may be accommodated in a medical shelter or general shelter per OA protocol. People with disabilities and others with access and functional needs generally may be accommodated in general shelters.[49] Challenges arise when there are short-term service disruptions in agencies responsible for direct services to people with access and functional needs, health maintenance needs, or assistance with daily living. For example, people requiring routine health services or who are reliant on prescription drugs but are unable to self-administer them due to a disability (either functional

[47] "Qualified interpreter" means an interpreter who, via a video remote interpreting (VRI) service or an onsite appearance, is able to interpret effectively, accurately, and impartially, both receptively and expressively, using any necessary specialized vocabulary. Qualified interpreters include, for example, sign language interpreters, oral transliterators, and cued-language transliterators. A list of auxiliary aids and services for the hearing and visually impaired can be found at http://www.ada.gov/regs2010/titleII_2010/titleII_2010_withbold.htm. Accessed on July 3, 2012.

[48] Kailes, J. I. (2008). *Southern California wildfires after action report*. Pomona, CA. Prepared in partnership with the Access to Readiness Coalition, the California Foundation for Independent Living Centers, and the Center for Disability Issues and the Health Professions at Western University of Health Sciences.

[49] Federal Emergency Management Agency (2010). *Guidance on planning for integration of functional needs support services in general population shelters*. Washington, DC.

or cognitive), will need continued assistance, care, or supervision. However, if facilities for this level of care are not sufficiently operable into the recovery period, such as adult daycare and adult day healthcare centers, there will be a service disruption. Accommodations for basic health needs may still be possible in an American Red Cross general shelter with American Red Cross Health Services staffing, or in separate medical shelters per OA protocol. Other strategies may be considered within community health-delivery settings.[50]

Self-identifying voluntary registries are sources to capture a jurisdiction's characteristics; however, they may not be an accurate picture of the jurisdiction's demographics during a disaster as registrants may be at other locations, and should not guarantee to registrants that assistance will be provided. Local planners need be aware of the possibility that a registry process can be misunderstood to imply priority assistance to its registrants in the event of an emergency. Part of the public education effort needs to be focused on the purpose of the registry and the constraints during disaster operations, as well as emphasizing the importance of individual preparedness, which should include developing a redundant support system for people with disabilities and others with access and functional needs.[51]

Federal regulations for a service animal differ from those for a household pet. *Service animal* means any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition. The work or tasks performed by a service animal must be directly related to the individual's disability. Examples of work or tasks include assisting individuals who are blind or have low vision with navigation and other tasks, alerting individuals who are deaf or hard of hearing to the presence of people or sounds, providing non-violent protection or rescue work, pulling a wheelchair, assisting an individual during a seizure, alerting individuals to the presence of allergens, retrieving items such as medicine or the telephone, providing physical support and assistance with balance and stability to individuals with mobility disabilities, and helping persons with psychiatric and neurological disabilities by preventing or interrupting impulsive or destructive behaviors. The crime deterrent effects of an animal's presence and the providing of emotional support, well-being,

[50] Los Angeles Operational Area. (2010). *Mass Care Guidance for Emergency Planners* (Medical/Health Annex). Los Angeles, CA. www.catastrophicplanning.org. Accessed on September 1, 2012.
[51] County of Los Angeles. *Specific Needs Disaster Voluntary Registry*. Los Angeles, CA. http://snap.lacounty.gov/index.cfm?fuseaction=app.registryLogin&CFID=11170&CFTOKEN=93935505 Accessed on July 11, 2012.

comfort, or companionship does not constitute work or tasks for the purposes of this definition.[52]

A household pet is a domesticated animal, such as a dog, cat, bird, rabbit, rodent, or turtle, that is traditionally kept in the home for pleasure rather than for commercial purposes, can travel in commercial carriers, and be housed in temporary facilities. Household pets do not include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes.[53]

In addition to the provisions about service dogs, the revised Americans with Disabilities Act (ADA) regulations have a new, separate provision about miniature horses that have been individually trained to do work or perform tasks for people with disabilities. (Miniature horses generally range in height from 24 inches to 34 inches measured to the shoulders and generally weigh between 70 and 100 pounds.) Entities covered by the ADA must modify their policies to permit miniature horses where reasonable.[54] The regulations set out four assessment factors to assist entities in determining whether miniature horses can be accommodated in their facility. The assessment factors are (1) whether the miniature horse is housebroken; (2) whether the miniature horse is under the owner's control; (3) whether the facility can accommodate the miniature horse's type, size, and weight; and (4) whether the miniature horse's presence will not compromise legitimate safety requirements necessary for safe operation of the facility.[55] This definition does not affect or limit the broader definition of "assistance animal" under the Fair Housing Act or the broader definition of "service animal" under the Air Carrier Access Act.[56] Under the ADA, State and local governments, businesses, and nonprofit organizations that serve the public generally must allow service animals to accompany people with disabilities in all areas of the facility where the public is normally allowed to go.[57] For information on reunification or replacement of lost service animals, see section on Reconnecting Displaced Human and Animal Populations.

This section will facilitate planning for agencies that provide assistance to people with disabilities and others with access and functional needs. Each

[52] Definition of service animal may be found at: U.S. Department of Justice, Part 35. http://www.ada.gov/regs2010/titleII_2010/titleII_2010_withbold.htm. Accessed on July 3, 2012.
[53] Federal Emergency Management Agency. (2010). *Eligible costs related to pet evacuations and sheltering*. Washington, DC. http://www.fema.gov/government/grant/pa/9523_19.shtm. Accessed on July 3, 2012.
[54] "Public entity" (for ADA compliance) is (1) any State or local government; (2) any department, agency, special purpose district, or other instrumentality of a State or States or local government; and (3) the National Railroad Passenger Corporation and any commuter authority (as defined in section 103(8) of the Rail Passenger Service Act). http://www.ada.gov/regs2010/titleII_2010/titleII_2010_withbold.htm. Non-public entities (for ADA compliance) are covered in Title III. Accessed on July 3, 2012.
[55] U.S. Department of Justice. (2011). *Service animals*. Washington, D.C. http://www.ada.gov/service_animals_2010.htm. Accessed on July 3, 2012.
[56] Ibid.
[57] Ibid.

section below will expound upon these issues in certain direct areas of service such as social services and medical support challenges.[58] Planners should integrate plans and processes to include persons with disabilities and others with access and functional needs into all areas of preparedness, as well as all phases of recovery.

1. Persons with disabilities

When disasters occur, people living with disabilities who may already face health or ability challenges are likely to be more susceptible to the difficulties of responding to and recovering from the disaster. Physical or mental disabilities may limit their capacity to respond or to seek help. This also may include those who are deaf, hard of hearing, blind or with a visual disability, or have intellectual disabilities. People with disabilities may rely on support services, such as personal care attendants. Any emergency that disrupts those services leaves them vulnerable. The following are some planning activities for organizations that assist people with disabilities:[59]

a) Preparedness

(1) Develop resilient systems to ensure critical services are not disrupted. This includes stockpiling essential items, such as durable medical equipment, consumable medical supplies, essential medications, communication access, and personal assistants.

(2) Identify redundant transportation partners and understand backup resources. People with mobility impairments may require accessible transportation that is disrupted due to the disaster. If a transportation service provider has a plan to restore services, determine if additional redundant providers could also be identified in advance.

(3) Anticipate the identification of previously undocumented access and functional needs that are discovered during response activities. Most American Red Cross shelters use the DHHS Initial Intake and Assessment Form to screen for access and functional needs. Some people may not have been receiving any services in the past, or develop a disability as a result of the disaster. Anticipate an increase in numbers of people to support through the recovery process.

[58] Adapted from: Los Angeles Operational Area. *Mass Care Guidance for Emergency Planners*. (2010). Los Angeles, CA. www.catastrophicplanning.org. Accessed on August 27, 2012.
[59] Ibid.

b) Recovery

(1) Ensure that people with communication barriers receive and understand public information sent out through the media or other sources. Develop messaging that is language simple, with pictures, if necessary. Consider resourcing alternative format materials, talk boards, picture boards, notepads, pens, and pencils available for staff to use to communicate.[60] Consider resourcing alternative message delivery, such as sign language interpreters.

(2) Housing accessibility—ensure transitional housing plans meet the accessibility standards that will enable people who have access restrictions to function with greater independence. See the Federal ADA Checklist for Emergency Shelters[61] for more information on accessibility standards.

(3) Alternate care locations: in cases where entire group homes or care facilities evacuate to a general public shelter, consider the complications involved with moving people with access and functional needs back to their original facility. Use of smaller, alternative facilities or keeping the general shelter available may be an easier recovery strategy in the long run. Care facility staff can evaluate the risks involved in transporting back to primary facilities on a case by case basis.

2. People Who Are Medically Fragile or Dependent

Populations that are unable to independently care for themselves, or require supervision include children, persons who are medically fragile, and older dependent adults.

Older adults have a higher prevalence of chronic conditions, physical disability, cognitive impairment, and other functional limitations. They may have a dependence on support systems for medical care, medication, food, and other essential needs. They

[60] "Picture boards" and "talk boards" are manual or electronic devices using viewable pictures and/or letters to communicate in situations where speech, auditory impairment, or limited language proficiency hinder communication. "Alternative format materials" include materials such as Braille, audio cassette, large print, computer diskette, CD-ROM, or human readers to assist those with disabilities, as defined in "Guidelines for Accessing Alternative Format Educational Materials," National Library Service for the Blind and Physically Handicapped (NLS), The Library of Congress.

[61] U.S. Department of Justice. (2007). *ADA Checklist for Emergency Shelters*. Washington, DC. http://www.ada.gov/shleterck.htm. Accessed on July 11, 2011.

may have limitations in their mobility, their access to transportation, or other aspects of functional autonomy.[62]

Recovery planners should also be aware of and responsive to language and cultural differences in receiving and conveying information in an appropriate format within the community.

a) Preparedness

(1) Pre-develop close family and neighbor networks with the knowledge and resources to support older adults in reestablishing routines in the transition from response phase to short-term recovery.

(2) Evaluate the needs of public communication and determine if pre-established public service announcements can be developed to facilitate rapid dissemination immediately after an event. These messages should be in a variety of formats that can be conveyed and understood universally.

(3) Secure translation services or translation review of approved communications (communications will be translated into additional languages based on available resources). This is an additional process beyond the translation process and is much easier to ensure accuracy and consistency of stock messages prior to an event.

(4) Outreach pre-event: create public messaging on preparedness and how to respond to a disaster in alternate languages, and work with non-English-language media outlets (e.g., radio, TV, and newspapers) to disseminate the message to their listening communities. Ensure that all messages are captioned and all information is audible. Identify community-based organizations that serve specific ethnic communities and enlist their help to reach diverse non-English-speaking populations.

(5) Create a database of individuals, organizations, or companies that speak a specific language or dialect, or that are experienced in cultural issues of a specific population.

(6) Pre-identify faith-based organizations that are trusted sources for preparedness education and training in communities with limited English proficiency.

[62] Centers for Disease Control and Prevention. (2012). *Identifying vulnerable older adults and legal options for increasing their protection during all-hazards emergencies*. Atlanta, GA. http://www.cdc.gov/aging/emergency/pdf/guide.pdf. Accessed on July 11, 2011.

(7) Pre-identify disability service agencies and disability service providers for assistance in preparedness education and training.

(8) Pre-identify other community organizations and businesses including local schools and their students to communicate in non-English languages and other forms of communication. Messaging should also increase awareness of disaster recovery planning for communities.

(9) Overarching considerations must be taken into account when planning for dependent older adults:

(a) Include older adult issues and needs when developing preparedness plans that identify essential agencies, organizations, and other stakeholders. This should also include planning for older adults with sensory, hearing, vision, and other disabilities.

(b) Pre-identify and review relevant legal authorities regarding older adults in disaster contingencies.

(c) Pre-identify recovery needs specific to the older population that are currently in place.

(10) Develop strategies for identifying dependent older adults.

(a) Assess the population using epidemiologic data to guide planning for the restoration of health services, medications, durable medical equipment (DME), communication access, and other materials needed to support older adults.

(b) Use geographic information systems (GIS) mapping technology to coordinate information about the locations of dependent older adult populations.

(c) Consider the use of the DHHS shelter intake form (or equivalent) in planning the discharge of older adults and anticipating their needs in short-term recovery, such as supervision, or assistance with daily living.

(11) Use existing national networks such as the Aging Services Network created under the authority of the

Older Americans Act in preparedness planning.[63] The Aging Services Network is made up of the Federal Administration on Aging (AoA), 56 State units on aging, 629 area agencies on aging (AAAs), 244 Tribal organizations, 2 Native Hawaiian organizations, and many organizations that provide services (e.g., home healthcare or meal delivery) to older adults.

(12) Develop medication resupply alternatives to mitigate the increased supply demands expected in early recovery.

(13) Promote mutual-aid agreements between agencies to provide services and supplies to older adults in recovery.

(14) Develop pre-event messages that are specific to the hazards likely to occur in your community. In particular, you should create messages that are geared to the health literacy levels of older adults in your community. Take into account language, culture, and vision or hearing limitations and use captioning and sign language.

(15) Build partnerships with local media (e.g., radio and television stations) so they will air messages for older adults in an emergency.

b) Recovery

(1) Caregivers and equipment: people dependent on durable medical equipment or home healthcare may have brought with them their equipment and/or personal support they normally receive at home to a general shelter (or alternatively to a separate medical shelter or health facility). A responsible agency may have been tasked with providing support to those individuals during the response and short-term recovery periods. As power and utilities are restored (or alternate housing options are made available), responsible agencies and personnel should identify challenges with transporting patients and equipment to the new location.

(2) Ensure an evaluation of a new location for dependent individuals is approved and licensed by the State (when required) to ensure people are not being

[63] Administration on Aging. (2011). *National Response Framework & Federal departments and agencies*. Washington, DC. http://www.aoa.gov/aoaroot/Preparedness/Resources_Network/index.aspx#planning. Accessed on July 4, 2012.

moved prematurely from a safe environment to a potentially unsafe environment.

(3) Isolation cases: a separate room or space within shelters may have been used for people who have health concerns (e.g., mental and behavioral health concerns, asthma, multiple chemical sensitivities, allergies, people with compromised immune systems, or cancer) or contagious diseases.[64] Coordinate with healthcare providers to transition these individuals to health facilities as early as possible. Health facilities should evaluate temporary isolation areas as part of their surge plan to ensure these cases can be transitioned out of general population shelters quickly.

(4) Bilingual assistance: The local jurisdiction should identify and prearrange for bilingual assistance or translation services to assist in transition from shelter operations to long-term housing and alternate living environments.

(5) Ensure that reentry plans are appropriately communicated in multiple languages and through a variety of sources

(6) Use GIS technology in real time to create a map to identify population shifts that are due to migration, changes in topography that are due to an event, and the location of remaining community resources.

(7) Develop mechanisms for efficient discharge planning in moving people from temporary shelters back into the community during the recovery. People may go back to their former home or to alternative housing. Discharge planning must begin before an emergency to ensure that all necessary partners are involved. By planning ahead, emergency management officials can make sure that the health of dependent older adults does not decline (especially if they have to stay in shelters for long periods) and that older adults are not released into the community without proper support.

(8) In cases where entire group homes or care facilities in the community are rendered unusable, having a building and safety department to assist with getting a new facility prepared and licensed can help with getting things up and running much smoother. It

[64] Persons with contagious diseases may be sufficiently isolated with use of "negative pressure" room isolation, and movement to a health facility may not always be necessary. Consult the local public health department.

generally takes a year or two for a facility to become prepared and usable. Distributing people to other facilities through surge may not be an option since there may already be a waiting list for many.

(9) Create a community leadership team during recovery that seeks to:

(a) Initiate activities designed to protect older adults

(b) Convene relevant stakeholders and partners

(c) Ensure accountability for dependent older adults

(d) Assess the capabilities and training needs of partner agencies beyond preparedness training

E. Strategies/Processes to Support Recovery Functions

Develop recovery strategies for public health, medical, mental and behavioral health, social services, educational services, child services, adult services, mass medical surge, mass fatality services, and veterinary health needs. These strategies should promote self-sufficiency and continuity for the general population including recovery workers, children, older adults, children and adults with disabilities and others with access and functional needs, people from diverse cultural origins and with limited English proficiency, and underserved populations, as well as those with household pets and animals.

There will be demands on the health and social services disciplines throughout the response and well into recovery. For example, restoration to full hospital capacity may take many months as other needs in the healthcare system are restored. Social service processes may also be affected well past the response phase as new clients are admitted into the system requiring additional resources over a sustained recovery period.

1. Mental/Behavioral Health Strategies

It is important to recognize that one of the most serious and long-lasting consequences of any disaster is the psychological impact that the disaster creates for disaster responders, volunteers, and residents who are directly and indirectly affected by it. The jurisdiction's plans to prepare for, respond to, and recover from disasters include providing mechanisms to deal with the psychological consequences of disasters. Appropriate planning steps should include systems for the rapid identification of those most at risk for developing a long-term mental health disorder as

well as plans to match those most in need with appropriate evidence-based practices for psychological support.[65]

Stress responses are more significant when they have an abnormal effect on daily life. As the majority of the population will not require professional assistance, disaster mental/behavioral health recovery plans should also include education and community-based interventions (such as psychological first aid) that can be facilitated by non-mental health professionals. Disaster planners should avoid "one size fits all" approaches to disaster mental/behavioral health (including interventions in the form of a one-time recital of traumatic events as advocated in some forms of psychological debriefings) as such interventions do not consistently reduce risks of posttraumatic stress disorder symptoms and other serious mental/behavioral health disorders.[66]

Disaster mental/behavioral health response plans and strategies should not be limited to intervention by mental/behavioral health professionals after a disaster. Disaster-related stress can be alleviated to a significant degree by pre-incident preparations made to cope with a disaster's occurrence. Because government employees represent a critical resource in disaster response and recovery, priority should be given to employee programs that help mitigate posttraumatic stress and other serious mental/behavioral health consequences of disaster.

The document *Guidelines for Local Mental Health Activities Following a Disaster* was published in 2003 and acknowledges the importance of mental health issues. The guidelines provide a comprehensive framework that includes pre-incident, incident, and recovery needs and strategies, as well as mental healthcare for emergency personnel.[67]

The Japanese *Guidelines for Local Mental Health Care Activities After a Disaster* was republished in 2003 and emphasized a natural recovery and resilience process as opposed to a trauma focused (or illness) model. The emphasis is on respecting natural recovery/resilience and avoiding predicting a disorder (medical model). These principles are consistent with the guidelines

[65] Schrieber, M. (2011). *National Children's Disaster Mental Health Concept of Operations*. Oklahoma City, OK: Terrorism and Disaster Center at the University of Oklahoma Health Sciences Center. http://www.cdms.uci.edu/conops_final_120511.pdf. Accessed on July 11, 2012.

[66] U.S. Department of Health and Human Services, et al. (29 Oct.–1 Nov., 2001). *Mental health and mass violence: Evidence-based early psychological intervention for victims/survivors of mass violence*. Workshop to reach consensus on best practices. Warrenton, VA. http://www.nimh.nih.gov/health/publications/massviolence.pdf. Accessed on July 11, 2012.

[67] *Guidelines for local mental health care activities after a disaster*. (2003). 2001 Health Labour Sciences Research Grant (Special Research Program for Welfare Science, Japan). www.ncnp.go.jp/nimh/seijin/EnglishDisasterMentalHealth.pdf. Accessed on July 11, 2012.

proposed by the National Institute of Clinical Excellence and other experts.[68]

a) Preparedness

(1) Coordinate with the county mental/behavioral health department to develop a mental/behavioral health disaster plan for disaster response and recovery. (Note: Establishing a planning partnership with the county mental/behavioral health agency is a critical first step in disaster mental/behavioral health and recovery planning efforts for all jurisdictions.)

(2) Encourage and implement pro-active disaster preparedness efforts (such as disaster fairs, etc.) at your facility to better prepare government employees to remain at work and carry out their duties more comfortably following disasters.

(3) Create an inventory to identify those elements already in place within the jurisdiction that address psychological stress impacts and support.

(4) Identify points of contact for each jurisdiction for mental/behavioral health services.

(5) Consider using personnel from human resources and other departments for collaboration and assistance in writing the plan.

(6) Collaborate with stakeholders that have a role or have responsibility for mental/behavioral health recovery efforts, including employees and staff.

(7) Coordinate with appropriate voluntary organizations and the private sector for assistance in the county recovery plan.

(8) Actively seek grant funding and other partnerships to support disaster mental/behavioral health preparedness efforts to implement the program embodied herein.

(9) Make mutual-aid agreements with public, private-sector, faith-based, and nonprofit partners specifically to increase the availability of licensed and trained mental/behavioral health professionals to assist with the delivery of mental/behavioral health support for those most impacted by disasters. This effort should also include pre-registered volunteer teams such as

[68] Ibid.

those from the Emergency System for the Advance Registration of Volunteer Health Professionals/Medical Reserve Corps (MRC).[69]

(10) Explore ways to increase access to paraprofessional crisis counseling team including the identification of the appropriate role and use of paraprofessionals during disasters such as delivering psychological first aid and methods to assist with the identification and referral of higher risk individuals to licensed mental/behavioral health professionals when needed.[70]

(11) Develop a program to mitigate serious psychological consequences of disasters for all government employees, with priority given to employees directly involved in disaster response and recovery. These steps toward a program should include the following:

(a) Involve the local department of mental/behavioral health and other partner mental/behavioral health organizations to develop a pre-incident psychological training program for government personnel who may be required to assist during and after emergencies. Training should include information on traumatic and cumulative disaster stressors, typical reactions, stress management, self-monitoring, peer- delivered psychological first aid, and guidance on when and how to seek further mental/behavioral health assistance when needed.[71]

(b) Identify and arrange for Employee Assistance Program (EAP) services.

(i) Meet with your EAP contractor to discuss their capacity to increase services for employees following a disaster.

(ii) Ensure that EAP services will provide auxiliary aids and services to the deaf and blind community.

[69] For more information regarding a county example of disaster healthcare volunteers, see http://www.lacountydhv.org.
[70] Orange County's Department of Education Crisis Response Network and City of Los Angeles' volunteer Crisis Response Team are examples of these type of teams.
[71] For an example, see the staff resiliency training currently in use by the Los Angeles County EMS Agency called "Anticipate, Plan and Deter" at http://www.cdms.uci.edu/APD_brochure.pdf.

(iii) Ensure that those that claim to know American Sign Language (ASL) truly can communicate in ASL, and that their skills are not limited to finger spelling or a couple of classes taken.

(iv) Clarify with Human Resources that procedures for a major disaster event are outlined.

(c) Identify a cadre of volunteer mental/behavioral health professionals and paraprofessionals pledged to assist government personnel in coping with the psychological consequences of disasters and establish a program to certify or register them for this work. (Note: These volunteers can be registered though the local or statewide Disaster Healthcare Volunteer Program at www.healthcarevolunteers.ca.gov).

(d) Consider the pre-selection of appropriate staff to monitor employee health and mental/behavioral health during disasters.

(e) Ensure that to the greatest extent possible, that appropriate employees receive training in peer-based psychological first aid. (For example, see Listen, Protect and Connect at http://www.cdms.uci.edu/protect.pdf.)

(12) Maximize community and public resources available to deal with health and mental/behavioral health in a major disaster. For example, encourage community and public mental/behavioral health and allied professionals to be trained in appropriate evidence informed practice for disaster mental/behavioral health by doing the following:

(a) Actively promote current, evidence-informed disaster mental/behavioral health practices including, mental/behavioral health triage. (See National Children's Disaster Mental Health Concept of Operations at http://www.cdms.uci.edu/conops_final_120511.pdf.)

(b) Consider training in psychological first aid and trauma-focused cognitive behavioral therapy (see http://tfcbt.musc.edu/).

(c) Consider training of healthcare workers and other emergency service workers in a peer-based psychological first aid such as Listen, Protect and Connect (see http://www.cdms.uci.edu/protect.pdf).

(d) Consider that employees should receive some type of mental/behavioral health resiliency training. (See "Anticipate, Plan and Deter" at http://www.cdms.uci.edu/APD_brochure.pdf)

(13) Other community and first-responder outreach should include the following:

(a) Develop mental/behavioral health resiliency throughout preparedness and recovery to include the design, development, and delivery of accredited courses and training for fire prevention, law enforcement, EMS, and other response agencies.

(b) Encourage a similar effort on the part of the fire department with regard to designing and accrediting a course in disaster mental/behavioral health and employee resiliency for professional fire and EMS organizations.

(c) Meet with local school district(s) to obtain information about school crisis and disaster programs already in place to assist students and staff following disasters. Determine if any of these practices can be adapted for use elsewhere in the community.

(d) Include multiple agencies in pre-event planning. This should include collaboration on processes/plans and methods of communication with existing stakeholder agencies on preparedness and recovery strategies to address mental/behavioral health issues. They should also include representatives from the County Mental Health/Behavioral Health Department and other mental/behavioral health partners in the community.

(e) Consider the feasibility of expanding the Neighborhood Watch program of the police department to include a component of disaster

preparedness and/or dissemination of a brochure on mental/behavioral health disaster preparedness.

(f) Work with the Mental/Behavioral Health Department, the American Red Cross, and other mental/behavior health experts to prepare materials for distribution jurisdiction-wide to prepare citizens to cope with psychological trauma under the guidance of a Mental/Behavioral Health Task Force (if implemented) and community leaders. This should include mental/behavioral health experts that work primarily with the deaf community and the intellectual disability community.

(g) Encourage businesses, PNPs, and other NGOs through the Chamber of Commerce and other appropriate business associations to include in their disaster preparedness plans a section on mental/behavioral health preparedness.

(h) Promote the establishment of mental/behavioral health disaster preparedness programs within civic, religious, and public health groups for all age groups and particularly to children of various ages.

b) Recovery

(1) Mental/Behavioral Health may identify mission-essential functions response phase involving continuity of operations in which it is determined that these missions must continue during an extended disruption of services. Although these are continuity and response activities, if unattended or inadequately addressed, the separate recovery activities may be detrimentally affected or prolonged. In general, this could apply to any discipline or service. For example, these categories may include:

(a) Administration

(b) Immediate emergency care

(c) General mental/behavioral health services

(d) Legally mandated requirements

(e) Medication services

(f) Crisis intervention

(g) Specialty mental/behavioral health programs such as those that address the deaf and hard of hearing community and intellectual disability community

(h) Other mental/behavioral health services

(2) Work with local departments of mental/behavioral health to maintain a hotline (toll-free number/TTY access) or website for residents, family members who need mental/behavioral health assistance following disasters.[72] (Note: Local departments of mental/behavioral health often maintain toll-free hotlines for mental/behavioral health services and augment these hotlines with additional staff following disasters.) Develop procedures for restoration if the hotline becomes unavailable due to service interruptions. A toll-free number and website should be hosted by a third-party out-of-area vendor. It is essential that staff or vendor answering hotline personnel be trained on accepting calls through relay services, specifically video relay.

(3) Use the Safe and Well website through the American Red Cross for family members who want to find other family members following a disaster. (See https://safeandwell.communityos.org/cms/.)

(4) Determine the health status of all personnel and establish a hotline (toll-free number) for family members and staff to send and receive messages in the workplace (human resource office).

(5) Because the jurisdiction's long-term recovery efforts will be significantly affected by the effects posttraumatic stress has on the residents and the community as a whole, priority must be given to efforts to prevent and deal with posttraumatic stress on the part of government employees and disaster volunteers.

(6) Collect and analyze key information relevant to mental/behavioral health and psychosocial support.

[72] For an example, refer to the Los Angeles County Department of Mental Health ACCESS hotline that is used daily and during disasters at http://dmh.lacounty.gov/wps/portal/dmh/our_services/disaster_services/disaster_detail/?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/DMH+Content/DMH+Site/Home/Our+Services/Disaster+Services/Disaster+Services+Detail/Access+Hotline. Accessed September 3, 2012.

(7) Ensure that assessments are coordinated among multiple agencies assessing psychosocial/mental/behavioral health issues.

(8) Specific social considerations should be included in assessments carried out by all sectors, including community services, protection, health, education, shelter, food, and water and sanitation.

(9) The assessment should collect information disaggregated by age, sex, disability and communication or physical access issues (if known), and location whenever possible. This includes identifying at-risk groups in the community and their particular needs/capacities.

(10) Address both the needs and resources of different sections of the affected population, from distressed people who are functioning well to those who are not functioning because of severe mental disorder.[73]

(11) Use Kinship Care Services to provide information, resources, services, and support to relative caregivers and their children to enhance the family unit, safety, and reduced reliance on detentions.[74]

(12) If remaining shelters exist during recovery, work with your local VOAD or American Red Cross to have respite care for children and children with disabilities or "child-friendly space" with Save the Children.

(13) Collaborate with community-based, resilience focused, age-appropriate mental/behavioral health programs throughout recovery.

2. Public Health and Environmental Health Strategies

Public Health and Environmental Health may reside in different departments depending on the jurisdiction but the functions and activities to reduce harm to public health from the environment will persist through recovery. Therefore, for this document, a functional approach is taken.

a) Community Preparedness

(1) Determine an inventory of health facilities within your jurisdictions and include the participation of various types of health partners in the community in development of recovery plans, including:

[73] Adapted from Inter-Agency Network for Education in Emergencies. (2004). *Minimum standards for education: Preparedness, response, recovery*. New York, NY: INEE Coordinator for Minimum Standards.
[74] Los Angeles Operational Area. (2010). *Mass Care Guidance for Emergency Planners*. Los Angeles, CA.

(a) General acute care hospitals

(b) Skilled nursing facilities

(c) Rehabilitation hospitals

(d) Urgent care centers

(e) Ambulatory surgical centers

(f) EMS providers

(g) Intermediate care/intellectual disability facilities

(h) Home health agencies

(i) Acute psychiatric hospitals

(j) End-stage renal dialysis centers

(k) Congregate living health facilities

(l) Primary care clinics/community clinics

(m) Hospice facilities

(2) Provide a forum and mechanisms for private-sector independent health providers and vendors to offer their additional assistance during recovery.

(3) Review prior plans for redevelopment or expansion of facilities that existed before the disaster, and align with current assessments of community needs post-disaster and when moving forward through recovery.

(4) Pre-identify alternate supply chains and sources of medication supply, delivery, and storage especially for at-home patients and residents. This may be necessary if reconstruction interrupts transportation systems or conventional dispensing methods.

(5) Pre-develop event-specific public information messages (e.g., what to do to prevent food spoilage or how to discard spoiled food, etc.). Consider developing or enhancing an outreach program that emphasizes individual and family disaster health preparedness. For example, following the fall 2011 wind storms in the San Gabriel Valley, California, many cities lost power for extended periods, on average 3–5 days. Food stored in refrigerators and freezers in homes and businesses was unusable within days. It was estimated that residents and businesses had $20 million in food losses.

(a) Pre-identify alternate locations where food and medicines may be stored at cold temperature if power is not available in the usual locations.

(b) Combine information on food storage at home with food storage in emergency kits.

(c) Encourage caregivers and families to prepare reserve food in an accessible location for people with disabilities and others with access and functional needs after a disaster for individuals that may spend part of their time living alone.

(d) Encourage family and friends to plan a strategy for sharing perishable food that can still be stored in areas that have not had power loss.

(e) Encourage self-sufficiency using foods that do not require refrigeration.

(f) Encourage use of antiseptic hand-wipes and hand-gels for food handling and to use at home to conserve water for drinking.

(g) Encourage alternate power sources such as generators to power refrigerators and electric appliances for cooking.

(h) Pre-identify alternate mechanisms to obtain medications (e.g., Internet companies, phone orders) in the event that local pharmacies are closed or without certain medications.

(6) Explore collaborative recovery efforts between human and veterinary health professionals (physicians and veterinarians) for resource sharing, including pharmacies, X-ray machines, and CAT-scan machines.

(7) Pre-identify environmental health risks and strategies with regards to hazardous materials, waste, water, food and air quality, vector control, etc.

(8) Coordinate with VOADs, faith-based organizations, and volunteer coordination groups such as MRC and the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP).

(9) Conduct outreach and educate the public to provide realistic expectations of health agencies and progress of the recovery effort using consistent and accurate

messaging and a variety of formats, accessibility, and communication methods.

(10) Conduct outreach and educate community programs such as YMCAs, child care providers, and schools to increase health preparedness, which will make more resilient communities and increase their ability to withstand and recover from disasters.

b) Priority Recovery Activities for Public Health

A number of field activities have been identified as priorities throughout recovery for public, mental, behavioral, and environmental health and are discussed in the following sections.

(1) Re-opening of Health Facilities

Health facilities will be stressed in the post-disaster environment as the number of ill or injured mount. Facilities may be impacted by damage, which may result in loss of services. Licensed health facilities may need to be inspected following a significant seismic event or any evacuation of the facility. In an earthquake disaster, continued aftershocks will need consultation and/or direct assessment by approved building inspectors for health facilities. This is performed by the Licensing and Certification Division of the State Department of Public Health, and in coordination with the municipal public health department. The department must ensure that services meet care standards at permanent facilities and temporary facilities.

Facilities have a primary responsibility to ensure that patients, residents and clients continue to receive the necessary care, treatment, and services in facilities that are safe to occupy and operate.

Coordinate with local EMS agency providers and healthcare facilities for the repopulation of healthcare facilities in a coordinated manner similar to how they were evacuated.

Coordinate the restoration of medical services with community planners, Public Health/EMS and Emergency Management, and other recovery planners using information such as facilities that are open, bed availability, safety and damage assessment of facilities, emergency generators, closed facilities, and evacuation of damaged facilities.

(2) Human and Animal Disease Surveillance

Communicable diseases spread through contact with an infected host (people, animals, or vectors), from contaminated food or drinking water, or from environmental sources where the organisms live. Unusual events and emergencies involving communicable diseases include atypical or unusually large outbreaks, periodic epidemics, pandemics or terrorism using bioterrorism agents/diseases, and depending on the severity of the illness and the number of people affected, may result in a healthcare surge and require the appropriate application of control measures to contain the spread of disease.[75] (Also see Vector Control.)

The need for zoonosis control, disease control and surveillance, and zoonosis consultation will continue into recovery as new environmental hazards and animal populations are displaced awaiting relocation or reunification in affected and unaffected areas.[76]

(a) Short-Term/Intermediate Recovery

(i) Develop a plan to monitor both human and animal disease outbreaks and/or pest infestation through long various seasonal changes, often with periodic cycles of higher prevalence of certain species.

(ii) Collaborate with other environmental agencies in unconventional areas where humans and animals may have congregated post-disaster.

(iii) Define the method of disease surveillance using standard epidemiological methods, including:

a. Elective laboratory reporting

b. Immunization program reporting

c. Inspection, screening, and situation reports received from remaining shelters (including shelters staffed by Public Health

[75] California Department of Public Health. (2011). *California Public Health and Medical Emergency Operations Manual*. Sacramento, CA.

[76] Zoonosis refers to diseases that can be passed from animals, whether wild or domesticated, to humans

Department clinical personnel and city or American Red Cross shelter staff)

d. Electronic syndromic surveillance methods

e. Coroner's reports

f. Confidential morbidity reports

g. Other labs such as the California Animal Health and Food Safety Laboratory System lab, Public Health lab, local veterinary labs, National Federal labs, miscellaneous surveillance and lab reports monitored by USDA, the California Department of Food and Agriculture (CDFA), and the California Department of Fish and Game (CDFG)

(iv) Communicate with animal owners regarding county code requirements that any person suspecting or having knowledge of infectious disease in animals is to report this information to the Director of Public Health.

(v) Remind veterinarians and veterinary medical associations (i.e., the Southern California Veterinary Medical Association, the California Veterinary Medical Association, the American Veterinary Medical Association, the American Animal Hospital Association, the American Association of Feline Practitioners, etc.), animal control agencies and shelter management, using appropriate messaging, that suspected infectious disease shall be reported to Veterinary Public Health.[77]

(b) Long-Term Recovery

(i) Continue disease surveillance and combined vector control methods with public education.

[77] Adapted from: Los Angeles Operational Area. (2010). *Animal Emergency Response Plan*. Los Angeles, CA.

(ii) Include mechanisms for ensuring transitional housing remains safe, and temporary facilities that were intended to operate for a short period continue to be inspected. Houses and temporary infrastructure resources are often designed to last for months and end up getting used for years.

(iii) Institute permanent control measures for agents that have been confined and are no longer transmissible to humans or animals.

(iv) Use automated surveillance collection systems when available to enable long-term analysis of exposures, prevalence, and health effects.

c) Priority Recovery Activities for Environmental Health

(1) Human and Animal Food and Water Safety

The safety of food sources is critical to the overall health of the community following an event. All food sources, including retailers and wholesalers and the food service industry in the affected areas should be inspected within 72 hours after an event if possible. Inspections encompass shelters, mass feeding venues, restaurants, and donated food sources entering or being stored in the operational areas. Shelters could still be operational well past the response phase and into the first phases of recovery as temporary and more permanent housing becomes available.

The safety of water sources is critical to the overall health in a post-disaster event. An assessment of the water supply system, including structural damage of buildings, storage tanks, pipelines, and processing equipment, should be conducted by large water purveyors. The assessment should encompass identification and location of alternative water supplies. Consider all small water systems be prioritized for assessment within 72 hours post-event. Inspection of large water facilities will have been largely completed during response. Inspection of smaller systems may continue well into recovery.

Many large open areas away from dense urban areas where many animals rely also on natural water sources should be a consideration for testing and surveillance.

Assuming the response phase has been completed, recovery will involve continued inspection due to hazards remnant of the disaster, or due to reconstruction activities.

(a) Preparedness

(i) Integrate water safety into personal preparedness planning.

(ii) Provide instruction on adequate stores of water necessary for self-sustainment for 72 hours to 2 weeks.

(iii) Provide instruction on use of non-drinkable water for other uses such as bathing and toileting.

(iv) Educate the public to use water from larger venues and known sources as these will likely be prioritized for inspection and compliance.

(b) Recovery

(i) The types of water systems that should be inspected by the Environmental Health Department include:

a. Irrigation systems

b. Individual water systems (four connections or less)

c. Small water systems (5–15 connections)

d. Large water systems (greater than 15 and fewer than 200 connections)

(ii) Continue inspections of incoming donated food stuffs, including those from nongovernmental organizations, faith-based organizations, nonprofit organizations, and citizen donations.

(iii) Reiterate to the public the safe handling, storage, and disposal of food based on preparedness messaging.

(iv) Establish criteria for human and animal food safety based on new hazard vulnerability assessments including input from other regulatory agencies such as the U.S. Food and Drug Administration.

(v) Coordinate food storage facility inspections for both animals and humans using:

a. Physical inspection of facilities

b. Windshield inspection of damaged facilities

c. In-depth inspection of food service facilities

(vi) Priorities for food/water inspections may include:

a. Ongoing inspections of mass feeding operations

b. Investigations for food-borne illness

c. Areas that have experience a loss of electrical power that extends beyond 4 hours

d. Areas that have had a loss of potable water service

e. Areas that are under “boil water,” “do not drink,” or “do not use water” orders

f. Areas common as sources of food and water, such as livestock and grazing animals, or multiple pet-feeding areas

g. Facilities closest in proximity to the earthquake epicenter or impact area(s)

h. Systems that serve the greatest number of residents

(vii) The types of food/water facilities that should be inspected throughout recovery are:

a. Retail food facilities
b. Wholesale food facilities
c. Feeding centers
d. Restaurants
e. Food market store
f. Food warehouses
g. Food processors
h. Hotels and motels
i. Mobile food facilities
j. Commissaries
k. School kitchens
l. In-plant feeding facilities
m. Institutional facilities
n. Children's day camps
o. Daycare centers
p. Vending machines
q. Amusement parks
r. Temporary disaster facilities that serve food, such as shelters and responder base camps

(c) Identify facilities that have public health permits and coordinate with interdepartmental divisions to expedite the monitoring process (coordinate with Natural and Cultural Resources RSF [solid waste management, etc.]). Examples of systems requiring permits are small water systems with 200 connections or fewer, septic tanks, landfills, public pools, and spas.

(2) Human and Animal Shelter Safety

In any event that displaces people and animals directly through evacuation or by an inability to remain or return to damaged or destroyed homes or dwellings, the cities and counties should implement a comprehensive sheltering program. It can also be

expected that residents may spontaneously shelter in backyards or parks. Environmental health's main focus in this mission is to ensure sanitary conditions at shelters to minimize the spread of disease or other conditions that will negatively impact the health of the public or animals living in shelters. Although sheltering is usually considered a response activity, continued monitoring of long-term shelters, continued compilation of inspection records, and additional monitoring of nontraditional and spontaneous shelters may be necessary during recovery.

(a) Preparedness

(i) Ensure that public health/environmental health inspectors are available and trained in shelter safety.

(ii) Educate planners and the community through outreach on sheltering types in disasters and that, following a disaster, use of designated shelters will be encouraged to reduce risk of public health hazards.

(iii) Familiarize other city/county agencies/departments, and shelter workers on shelter safety guidelines consistent with local public health or environmental health departments on a range of shelter types.

(iv) Encourage participation by other recovery agencies in preparedness to convey similar messages regarding established sheltering guidelines to reduce risk of health hazards.

(b) Recovery

(i) Continue inspection of remaining shelter facilities, using local health department/environmental health or American Red Cross guidelines, as resources permit.

(ii) Monitor remaining shelter facilities for accessibility as soon as possible after opening, especially if there is no prior record of ADA accessibility at that location.

(iii) Continue to incorporate Public Health guidance and messaging that will help convince the public to use established shelters rather than ad hoc (spontaneous) shelters.

(iv) Continue to provide public health support to shelter locations upon request to the extent possible.

(v) Coordinate with County Social/Human Services, the Department of Education, the American Red Cross, and other agencies to determine current and projected mass care and sheltering needs, including temporary housing arrangements.

(3) Human and Animal Air Quality[78]

Air quality will be affected as demolition and removal of debris must be conducted before reconstruction can begin. The concentration of airborne contaminants may be exacerbated by small particle size, low humidity, and wind conditions. Proximity to sources of contaminant may vary over time as debris is transported and moved to temporary locations or collected and stored at areas (such as large open areas, or loading docks) before final removal or disposition. Debris or debris-clearing activities near major population centers or heavily-used highways will also expose a greater number of people and animals.

(a) Preparedness

(i) Pre-identify measurement techniques and capabilities for expanded monitoring in areas not usually considered at risk pre-disaster.

(ii) Pre-identify susceptible sources of hazardous material in all forms that may be produced, stored, or transported on commonly used routes pre-disaster. These routes may be unavailable post-disaster and alternatives may need to be pre-planned.

[78] Also see Natural and Cultural Resources RSF.

(iii) Develop plume-modeling and historical weather climates in susceptible geographical areas to predetermine likely dispersion patterns and mitigation strategies during reconstruction.

(iv) Educate the general public through preparedness outreach on methods to reduce indoor air pollution and unnecessary exposures in handling private debris removal.

(b) Recovery

(i) Limit demolition and reconstruction to periods of the day when those areas are not occupied by commuters, students, or concentrated populations.

(ii) Confine movement and overland transportation of hazardous materials and debris to designated routes with monitoring to insure handling and storage on points along those routes.

(iii) Continue public health messaging for people and children with allergies and sensitivities to air-borne contaminants and animals.

(iv) Educate the medical community and public health educators to recognize and treat conditions resulting from exposures.

(v) Encourage research to document locations and levels of potential contaminants for long-term follow-up and retroactive studies.

(4) Human and Animal Vector Control[79]

(a) Preparedness

Different types and quantities of vectors can be anticipated in areas where there are large congregations and in proximity to environments conducive to vector propagation. Anticipated vector-related problems may include increased arthropod populations (mosquitoes, flies, fleas,

[79] Also see Natural and Cultural Resources RSF.

lice, mites, ticks) and increased interaction among humans and vertebrate pests (rats, mice, ground squirrels, raccoons, skunks, opossums, feral/stray cats). Endemic diseases, such as murine typhus, plague, rabies, West Nile, and St. Louis encephalitis infections may increase as a result, as well as emerging vector-borne diseases (*Bartonella spp*., tick-borne *Rickettsia spp*., and others).

An event that displaces people from their homes will likely result in the establishment of unconventional shelters, such as back yards, parking lots, city/county parks and campgrounds, in addition to organized shelters. Mixing of these people, their pets, and the local wildlife population may create vector-related risk factors, from people to people (lice), pets to people (fleas, ticks, excreta/secreta), and local wildlife to pets and people (fleas, ticks, mites, and excreta/secreta). Warmer temperatures and previous high seasonal rainfall can exacerbate these risk factors.

Surveillance for vectors in all shelters and affected areas would be essential to identifying problems, so as to direct suppression/control efforts promptly. Integrated pest management principles (using a combination of control methods) should be implemented in addressing problems. Adequate prevention and public education will mitigate many potential situations. These should include:

(i) Informational brochures for prevention of vectors and associated diseases such as rodents, other wildlife (opossums, skunks, raccoons, feral/stray cats), flies, fleas, mosquitoes, lice (head, body, pubic), ticks (especially dog ticks), and bird and rat mites

(ii) Informational brochures on endemic typhus and other rickettsia agents, i.e., plague, hantaviruses, and arboviruses (e.g., West Nile, St. Louis encephalitis)

(iii) Disease-risk-reduction recommendations pre-disaster that encompass classifications of risks (e.g., rodent-borne risk reduction recommendations)

(iv) Literature for pet owners stressing flea control and proper vaccinations as preparedness measures to implement

(v) Policies that will help reduce the existing number of zoonotic disease vectors and associated hosts (rats, mice, ground squirrels, feral/stray cats, opossums, raccoons, skunks), including recommendation of "no feeding of wildlife" policies and pest management practices to reduce food sources, eliminate harborage, and establish pest controls

(vi) Mechanisms for enforcement of such policies in nonconventional environments where people, pets, and other animals co-exist

(vii) Properly trained and certified staff who can perform inspections and disease surveillance in vector populations, and who can legally apply pesticides

(viii) Laboratory support for testing for zoonotic diseases, including possible surge capabilities

(b) Short-Term/Intermediate Recovery

(i) Identify and coordinate conditions to ensure safety in these sectors, including inspection and quarantine.

(ii) Provide for the safety and well-being of household and service animals through preventive education to the public.

(iii) Continue surveillance in shelters that accept animals, and ad hoc shelters, for sick or flea/tick infested pets, and treat as needed.

(iv) Conduct surveillance for “hot spots” for these vectors, so as to anticipate problematic areas.

(v) Continue rapid elimination of food sources that attract animals and insects.

(vi) Continue monitoring and disposal of food waste (domestic and commercial).

(vii) Continue repair of selected buildings to exclude rodents and other vermin to protect existing food supplies.

(viii) Continue surveillance and control for flies, mosquitoes and other arthropods (especially in warm weather).

(ix) Continue surveillance and control for rodents, especially rats and mice (high fecundity).

(x) Continue surveillance and control for other vertebrate pests as needed.

(c) Long-Term Recovery

Months and years after the disaster, people may still reside in outlying areas closer to wilderness areas, and the process to restore abatement processes will need to continue and adapt to new conditions as populations move back to urban settings. Restoration of vector control conditions to pre-disaster levels will be a continuous process in recovery.

(i) Coordinate continued vector surveillance control activities, addressing known problematic areas not resolved from short-term efforts, and identify any new/emerging issues in collaboration with:

a. Vector-control districts (mosquitoes, black flies, others)

b. County agriculture (rodents and larger vertebrates)

c. Local animal control departments (domestic species) and

d. Other environmental health agencies

(ii) Continue long-term surveillance for additional elevated vector populations.

(iii) Conduct special consideration for vertebrates (rats, mice, feral/stray cats, skunks, opossums, raccoons).

(iv) Continue public education specific to the environmental conditions that have evolved from the event.

(v) Reevaluate control measures in urban areas, checking for reestablished rodent populations or conditions associated with rodent problems (sanitation, harborage).

(vi) Continue to evaluate and resolve vector related problems in shelters, especially associated with companion animals, so as to prevent relocation of vectors and/or disease as people return to their homes and neighborhoods.

3. Medical Strategies

The California Department of Public Health (CDPH) and the Emergency Medical Services Authority (EMSA) provide essential services and support local health services agencies during non-disaster times.

The primary function is to continue immediate medical service through continuity of operations and to restore full-service capability within the medical delivery system over the long term. Activities should include participation by the municipal or county public health department and local EMS Agency (LEMSA).

Realize that provisions should be anticipated to provide for ongoing human health and medical needs for the acute and chronically ill, and new illnesses and injuries from the disaster itself.

a) Preparedness

(1) Understand the probability and effects of risks to the health delivery systems by using the Hazard Risk Assessment Instrument Workbook (available at http://www.cphd.ucla.edu/hrai.html) or an equivalent.[80]

[80] The hHAP (Health Hazard Assessment and Prioritization) tool is the SoCal Metropolitan Statistical Area (MSA) Collaborative (Orange County, Long Beach Health Department, Pasadena Health Department, and Los Angeles) that recently completed Hazard Vulnerability Analysis (HVA) tool.

(2) Ensure electronic medical records functionality and transferability to multiple storage sites and viewing modalities that may be in temporary or alternate locations.

(3) Develop electronic medical records that can be transferred across different software systems for use by different medical providers.

(4) Develop portable medical record storage systems to assist in continuity of care, or access cards to securely access off-site medical records to ensure continuity of care.

(5) Consider plans for stockpiling, distributing, and rotating medical supplies and coordinate these plans with county public health and local emergency management efforts. Include medical countermeasures for children.

(6) Pre-identify storage methods to secure caches of critical medical supplies and pharmaceuticals and provide necessary environmental storage devices to maintain the appropriate environment (climate control).[81]

(7) Identify alternate mechanisms to deliver pharmaceuticals to patients with interrupted supply chains and routes.

(8) Conduct training and exercises with practitioners for infant, child, and young adult pre-hospital and emergency healthcare and mental/behavioral health issues, including pharmacy support. This training should integrate the needs of children with disabilities; especially children who are deaf or hard of hearing and those with intellectual disabilities, and those with autism. Activities should include the following:

(a) Initiate and sustain training for healthcare professionals who may treat children during an emergency and that they have adequate pediatric disaster clinical training specific to their role.[82]

(b) Provide funding for a formal regionalized pediatric system of care for disasters.[83]

[81] Assistant Secretary for Preparedness and Response. (2012). *Healthcare preparedness capabilities*. Washington, DC.
[82] National Commission on Children and Disasters (2009). *Intermediate report*. Washington, DC.
[83] Ibid.

(c) Improve the capability of EMS to transport pediatric patients and provide comprehensive pre-hospital pediatric care during daily operations and disasters.

(d) Provide for adequate supply of pediatric medicines and dosages, and resupply contingencies.

(9) Assist healthcare organizations with FEMA 100-, 200-, 700-, and 800-level training or equivalent Incident Command System (ICS) training.

(10) Pre-identify alternate sources of DME for residents and patients. This may be done through contingencies contracted with existing vendors.

(11) Pre-identify communication resources (e.g., sign language interpreters, video conferencing capability, and other trained personnel and modalities).

(12) Pre-identify equipment that can deliver power, heating/ventilation/air conditioning, potable water, food storage, or other equipment that can sustain essential patient services.

(13) Pre-identify alternate care systems and sites for providing medical services with the local health departments.

(14) Pre-identify occupational medicine providers and clinics for treatment of injured or exposed workers during recovery.

(15) Consider the development of vendor-managed inventory, such as for ventilators and other specialized equipment.

(16) Consider the acquiring or obtaining access to emergency communications.

(17) Pre-identify shortages of specialized diagnostic or treatment equipment, which during recovery will be scarce.

(18) Develop mass medical surge logistics plan involving hospitals, medical providers, skilled nursing facilities, community clinics, private outpatient clinics, and surgery centers.

(19) Establish relationship with the local end-stage renal disease network. Consider accessibility for dialysis

treatments, including recovery of dialysis centers and ensuring patients can continue dialysis at home.

(20) Pre-identify supply lines and transportation routes that accommodate points of distribution in existing operational plans.

b) Short-Term Recovery

(1) Conduct initial and ongoing facility assessments.

(2) Coordinate with licensing and certification officials for requirements and timelines for repopulating hospitals.

(3) Prioritize reestablishment of temporary emergency departments, which it may not be possible to locate in damaged healthcare facilities. Consider alternate locations.

(4) Consider positioning health resources outside of the impact zone during reconstruction occurring within impact zones. Encourage impacted populations to vacate areas under reconstruction and provide accessible public transportation to access care at relocated health facilities.

(5) Implement a reporting structure for hospital status reports through the operational area medical/health EOC/DOC, or other established mechanisms within jurisdictions or operational areas.

(6) Determine and communicate facility capabilities to emergency management and coordinate with public health to communicate the status of hospital capabilities to the public throughout recovery.

(7) Prioritize resumption of health services and establishment of expanded services with increased demand.

(8) Prioritize recovery of dialysis capability, chemotherapy clinics, and radiation therapy facilities and access to these facilities. Consider accessibility for dialysis treatments, including recovery of dialysis centers and ensuring patients can continue dialysis at home.

(9) Consider medical transportation issues and priorities for urgent patient care, and routine maintenance of care throughout the phases of recovery.

(10) Ensure coordination of multiple transport options, including the following considerations:

(a) Air, ground, and sea options

(b) Public and private options

(c) National Guard collaboration

(d) Volunteer agencies

(e) Family members

(f) Additional innovative options

(11) In coordination with Public Health, EMS, and the private sector, establish patient movement protocols between the private sector and the Federal patient movement system.

(12) Ensure coordination with community clinics, long-term care facilities, urgent care centers, and board and care facilities in surge management.

(13) Provide crisis counseling, case management, and mental/behavioral health support for health workers, staff, and family.

(14) Provide for continued worker safety, and treatment of work-related injuries during recovery operations.

(15) Ensure medical aid devices reach those who are impacted by a disaster to help keep them functioning and as independent as possible (e.g., ventilators, wheelchairs, eyeglasses, hearing aids, etc.).

(16) Resume the treatment of diseases and illnesses, including cancer treatment, dialysis, long-term treatment, physical disabilities, and psychiatric services.

(17) Hospitals should prioritize vendors according to priorities established during restoration to full services or as identified in their continuity planning.

(18) Consider the use of a temporary healthcare site for intermediate and long-term medical strategies.

(19) Use Medical Reserve Corps (MRC), disaster healthcare volunteers, and other affiliated teams.

(20) Use veterinary volunteer teams and animal handling experts, such as the American Humane Society, and other affiliated teams.

(21) In addition, a number of private-sector entities, which provide *specific* services in the impacted jurisdiction, may require additional support to return to business

as usual activities. Other health-related services that could be subject to disruption include:

(a) Skilled nursing facilities

(b) Adult care, including long-term chronic care

(c) Regional centers

(d) Adult residential facilities

(e) Child care facilities (centers and family homes)

(f) Home healthcare

(g) Adult and child daycare centers

(h) Independent living centers

(i) Deaf services agencies

(j) Blind services agencies

(k) Children's health and emergency medicine

(l) Community health and ethnic- and gender-health specific services

(m) Private practices, in-home treatment programs, and residential living programs that provide medical service

(n) Sign-language interpreter service agencies

c) Intermediate/Long-Term Recovery

(1) Develop alternate accessible public transportation and transit routes due to increases in area populations to allow continued access to health services.

(2) Consider the use of a temporary mobile medical system for intermediate and long-term medical care if necessary. This should be physically accessible to people with disabilities and should also include arrangements for communication disabilities.

(3) Determine and communicate facility capabilities to emergency management. Communicate the status of hospital capabilities to the public throughout recovery. This should also include information on whether the facilities are physically accessible and which ones have communication access.

(4) Coordinate with the lead jurisdictional authority, and jurisdictional and regional mental/behavioral health partners to assist healthcare organizations with the

processes to solicit support for the provision of non-intrusive, age-appropriate, culturally sensitive mental/behavioral health support services to family members of the deceased, incident survivors, and responders, if requested.[84] This should include communication access for the deaf, hard of hearing and deaf/blind community and the blind and visual disability community, in addition to those with intellectual disabilities or non-English speaking

(5) Re-establish financial systems within the medical infrastructure and payment/reimbursement systems for patients, suppliers, and vendors. Coordinate with Economic RSF to reestablish financial strategies.

(6) Collaborate with State and Federal coordinators in the request for deployment of field hospitals or field medical stations (FMSs) as longer term temporary treatment sites may be necessary during reconstruction of damaged health facilities.

4. Mass Medical Care Surge[85]

A healthcare surge specifically relates to a catastrophic emergency that overwhelms the healthcare delivery system.

A healthcare surge is proclaimed in a local jurisdiction when an authorized local official such as a local health officer or other appropriate designee, using professional judgment determines, subsequent to a significant emergency or circumstances, that the healthcare delivery system has been impacted, resulting in an excess in demand over capacity in hospitals, long-term facilities, community care clinics, public health departments, other primary and secondary care providers, resources and/or emergency medical services. The local health official uses the situation assessment information provided from the healthcare delivery system partners to determine overall local jurisdiction/operational area medical and health status.

Healthcare surge should not be confused with the frequent emergency department overcrowding experienced by healthcare facilities (late night crowded emergency departments). It is also not a local casualty emergency that might crowd nearby emergency departments/hospitals but has no impact on the overall healthcare delivery system.[86]

[84] Assistant Secretary for Preparedness and Response. (2012). *Healthcare preparedness capabilities*. Washington, DC.
[85] Los Angeles County Department of Public Health and Los Angeles County EMS Agency. (Draft 2011). *Los Angeles County mass medical care framework response reference guide*. Los Angeles, CA.

In almost any incident of any significant size, the healthcare system will have to optimize care for the most number of people in a variety of settings by prioritizing the most medically injured and ill. In a mass casualty situation, the surging of less-acute patients to alternate facilities or earlier discharge to home arrangements may accommodate the surge of patients coming into emergency rooms and critical care. This process may well be completed in the response phase. In a prolonged pandemic influenza scenario lasting many months, the large volume of patients may require a surge system that involves the movement of patients between medical facilities to make room for the most acutely ill. This response operation will then be occurring continuously while other healthcare recovery operations are ongoing.

a) Preparedness

(1) Pre-identify sectors of the medical infrastructure that can engage in discussions on common strategies in surge planning. Sectors can include both public and private institutions and a variety of medical personnel, vendors, and administrators in this process. These sectors may include the following:

(a) Hospitals

(b) Hospital clinics

(c) Skilled nursing facilities

(d) Community clinics

(e) Health centers

(f) Ambulatory surgery centers and urgent care

(g) Dialysis centers

(h) Emergency medical service providers

(i) Home health agencies

(j) Hospice agencies

(k) Pharmacists, dentists, and veterinarians

(l) Military medical providers

(m) Licensing and certification authorities (State and local)

(2) Identify indicators for initiating surge strategies, such as[87]:

[87] The local health officer or authorized local official may use color-coded descriptors to designate the status of the health care system in the local jurisdiction or Operational Area. For further information, see: Health Care surge in the Continuum of Care, *California Public Health and Medical Emergency Operations Manual* (2011), p. 131-144.

(a) Filling of all staffed beds

(b) Expedited discharges

(c) Cancellation of elective and outpatient surgeries

(d) Downgrading of patients to lower levels of skilled care

(3) Medical facilities and providers should pre-identify through Licensing and Certification personnel or approving authorities which health regulations are determined through State law, local health laws, or governor's proclamation in preparing a surge plan. This includes which regulations can be relaxed or waived and under what conditions. An existing surge plan should list these regulations and the agency/agent of authority.[88]

(4) Work with Licensing and Certification personnel to identify the process for reprioritizing workspace, staff, and supplies.

(5) Inventory potential workspace within or adjacent to existing medical facilities, its present use and its intended use in an emergency, and the anticipated time it would be used for that purpose. Such rooms could include break rooms, meeting rooms, auditoriums, nearby affiliated clinics, and tents or covered facilities.

(6) Health facilities should pre-identify staffing job descriptions and allowances for lower-skill levels that might be filled by higher skilled workers should the need arise.

(7) Health facilities should pre-identify specific standing orders within the institution or practice for nursing staff and medical assistants.

(8) Pre-identify potential staffing resources from community-based volunteer units such as the Medical Reserve Corps (MRC), Disaster Volunteer Corps, Disaster Healthcare Volunteers (DHV), student nurses, medical students, and Disaster Service

[88] An Executive Order may address issues such as scope of practice; conversion of space; staffing ratios; informed consent; disease reporting; advanced health care directives; communication with health care agents, surrogates and next of kin; and honoring cultural preferences and rituals in disposing of human remains. An expanded list of State statutes and regulations that may be addressed by a Governor's Executive Order can be found in the Foundational Knowledge volume of *Standards and Guidelines for Healthcare Surge During Emergencies* (CDPH, 2007, pp 85-95).

Workers (DSWs). Note that Disaster Medical Assistance Teams (DMATs) through the National Disaster Medical System (NDMS) system are only available and deployable as a Federal asset. California Medical Assistance Teams (CAL-MATs) operate under State direction for response to local requests through California's disaster medical mutual aid system to augment medical care in disaster areas.[89]

(9) Pre-identify vendors for resupply capabilities when multiple facilities may be relying on the same vendors.

(10) Develop agreements with local stores/pharmacies for alternate sources of medications and delivery systems.

b) Recovery

(1) Healthcare facilities may use the same process for de-escalating or transitioning back from mass surge, such as:

(a) Reduction in filling of all staffed beds

(b) Decrease in expedited discharges

(c) Resumption of some elective and outpatient surgeries

(d) Upgrading of patients to higher levels of skilled care

(2) Start identifying how to "demobilize" and return space back to normal use. Prioritize how to return converted spaces back to their original use. Ensure approval by and compliance with all State, Federal, and local regulations, if surge strategies are in use beyond initial anticipated and approved time.

(3) Health planners should continue alerting and communication to health agencies via the California Health Alert Network (CAHAN) or other internal notification networks within each jurisdictional area, as appropriate.

(4) Plan a series of short-term recovery activities to incrementally move into intermediate/long-term recovery with participation by emergency management, licensing and certification or approving

[89] California Emergency Medical Services Authority. (2007). *California Disaster Medical Response Plan*. Rancho Cordova, CA.

agencies, building/safety, public health officers, public health DOCs, EMS coordinators, Regional Medical and Health Operational Area Coordinators (MHOACs), and regional and county area commands.

(5) Work with external communications and public health messaging to develop public information templates (fact sheets) and ensure various modes and methods of public information to redirect patients to appropriate facilities for care, until their usual healthcare providers are "reopened" for business.

(6) Work with communications and public health messaging to describe the processes of reconstruction and the anticipated effects on the overall community effort to rebuild.

(7) Designate a health facility liaison from the healthcare systems (hospitals, skilled nursing facilities, clinics, and private providers) to communicate with the Community Recovery Committee, steering committee, or community task force to coordinate local efforts towards restoration of health services with the support of the community.

(8) Use mitigation during health facility rebuilding to implement higher building standards for long-term resilience.

5. Social Services/Human Services Strategies

Social services programs promote the general welfare of the community during non-disaster times. During an emergency, these programs, when unavailable or impacted, can contribute to and exacerbate the ongoing social conditions of a disaster such as poverty, unrest, crime rates, and other community tensions. The support and expansion of these services immediately following a disaster can be essential to ensuring the community is able to return to pre-disaster situations, which may have already been strained due to other economic, psychosocial, or historical situations. Understanding the variety of disaster programs available to individuals will positively influence the well-being of the community.

Most social services are provided in whole or in part by governmental agencies though some are provided by NGOs, religious or other community-based organizations. It is imperative to identify these service providers in advance, engage them in recovery planning, and support the provision of service from a whole community approach instead of as a government dependent

responsibility. This approach ensures continued resilience, although it requires greater coordination.

A worksheet describing social services programs can assist each operational area in comparing similarities and differences. Scope and content of social services will vary with differences in names of programs although their functions may be identical. Table 9 illustrates an example of a worksheet listing governmental and nongovernmental agencies. It is not exhaustive nor includes every service provider or social service resource available. It is important to note that each of these services must also address the deaf and blind communities in their responses. The blind and deaf communities are not represented by a specific service, but they may fall within all of these services. A regional recovery plan can benefit from comparisons of functions for each operational area in the manner shown here.

Table 9: Support Activities for Social Services in Recovery

Governmental and Private	
Adult Protective Services	Adult Protective Services (APS) is a State-mandated service program within the Adult Services program that investigates situations involving elders (age 65 or older) and dependent adults (physically or mentally impaired 18–64 year olds) who are reported to be endangered by physical, sexual or financial abuse, abandonment, isolation, abduction, neglect, or self-neglect. Any endangered elder or dependent adult is eligible for APS without regard to income. APS is separately funded.[90]
In-Home Supportive Services or In-Home Care	In-Home Supportive Services (IHSS) is a State-mandated program providing assessment of in-home care needs and reimbursement of eligible in-home care services provided to eligible persons who are 65 years of age or over or legally blind or disabled adults and children so they can remain safely in their own homes. IHSS is considered an alternative to out-of-home care such as nursing homes or board and care facilities. In-home Care providers are independent agencies or a credentialing public authority that provide services. Some In-home care providers are not credentialed, but still provide services. Working with IHSS to identify credentialed providers is essential. Note that a large number of persons receive in-home services outside of the IHSS system, directly with private-sector independent providers.
Children and Family-related services	Children and Family services (includes foster care, child protective services), Adoption and Foster Parenting, Child Care Services, Child Support Services,[91] family reunification, education placement for displaced children, and child-focused mental/behavioral health
CalWORKs	• CalWORKs is a State-mandated program providing temporary financial assistance to eligible families with minor children who have income and property

[90] See Adult Protective Services legal reference: California Welfare and Institutions Code: 11135-11139.5 Welfare institution code 15635 for definitions http://www.leginfo.ca.gov/.html/wic_table_of_contents.html.
[91] Child Protective Services, Welfare Institution Code: 16504

Governmental and Private	
	below State maximum limits for their family size. • Welfare to Work[92] (WTW) is the employment services program for eligible adults within CalWORKs. WTW provides employment preparation and employment support services to help CalWORKs adults find and retain employment. WTW services can include job search and readiness assistance, vocational assessment, education and training. WTW also includes child care, transportation and other supportive services enabling participants to get and keep a job.
CalFresh	The CalFresh Program (formerly known as food stamps and federally known as the Supplemental Nutrition Assistance Program) is a State-mandated program that provides financial assistance for income-eligible families to purchase food. The program issues monthly electronic benefits that can be used to buy most foods at many markets and food stores.
Medi-Cal	Medi-Cal is a State-mandated program. It is California's implementation of the Federal Medicaid health program providing a variety of medical services for adults and children with limited income and resources.
General Relief Assistance	General Relief (GR) is a State-mandated, county-funded program that provides temporary cash aid to indigent adults and certain sponsored legal immigrant families who are ineligible for Federal or State programs. GR Work Program[93] Job Training: Provides employment and training services to help employable GR participants obtain jobs and achieve self-sufficiency. Participants are assigned to a Case Manager who will work with them to achieve their employment goals.
Regional Centers	Regional Centers are diagnostic, counseling, and service coordination centers for developmentally disabled persons and their families.[94]
Independent Living Resources[95]	Services include: self-advocacy training, assistive technology, housing information, independent living skills training, peer counseling, and personal care assistance, as well as information and referral about a variety of timely topics.
Food Delivery Services	Meals-On-Wheels and other home-delivered meals services.
In-Home Care provider registries and providers	In-Home Care provider registries include care and services to clients who require personal assistance with daily living.
Senior Centers	Senior centers typically provide nutrition, recreation, social and educational services, and comprehensive information and referrals. Some centers also offer case

[92] An example is the Greater Avenues for Independence (GAIN) program in Los Angeles County.
[93] An example is the General Relief Opportunities for Work (GROW) program in Los Angeles County.
[94] Title 17. California Code of Regulations, Chapter 3. Community Services, Subchapter 2. Article 1. Definitions
[95] Living Independently in Los Angeles (LILA) is a consumer-directed and regionally focused online project to benefit people with disabilities living in Los Angeles County. LILA uses a geographic information system (GIS) – based interactive information resource database, created by local residents with disabilities using their personal "expert knowledge" to identify and map local independent living resources. APS, IHSS, and LILA are categorized under "Elder Services" the Los Angeles County Department of Social Services.

Governmental and Private	
	management programs, long-term care ombudsman services and operate adult daycare and adult day healthcare centers.[96]

a) Preparedness

(1) Pre-identify locations of most dependent clients, specifically those who are in:

(a) In-Home Supportive Services: This program uses the statewide system of disaster preparedness assessments for all clients in the program. The Case Management, Information and Payrolling System (CMIPS)[97] tracks case information and processes payments for the California Department of Social Services In-Home Supportive Services Program, enabling aged, blind, and disabled individuals in California to remain in their own homes and avoid institutionalization. There are three areas they rate: vulnerability, special impairment, and life support supplies.

(b) Foster care arrangements, including group homes and foster care providers

(c) Licensed and registered child care facilities (a list is maintained by each county)

(d) Dependent situations, such as living alone or without an adequate family or friend support system at home

(e) Congregate housing, senior centers, adult daycare centers, sheltered workshops, independent living communities

(2) Pre-identify populations using risk assessment and demographic information as dependency on services may be concentrated in certain areas, or subject to disruption if located in disaster-prone areas.

(3) Pre-identify clients near existing facilities, which may be close to hazardous locations.

(4) Educate clients and caregivers on individual preparedness including kits (include other needed

[96] California Commission on Aging. (2007). *Senior Center fact sheet*. Sacramento, CA. http://www.ccoa.ca.gov/senior_factsheet.htm. Accessed on April 4, 2012.
[97] California Department of Social Services. (2007). *Case Management, Information and Payrolling System (CMIPS)*. Sacramento, CA. http://www.cdss.ca.gov/agedblinddisabled/PG1783.htm. Accessed on April 4, 2012.

items needed to function besides basic supplies such as glasses, medication, cane), as well as contact numbers of other caregivers and responsible family members.

(5) Encourage clients to pre-register on county alert systems.

(6) Local homeless outreach teams from agencies serving the homeless populations and service providers[98] should be incorporated into the planning process. They can assist with locating and evacuating homeless people who are in more isolated areas. Generally, these outreach teams know hotspots where socially isolated homeless people tend to reside and who these people are.

(7) Pre-identify organizations that provide information and services to individuals who are undocumented. Examples are community clinics, nonprofit organizations, consulate offices, faith-based organizations, and long-term Medi-Cal programs, interpreter agencies, ethnic youth/family centers, legal associations, and Promotor(a) programs.[99]

(8) Consider involving adult welfare groups and agencies in disaster protocol development, planning, preparedness, response, and recovery to address the needs of older adults, those receiving in-home care, meal delivery services, and support for people who live with access and functional needs.[100]

(9) Identify independent living service centers that provide referrals to the disability community and coordinate preparedness programs that educate the public and emergency management. Services may include:

(a) Advocacy

(b) Peer support

(c) Assistive technology

[98] For more information, see websites for the Los Angeles Homeless Services Authority (http://www.lahsa.org) and People Assisting the Homeless (PATH) (http://www.epath.org/index_01.php).
[99] *Promotores* and *Promotoras* are community members who promote health in their own communities. For more information, see website for Migrant Health Promotion at http://migranthealth.org. Accessed on April 17, 2012.
[100] Other Orange County organizations include the Area Agency on Aging, community-based organizations such as Meals on Wheels, 211 as a resource for references, Tri-County Regional, Easter Seals, and the Cerebral Palsy Association.

(d) Social Security, Medi-Cal, and Medicare eligibility

(e) Personal assistance referrals

(f) Affordable housing

(g) Youth programs for transitioning to independence

(h) Workshops on disability-related topics

(i) Communication access

b) Short-Term Recovery

(1) Continue prioritization of those dependent on In-Home Supportive Services, Adult and Child Abuse services, and Children's Homes/Group Homes.

(2) Continue communication with registered caregivers for IHSS clients, to ensure continued service to clients.

(3) Continue coordination with county social/human services and child protective services for reunification of children.

(4) Governmental Public Social Services is mandated by law to perform the duties listed below and cannot defer them following a disaster:

(a) Ensure the continuation of programs to provide services to applicants and participants for public assistance programs. As examples in different counties the list may include; CalWORKs, General Relief, Medi-Cal, CalFresh, and In-Home Supportive Services whose administration is assigned by law to county welfare departments.

(b) Prepare and submit expenditure claims related to the administration of welfare programs within specific time frames to ensure State and Federal reimbursements of eligible program costs.

(c) Perform duties associated with disaster relief programs as the Operational Area Care and Shelter Coordinator.

(d) Engage elected officials and authorities in considering the granting of emergency relaxation of requirements on eligibility criteria

for governmental assistance programs. State services administered on county levels may require local and/or State law changes to allow for temporary allowance.

(e) Consider emergency waivers from Federal and State regulations such as application timeframes and work participation rate requirements as qualifications for eligibility. Consider similar waivers for child care subsidies, child care licensing regulations, etc.[101]

(5) Set up LACs to offer social services. Also, consider that after a large scale emergency, transportation will be curtailed. Therefore, the setting up of additional LACs allows more existing and new clients to be provided with services.

(6) Continue contact with clients to determine status and needs of:

(a) Durable medical equipment (DME) and supplies

(b) Caregivers/nurses

(c) Medications

(d) Glasses

(e) Hearing aids and batteries

(f) American Sign Language (ASL) interpreters

(g) Translators

(h) Mental/behavioral health providers

(7) A critical group to consider would be all others who will need assistance but are not pre-identified or self-registered in any form of database or mapping system. This includes:

(a) Those who are reluctant to register

(b) Those who develop emergent needs because of the disaster, such as exacerbation of

[101] An example of this for the State of California is Government Code Section 8571, allowing the Governor to suspend regulatory statues, or statutes prescribing the procedure for the conducting of State business, such as time-dependent requirements. The Governor can also request the President to declare a Federal disaster, and to also suspend such requirements. See http://law.onecle.com/california/2010/government/8571.html. Accessed on April 17, 2012.

disability, spontaneous stress disorders or injuries

(c) Those who have a recurrence of an otherwise dormant health condition

(d) Minors temporarily separated from their guardians

(e) Pre-disaster homeless populations

(f) Those receiving private, independent in-home care[102]

(8) Use the statewide 211 system as a local resource.

(9) Casework and referral services

Direct casework services often provide counseling, guidance, education, and pre-screening of candidate cases to referral agencies. A key example of this is the American Red Cross Client Casework program. Effective casework programs focus services on the following:

(a) Comfort and council: Many caseworkers are trained in basic psychological first aid and can explain the value of individual and family recovery planning.

(b) Wellness: Caseworkers evaluate health service, mental/behavioral health, and social service needs to provide an appropriate referral to an agency that clients are likely to qualify for.

(c) Communication: Caseworkers often facilitate direct communication services to family members by providing phones, pre-paid phone cards, and reunification support to family networks. Also address the deaf and hard of hearing community and blind community to ensure that any phones or pre-paid cards are accessible.[103]

(d) Information: Key to successful casework is the provision of information on how to access key essential programs to assist with the recovery

[102] Los Angeles Operational Area. (2011). *Mass Evacuation Process Guidance for Emergency Planners*. www.catastrophicplanning.org. Accessed on September 3, 2012.
[103] Additional information on communication services can be found at the Deaf and Disabled Telecommunications Program, http://ddtp.cpuc.ca.gov.

process and reestablish pre-disaster living conditions.

(10) In-Home Supportive Services

Many independent or contract workers who provide in-home support will likely be directly impacted after an event. Ideally, anyone receiving care in the home had been contacted, and potentially evacuated to a congregate care facility during the response phase. Key efforts to restore services include the following:

(a) Identify available personnel, and assign to support shelter operations more directly.

(b) Establish scheduling expectations to support in-home services in transitional housing locations (coordinate with Housing RSF to ensure safety and appropriateness of locations).

(c) For IHSS/Adult Services issues, long-term evacuation out of State into long-term housing will present eligibility issues for continued benefits. For instance, clients living out of State for more than 30 days without their caregiver, or more than 60 days with their caregiver will have their benefits discontinued.

(11) Dependent adults requiring care or supervision

(a) Following a disaster, dependent adults requiring care may become separated from their caregivers. Reunification with caregivers should be a priority. Strategies to address supporting dependent adults until they can be reunified with their caregivers include the following:

(i) Work with the appropriate law enforcement and legal authorities to develop a disaster protocol for temporary care of dependent adults requiring care until reunified.

(ii) Adult care support groups, nonprofit organizations, and faith-based groups, such as Baptist Child and Family Services (BCFS), may provide assistance in providing care until guardians or caregivers can be located

or longer-term arrangements can be made.

(iii) Ensure effective communication is provided, and consider mental/behavioral health support for dependent adults, as needed.

(12) Direct financial assistance programs

(a) Some financial assistance programs are only established during disaster conditions (such as FEMA individual assistance and Emergency or Disaster CalFresh). Other programs are impacted by a disaster and service delivery is impacted due to other networks (postal service may not be able to deliver checks). It is important to evaluate existing programs for their long-term feasibility during the recovery process, and educate the public on available options.

(b) As poverty levels rise, caseloads rise, and programs reliant on the local economy may be directly impacted. Consider expansion of programs through resources and programs outside of the impact area.

(c) Insurance is a form of financial assistance that may not cover all of an individual's needs. Consider supporting available insurance programs through supplemental programs.

(d) Consider contingencies both in preparedness and short-term recovery given that health and other benefit programs will not want to pay if the client is out of the county at all and, out of State, they will refuse to pay anything. This highlights the residency requirement issues for Medi-Cal, CalWORKs, CalFresh, etc. benefits. Without these benefits it will be very difficult for the client to participate in a long-term recovery program.

(13) Casework and referral services

(a) Some programs will require significant expansion due to the number of qualifying cases. Contingencies should be developed to handle the increased caseload to sustain new

and existing clients through the recovery period.

(b) Interruptions to casework and referral programs can slow recovery for the entire community. Identify essential programs, the reason for the disruption, and the most expedient means of reinitiating services.

(c) Evaluate less sophisticated procedures (pen-and-paper tracking) that can be used temporarily as electronic systems are brought back online.

(d) Ensure data systems are remotely accessible. Consider bringing in additional technology, such as laptops with satellite internet service, to access those networks on a temporary basis. Agencies providing essential referral services should be supported to help facilitate recovery activities.

(14) Continue restoration of foster care, child daycare, and private child care providers to restore a sense of normalcy and to allow parents to return to daily routines.

(15) Coordinate with the Veteran's Administration to identify veterans needing social services and other care.

(16) Coordinate with State social services to support other care facilities in the community setting. Encourage private care providers and facilities to:[104]

(a) Establish contact and assess the level of preparedness and/or existence of facility emergency plans.

(b) Planners should review care facility EOPs to determine their capabilities for self-evacuation, including movement to pre-designated destinations that offer a similar level of care and capability, and their capability for reentry or return.

(c) Develop streamlined approval processes to repopulate group homes and daycare residences and facilities. (In non-disaster

[104] Los Angeles Operational Area. (2011). *Mass Evacuation Process Guide*. www.catastrophicplanning.org. Accessed on September 3, 2012.

situations, it may take as many as 10 local, State, and Federal agencies up to 6 months to inspect and approve a facility for daycare use.) The local operational area should identify temporary transitional care sites and pre-plan for contacting the appropriate licensing and certification agencies for both temporary waivers from regulations and for rebuilding or re-designating new facilities.

(d) Establish written agreements with transportation companies or other means of reentry transportation for people in their care.[105]

(e) Establish written agreements for transportation of pet owners to accompany their pets as long as they are safely secured via, for example, leash or pet carriers.

(f) Facility self-sufficiency or its ability to support the people in their care with food, water, medical supplies, and/or other resources that may be necessary to support the people in their care during an evacuation or if the facility should have to shelter-in-place

(g) Consider determining if other non-affected facilities have transportation or other types of resources that they may be able to contribute to the evacuation and reentry effort.

(h) The identification of staff and support personnel that may have to participate in the evacuation of people under their care, and provide a contact list of personnel or chain of command contact information that is checked and updated periodically

(i) The assurance that the facility emergency plan includes a risk assessment and contingency plan that includes what the facility may need in the event of an emergency (e.g., food, water, fuel, and medical supplies)

[105] During a catastrophic evacuation, transportation resources, especially those that can accommodate persons with disabilities and others with access and functional needs, become scarce, critical resources. The organization overseeing care sites should, in conjunction with the operational area's emergency management department, review and identify those agreements that promise the same resource to multiple sources. In addition, transportation resource providers should be required to maintain or develop COOP plans to ensure that there is not a gap in service.

(j) The assurance that the facility emergency plan includes scheduled training exercises and plan maintenance that includes periodic reviews of procedures, staff updates, contact information, and written agreements.

(k) Planners should provide informational updates to all affected populations regarding the progress of recovery operations using redundant forms of accessible public messaging, as each has tool or service has its own limitations. Some tools for diverse messaging include:

(i) Teletypewriter (TTY)[106]

(ii) Emerging technologies[107]

(ii) Video phones for the deaf community

(iii) Text messaging

(iv) Closed captioning

(v) Social media

(vi) Nixle[108] notification system

(vii) Signboards

(viii) Sign language

(ix) Multiple languages

(x) Public alert systems[109]

(xi) Public service announcements on electronic media with captioning

(xii) Door-to-door neighborhood and community outreach

(17) Coordinate with a Functional Assessment Service Team (FAST) in longer-term sheltering to continue support of children and adults with disabilities and others with access and functional needs.

(18) Conduct assessments for clients in long-term shelters to enable transition to appropriate temporary or alternative housing.

[106] TTY or Telecommunications Device for the Deaf (TDD) is becoming obsolete due to the widely pervasive emergence of videophone technology.
[107] Emerging technologies such as iPad, IPhone, and 4G devices
[108] Nixle is a community-information type of notification system. For more information, see http://www.nixle.com. Accessed on August 27, 2012
[109] For example, "Alert LA" (LA County) and equivalent governmental alert systems in each operational area.

c) Long-Term Recovery

(1) Consider coordinating with private and nonprofit organizations[110]

(2) Continue coordination with other organizations, community groups, and NGOs, that provide services to the undocumented populations and other at-risk populations who might not normally qualify for government services.[111]

6. Animals Services Strategies

Animal Care and Management issues will continue well-past the response phase and will need consideration of the numbers and variety of animals including pets, livestock, and exotics in a variety of settings displaced from their homes and owners. This coordination will require the involvement of multiple agencies, activation of mutual aid agreements, cooperative agreements, animal organizations, volunteers, and advocacy groups, with a wide-range of animal-handling experience commensurate with the animal care and management needed.

Federal ESFs #6, 8, 9, 11, and 14[112] provide the structure for coordinating Federal interagency support for a Federal response. The ESFs outline the mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents. Animal emergency response issues are included in ESFs #6, 8, 9, 11, and 14 and address the following areas:

a) Implementation of an integrated Federal, State, Tribal, and local response to an outbreak of a highly contagious or economically devastating animal/zoonotic disease, or an outbreak of a harmful or economically significant plant pest or disease

b) Providing for the safety and well-being of household pets

c) Supporting animal/veterinary issues in natural disasters as coordinated by USDA's Animal and Plant Health Inspection Service (APHIS)

[110] Other Orange County organizations include the Area Agency on Aging, community-based organizations such as Meals on Wheels, 211 as a resource for references, Tri-County Regional, Easter Seals, and the Cerebral Palsy Association.

[111] Social Services cannot ask clients or potential clients if they are in the United States legally or not.

[112] Federal Emergency Management Agency. (2008). *Emergency Support Function #11 – Agriculture and Natural Resources Annex*. Washington, DC. http://www.fema.gov/pdf/emergency/nrf/nrf-esf-11.pdf. Accessed on July 12, 2012

Household pets are defined by FEMA, in Disaster Assistance Policy (DAP) 9523.19, as a "domesticated animal, such as a dog, cat, bird, rabbit, rodent, or turtle that is traditionally kept in the home for pleasure rather than for commercial purposes, can travel in commercial carriers, and be housed in temporary facilities. Household pets do not include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes."[113]

Federal regulations for service animals differ from those for household pets. Service animals are not pets and are defined in the Access and Functional Needs discussion in this document. There are several different laws and different definitions of service animals under laws such as the ADA and Fair Housing Act, in addition to Department of Transportation (DOT) definition for transportation, which includes the Air Carrier Access Act. Limited material support and temporary assistance for short-term sustainment of the service animal may be available through Animal Services, or other entities. (See examples in the Health and Social Services RSF section).

Wildlife and exotic animal shelter and rescue are not a main focus of this plan and are the responsibility of many regulatory agencies that oversee the possession of wildlife and exotic animals. The California Department of Fish and Game (CDFG) will likely be a consulting participant on such issues in communication and coordination with other regulatory agencies. CDFG's website has a list of licensed rehabilitators.

a) Preparedness

(1) Pre-position or dispense human and animal emergency kits containing emergency items and first-aid kits.

(2) Educate animal owners on evacuation and shelter-in-place.

(3) Encourage pet owners to microchip their pets as well as encouraging use of external identification name tags with local and out of state emergency contact numbers to aid in reunification and reduce recovery resources needed to match owners with their lost pets.

(4) Encourage pet owners to learn pet first aid.

[113] Federal Emergency Management Agency. (2009). *Evacuee Support Planning Guide, FEMA P-760 /Catalog No. 09049-2*. Washington, DC.

(5) Encourage pet owners to plan alternate living sites with friends and family through an extended recovery period.

(6) Pre-identify large animals, livestock, wildlife, and exotic animals to anticipate food and health services demands especially for shelter-in-place scenarios.

(7) Pre-identify other sources of vehicles and personnel for transporting large animals such as certified equine response teams.[114]

(8) Pre-identify arrangements and established MOUs with veterinary partners, including California Veterinary Medical Reserve Corps, private/corporate veterinary practitioners, veterinary clinics, and shelter vets and encourage prior written agreements.

(9) Local animal care and control agencies will be responsible for coordinating veterinary care for their jurisdictions. Agencies should identify volunteer veterinarians in advance of a disaster response.[115]

(10) Pre-identify relationships with private corporations and partnering stakeholders (MOUs, MAAs) regarding cooperative agreements.

(11) Encourage veterinary practice teams (doctors of veterinary medicine, registered veterinary technicians, etc.) to join the California Veterinary Medical Reserve Corps program coordinated by the California Veterinary Medical Association and supported by the California Veterinary Medical Foundation, the California Department of Food and Agriculture, USDA, University of California Davis, Western University, CDPH, Cal OES, California Disaster Health Care Volunteers, and other agencies. Another option is to enter a formal agreement (MOUs with the State) and partner with the American Veterinary Medical Association's Veterinary Medical Assistance Teams™ to assist with emergency veterinary care throughout the Operational Area.[116]

(12) It is the responsibility of livestock owners to have in place appropriate evacuation plans in the event of a disaster. Pre-identify the department and/or agencies that will serve in a coordinating role and provide

[114] Local horse racing venues may also have certified equine response teams, veterinarians, and trainers.
[115] Los Angeles Operational Area. (2010). *Animal Emergency Response Plan*. Washington, DC.
[116] Ibid.

oversight and direction related to the movement of diseased animals and/or animals that pose a public health risk, with the appropriate agencies. Pre-identify a representative of the California Department of Food and Agriculture, if applicable.[117]

b) Short-Term Recovery

(1) Coordinate with Social/Human Services and Disability Services to identify stray or missing service animals.

(2) Continue reunification efforts with veterinarians and NGOs.

(3) Coordinate with State and local veterinary services, animal support services, and the State lead agency for support of animals in disasters to address health needs of service animals

(4) Coordinate with pet rescue operations with priority for pets with medical needs requiring resumption of medical care.

(5) Work in coordination with local animal control agencies to leverage their efforts to monitor and control animal disease.

(6) Advise the public of any animal disease outbreaks and mitigation steps.

c) Long-Term Recovery

(1) Continue reunification efforts with veterinarians and work with animal shelters and adoption agencies in providing new service animals for owners.

(2) Coordinate mental/behavioral health response activities within the Operational Area, including human-animal bonding issues affected by a disaster.

(3) Continue public information statements coordinated and disseminated by the EOC on the following topics:

(a) Provide logistical information to the public about transportation and shelter locations for domesticated animals and livestock.

(b) Provide information about legal rights of individuals with disabilities accompanied by service animals in coordination with other agencies and service organizations.

[117] Ibid.

(c) Provide animal disease information, including information on eradication and proper decontamination of pets.

(4) Pre-identify the regulatory agencies that oversee the possession of wildlife and exotic animals. California Department of Fish and Game (CDFG) will likely be a consulting participant on such issues as communication and coordination with other regulatory agencies such as the USDA's Animal and Plant Inspection Service (APHIS), the U.S. Fish and Wildlife Service (USFWS), County Animal Care and Control, and any of several cities that further regulate and permit keeping animals not normally domesticated in this State. (Also consult with the Natural and Cultural Resources RSF and Community Planning RSF.)

(5) Provide health maintenance to service animals, pets, and livestock with pre-existing conditions or long-term health effects sustained from the disaster.

(6) Provide for emerging animal health and medical needs, including the safety and well-being of household pets and service animals with veterinary staff.

(7) Collaborate with other agencies that are responsible for disease surveillance, disease control, quarantining, and disease reporting.

(a) Coordinate reunification processes with the Community Planning RSF.

(b) Coordinate with private, nonprofit, or animal control organizations (e.g., NGOs, Noah's Wish) regarding transportation.

(c) Provide transitional animal shelters and temporary animal housing during recovery phases.

(d) Coordinate disposal of carcasses if animal disease is a possibility.

(e) Coordinate with animal control officials concerning public safety and zoonotic diseases.

7. Reconnecting Displaced Human and Animal Populations

Many disasters may result in shelter in place and local sheltering through response and into short-term recovery. In disasters causing large mass evacuations in which immediate return to affected areas

is not possible, it will be important to have mechanisms for reunification of people, and owners of pets and animals displaced by the disaster.

Provide mechanisms for individuals new to the area requiring services for reunification, including reception sites, the American Red Cross, and LACs. Reception sites are temporary and are designed for maximum throughput of transportation-dependent evacuees to further processing to temporary shelter or housing. Although many other methods of reunification such as other large public venues, and social networking may be possible, LACs provide an environment that can also offer support services on-site from multiple community partners and agencies to initiate the path to recovery. Also, planners should provide for a dedicated FAC as a separate operation during recovery for family emotional support and spiritual care during identification of remains of deceased persons. FACs are more suited to the immediate aftermath of a mass fatality incident or a mass casualty incident.[118]

Replacement of lost or deceased service animals following a disaster should be a high priority. Although there is a mechanism through the EOC for the notification to the Care and Shelter Branch Coordinator, which then initiates Animal Services contacts as well as known organizations dealing with service animals, this system has limitations due to the complexity of acquiring and training service animals. This process is most efficient at documenting the pre-existence of a service animal and reconnecting the client with the original provider of their service animal to arrange for a replacement. Some counties may have an ombudsman service to be the intermediary in restoring a lost service animal through this process.

The type of client need will determine the type of service dog required. Seizure alert dogs, dogs for children and adults with autism or other intellectual disabilities, psychiatric disabilities, physical disabilities hearing dogs, etc. are required to be individually trained to perform specific tasks. Some may require specialized training depending on the task or service the dog will provide to the child or adult. This process may take weeks or longer.

Only guide dogs for the blind are specially trained and certified. Often the blind individual is required to take a class and then work with a dog for several weeks to ensure a suitable match between the handler and dog. Guide dogs are provided through various certified Guide Dog Agencies.

[118] Los Angeles County Operational Area. (2010). *Family Assistance Center Plan*. Los Angeles, CA.

Determine a list of nonprofit, for-profit, and free-service providers that provide service animals and guide dogs for the blind as sources for the replacement of service animals. Also consult with City Departments of Animal Services for policies and procedures for adoption of dogs in their inventory that are suitable for further training by outside agencies to become service animals.

Intermediate evacuee support could continue for up to six months (using the Federal Individual Assistance [IA] definition for transitional sheltering) and could include the movement of evacuees to transitional shelters or intermediate housing, school enrollment, and return/re-entry to the affected area. The length of time required for intermediate evacuee support will depend on many factors, including damage to the affected area, availability of housing resources, and evacuee needs.[119]

a) Preparedness

(1) Develop a tracking system to more effectively support the process of reunification of separated families, as well as of persons with their household pets, personal assistance services, durable medical equipment, and/or personal items (e.g., luggage) that will have been moved and/or sheltered separately from them.[120]

(2) Develop a system for expedient replacement of lost or missing service animals with coordination between animal services, animal control, social services/human services, nonprofit and for-profit animal training organizations, and animal advocacy groups and adoption agencies. There are many entities that will help train or provide service dogs, including guide dogs for the blind, canine companions, dogs for the deaf, etc.[121]

(3) Identify and map facilities such as licensed care facilities and congregate older adult housing complexes or facilities housing persons who will need assistance in reunification.

(4) Educate the public to have predetermined meeting points and out-of-state contacts in the case of

[119] Los Angeles Operational Area. (2011). *Mass Reception Guide*. www.catastrophicplanning.org. Accessed September 3, 2012.
[120] Ibid.
[121] The Assistance Dog United Campaign is a health and human welfare organization, which provides financial assistance to individuals who have the need for an assistance dog but have difficulty in raising the necessary funds, and to people and programs whose purpose is to provide assistance dogs to people with disabilities. For further information, see http://www.assistancedogunitedcampaign.org/index.html. Accessed on August 27, 2012

separation or impaired internet, home phone, or cell phone connections.

b) Recovery

(1) Use the nearest LAC or reception site with technologies for reunification such as the Safe and Well website of the American Red Cross.

(2) Prioritize those with health or supervision needs for reunification with family, personal assistants, and caregivers.

(3) Use a primary system for collecting information on displaced persons and pets for reunification such as:[122]

(a) Name

(b) Date of birth

(c) Pre-disaster address/point of origin

(d) Access and functional needs information

(e) Durable medical equipment and service animals

(f) Children or dependent adults traveling with or separated from the evacuee

(g) Household pet information

(h) Pets should be tagged and matched with their owners

(4) Additional data that may be collected if time permits, including:

(a) Cross-referenced names of family members, including minors

(b) Identifiers of personal items (e.g., luggage)

(c) Post-disaster contact phone number

(d) Emergency contact numbers

(e) Homeowner or renter

(f) Vehicle license plate

(g) Names of family members residing in the local host area

[122] Los Angeles Operational Area. (2011). *Mass Reception Guide*. Los Angeles, CA.

(h) Check box/disclaimer allowing information to be shared with other disaster response organizations

(5) Animals without owners may be micro chipped to aid in identification later.

(6) Use social media family/friend networks to locate or communicate pertinent information or needs.

8. Educational Facilities

Educational facilities have daily populations of student, faculty, residents, and visitors numbering hundreds to many thousands of people, depending on curricula, community events, and athletic events. Educational facilities are unique in terms of their history within the community, demographics, levels and types of curricula, and relationships to other campuses in other communities. Students with disabilities and others with access and functional needs should be identified and preparedness and recovery activities should be coordinated with local school districts.

Campuses are concentrated population areas within the greater community, and larger campuses resemble small cities with infrastructure, housing, food services, banking, retail, and other daily needs to support students and faculty. The surrounding community, which includes retail and other businesses, housing, and services, is a vital partner in the continuity and recovery of campus activities.

Restoration of educational services should be a priority as part of recovery because the role of schools and colleges serves an educational purpose and the return to full services benefits the economic and social well-being of the community at large. When restored, community institutions such as this can symbolize reconstruction efforts.

Under the FEMA Public Assistance Program, educational institutions encompass primary, secondary, and higher education schools. For primary and secondary schools, an educational institution is a day or residential school that provides primary and secondary education as determined under State law. This generally means that the school satisfies State requirements for compulsory attendance.

Coordinate with the County Office of Education and school district planners for specific contingencies appropriate for varying educational levels, types of educational programs, curricula, and student age-groups. Consider special education planning efforts, homeless children programs, and other resources related to education services.

a) Preparedness

(1) Support campus disaster readiness by:

(a) Establishing school disaster preparedness programs

(b) Conducting campus drills and exercises in coordination with the surrounding community

(c) Developing a campus recovery plan

(2) Particular groups or individuals may have difficulty accessing education in an emergency situation. Some may become more vulnerable as a result of emergencies and displacement. Planners should identify unique populations within each jurisdiction that will need additional support. These groups include:[123]

(a) Physically and developmentally disabled people

(b) Those who suffer from severe mental/behavioral health and psychosocial difficulties

(c) Youth

(d) Adolescent heads of household

(e) Teenage mothers

(f) Persons from particular ethnic or other social groups

(3) Enhance the ability of school personnel to support children who are traumatized, grieving, or otherwise recovering from a disaster.

(4) Invest in emergency equipment and supplies that can be used in response through recovery and add a component of self-sufficiency for a portion of the campus population during reconstruction.

(5) Pre-identify and formulate specific processes and protocols, which will identify, assess, or prioritize campus needs and those of its constituency.

(6) Conduct a campus hazard vulnerability analysis and pre-determine which outside agencies will be contacted after a disaster.

[123] Adapted from: Inter-Agency Network for Education in Emergencies. (2004). *Minimum standards for education: Preparedness, response, recovery*. New York, NY: INEE Coordinator for Minimum Standards.

(7) Pre-identify hazardous waste or solid waste management materials types and existing locations for handling and removal post-disaster.

(8) Review written agreements and cooperative agreements for post-disaster activities and establish extended time-frames to sustain successful transition from business continuity through recovery.

(9) Identify existing businesses in the surrounding campus community to involve them in pre-planning and contingency planning to provide additional services should campus services be unavailable.

b) Short-Term Recovery

(1) Initiate psychological services (mental/behavioral health recovery) for students, faculty, and staff.

(2) Consider buying portable classrooms to return students to a learning environment until permanent restoration occurs.

(3) Consider rapid transition to temporary housing for faculty, staff, and students to promote a return to daily classroom routines.

(4) Actively engage communities in education processes to facilitate access to education. Community involvement helps to:[124]

(a) Address communication gaps

(b) Mobilize additional resources

(c) Address security, protection and psychosocial concerns

(d) Identify needs for alternative learning opportunities

(e) Promote participation of all relevant groups, particularly those who are dependent

(5) Provide temporary relocation facilities. Section 403(a)(3)(D) of the Stafford Act authorizes providing temporary facilities for schools and other essential community services.

(6) Begin restoration of priority services and structures.

(7) Begin restoration of permanent housing and food services.

[124] Ibid.

(8) Continue restoration of information technology services and support using contracted and off-site servers.

(9) Identify and begin procedures for removal of hazardous materials and solid waste based on pre-disaster hazard vulnerability analysis and pre-identified regulatory agencies.

(10) Re-establish satellite and Internet/Intranet communications.

(11) Coordinate with campus Public Information Office (PIO) and Joint Information Center PIO for public messaging in a variety of accurate and communicative formats.

(12) The educational institution or appropriate governmental jurisdiction must submit a Request for Public Assistance (RPA), FEMA Form 90-49, to FEMA within 30 days after the date of designation of the area where the damage occurred. FEMA and the State will review to determine applicant eligibility. The educational institution or appropriate governmental jurisdiction will be notified by FEMA or the State of its eligibility.

(13) Educational facilities should only be used as shelters for displaced people when there are no other possibilities. Alternative locations for shelter in the event of an emergency or disaster should be identified during preparedness planning.

(14) When educational facilities are used as temporary shelters, the negative impacts and potential protection risks must be minimized in collaboration with the shelter and protection sectors. Stakeholders should agree to a date for returning the educational facility to its original function. This minimizes disruptions to learning and avoids families remaining in an educational facility long after an emergency has occurred.

(15) If educational facilities are used as temporary shelters, it is important to protect school property, including books, libraries, furniture, school records and recreational equipment. The educational facilities should be returned in a useable state.

c) Intermediate/Long-Term Recovery

FEMA's Public Assistance Program, under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, can provide grants for educational facilities after a presidentially declared major disaster that involves a public assistance clause. Under the Public Assistance Program, FEMA can assist applicants (State, local, and Tribal governments and certain PNP entities with the response to and recovery from major disasters and emergencies. Specifically, the program provides assistance for the repair, replacement or restoration of disaster-damaged facilities, and for the cost of debris removal and emergency protective measures. The program also encourages protection from future damage by providing assistance for hazard mitigation measures during the recovery process.[125]

(1) Continue rebuilding/restoration of damaged academic buildings.

(2) Begin transition from temporary buildings to permanent structures.

(3) Diversity should be considered in the development and implementation of educational activities at all stages of emergency through to recovery. Specific aspects of diversity may include:[126]

(a) Gender

(b) Mental and physical disability

(c) Learning capacity

(d) Learners from diverse income groups

(e) Classes containing children of different ages

(f) Culture and nationality

(g) Ethnicity and religion

(4) Continue restoration of information technology and communications to full capacity.

(5) Complete restoration to infrastructure using improvements and enhancements through mitigation and consultation with campus planners. National

[125] Federal Emergency Management Agency. (2011). *Public assistance program and educational facilities: Frequently asked questions*. Washington, DC. www.fema.gov/pdf/about/educational_facilities_factsheet.pdf. Accessed on March 24, 2012.

[126] Inter-Agency Network for Education in Emergencies. (2004). *Minimum standards for education: Preparedness, response, recovery*. New York, NY: INEE Coordinator for Minimum Standards.

authorities, humanitarian agencies, donors, NGOs, communities and other stakeholders should work together to ensure adequate funding for emergency education provision. Resource coordination should be county-led and integrated with existing coordination mechanisms. Where feasible, resource allocation should be balanced between physical elements (such as additional classroom, textbooks, and teaching and learning materials) and qualitative components (such as teacher and supervisory training, courses, and teaching and learning materials).[127]

9. Child and Minor Services

Children and young adults have unique social, dietary, recreational, and medical, health, and mental/behavioral health needs. This includes children with disabilities, especially those with deafness, and those with intellectual disabilities. Children are often the first to be traumatized by the disaster and subsequently being separated from their caregivers can compound the trauma they experience. During Hurricane Katrina, children too young to speak or so traumatized they were unable to speak were found separated from caregivers, making reunification challenging.[128]

Child Services recovery supports a community's economic recovery. If a community does not have access to child care for its youngest children, families cannot return to work and the community cannot recover economically. Research indicates that consistent, high-quality early education and Child Services improve the health and promote the cognitive development of young children, both of which can be negatively affected by a disaster.[129]

Support for children in disasters is a critical recovery priority that relies on a coordinated effort among multiple agencies. Challenges that arise, if left unaddressed, can result in long-term implications for the entire community. International efforts to prevent child related complications after an event have been engaged in frequently by agencies such as Save the Children, the American Red Cross, and other relief efforts. When planning to support the needs of children, it is important to consider the modifications to standing procedures, assumptions, and practices to avoid long-term impact.

Title 22 Regulations (Section 102417 (g) (9) for Family Child Care Homes and Section 101174 (a) for Child Care Centers) require that

[127] Ibid.
[128] Los Angeles Operational Area. (2010). *Mass Care Guidance for Emergency Planners*. Los Angeles, CA. www.catastrophicplanning.org. Accessed September 3, 2012.
[129] National Commission on Children and Disasters. (2009). *Intermediate report*. Washington, DC.

every facility develop and implement a disaster and mass casualty plan. All facilities must include a written disaster plan in their plan of operation.

In recent years, child care programs have sustained major disaster-related damage, requiring temporary closure, evacuation and relocation of vulnerable populations of children. Facilities that have followed the steps toward preparedness and planning will be better able to protect lives and property with the ability to return to a normal operation in a shorter period.

Furthermore, in recognition of the special threat that earthquakes pose in California, the State Legislature enacted Health and Safety Code Section 1596.867, which requires child care facilities to have an Earthquake Preparedness Checklist (LIC 9148) as an attachment to your disaster plan. This checklist is not reviewed by licensing and is not a requirement to be licensed, but it is a useful tool in earthquake preparedness planning.[130]

Recovery from disaster means efforts to return the facility, staff, and children to normal as soon as possible. There may be extensive visible damage to the physical plant, requiring a series of repairs. Depending on the amount of damage, returning to normal operations could be a long-term process. Be familiar with your local jurisdiction's safety/damage assessment process. If your facility sustains structural damage, access may be limited or prohibited and this will impact the clean-up and initial repairs that you and your staff can do. Be sure that your facility has been inspected and you have been given approval to return. The cumulative crisis-related stress of a disaster can dramatically impact the psychological and physical well-being of children and adults. Facilities that are prepared for disaster have shorter recovery times. Loss of clientele and potential loss in income are added reasons why facilities will want to do everything they can to return to normal as soon as possible. Despite your best efforts to provide support and reassurance to children and adults, they may continue to experience these symptoms and reactions, which may indicate a need for professional consultation and intervention.

Child care services are eligible for reimbursement under the Category B, Emergency Protective Measures provision of the Federal Emergency Management Agency's (FEMA) Public Assistance Program. FEMA will reimburse eligible applicants' reasonable costs associated with the provision of child care

[130] California Department of Social Services. (1999). *Child care centers and family child care homes disaster planning self-assessment guide*. Sacramento, CA. http://ccld.ca.gov/Res%5Cpdf%5CDisasterGuideforHomesCenters.pdf. Accessed on March 24, 2012.

services during federally declared major disasters and emergencies.

Key areas of concern include the following:

a) Child Care

(1) Preparedness

(a) Determine which children or staff will require additional assistance from staff to relocate during emergencies.

(b) Consider earthquake and flood insurance.

(c) Conduct safety inspections both inside and outside the facility

(d) Conduct emergency drills and emergency preparedness.

(e) Develop temporary disaster child care operating standards at the State level that permit the provision of disaster child care in nontraditional settings and modify, and when necessary waive licensing requirements that may be impractical in the aftermath of a disaster while continuing to ensure the health, safety, nutritional status and overall well-being of children.[131]

(f) Check for Category B eligibility (44 CFR §206.221 Definitions, and 206.222 Applicant eligibility), which states that State, local, and Tribal governments may provide child care services directly, or may contract (including through mutual aid agreements and MOUs) with other child care service providers for such services.[132]

(2) Recovery

(a) Consider the stress and mental/behavioral health needs of clients throughout recovery, which will vary according to age range and proximity to the event.

(b) Consider a structural engineer, architect, or building inspector to assist in a detailed safety inspection of your buildings.

[131] National Commission on Children and Disasters. (2009). *Intermediate report*. Washington, DC.
[132] Federal Emergency Management Agency. (2010). *Child care services*. Washington DC. http://www.fema.gov/pdf/government/grant/pa/9580_107.pdf. Accessed on August 27, 2012.

(c) Emergency sheltering: If a State, local, or Tribal government provides child care services to families that are in congregate shelters, the cost to provide child care services is considered part of the sheltering operation and the cost for both the facility and its operation are eligible.

(d) Reduce delays in repair and construction, which will result in lost business.

(e) Coordinate with Community Care Licensing to expedite the issuance of Provisional Licenses for temporary sites.

(f) FEMA may also reimburse a State and local government the cost to establish and operate standalone child care centers as emergency shelters. The State may use its own resources or contract with other providers for the emergency sheltering operations.

(g) Institute temporary relocation facilities. Section 403(a)(3)(D) of the Stafford Act authorizes the provision of temporary facilities for schools and other essential community services. FEMA has determined that the provision of child care services is an essential community service and will provide assistance for the lease, purchase, or construction of temporary facilities to allow the applicant to reestablish child care services it provided prior to the disaster. (See FEMA Recovery Policy RP9523.3, Provision of Temporary Relocation Facilities, for information related to eligible temporary relocation costs).

(h) Section 406 of the Stafford Act authorizes funding to repair, restore, or replace damaged public and PNP facilities. Disaster Assistance policy DAP9521.3, PNP facility eligibility classifies daycare centers for children as facilities that provide essential governmental services. To receive reimbursement for permanent work, the PNP applicant must apply for a disaster loan from the SBA.

b) Child Welfare Program Support

The child welfare system serves some of our nation's most vulnerable and troubled children and families. The goal of

child welfare services is to provide an array of prevention and intervention services to children and families, particularly children who have been or are at risk of abuse or neglect, children with special medical or mental/behavioral health needs, delinquent children, and children who do not have adult caregivers.[133]

In addition to challenging a child welfare agency's ability to handle existing cases, a disaster may also create a higher level of demand on referrals for children in need of child welfare services, including children who are separated from their parents/caregivers, injured, or orphaned.

(1) Preparedness

Child welfare agencies should have procedures in place to:[134]

(a) Identify, locate and continue availability of services for children under State care or supervision who are displaced or adversely affected by a disaster

(b) Re-establish the Child Abuse Registry/child abuse hotline as expeditiously as possible as this is a State mandate

(c) Respond to new child welfare cases in areas adversely affected by a disaster, and provide services

(d) Remain in communication with caseworkers and other essential child welfare personnel who are displaced because of a disaster

(e) Place via the CDSS's "Child Welfare Services Disaster Response Plan Template," TEMP-AD 525 (07/07) (or final version)

(f) Preserve essential program records

(g) Coordinate services and share information with other States

(2) Recovery

(a) Collect child support payments for custodial parents.

[133] National Association of Social Workers. (2005). *NASW standards for social work practice in child welfare*. Washington, DC. http://www.socialworkers.org/practice/standards/NASWChildWelfareStandards0905.pdf. Accessed on September 4, 2012.
[134] Child and Family Services Improvement Act of 2006, Public Law 109-288; 120 Stat. 1233.

(b) Locate absent parents, establishing parentage, obtaining court ordered child support awards including medical insurance, and collecting payments pursuant to the award.

(c) Consider implementation of a differential response[135] strategy allowing Child Welfare Service agencies to respond to reports of child abuse or neglect post-disaster. Differential response paths are based on level of risk factors, from low to high, and are participated in by:

(i) Community Response for low-risk conditions

(ii) Child Welfare Services and Agency Partners Response for low to moderate risk conditions

(iii) Child Welfare Services response or traditional response path for initial assessments moderate-to-high risk and unsafe for children

c) Foster Care and Unaccompanied Minors

If a disaster forces a mass evacuation, parents and guardians may have difficulty locating their children in foster care. States will be unable to continue processing cases and providing much-needed services without proper procedures to locate children and families in their systems. This includes preservation of essential program records, and communication with caseworkers, courts and other key personnel and stakeholders. In addition, child welfare systems and courts in areas that were not directly affected by a disaster should be prepared to effectively respond to an influx of new child welfare cases emanating from the disaster area or emerging as a result of the disaster itself.[136]

Following a disaster, unaccompanied minors may become separated from their families. Reunification of families, especially those with minors, should be a priority during recovery.

(1) Preparedness

[135] California Department of Social Services. (2010). *The California child welfare improvement activities: Differential response guidelines and resources for implementation*. Sacramento, CA. www.childsworld.ca.gov/res/pdf/DR_Guidelines.pdf. Accessed on August 27, 2012.
[136] National Commission on Children and Disasters. (2009). *Intermediate report*. Washington, DC.

(a) Consider involving child welfare groups and agencies in disaster protocol development, planning, preparedness, response, and recovery to address these needs. Staff should be aware of protocols to manage unaccompanied minors, homeless youth, or self-evacuated youth who present at shelters.

(b) Work with the appropriate law enforcement and legal authorities to develop a disaster protocol for the temporary care of unaccompanied children/minors and until reunified with parents/caregivers.

(2) Recovery

(a) Unaccompanied children should be tracked in emergency shelters for the purpose of family reunification. If systems that support family reunification are impacted or unavailable, custody should continue to be coordinated with law enforcement until transition can occur

(b) Unaccompanied children may be at increased risk for being abducted, abused, or neglected during a disaster. Until Child Protective Services (CPS) or law enforcement takes physical custody of the child, provide a secure and supervised location for the child. If custody has not been transferred to a parent/guardian or CPS within 12 hours, contact CPS directly or law enforcement.

(c) Children and Family Services may perform the duties listed below for children under State care or supervision who are displaced or adversely affected by a disaster.

(i) Investigate abuse claims against children.

(ii) Track and locate all foster children.

(iii) Establish an identification and location process of children who may be displaced.

(iv) Establish a communication process with caregivers.

(v) Identify suitable shelters for children.

(vi) Conduct parental notification procedures.

(vii) Use alternative processes for providing continued services.

(viii) Implement new services.

(ix) Maintain communication channels internally.

(d) Child support groups, nonprofit organizations, and faith-based groups, such as BCFS and the National Association of Child Care Resource and Referral Agencies, may provide assistance in providing care until parents, guardians, or caregivers can be located or longer-term arrangements can be made.

(e) Agencies that support children and family services often plan to have staff available to assume custody when parents or guardians are unaccounted for. Plan for a qualified staff person to supervise the unaccompanied minors until the child can be turned over to the custody of CPS. Surge of these services often rely on mutual aid support from neighboring counties. As the number of unaccompanied children begins to exceed even the surge capacity, work with educational institutions to develop short-term supervision solutions with qualified staff, and consider coordination with the State to use out-of-state resources and programs.

(f) Coordination with the National Center for Missing and Exploited Children (NCMEC) regarding children missing or separated from their families is essential during intermediate and long-term recovery phases. The NCMEC operates a National Emergency Child Locator Center, which it will use during disaster events.

(g) Coordinate with mental/behavioral health programs for children to support the needs of foster care particularly when loss of a parent/caregiver due to the disaster is a factor.

10. Adult Services and Programs

a) Preparedness

(1) Encourage voluntary registration for all Adult Protective Services (APS) clients through departmental education and outreach.

(2) Maintain a database of Community and Senior Services updated on a frequent and regular basis in case of a major event response.

(3) Maintain a system where APS operates 24/7 and an On Duty Supervisor has access to the APS client data base ("Harmony APS" for example) to ascertain the following during the initial response phase:[137]

(a) Last known location of the client

(b) Prescribed medication list

(c) Collateral contacts including family members

(4) Encourage families and caretakers of dependent adults to maintain preparedness kits including medication lists, contact numbers, and personal effects that can assist in reunification.

b) Recovery

(1) Contact APS and IHSS caseload to ensure client safety and reporting of outcomes.

(2) Activate Centralized Intake Units to increase intake capacity.

(3) Activate APS Response Teams (APS management group).

(4) Assist with remaining American Red Cross shelters as members of the FAST and support reentry of clients to their residences.

(5) Continue with DSW assignments if pre-designated for special duties.

(6) Continue with DSW assignments as requested by Community and Senior Services.

(7) Continue with psychological services for APS clients.

(8) Coordinate with Social Workers as needed through County Mental/Behavioral Health for older adults with mental illness. These include house visits and access to mental/behavioral health services.[138]

[137] Similar requirements would also be the case for IHSS Program and clients.

[138] The Los Angeles County DMH GENESIS program is for older adults with a mental illness and includes house visits and access to services. For more information, see http://www.la4seniors.com/genesis.htm. Accessed on August 27, 2012.

(9) Support repatriation of foreigners (including tourists, visitors, business travelers) through the lead agencies assigned to this task.

(10) Continue receiving referrals from the American Red Cross regarding older adults and dependent adults at American Red Cross shelters.

(11) Continue with public messaging with other agencies in advocating for APS clients.

(12) Explore resources from NGOs, PNPs, and private for-profit organizations, such as "Home Instead."

11. Mass Fatality Services

Fatalities from different events following or related to the disaster may exceed the capacity of local facilities such as hospitals, medical examiner/coroner's offices, and funeral homes, which may persist well into the Recovery period. Pre-event planning can identify roles/responsibilities, on handling remains and belongings, cause-of-death investigations, next-of-kin notification, cultural and religious considerations, storage, transportation, mass burial, cremations, and environmental regulations.[139]

Public Health vital records and disease surveillance will be vital throughout the recovery period. Mental/Behavioral Health services and Family Assistance Centers, among many other agencies and services will be needed to support the Coroner's lead role. Participation and collaboration will be needed with law enforcement and other first responders as well as community and cultural organizations, institutions, and the private sector.

Many of the issues for mass fatality will involve survivors and the general community affected by the loss of life and responsibilities for locating and handling the deceased. Much of the long-term implications stems from the response effort, and quickly moves into the extended recovery phase. FEMA's previous core capabilities based on the ESF model included the following:

a) Fatality Management Branch command and control

b) Missing persons call centers/public messaging

c) FACs/antemortem[140] data collection

d) Health and Safety/chemical, biological, radiological, nuclear, and explosive weapons considerations

[139] Adapted from: Constant and Associates. (2012, draft). *Mass fatality management guide for healthcare entities.* Los Angeles, CA.
[140] "Antemortem" means "preceding death".
http://www.merriam-webster.com/medical/antemortem. Accessed on July 20, 2012.

e) Decedent recovery

f) Transport and storage of remains and temporary interment

g) Information technology (IT)/tracking

h) Incident characterization

i) Decedent manifest

j) Long-term family management/memorial

k) Joint agency death investigation

l) Postmortem examination, morgue operations, and specimen analysis

m) Decedent release

(For further information on Mass Fatality Services, refer to Appendix 13: Mass Fatality Information.)

F. Human Services Programs[141]

Includes the implementation of disaster assistance programs to help disaster victims recover their non-housing losses, including programs to replace destroyed personal property, and help to obtain disaster loans, disaster CalFresh (food stamps), crisis counseling, disaster unemployment, disaster legal services, support and services for special needs populations, and other Federal and State benefits. (A more complete list of assistance programs is available in Appendix 8: Federal Recovery Programs.)

1. Individual Assistance (IA) is provided to individuals and families by family, friends, voluntary organizations, churches, local, State, and Federal governments, etc.

   To take advantage of the Individuals and Households Program (IHP), individuals are required to register with FEMA by telephone, at www.disasterassistance.gov, or by smartphone at m.fema.gov. Registrants will be referred to the appropriate program for loan and/or grant assistance (e.g., FEMA, SBA, USDA) and will be provided with loan and/or grant application information, instructions, terms, and conditions directly from the agency providing assistance. Widespread notice through local media and/or websites maintained by local government, SBA, USDA, FEMA, or Cal OES informs the public of the registration options. Websites and/or local media are also resources for physical locations of local SBA, USDA, LAC, or DRC offices.

2. The Cora Brown Fund (DHS/FEMA) is used for the uninsured or underinsured disaster-related needs of individuals or families who

[141] Information from the *National Response Framework*, Annex ESF#6 Annex. http://www.fema.gov/pdf/emergency/nrf/nrf-esf-06.pdf. Accessed on June 15, 2012.

are unable to obtain adequate assistance from other local, Tribal, State, and Federal government programs.

3. The Crisis Counseling Assistance and Training Program (FEMA/Substance Abuse and Mental Health Services Administration [SAMHSA]) provides immediate, short-term crisis counseling services.

4. Other Needs Assistance (DHS/FEMA) awards help with medical, dental, funeral, personal property, transportation, moving and storage, and other expenses authorized by law (for uninsured or underinsured eligible applicants).

5. Disaster Case Management (FEMA/Department of Health and Human Services [HHS]): ESF #6 provides case management services, including financial assistance, through government agencies or qualified nonprofit agencies to eligible individuals. Case management ensures that a sequence of delivery is followed to streamline assistance, prevent duplication of benefits, and provide an efficient referral system.

6. U.S. Department of Health and Human Services:

   a) Expedites claims for new Federal benefits

   b) Ensures continuity of services to beneficiaries, such as Medicaid, Temporary Assistance to Needy Families, and Child Care

   c) Supports States hosting relocated populations by extending existing programs and benefits or taking other actions as needed, consistent with program authorities

   d) Provides support and consultation to the primary agency in the development and provision of case management services, to include advocacy services

   e) Provides public health and medical support under ESF #8

7. Victims of Crime Assistance (U.S. Department of Justice [DOJ]) supports local, Tribal, State, and Federal assistance to crime victim compensation in incidents resulting from terrorism or acts of criminal violence, as appropriate.

8. Disaster Unemployment Assistance (DUA) (U.S. Department of Labor [DOL]) is administered by the impacted State and provides financial assistance to individuals whose employment or self-employment has been lost or interrupted as a direct result of a major disaster declared by the President and who are not covered by regular unemployment insurance.

9. Alcohol and Tobacco Tax and Trade Bureau (TTB) (U.S. Department of the Treasury) provides Federal alcohol and tobacco excise tax refunds to businesses that have lost assets in a disaster.
10. Internal Revenue Service (IRS) (U.S. Department of the Treasury) provides tax counseling and assistance to taxpayers whose property has been damaged or lost in a federally declared disaster area.
11. Bureau of the Public Debt (U.S. Department of the Treasury) assists disaster victims by expediting replacement or redemption of U.S. Savings Bonds. It may waive the minimum holding period for Series EE and I Savings Bonds presented to authorized paying agents for redemption.
12. Veterans Assistance Program (U.S. Department of Veterans Affairs) provides insurance settlements, adjustments to home mortgages, and death benefits and ensures continuity of services, such as pensions, to beneficiaries.
13. Social Security Administration (SSA) provides Social Security Disability, Social Security Retirement, Social Security Survivors, Special Veterans, and Supplemental Security Income benefits.
14. U.S. Postal Service (USPS) provides extended mail services to relocated populations.
15. Disaster Legal Services—American Bar Association (ABA)/Young Lawyers Program provides free disaster legal services for low-income individuals who, prior to or because of the disaster, are unable to secure legal services adequate to meet their disaster-related needs.
16. Insurance Recovery Assistance includes assistance provided from private insurance carriers.

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IX. HOUSING RSF

A. Overview

The core recovery capability for housing is the ability to implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience. Like infrastructure and safety services, housing is a critical and often challenging component of disaster recovery. It is critical because local economies cannot recover from devastating disasters without adequate housing, especially affordable housing. It is challenging because many years' worth of housing repair, rehabilitation, reconstruction, and new construction often need to occur at an accelerated pace as a result of a disaster. These conditions create design, construction, labor, materials, logistics, inspection, and financing issues.[142]

B. Roles and Responsibilities

1. Planning
   a) Primary: Office of Planning and Research, Department of Building and Safety
   b) Support: Banks/financiers, insurance companies, State/Federal recovery program experts, housing industry
2. Zoning
   a) Primary: Department of Planning and Research, Department of Building and Safety
   b) Support: Public Works Board
3. Inspection
   a) Primary: Department of Building and Safety, Department of Housing and Community Development
4. Design
   a) Primary: Department of Building and Safety, Department of Housing and Community Development
   b) Support: Housing industry, architectural firms, access and functional needs experts, Office of Planning and Research
5. Logistics
   a) Primary: Emergency Management (local, State, Federal),
   b) Support: Financial institutions, construction companies, home building supplies retailers, transportation, utilities support

[142] Federal Emergency Management Agency. (2011). *National Disaster Recovery Framework*. Washington, DC.

6. Codes—Building
   a) Primary: Department of Building and Safety
   b) Support: Housing, planning, security
7. Financing
   a) Primary: Community Redevelopment Agency (CRAC), U.S. Department of Housing and Urban Development (HUD), Community Development Department (CDD)
   b) Support: SBA, Cal OES, FEMA, banks
8. Transportation
   a) Primary: Department of Transportation
   b) Support: FEMA, private contractors
9. Permitting
   a) Primary: Department of Building and Safety
   b) Support: Department of Transportation, Public Works Board
10. Temporary Interim Housing—Resources
   a) Primary: American Red Cross, Salvation Army, Department of Housing and Community Development
   b) Support: NGOs

C. Disaster Housing Planning Considerations

Disaster housing planning *before* a disaster occurs will greatly help to improve the knowledge and ability of a community to address disaster issues and sets priorities in advance so a faster and more effective recovery is possible post-disaster. Additional disaster housing planning considerations can be found in the Los Angeles/Long Beach RCPGP Region Disaster Housing Planning Guide available from the City of Los Angeles Housing Department.

1. Preparedness
   a) Consider establishment of online housing locator services and other housing resources.
   b) Consider use of open spaces in parks that already have sewer and water infrastructure in place.
   c) Consider as an important pre-incident activity that insurance may not be sufficient for repairs or replacement. Alternative options should be available for the population. In addition, a significant percentage of the population does not have or may have difficulty obtaining adequate insurance for the various types of disasters that may occur in the Los Angeles

region. Addressing this will need coordination with the Economic RSF.

d) As part of preplanning, understand requirements/process for requesting information from third parties and other agencies covered by the Privacy Act and requirements/parameters for requesting and use of that information.

e) Consider the use of placards to indicate whether a facility or structure is safe/not safe. Involve community/neighborhood development in identifying potential temporary and interim housing sites.

f) Consider the use of development agreements.

g) Review existing MOUs/MOAs and cooperative agreements with regional partners and support agencies and the private sector for resources needed for housing sites as a part of preparedness activities.

2. Recovery

a) Low-interest disaster loans may be available after a disaster for homeowners and renters from SBA to cover uninsured or underinsured property losses. Loans may be used for repair or replacement of homes, automobiles, clothing, or other damaged personal property. Loans may also be available to businesses for property loss and economic injury.

b) Identify and implement housing to rebuild and renew the community, since interim housing decisions can have a profound impact on the direction and character of permanent housing. Coordinate interim/permanent housing plans/mitigation with the Community Planning and Capacity Building and Infrastructure RSFs.

c) Disaster housing assistance may be available for displaced persons whose residences were heavily damaged or destroyed. Funding also can be provided for housing repairs and replacement of damaged items to make homes habitable. NGOs may be able to help with smaller repairs.

d) New interim or permanent housing must consider community services and the key players for this need to be identified and coordinated with beforehand for requirements and considerations.

e) When the housing infrastructure of a community has been severely damaged, attaining permanent housing in a timely manner becomes an immense challenge that requires choices and, ultimately, alignment of individuals and the local government and providing financial resources through

both public- and private-sector sources. This issue will need coordination with the Economic and Infrastructure RSFs.

f) Clear coordination and organization is necessary to balance all the available funding resources and make decisions in an informed, productive manner.

g) Integrate the private sector—especially those who own the properties or who can provide repair services or supplies—is important to help communicate priorities and direction for the jurisdiction. Consider coordination with property owners to establish post-disaster lease agreements at a lower rate. Also incorporate FBOs and other nonprofit organizations to help homeowners rebuild when possible.

h) Consider the potential for price-gouging from the private sector for materials and resources that will be in high demand throughout the recovery phase.

i) Explore FEMA's Joint Housing Solutions Group efforts to develop a systematic process to evaluate and rate various and innovative disaster housing options.

j) Identify businesses that have the capability of building prefabricated homes quickly. Explore FEMA's Joint Housing Solutions Group efforts to develop a systematic process to evaluate and rate various and innovative disaster housing options.

k) People with disabilities and others with access and functional needs should be included as an integral part of the planning process. This may be coordinated with the Health and Social Services RSF.

l) For large projects, consider the potential use of a development agreement, a contract between a municipality and a landowner/developer, for development approval. Include Federal partners in discussions to take advantage of Federal programs that may be implemented to assist.

m) Consider housing plans and resources to encourage residents to move back into homes, such as toolkits, repair tools, and other solutions to help them rebuild as much as possible.

n) In coordination with Health and Social Services RSF, consider ways to expand local assistance programs to meet projected or anticipated needs created by the housing activities post-disaster.

o) Identify online housing locator services and other housing resources.[143]

p) Consider coordinating with neighboring counties and across municipal boundaries in regards to resident displacement.

q) Consider that most existing government programs may not service undocumented residents. Coordination with nonprofit organizations will be needed to address these housing needs. Effective communication of available services to the target audience will be an important aspect of this coordination.

r) Coordinate with Health and Social Services RSF planners to verify family size in regards to housing placement requirements.

s) Understand that property owners will not be readily identifiable, especially considering the number of foreclosed homes and commercial dwellings in the region. Coordination with banks and other lenders to assist in owner identification will be necessary.

t) Consider documentation requirements to keep funding after review; for example, HUD requires demographic information, which must be documented and provided, or grant funds could be taken back.

u) Fulfilling the housing mission may extend past simply providing only a house. A house will require furnishings, cookware, dining ware and other basics. Coordination with the Health and Social Services and Economic RSFs will be necessary.

v) Develop long-term housing reconstruction and relocation strategies including available and affordable housing.

D. Disaster Housing Concept of Operations

1. Logistical Requirements

Logistical requirements depend on the needs of the population impacted by the disaster and the type and location of the disaster housing site (e.g., pre-existing hotels, motels, apartments, interim housing sites). An assessment of the logistical requirements should be part of the site survey process when considering locations for disaster housing. Logistics specifics include the following:

a) Consider both materials and people when thinking about housing logistics.

[143] For an example of an online locator service, see the Los Angeles County Housing Resource Center website at http://housing.lacounty.gov/index.html.

b) Support measures that may be required to implement a housing strategy, such as electrical and sewer hook-ups, will vary in terms of length of time to become operational and availability. Consider use of open spaces in parks that already have sewer and water infrastructure in place.

c) Employ innovative forms of housing such as modified overseas shipping containers, modular housing, converted warehouses, and prefabricated dwellings, which may simply logistics of movement.

d) Consider the temporary housing needs for additional groups coming into or near the impacted area, such as relief and construction workers.

(1) Consider use of water tenders for water supplies, port-o-potties, temporary power, and sanitation as rebuilding occurs.

(2) Develop relationships beforehand with vendors who may be able to provide these services following a disaster.

(3) Develop additional staffing to deliver these services using NGOs, neighborhood organizations, existing staff, and volunteer recruitment from area neighborhoods.

e) Assess the potential availability of building supplies and suppliers early on and develop strategies about how to resupply. Consider all types of equipment and supplies, which may include assistive devices for housing modification needed by access and functional needs populations.

(1) Consider vendor agreements with national suppliers pre-disaster

(2) Consider regionalizing vendor agreements with national suppliers to mitigate competition for limited resources since many or all of the affected jurisdictions may intend to rely on the same vendors; this may help alleviate issues concerning allocation and competition for resources post-disaster

(3) Consider the development of a logistics plan, integrated with State and Federal programs, with written procedures, roles, and responsibilities with regards to housing operations. The plan may also include procedures for use of available logistics nodes for access to construction supplies, basic living essential supplies, supply/resupply processes, financing, and logistics management.

2. Coordination Requirements

a) Coordination with local realtors and rental associations may help confirm availability of current resource needs under agreement once recovery housing operations have begun.

b) Consider the processes that would be most beneficial and efficient to request and acquire resources as needed from other jurisdictions and the State following a disaster including those on housing assistance that are displaced to other jurisdictions.

c) The communication with neighboring jurisdictions of your plan for potential use of certain facilities for housing or housing-associated logistical support in the event of a disaster will help clarify and coordinate the use of those facilities following a disaster.

d) Sharing innovative forms of housing, best practices, and lessons learned with community partners and other jurisdictions as they are developed will greatly benefit all communities that are ultimately affected by a disaster.

e) An assessment of wrap around services such as education, public transportation, essential social services, emergency services, healthcare facilities, food and shopping services, laundry, and child care, may help to mitigate limitations and discrepancies in these services to include transportation to these locations when necessary.

f) Consider the longer term use of developed temporary housing resources (developing manufactured housing infrastructure to convert into a permanent resource such as single family housing). Coordination with FEMA during housing mission development may allow for retaining infrastructure when a cost savings over removing the infrastructure can be shown.

E. Disaster Housing Options

1. Several disaster housing options exist, and strategies in one impacted area may not work for another area. Therefore, it is important to plan for housing solutions that best match the situation and needs of the community. The transition from sheltering (largely a response function) to interim housing, whether short- or long-term, is an important consideration. Jurisdictions will want to consider how quickly people may be able to be placed into permanent housing. Identifying available permanent housing solutions as soon as possible may keep from moving people from shelter to interim housing to short-term housing to permanent

housing. Possible solutions for quickly allowing people to move back into their own homes, if they are otherwise safe, include:

a) Providing materials, through individual assistance, nonprofits, or business donations, for people who can do their own small repairs but need materials and tools

b) Coordinating with insurance providers to expedite payments

c) Planning for assistance to homeowners, where possible, to cover costs of code required improvements and/or deductibles to expedite their return to their homes

2. Transition from Shelter to Interim or Permanent Housing

a) During the response phase, the most basic needs are met such as food, water, shelter, and immediate medical aid. Many shelters will remain open until those who remain have secured other types of interim housing options. In conjunction, if Individual Assistance is authorized, the State and Federal support begins. Some residents may be able to return to slightly damaged homes, while others cannot due to substantial damage to their homes. At this point of the transition from response to recovery, coordination with the mass care function will be important and necessary.

b) Sheltering and transitional sheltering, which are covered in detail in the Los Angeles Operational Area (LAOA) *Mass Care Guidance (2010),* may provide assistance within the currently defined timeframes:[144]

(1) Emergency Sheltering: day 1 to 2 weeks (such as congregate shelters)

(2) Transitional Sheltering: 2 weeks to 6 months (such as hotels)

3. Interim Housing

Interim housing can be described as a disaster housing unit that allows families to secure their belongings and provides a higher level of privacy than sheltering while they work on securing long-term options. Interim housing will be arranged for displaced residents in individual family-sized units (if possible) as soon as the emergency is declared. Interim housing may include the following:

a) Rental assistance

b) Rapid repair assistance

c) Manufactured housing

d) Recreational vehicles—park models and trailers

[144] Document may be found at www.catastrophicplanning.org. Accessed on August 27, 2012

e) Panelized housing

f) Pre-cut housing

g) Temporary structures on private or commercial property

(1) Site Identification

(a) Pre-event

(i) Maintain a list, based on predicted number of families, of three alternate sites in various sections of the jurisdiction and prepare a nontraditional shelter plan for each site.

(ii) Complete a computerized inventory of possible temporary housing sites including open spaces, schools, etc., and the capabilities and features of potential temporary housing sites; update regularly.

(iii) Identify temporary large group housing to facilitate rapid closure of emergency shelters.

(iv) Determine the features of a nontraditional shelter site and maintain a plan (e.g., one sanitation facility for X number of people, optimum number of family tents, size of family tent, how many and what kind of businesses will be in a nontraditional location, what are their needs).

(v) Maintain a plan detailing how much equipment and what type will be needed for a predicted event.

(vi) Develop policies and actions programs addressing the need for rapid post-event development of a permanent replacement-housing program.

(vii) Develop interim and long-term policies and actions for inclusion in the Recovery and Reconstruction Plan that address the correction of illegal occupancies and construction within reasonable limits, based on essential health and safety factors and given the existing and

projected shortage of adequate low- and moderate-income housing.

(2) Short-Term

(a) Implement the process and procedures of developing a nontraditional shelter site after an event.

(b) Inspect and evaluate shelters before occupation and based on a prioritized schedule.

(c) If necessary, provide immediate housing assistance to fill any gaps in Federal or State assistance periods, being careful to avoid a duplication of benefit.

4. Permanent Housing

Permanent housing can be described as a long-term housing unit that is accessible, affordable, and allows families to secure their belongings, provides privacy, and enhances self-sufficiency. Attaining permanent housing in a timely manner becomes an immense challenge that requires the choices and alignment of individuals and the local government, and the provision of financial resources through public, private, and nonprofit sources, and several factors will be involved. Permanent housing may include permanent construction and repairs, transfer of title or deed through purchase or donation, or relocation.

Considerations for permanent housing include:

a) Encourage immediate repair for interim re-occupancy of damaged properties.

b) Preparedness

(1) Develop criteria for minimal habitability based upon health and life safety measures. Standards of damage will be determined dependent on magnitude of event.

(2) In coordination with the assessor's office, identify and examine assistance programs to determine obstacles for loan expediting assistance such as:

(a) Appraisals

(b) Lot Book Report in lieu of Title Report

(c) Income and mortgage verification documents

(d) Judgments and liens

(e) Control of construction funds

(3) Plan for inspection and permitting staff surge requirements by initiating coordination and MOUs with local agencies that have certified inspectors, other counties, and private-sector organizations with inspectors.

(4) Consider the establishment or creation of a communications process plan with appropriate State and Federal agencies that shares information about specific roles and responsibilities Establish MOUs with Federal agencies (i.e., FEMA, SBA, HUD) on sharing of information.

(5) Address how the housing authority will prioritize emergency vouchers with the existing waiting list, new applications, and those displaced from tenant-based housing and project-based Section 8 residents.[145]

(6) Investigate and establish if feasible, a jurisdictional loan program for financing loans to renters and homeowners of damaged properties. Coordinate with their State and Federal assistance applications to avoid duplication of benefits issues.

c) Short-Term Recovery

(1) Establish listing of severely damaged buildings.

(2) Expedite local process such as Section 8 and the homeless programs that temporary housing residents might benefit from.

F. Information Collection, Analysis, and Dissemination

Before information can be analyzed, specific types of information need to be collected from the different organizations and departments. Considerations for this include the specific information that would be most useful for housing operations. A jurisdiction may find it beneficial to create and use a standardized form containing information such as:

1. Personal demographic information, such as family numbers and ages in household
2. Requirements of people with disabilities and others with access and functional needs
3. Insurance information (property and home-business interruption)

[145] The Section 8 program is financed by the U.S. Department of Housing and Urban Development to provide rental assistance to very low income families. For further information, see http://portal.hud.gov/hudportal/HUD?src=/topics/housing_choice_voucher_program_section_8. Accessed on August 28, 2012

4. Personal income/family income (may be necessary for historic context or any type of assistance previously given)
5. Whether the impacted person rents or owns
6. Contact address and physical address affected (not post office boxes)
7. Signatures
8. Phone numbers
9. Personal narratives/statements from those impacted by the event describing their perceived need in terms of housing
10. Driver's license and social security number
11. Registration numbers for American Red Cross and FEMA registries
12. Legal obligation to report to law enforcement or any other authorities for any reason
13. Other pertinent information that would help in providing housing

Other considerations for information collection include the following:

1. Identify where multiple sources can be used to help determine housing requirements:
    a) Establish a process to track 211 calls immediately after disaster and during recovery; make contact with property owner regarding insurance
        (1) Consider the creation of a system to access 211 that has criteria for figuring out what is needed; jurisdictions might be able to better assess what is needed.
        (2) Use information hotlines already established which may be supplemented with partner agency staff and volunteers.
    b) Shelters
    c) LACs/FACs
    d) DRCs
    e) Field outreach teams which may be comprised of county staff, nonprofits, and/or volunteers
2. Establish clearinghouses, in which various agencies may consider the creation of a central collection point. Consider how information is collected and disseminated:
    a) Develop relationship with communications and public affairs (private and public)

b) Disseminate information using public service announcements, flyers, press releases, social media, and mass notification systems with information such as the following:

(1) Locations and phone numbers of where to register

(2) What assistance will be provided at the centers

(3) What information residents will need to bring with them in terms of applying for recovery assistance

c) Consider the Affordable Housing Management Association (AHMA) as a point of contact for private-sector Section 8 housing

3. Considerations for analysis of information may include the following:

a) Get situational assessment (report) including numbers of individuals in shelters and informal shelters, including location and infrastructure status

b) Obtain safety/damage assessment list to provide a resource of highly impacted areas and locations of damage

c) Establish a centralized location for housing partners providing services to vet incoming information (victim's needs)

d) Identify a lead agency

e) Develop a method to crosswalk other databases

f) Create and provide to housing agencies information of housing needs from assessment (for example, AHMA)

g) Receive availability of housing units in a usable digital format, such as a spreadsheet

G. People with Disabilities and Others with Access and Functional Needs

People with disabilities and others with access and functional needs, including those living in group settings such as nursing homes, assisted-living facilities, and other care facilities as well as individuals living at home, will require some assistance after a major disaster. Disabled populations are going to need specific accommodations and living arrangements throughout the response and recovery phases. Disabilities and access and functional needs go beyond physical limitations and accessibility. A variety of challenges exist, such as hearing and sight impairment, language barriers and developmental, cognitive and psychiatric disabilities. Planners may need to take into account concerns regarding interim and permanent housing, such as:

1. Who is likely to require special assistance? How will they be identified? What outreach efforts will be required to ensure that these needs are met? What preparedness activities can streamline recovery activities, such as identification of like-facilities for congregate care, and licensing requirements for such facilities?
2. What are the ADA requirements for a new facility receiving FEMA public assistance funding and constructed as a replacement facility, an improved project, or an alternate project be it a private or governmental entity?[146]
3. Which ADA-relevant repairs and alterations apply to existing facilities including primary and non-primary function areas of the facility, and accessible pathways for entry and exit?
4. What resources will be required to meet these needs in a residence such as a family-type dwelling or in a multi-family structure or larger facility?
5. Where are potential interim housing options located as alternatives and which congregate care licensing requirements can be waived temporarily?

H. Housing Recovery-Related Issues

Placement into secure housing following a disaster is a main priority for those affected by a disaster. However, listed below are a range of other factors exist that contribute to, support, or impact a community's recovery.

1. Unmet needs
2. Case management
3. Transportation
4. Pre-disaster homeless population
5. Undocumented population
6. Asbestos and lead paint
7. Salvaging
8. Land zoning and building codes
9. Historic properties and Section 106 review[147]

[146] Federal Emergency Management Agency. (2010). Americans with Disabilities Act (ADA) access requirements. Washington, DC. http://www.fema.gov/government/grant/pa/9525_5.shtm. Accessed on July 2, 2012.
[147] Section 106 requires federal agencies to consider the effects of projects they carry out, approve, or fund on historic properties. Advisory Council on Historic Preservation. *Protecting historic properties: A citizen's guide to Section 106 review*. Washington, DC. http://www.achp.gov/docs/CitizenGuide.pdf. Accessed on June 29, 2012.

I. Land Use Planning

Land use decisions, infrastructure restoration, the provision of community services and other long-range needs are significantly tied to housing decisions made during the recovery process.

1. Zoning

Prior to a disaster, policies regarding variances, densities, and other non-conforming issues need to be evaluated, including the land use issues that will likely arise with interim and permanent housing implementation, including property rights, zoning, preservation, and phasing of reconstruction and development.

Be aware of flood zones, areas of new construction, rebuilding, and temporary housing sites. Land-use decisions could affect availability of capital to finance a housing recovery and attract or discourage builders, investors, residents, and/or potential residents. Common land-use considerations include:

a) If rebuilding should occur in a particular area

b) What areas should be zoned (e.g., residential use, single-family housing, multifamily house, mixed use, open space)

c) If the land-use decisions made reflect responsible floodplain management or earthquake or wildfire risk

d) Temporary zoning allowances that would allow temporary housing in business/commercial zones or vice-versa (this will need to be coordinated with the Community Planning and Capacity Building RSF)

e) Engaging community groups early on to de-conflict potential industry and business recovery/reconstruction zones with potential residential zones

f) Sustainable rebuilding strategies and other initiatives (e.g., transit-oriented development and smart growth)

g) The need for a consistent, two-way public participation and process when looking at rezoning (it is a public process and officials and planners will need to anticipate potential community dissention regarding rezoning and the process itself may not be very expeditious)

2. Criteria/Considerations to Demolish, Rebuild, Buy-out/Acquire Properties or Relocation

Establishing criteria for determining different types of structures uninhabitable and unsafe may need to be in place or considered by a jurisdiction prior to a disaster. A plan may need to include methods for this determination as well as adequate and realistic timeframes for removal of structures.

3. Floodplain Management

Planners and decision makers should avoid placing shelters, interim, and permanent disaster housing in floodplains to the maximum extent possible. Any State, Tribal, and local laws, codes and statutes must be adhered to in the absence of waiver authority when considering the use of floodplains for disaster housing development which may include actions such as elevation above of the flood plain. No units may be placed in Zone V or floodways; however, there have been past allowances for the placement of temporary housing units (trailers) in Zone A for 180 days (6 months).[148]

4. Roads Permitting

If temporary housing is used, planning should consider methods of expediting permitting for the transportation of temporary housing units into and through local jurisdictions.

J. Building Permitting, Inspections, and Building Codes

An established provision for a phased building moratorium or other temporary restrictions on processing development orders may be a vital tool for a local government after a major disaster. Temporarily modifying the local permitting process can allow for rapid disaster repairs to take place while affording permitting officials and property owners a reasonable amount of time to assess the situation and make smart redevelopment decisions.

1. Permitting

The permitting process and requirements will provide several advantages for a local jurisdiction following a disaster, including:

a) Knowledge of placement of temporary housing units and travel trailers within a jurisdiction, which is necessary for inspections and other purposes

b) Provides a record of those properties where houses were damaged so home repair inspections may be enforced

2. Streamlined Permitting Considerations

Expedited post-disaster repair permitting and inspection processes can increase a community's ability to reconstruct homes rapidly. An

[148] "V Zone": Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
"A Zone": Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%2520Flood%2520Zone%2520Designations. Accessed on August 17, 2012.

important pre-disaster action is to analyze permitting and inspection procedures in an effort to identify opportunities for temporary changes to be made post-disaster that will allow for faster operations without compromising quality. Some considerations for streamlining the permit process at the local level include:

a) Fostering better communication between regulatory officials and applicants

b) Standardizing forms and procedures

c) Providing sufficient resources to enhance permitting services

d) Encouraging proactive planning

3. Inspections—Buildings and Sites

a) Recognize that in earthquake scenarios, building safety inspection are key, however, aftershocks can affect the rate of recovery due to the necessity for re-inspections.

b) Address regulatory and statutory challenges that may occur as a result of the disaster.

c) Identify emergency permitting requirements for movement of temporary housing solutions, such as manufactured homes.

d) Establish one-stop processing centers.

e) Create a parcel database.

f) Consider the potential need for additional building inspectors.

g) Development of an outreach strategy to encourage jurisdictions to make sure their inspectors have completed certification.

h) These types of organizations may have inspectors who can provide assistance in conducting necessary safety assessments and inspections required to allow people back in to their homes. Coordinate with the following types of organizations in your jurisdiction to establish necessary agreements and plans for assistance:

(1) Building and safety departments

(2) Public works

(3) Ports have certified inspectors

(4) Housing

(5) Airports

(6) Department of water and power

(7) Ensure ADA compliance, Section 504 (Federal), Rehab Act, Uniform Building Code, State requirements, local ordinances

(8) Outreach strategy to encourage jurisdictions to make sure their inspectors have current completed certification

i) Utility companies have a say about approvals for turning on.

j) Some repair requirements may not be identified during official inspections. For example, lead and asbestos mitigation needs may not be identified until contractors begin working.

k) While temporary housing units are only one alternative, the following planning and coordination considerations, if addressed pre-disaster, will help expedite placement when they are required:

l) Identify and plan for central coordination of all inspections by all required agencies.

(1) Documenting the costs for all inspections and permits will help expedite payment of the costs, and expedite housing placement, when Federal temporary housing assistance is provided.

(2) Establish and document points for contacts with utility providers to expedite connection.

m) Develop methodology for analyzing and defining buildings likely to fail or be damaged and mitigation plan. This may be in coordination with the Infrastructure RSF.

n) Inspect government and private buildings (every jurisdiction should identify a list of types of building construction and prioritize inspection process).

o) Consider modifying or creating local hazardous buildings retrofit ordinances to include pre-disaster mitigation measures such as unreinforced masonry in-fills, tilt-up, reinforced masonry wall, and non-ductile concrete frame building categories, as budget permits.

p) Develop appropriate mitigation standards for new and existing construction commensurate with the degree of hazard and require building owners/developers to comply with standards.

q) Identify emergency permitting requirements for movement and transportation of temporary housing solutions, such as manufactured homes.

4. Building Codes

Local jurisdictions may choose to develop mechanisms that would allow for the relaxation or waiving of local policies to be triggered by the declaration of a catastrophic event or major disaster. Pre-disaster planning may include modifying local laws, regulations or codes to help get residents returned to homes that may have only slight and non-life-threatening damages. This may provide for a shift to inspections focused on safety versus compliance to expedite return to damaged homes. Other regulations that may be considered for initial bypassing include “green” requirements and some ADA requirements on personal property.

5. Safety/Damage Assessment

Information that is critical when determining the need for interim housing includes the number of households that have an eligible, disaster-related housing need. It will be necessary to coordinate an efficient collection and distribution of residential safety/damage assessment data and address the physical damages and associated occupancy data over time. Following a disaster, a jurisdiction may consider establishing an inventory of damaged homes with defined categories of damage level.

K. Construction and Design

1. Critical Infrastructure

Damage to potable water, sewer, and storm water infrastructure can weaken a community’s ability to recover and affect decisions on and timing of housing restoration or replacement. In cases of severe damage to infrastructure in highly hazardous locations, relocation may need to be considered.

2. Use of Contractors

While it remains a priority to use local contractors and businesses during the recovery process, jurisdictions may need to consider using out-of-state contractors in response to a large event or in situations where local businesses and contractors do not have the capacity to meet recovery needs. This may require handling and enforcing licensing of these contractors, as well as other logistics concerning housing for additional personnel in the disaster area. Coordination with the State to determine if there are established regulations with regards for contractor licensing following a disaster will be necessary

3. Design

Housing design should consider sites, planning, accessibility, resilience, sustainability, mitigation measures, and whether dwellings are meant as temporary or permanent. Pre-identification

of possible sites for temporary housing pre-disaster will allow evaluation and rapid approval post-disaster. Tailor all phases of housing assistance to reflect community or regional characteristics. Opportunities to improve accessibility for the disabled in community/public features such as sidewalks should also be considered. Design should include consideration of:

a) Research of new architectural concepts that allow for an expansion of infrastructure within community activity hubs that may be accomplished quickly and easily following a disaster (this may be coordinated with the Community Planning and Capacity Building RSF)

b) Availability and access to commercial facilities and businesses to include grocery, gas, retail merchants, schools, parks and recreational facilities, places of employment, as well as transportation infrastructure

c) Development of appropriate mitigation standards for new and existing construction commensurate with the degree of hazard and require building owners/developers to comply with standards

d) Ensuring that newly developed housing structures are not placed in a different hazard-type zone (this effort may be coordinated with mitigation functions, local floodplain managers, and the Community Planning and Capacity Building and the Infrastructure RSFs)

e) Considering and anticipating the potential for additional codes or ordinances that are created as a result of a disaster

f) Researching current local and State building codes to know which are merely suggestive and which are mandatory

g) Accessibility requirements, including placement of individual units to accommodate handicapped parking, entry height, etc.

h) Priority for placement of temporary housing units generally should follow these options:

   (1) On home-owner's property

   (2) In existing mobile home parks

   (3) New temporary housing site

i) Universal design (i.e., broad ideas including products and environments that are accessible to those with and without disabilities, such as curb cuts, lever handles for opening doors rather than twisting knobs, and components that require less than 5 pounds of force to operate)

j) Green building, which encompasses measures to make homes and businesses more energy- and water-efficient, use renewable energy and sustainable building materials and construction, and improve indoor air quality

L. Mitigation

"As a policy objective, mitigation should be seen as posing two distinct sets of opportunities that deserve distinct treatment—those pursued during the pre-disaster period and programmed into local government activities and budgets on an ongoing basis, and those created as an immediate result of a natural disaster and which must be acted upon in a timely manner during the recovery and long-term reconstruction periods. There are two essential reasons why these sets of opportunities are different. First, the post-disaster period, especially if the local government has planned effectively for this eventuality, is one in which additional outside resources become available that would not otherwise exist. Second, the damage caused by the disaster and the consequent need to rebuild produce an atmosphere of heightened urgency in decisions concerning when, where, and how to rebuild. In other words, there is no substitute for a good plan in these circumstances."[149]

1. Hazard Identification, Vulnerability Assessment, and Risk Assessment

   An analysis of land uses within a defined hazard zone (e.g., FEMA flood zone, the Hurricane Vulnerability Zone, and the Coastal High Hazard Area) would help to inform redevelopment strategies concerning land use. Such an analysis may assist in prioritizing limited funding for land acquisition to remove vulnerable property from hazardous zones and create natural buffers.

2. Individual Mitigation Measures

   There are many proven and cost-effective hazard mitigation techniques that can be applied; information, educational materials, and even training are available through several nonprofit organizations and government agencies. Immediate and prompt public outreach strategies for reaching homeowners with mitigation information and technical assistance should be considered.

[149] Federal Emergency Management Agency. (2005). *Planning for post-disaster recovery and reconstruction*. Washington, DC. http://www.fema.gov/pdf/rebuild/ltrc/fema_apa_ch3.pdf. Accessed on July 2, 2012.

M. Finance

1. The National Disaster Housing Strategy defines the full scope of options for disaster housing assistance, including:[150]

   a) Temporary roof repair, i.e., quick repairs to damaged roofs on private homes, which allows residents to return to and remain in their own homes while performing permanent repairs

   b) Repair program, which provides financial assistance to homeowners for repair of their primary residence, utilities, and residential infrastructure

   c) Replacement program, which issues financial assistance to victims to replace their destroyed primary residence

   d) Existing housing resources, which identifies a centralized location for available housing resources from the private sector and other Federal agencies (i.e., HUD, U.S. Department of Veterans Affairs [VA], and U.S. Department of Agriculture [USDA] properties)

   e) Rental assistance, which provides financial assistance issued to individuals and families for rental of temporary accommodations

   f) Non-congregate facilities, i.e., facilities that provide private or semiprivate accommodations but that are not considered temporary housing (e.g., cruise ships, tent cities, military installations, school dorm facilities, or modified nursing homes)

   g) Transportation to other locations, which includes assistance to relocate individuals and families outside of the disaster area where short- or long-term housing resources are available; may include return to the pre-disaster location

   h) Permanent construction, which provides direct assistance to victims and families of permanent or semi-permanent housing construction

   i) Direct financial housing, which makes payments directly to landlords on behalf of disaster victims

   j) Hotel/motel program, which provides temporary accommodations for individuals and families in transition from congregate shelters or other temporary environments, but unable to return to their pre-disaster dwelling

[150] Federal Emergency Management Agency. (2008). *National Response Framework, Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing and Human Services Annex*. http://www.fema.gov/pdf/emergency/nrf/nrf-esf-06.pdf. Accessed on August 28, 2012.

k) Direct housing operations, which provides temporary, usually factory-built units appropriate to community needs and include accessible units (this option is used only when other housing resources are not available)

l) Housing resources available from the private sector, FEMA, and other Federal agencies (as described below)

(1) Small Business Administration (SBA) Disaster Loan Program

(a) Provides low-interest, long-term disaster loan assistance for qualified homeowners and renters, nonagricultural businesses of all sizes, and nonprofit organizations to fund the repair and replacement of disaster-damaged property

(b) Provides loan funds that also may include money for such things as relocation, mitigation, refinancing of existing liens, code-required upgrades, and one-year insurance premiums

(2) U.S. Department of Housing and Urban Development (HUD)

(a) Provides access to and information on available habitable housing units, including housing units accessible to individuals with disabilities, owned, or in HUD possession, within or adjacent to the incident area for use as temporary housing

(b) Ensures that disaster victims who were receiving Section 8 Rental Assistance vouchers prior to the disaster are reintegrated into that program

(c) Provides available HUD staff to assist when needed with mass care and housing operations

(d) Administers the Disaster Housing Assistance Program for eligible applicants, when requested and funded by FEMA

(e) Provides housing resources for individuals certified as eligible for long-term housing

(f) Provides access to housing counseling services

(3) U.S. Department of Agriculture (USDA) Rural Development (RD)

(a) Provides information (location, type, owners, and/or management service) on USDA-financed, currently available, habitable housing units that are not under lease or under agreement of sale

(b) Provides available USDA (RD) staff to assist when needed with ESF #6

(c) Provides Letters of Priority Entitlement allowing the holder of the letter (identified evacuee and/or victim) to go to the top of any USDA MF 515 or 514 waiting lists for placement in USDA-financed housing

(d) Assists eligible recipients to meet emergency housing assistance needs resulting from Presidentially declared emergencies or major disasters

(4) U.S. Department of Veterans Affairs (VA)

(a) Provides available facilities suitable for mass shelter

(b) Provides assistance to veterans affected by disasters to help them avoid defaulting on existing home mortgages and/or foreclosure on their homes, as well as assistance for veterans with disabilities to retrofit their homes with necessary accessibility measures (e.g., wheelchair ramp)

(c) Develops and maintains plans to make available housing assets that are habitable, to which VA has title and possession, for use by survivors in catastrophic disasters

2. Funding Implementation and Distribution Strategies

a) Resource and assistance programs should be identified in advance and pursued actively following a disaster. Existing local programs, such as those relating to housing rehabilitation, may be redirected to assume a housing recovery focus.

b) Consider financial aspects of projects, developments, and programs. Identify and facilitate availability and use of sources of recovery funding.

c) Develop loan guidelines and procedures and work with SBA and HUD to obtain pre-approval.

d) To avoid post-disaster price gouging, in pre-disaster contracts with vendors and suppliers, consider including a clause that states prices will be established at an average from over the past few months.

3. Other finance considerations include:

a) Identify staff in other departments who understand loan processing

b) Have procedures to adopt emergency regulations

c) Obtain pre-approval on loan procedure from Federal agencies

d) Develop and implement jurisdictional loan programs

e) Coordinate with lenders to determine policies for loan extensions

f) Know what the Federal programs do not cover to determine what local loan programs can cover

g) Consider education and outreach programs for homeowners about disaster programs availability and limitations and updating insurance costs

h) Replacement housing needs to be affordable for both renters and homeowners if they are forced out of their homes or neighborhoods (i.e., from affordable area to more expensive area if limited options)

4. Legal Protection for Property Owners and Renters

Maximize available housing stock by protecting renters from unwarranted displacement and financial hardship as a result of unlawful actions by property owners.

a) Pre-event: Enact administrative regulations to:

(1) Prohibit the eviction of renters from rental units

(2) Relocate displaced renters into their original housing at the same rental level

(3) Require landlords to refund security deposits in full to renters forced to move because of the disaster

b) Post-event short-term: Implement the procedures after the disaster to protect renters from displacement and unwarranted financial hardships resulting from property owner actions.

5. Jurisdiction Funding Process for Interim Housing Disaster Assistance

Establish process and priorities to use both current and future funding for use and application of jurisdictional resources and programs for persons applying for disaster assistance for interim housing.

a) Pre-event

(1) Identify staff from other jurisdictional departments who are knowledgeable regarding loan processing and/or real estate practices and procedures.

(2) Develop loan guidelines and procedures.

(3) Establish procedures to streamline and expedite the building permit process and provide relief for the required fees.

(4) To expedite processing of Federal assistance, develop and obtain loan procedure pre-approval from Housing and Community Development, HUD, and FEMA on process to follow, subsequent to emergency.

(5) Consider ways to streamline processes – get pre-authorities to go into the recovery mode when needed

b) Post-Event Short-Term

(1) Establish a one-stop processing center in areas where most of displaced residents are (or where you want them to be). For events with forewarning, some of these related functions may start before the disaster occurs.

(2) Identify and seek Federal and State grant money.

(3) Coordinate local emergency assistance for rehousing the displaced population.

(4) Assist in efforts to verify the displaced population to qualify them for relocation assistance.

(5) Assist in identifying available housing units for the displaced population meeting health and safety standards.

(6) Identify assistance gaps and ways to meet those gaps.

(7) In coordination with the Economic RSF, consider financial stability of jurisdiction pre-disaster so processes can continue.

X. INFRASTRUCTURE SYSTEMS RSF[151]

A. Overview

The core recovery capability for infrastructure systems is the ability to efficiently restore infrastructure systems and services to support a viable, sustainable community and improve resilience to and protection from future hazards. The Infrastructure Systems RSF promotes a holistic approach to disaster recovery coordination, support, planning, and implementation for infrastructure systems that serve the community.

The collaborative nature of this RSF involves government and private-sector partners with expertise in public engineering services, as appropriate, across the infrastructure sectors identified through the National Infrastructure Protection Plan (NIPP) Partnership Framework. The identification, protection, assessment, and restoration of critical infrastructure and key resources are vital to the resiliency of the jurisdictions and recovery of the impacted area.

Therefore, the scope of this RSF includes the following infrastructure sectors and subsectors as identified in the NIPP: energy, water, dams, communications, transportation systems, agriculture (food production and delivery), government facilities, utilities, sanitation, engineering, flood control, and other systems that directly support the physical infrastructure of communities as well as physical facilities that support essential services, such as public safety, emergency services, and public recreation.[152] Infrastructure planning considerations should address pre-disaster, post-disaster, and specific outcomes.

B. Roles and Responsibilities

The following agencies and organizations have roles in Infrastructure:

1. Public Works, Environmental Services, Planning and Zoning, Transportation, Facilities Management, Parks and Recreation, Solid Waste/Sewer/Water Resources, public and private utility and telecommunication entities, Federal Bureau of Investigation InfraGard (ports, Cajon pass), Emergency Network Los Angeles, Joint Regional Intelligence Center, California Utilities Emergency Association, Public Works Board, U.S. Department of Homeland Security/FEMA, Protective Security Advisor, water/waste water

[151] Defined from the *National Infrastructure Protection Plan* as "Systems and assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction."

[152] *National Disaster Recovery Framework* Infrastructure Systems RSF informational sheet.

C. Safety/Damage Assessment Inspections

1. Jurisdictions should work with stakeholders to identify their structure and resources, and then prioritize those for inspection and assessment.
2. Lists should be coordinated and assessed for overall jurisdictional priority to assign assessment and inspection teams appropriately.
3. Specific categories (hospitals, educational facilities, etc.) of infrastructure that require different assessment and inspection teams should be determined.
4. Use standard terminology for safety/damage assessments based on Cal OES's Safety Assessment Program.
5. Consider creating pre-event documentation of infrastructure and condition to help verify and validate requests for funding when damage occurs. Consider using the FEMA ROVER program that Cal OES has adopted for documenting and cataloging the status of current infrastructure.

D. Infrastructure Restoration and Recovery

Infrastructure restoration and recovery is addressed by the local public, private, and nonprofit sectors and systems. There are numerous agencies, jurisdictions, and stakeholders involved with the public facilities, infrastructures systems, and related services. Following are sectors, sub-sectors and infrastructure systems that may be affected following an event:

1. Agriculture and food

This aspect of the Infrastructure System RSF involves food production and delivery.

a) Identify food and agricultural processing facilities.
b) When feasible, establish cooperative agreements with the private sector on supply chain, production facilities, etc. to enhance their ability to return to the local community and expedite the paperwork process.
c) Determine private-company plans to coordinate with and determine preparatory efforts.
d) Integrate private-sector agriculture and food representatives into the EOCs, depending on the incident requirements.
e) Identify regulatory agencies responsible for inspecting food, restaurant and cold storage facilities, facilities that may have chemicals and wastewater, and identify methods to streamline the approval process required to safely reopen these facilities.

Determine which regulatory agencies maintain up-to-date facility databases and if those databases could be accessed by emergency planners to conduct preparedness campaigns.

f) Receive safety/damage assessment reports to obtain situational awareness that will drive agriculture and food requirements.

g) Agricultural production

(1) Availability of resources

(2) Availability of support elements (feed, water, fertilizer, etc.) to produce end products

h) Delivery—supply chains

i) Processing systems

j) Distribution centers

k) Cold storage options

(1) Backup generators, need for fuel to continue operating

(2) There is a known capability gap in the amount of cold storage available.

l) Security of production facilities, supply chains, and distribution centers

m) Identify food and agriculture processing plants that could temporarily cease operations to reduce their impact on key and critical resources, like power and water.

n) Distributors

(1) Grocers

(2) Food wholesalers

(3) Food importers

(4) Food banks

o) Restaurants and other organizations with regular consumption needs (i.e., hotels, school kitchens, daycare centers, amusement parks)

2. Energy

This includes energy generation and distribution.

a) Pre-identify companies in the energy sector that provide services (solar, natural gas, steam, oil, etc.).

b) Identify energy providers in your jurisdiction. If there are multiple energy providers, consider creating a coordination body among energy providers to provide representative(s) to local EOCs and to planning processes. This representative needs decision-making authority.

c) Expedite debris removal and road repair to ensure access to energy facilities for restoration efforts. Coordinate with leadership to highlight access priorities.

d) Pre-identify critical customers. The electrical companies have already identified these lists.

e) Develop an evaluation process throughout the phases of recovery to determine needs, priorities, gaps, etc.

f) Identify existing mutual aid groups for each of the energy sectors.

g) Outline list of major utility providers in each area, with list of 24-hour operational center contacts. Regularly test telephone numbers to ensure they are current.

h) Determine whether rationing and preserving energy resources is necessary for recovery operations.

i) Track end-user estimated time of restoration. What percentage of the population is affected? Identify what obstacles are preventing the timely restoration for power to customers.

j) Identify generator availability, prioritization, staging, replacing, fueling, maintenance, and repair

(1) Identify and prioritize facilities in need of generators, including hospitals; EOC-essential government services; schools; water, wastewater, and fueling stations; and facilities providing services to at-risk populations dependent on power generation.

(2) Identify which facilities have fueling capabilities.

(3) Facilities should identify what type of generator (size, electrical cable connections, load or capacity, etc.) their site can receive so that they can quickly and specifically request the resource they need. If you can avoid requiring an assessment team being deployed, and there is a database listing the priority facilities and the type of generators ahead of time, those requests could be executed in a more timely manner. This should include identifying the fuel burn rate, which should include the number of gallons your

generator requires, how long it can last, and when you will need to receive refills.

k) Identify permitting and fee requirements for fuel providers (i.e., storage and distribution). Determine if waivers or temporary suspension of rules can be leveraged to increase assets that can provide resources in the area.

l) Identify oil, gas, and natural gas production and storage.

(1) Work with the private industry to identify oil, gas, and natural gas production sites before the event.

(2) Identify prioritization lists in jurisdictions and work between local, operational area, and State entities to determine existing agreements and de-conflict to the use of suppliers and resources. Employ this process for each type of energy supply: diesel, gas, compressed natural gas (CNG), propane, jet fuel.

(3) One of the largest underground natural gas storage facilities is in the region.

m) Identify electrical power resources.

(1) Identify electrical company(s) in the area.

(2) Identify priorities of power companies. Develop communication strategy for monitoring conditions and location.

(3) Coordinate resources with power companies to establish getting to affected areas.

(4) Maintain common messages. Keep messages general at onset of event. Refine messages as the damage is assessed and power companies have a better estimation of damages/repairs.

(5) Consider lodging for outside and traveling field crews.

n) Identify fuel resources (e.g., propane, diesel, gasoline, CNG)

(1) Identify high-pressure lines regionally that provide fuel to other States.

(2) Determine the impact to neighboring states that lengthy repair times would have.

(3) Identify which agencies do not have internal fuel resources, and depend on the use of gas cards to obtain fuel at other facilities.

(4) CNG interoperability—special considerations: Not all CNG-fueled vehicles use the same nozzles. Verify interoperability.

3. Healthcare and Public Health (see Health and Social Services RSF section for more detailed information)

   a) Hospitals, Skilled Nursing Facilities, Home Care

      (1) Preparedness

         (a) Hospitals are a critical infrastructure and should be one of the first priorities for restoration of electrical and water utilities. Resources to sustain hospitals must be requested through the same city agencies that provide utility services to their businesses and communities.

      (2) Recovery

         (a) During a sustained recovery process to restore full medical service to the community, hospitals should be a priority for continuity of electrical and water utility service as an interruption in service will place existing patients at risk, and diminish the capability of addressing new injuries and illnesses in the community.

         (b) Hospitals and skilled nursing facilities have as part of their emergency plans a contingency for temporary loss of water, which includes continuity of operations and surge planning to reduce demands on use of water.

         (c) Home healthcare may be through government programs or the private sector. In-Home Supportive Services (Social/Human Services) will make calls to clients to determine their status and need for service. For private-sector home health, regular communication may not be possible without pre-established contacts, or affiliation with home health networks. (i.e., Providence Home Health)

         (d) Community clinics (both private and public) have as part of their building emergency plans and continuity of operations, contingencies for temporary loss of water. They will have limited capacity to sustain outpatient care without water for more than a few hours.

         (e) Identify healthcare facilities that do not have an adequate water supply for daily operations and patient care, including drinking water.

(f) Reconsider long-term supply needs. Initial estimates of self-sustainment may be overestimated. Factor in that after the disaster there will be increased demand for services, the usage rate for water and power will be increased. It will not be business as usual in any way, including the number and type of patients.

(g) As part of their emergency plans, hospitals will implement water-conservation measures. In a power loss, use of an emergency generator and back-up will be implemented, with limited fuel on-site to sustain generator power. Skilled nursing facilities also rely heavily on fresh running water and do not have a long-term capacity for self-sustainment. Many nursing facilities do not have a generator. Should a lack of water significantly affect the ability of any healthcare to continue care, as part of their emergency planning, preparations for surge to like-facilities, or relocation of their patients will be implemented through their notification system.

(h) Coordinate with the healthcare systems to determine which of their functions can be run with water that could have varying levels of quality given catastrophic environments.

  (i) Expedite the communication received from hospitals on their status and updated water requirements.

  (ii) Determine which functions must maintain a certain quality, and which could run over a temporary period.

(i) Identify patient record management systems and determine if there is a process in place to back-up the files in the event of a catastrophic incident. Determine if the files are accessible at alternate facilities. If there is not full access, determine what temporary or intermediary access is available.

(j) Identify transportation and access to facilities.

  (i) Consider the movement of employees, patients, and families.

(ii) Identify alternative forms of transportation that will be needed for non-acute patients, medications, larger equipment, and supplies.

(iii) Coordinate with both medical and non-medical transportation providers.

4. Water

Water conveyance, supply, treatment, and distribution must be considered.

a) Dealing with multiple entities is a difficult recovery element. There are a number of smaller water companies that need to be coordinated. Los Angeles County has 240 separate purveyors (irrigation districts, small businesses). Other operational areas have a coordinating entity.

b) Consider the need to implement a MAC process for water. Work with the California Water/Wastewater Agency Response Network (CalWARN), a mutual-aid group for water.

c) Work with CDPH to temporarily reduce or suspend regulations on water quality and operators.

d) If potable water needs to be distributed, determine available resources to maintain, store, and distribute.

(1) Develop a small fleet of distribution trucks and water buffalos.

(2) Ensure that the needs of animals are considered.

(3) Determine if National Guard, military, or USACE resources are available to use.

(4) See if private resources, such as cruise ships, would also be available.

(5) Consider distributing point-of-use (POU) water treatment systems.

e) Use existing production and distribution systems to alter normal production to produce potable water. For example, soda and beer production companies have used facilities to produce bottled water in the past.

f) Consider the availability of materials—there will likely be pipe fabrication and materials shortages. These resources are necessary for repair of lines.

g) Identify the need for temporary, aboveground piping to convey water.

h) Consider adding an appendix maintained by the CDPH of a list of certified water haulers.

i) Consider alternative water supplies, such as ocean and river water, for activities such as fighting fires. Coordinate with local public/environmental health department to ensure that drinking water sources are protected.

j) Determine major public health considerations for potable water. Boil-water notices over the long-term are not a viable option.

k) Conduct damage mitigation activities, including replacement of older pipes and systems. Identify known weaknesses or areas to replace and rebuild. Work with private-sector partners to develop long-term replacement plans and considerations that can be applied after a disaster.

l) Consider the many people who will find close family or friends to stay with and the subsequent strain on and requirements for the water system. Restoring power to local homes may become a higher priority than producing potable water.

m) Consider identifying areas for distributing potable water.

n) The USACE has pre-scripted missions for water and water waster tasks.

o) The USACE has flyover reconnaissance capabilities that could be accessed for assessment purposes.

p) The USACE can provide technical assistance for flood control and GIS support upon request.

q) Examine storm water, including drainage systems.

(1) Identify storm drains that have been impacted by earthquakes.

(a) Anticipate the secondary impact of flooding if the drainage system is damaged.

(2) Develop methods and plans to keep debris out or remove debris from the drainage system.

(3) Identify regional requirements and permitting through regulatory boards, and consider the delays and impact on recovery operations.

r) Flood control

(1) Maintain mapping of all flood-control facilities, including levees.

(2) Identify key players and regional water boards (Los Angeles, Riverside, San Bernardino, Orange, and Ventura counties), including the Bureau of Reclamation, the California Department of Water Resources (DWR), USACE, Natural Resources Conservation Service (NRCS), and the California Department of Fish and Game. (The NRCS is responsible for more rural areas that the do not fall under the USACE's jurisdiction.)

(3) The USACE has a rehabilitation program for levees, channels, dams, etc., that can provide an 80/20 cost share for repairs if they have been registered and inspected as part of the program before the disaster. This program does not require a Presidential disaster declaration.

(4) Cascading events are very likely and have a high likelihood of serious damage should flood control dams be impacted.

(5) USACE has oversight of a number of flood-control properties and should be in consulted in planning efforts.

(6) Jurisdictions should have floodplain and inundation maps available and updated. Dam inundation maps include estimated length of time water will take to arrive at specific locations in a jurisdiction in the event that a dam is compromised. FEMA floodplain maps indicate areas that will or are likely to flood in the event a waterway is compromised.

(7) Dams

(a) Determine which dams are primarily flood-control–related in Los Angeles County.

(b) Identify the number and locations of dams within the jurisdiction.

(8) Identify facilities that maintain hazardous materials that could be impacted by flooding and would require longer-term clean up.

s) Wastewater

(1) Identify alternative methods for waste management (portable facilities) in the event restoration is delayed.

(2) Identify areas where standing water could lead to pest control issues that will need to be managed through vector control.

(3) Identify areas with a concentration of septic systems that will need to be mitigated to keep from becoming a health issue.

(4) If the wastewater facility is dependent on electrical systems and backup power, ensure the Continuity of Operations Plan addresses the need for generators, etc.

(5) Implement protective measures in the event of leaks or spills.

(6) Identify methods used in other countries to convert wastewater into portable water and which resources and processes could be applied in this region.

(7) Identify temporary restoration needs and subsequent permanent restoration needs and how they will affect end users.

(8) Inspection of lines may take more time than anticipated due to a lack of qualified personnel to inspect lines.

(a) Wastewater issues will often not be identified until after water has been restored.

(b) Explore alternate local resources and any mutual aid or MOU/MOA requirements.

(9) Identify methods and opportunities to educate the public regarding methods to reduce wastewater.

5. Telecommunications

a) Communication towers

(1) Consider access to locations, fuel, and site power.

(2) Consider that hardware may need to be recalibrated given the disruption caused by the incident.

(3) Consider that the number of backup power sources have largely been reduced due to costs.

(4) Create a list of national, out-of-state vendors that could provide resources and certified communication vendors with Occupational Safety and Health Administration (OSHA) certification.

(5) Determine permitting requirements for communications infra-structure and streamline the process for allowing providers to rebuild or replace their networks.

b) There may be extensive damage to switch offices, which cannot be easily or quickly repaired.

c) Consider a public education campaign to reduce the bandwidth used by the public to upload and send pictures. Educate users about what features of their phones may work if normal calls do not (such as text messaging).

d) Government entities should obtain a Government Emergency Telecommunications Service (GETS) card and look at the Wireless Priority System (WPS), which allows for prioritization of critical cell phone calls during an incident. WPS does have a small cost associated with it and planners should evaluate the cost-benefit.

e) Phone lines

(1) Local telephone systems only have backup power for 24 hours or less. Determine if local service providers have a plan in place to deploy backup power systems to support switch offices and distribution points.

> During the 2011 earthquake impacting Japan, there was extensive damage to central switch offices, which tie local and regional telephone systems together. These facilities cannot be easily or quickly restored.

(2) Work with local service providers to identify priority customers within a region to be restored first following an incident and who are essential to response and recovery services.

(3) Work with local service providers and public works to identify local vendors who can provide the specialized heavy equipment for telephone system restoration.

(4) Local planners should identify remote communities within their jurisdictions which may have extended restoration times due to their remote locations and determine alternate means of communication.

f) Cell phone towers and systems

(1) Identify operators of cell towers and determine their plan for site restoration.

(2) Identify points of weaknesses in the system that will fail during a disaster and the requirements for their restoration.

(3) Identify systems' interconnect points between cellular and landline phone systems.

(4) Identify site backup power and fuel consumption requirements.

(5) Determine if local cell service providers have inter-use agreements between service providers.

(6) Educate users about the features of their telephones, which may work during a disaster. Include a public education campaign about not uploading pictures and videos during a disaster to reduce the drawdown on limited bandwidth.

g) Network connectivity

(1) Determine alternate means of communication, including amateur and ham radio, highway alert system, signs/radio alerts, the Advanced Traffic Management and Information System, Operational Area Response and Recovery System (OARRS), and satellite phones.

(2) Identify critical networks to response and recovery for both government and private organizations to identify service providers for these networks and determine their ability to support and respond in a disaster.

(3) Determine which government entities and government/private organizations have data backup and recovery plans in place, including out-of-state backup.

(4) Identify key NGOs, FBOs, and CBOs essential for recovery operations and determine if they have a plan for reestablishing their network infrastructure and computer systems following a disaster or if they will be relying on outside support.

(5) Identify points of weakness in system that would be most likely to fail.

(6) Conduct internal assessment of communications, and develop redundant options.

(7) Determine permitting requirements for communications infrastructure and streamline the

process for allowing providers to rebuild or replace their networks.

(8) Establish priority approach for restarting systems, both for government facilities and public.

(9) Identify current communication providers, as well as backup providers that could backfill.

(10) Consider developing cooperative agreements with private companies to support them in preparing for disasters and serving a role in recovery operations.

(11) Identify cooperation needed between providers who may provide external/outside resources, and those who provide internal/inside services.

(12) The jurisdiction should ensure that it has passed and signed a Repair and Reconstruction Ordinance. FEMA funding often requires this ordinance to be on the books in order for FEMA funding to be provided. Doing so will bring the jurisdiction into compliance with the Stafford Act and help maximize FEMA funding. FEMA will provide assistance in rebuilding damaged government buildings, and will facilitate restoring such buildings to the condition they were in before the disaster event. In order for this money to be approved, a Repair and Reconstruction Ordinance must be in place. In addition, the jurisdiction needs to update its condition reports on buildings for which it may seek FEMA funds, in order to document the condition of those buildings with the most current information.

(13) Discuss conducting a public education campaign urging citizens to reduce their impact on the communications networks. Develop canned messages that could be deployed after an incident.

(14) Identify interoperability needs before an incident. Be prepared to pursue a “new normal” of obtaining a system that will enable responders to be interoperable as the system is repaired.

E. Transportation Systems

Transportation systems include roads and bridges and rail and air travel.

Establish lines of supply: sea ports, airports, railroads, and roads.

1. Disaster routes have been identified:

a) Highways (primary)

b) Major arterials (secondary)

c) Jurisdictions should determine if there is a critical route plan discussing how roads will be used for priority traffic and which ones should be opened first. There needs to be interoperable planning with other operational areas. The County Sheriff's Office often is the lead organization to identify if a plan exists.

d) Safety and security teams may be needed to escort high priority shipments/vehicles along its route of travel. The California Highway Patrol, local jurisdictions, and military entities should be considered.

2. Logistical support elements for fuel: gasoline, diesel, CNG, and electricity. (CNG requires electricity both to process and dispense.)

3. Consider implementing existing agreements with transportation providers, or identify additional agreements necessary.

4. Roads/bridges assessments

a) Identify assessment teams to determine if roads and bridges are structurally sound.

b) Consider alternate route plan for highways or major arterials that may fail or are impassable.

c) Take into account the weight and size requirements of incoming resources, e.g., larger-sized mobile health resources.

5. Rail assessments: Identify who owns the rail lines and who can provide details about the status of the lines and repair timelines.

6. Airport operations

a) Planners should consider general aviation airports within their jurisdiction and how they can be used for other functions (staging, shelter, etc.).

b) Per Federal Aviation Administration (FAA) regulations, if the control tower is disabled, flight operations cannot be conducted. The facility could serve alternative functions even if flight operations cannot be conducted.

c) Airports should have a COOP/COG that will be activated.

d) The Southern California Catastrophic Earthquake Plan has identified some airports as a hub for supplies, resources and evacuation. Jurisdictions should coordinate to de-conflict potential uses of the airports.

7. Paratransit services and other accessible transportation providers

a) Identify agreements necessary to leverage these providers and ensure eligibility for reimbursement.

b) Planners should consider alternative resources to meet these transportation needs.

8. Mass Transit System

a) Bus: Determine if mass transit in your jurisdiction runs on CNG and if potential fueling stations have interoperable equipment.

b) Rail: Identify which rail systems are solely dependent on electrical power and will not function in the event of a power outage.

c) Access and Functional Needs: Consider the transportation-dependent populations that rely heavily on mass transit services.

d) Urgent medical transportation should be requested and use qualified ambulance service; however, alternatives should be identified in the event the capacity is overwhelmed. Consideration of alternate routes based on population shifts or damage is important. This information should be coordinated through the Operational Area EMS dispatch center and communicated with transportation planners.

9. Ports/harbors (commerce/resources)

a) Identify location(s) for a Unified Command for Intelligence gathering and long-term restoration of Port Services.

b) Key stakeholders need to be included: law, fire, engineering, shipping companies, tenants, labor, utilities, etc.

c) The U.S. Coast Guard (USCG) is responsible for the navigable waterways within the port. USCG can access Federal resources without making a request through the State and then to FEMA. Local governmental agencies and tenants are responsible for the fixed infrastructure.

(1) Determine and prioritize repairs of damaged property.

(a) Safety/damage assessment of terminals, including roads, piers, rail, and bridges

(b) Survey waterways

(2) Determine and prioritize intermodal transportation corridors for goods movement.

(3) Coordinate with local agencies for interdependences such as water, power, fuel, and communications. (For

example, cranes require strict power to function properly).

d) Identify locations that could be used as possible staging locations for supply relief for the region.

e) Coordinate with labor unions and keep them apprised of the ports' operational status.

f) Ensure a Joint Information Center (JIC) is established.

g) Coordinate with terminal operators and determine if ships could be rerouted from other terminals or other harbors.

(1) Consider pre-establish MOUs, memorandums of agreement (MOAs)

(2) Support and aid tenants in business continuity where possible

h) Implement Business Continuity Plan/COOP to include:[153]

(1) Lines of succession

(2) Critical functions identified

(3) Alternate modes of communication

(4) Data recovery

(5) Identify alternate work locations

(6) Temporary shelter for employees who live outside easy commuting distance

(7) Pre-assessment of resources

i) Operations of port infrastructure requires and relies on the operations of other agencies outside the control of Port Operations. These include:

(1) Utilities

(2) Rail companies

(3) Independent trucking operations

(4) Cal Trans

(5) USACE

(6) Customs and border protection

(7) State tidelands

(8) California Department of Fish and Game

[153] For further information, see: Federal Emergency Management Agency. *Ready.gov. Business continuity plan*. Washington, DC. http://www.ready.gov/business/implementation/continuity. Accessed on July 12, 2012.

j) Facilitate emergency response of transit agencies and transit providers within the jurisdiction during the recovery and reconstruction phase of a major disaster.

(1) Preparedness

(a) Identify those transit agencies, both public and private, that operate within the jurisdiction.

(b) Identify other transit providers, such as nontraditional paratransit and shuttle companies, that operate within the jurisdiction.

(c) Develop MOUs regarding providing emergency transit and paratransit services during and after a major disaster with those transit agencies and private companies that operate within the jurisdiction.

(d) Develop strategies for "jitney"-type operations to augment transit service in case of emergencies, including suspension of regulations, etc.

(2) Post-Event Short-Term

Implement emergency transit and paratransit services to facilitate the movement of people and goods during the recovery and reconstruction phase of a major disaster.

F. Government Facilities

Government facilities include offices, universities, utility facilities, and parks.

1. Pre-identify critical government facilities that require generators to continue operating during power outages in a major incident.[154] This should list which facilities have a generator, which ones would need one and what type they can hook up and what the collective maintenance requirements are.

2. Planners need to identify long-term alternative facilities. If complete relocation is required, determine the considerations. Determine what support facilities (mechanical yards, computer/data centers) are necessary and need to be relocated or "linked" in some way.

3. Requirement for inspection of government facilities is a lengthy process. There are thousands of buildings that will need to be assessed.

[154] Harris County Office of Homeland Security and Emergency Management. (2009). *Harris County Hurricane Ike After Action Report and Improvement Plan*. https://www.llis.dhs.gov/docdetails/details.do?contentID=37139. Accessed on July 2012.

4. Planners should evaluate what similar facilities could also serve the same role. This could include identifying what government facilities could serve a purpose outside of its traditional function. For example, libraries resembled community centers during recent windstorms. They were a nontraditional gathering location for people to do homework, charge phones, and access the Internet. Determine which libraries have backup generators.

   a) Prioritize buildings in advance for assessment.

      (1) Identify alternate uses for buildings that are operational for completing essential missions. Consider typing buildings based on office space, communications capabilities, network accessibility, staging capability, location to transportation resources and other criteria important to day-to-day work.

      (2) Identify a priority repair schedule for impacted buildings based on critical mission needs.

   b) Determine accessibility to government buildings for assessment, repair, and reopening.

   c) Identify employees who could telecommute, and ensure that the network can handle the nontraditional levels of access to the system.

   d) Emergency Services

      Per the Emergency Services Sector-Specific Plan, an annex to the NIPP, emergency services are defined as law enforcement; fire and emergency services; emergency management; emergency medical services, and public works.

      (1) Identify alternate facilities from which to operate and the infrastructure to support it.

      (2) Redeploy law resources in accordance with recovery efforts, i.e., to areas that have experienced an increase in population due to temporary housing.

      (3) Support responder families to ensure staff can report to work, work in a safe environment, and have the ability to concentrate on their work while their families are taken care of.

      (4) Identify pet-friendly shelters or co-located animal shelters, or temporary animal housing options.

      (5) Identify logistical support needs for services (fuel, ammunition, vehicle maintenance, specialized personnel).

(6) Provide support services for first responders who have had mental or emotional damage due to the event.

5. Educational Facilities

School funding is based on student population, and as such, it will be a top priority to reopen schools. The Health and Social Services RSF specifically discusses educational facilities.

a) For areas in which schools cannot be quickly restored, consider pooling home schooling resources.

b) Consider using the Parent-Teacher-Student Association to coordinate homeschooling as intermediary solution.

c) Determine the necessary steps to transition schools from being shelters to opening back to students.

d) Consider policies for students changing districts to meet baseline requirements.

e) Determine the necessary feeding resources to support schools' reopening.

f) Consider longer-term rebuilding or mitigation approaches for damaged or destroyed schools (see Field Act of 1933).[155]

g) Coordinate with universities for uses of facilities and other assistance, such as using graduate students as teachers.

h) Consider deploying teachers to centralized locations where groups of children could be educated in nontraditional settings (meeting rooms in commercial facilities, faith-based organizations, business, community, etc.).

i) Consider pooling private and public teachers to meet highest need areas. Determine if hiring a private school teacher for a public school system would be a reimbursable cost to FEMA.

j) Consider implementing a temporary, portable educational system at long-term shelters, parks, or other areas and the logistical requirements to support this operation.

k) School districts should identify needs for waivers for State standards to operate in an interim fashion.

l) Public schools

(1) Consideration should be taken to identify alternate locations for children until schools are reopened such as churches, parks, and/or portable trailers.

[155] California Department of General Services. (2010). *Section 7: Design to maximize student safety*. Sacramento, CA. http://www.excellence.dgs.ca.gov/StudentSafety/S7_7-1.htm. Accessed on July 12, 2012.

(2) Many Southern California schools have been closed due to budget constraints. They should be considered for reopening if a need for space exists.

(3) Reopening public schools must be considered a priority since many government and private-sector employees will not be able to make it in to work if their children do not have a place to go or there is no available child care.

(4) Public schools should consider daycare or after school programs for emergency workers' extended hours.

m) Private schools

n) Higher education: includes public, private, and community universities and colleges

(1) Higher education operates like small cities. Their recovery affects neighboring cities and operations and has to be thoroughly considered.

(2) Identify alternate housing for students in dorms or on/off-campus housing that is impacted.

(3) Integrate universities into the disaster recovery planning process to identify potential assets and resources (personnel with technical expertise).

6. Sanitation

Waste and debris management, includes solid and hazardous waste.

a) Identify locations that debris can be temporarily stored, including recycling and incineration areas.

b) Refer to local and State law regarding waste and debris management.

c) Identify plans for landfills for recovery.

d) Determine the legal requirements of disposing of debris (for example, are there requirements for a certain percentage to be recycled?).

e) Identify a plan for handling hazardous materials, and consult with your local hazardous materials (HazMat) agency.

f) Identify programs that could assist in paying for the debris management and the requirements and rules of available funding.

g) Identify supporting mechanisms to remove debris when local capacity is overwhelmed.

h) Identify who is responsible for debris removal (note that some cities remove debris from private property).

i) Consider environmental factors, such as air-quality and noise permitting.

j) Identify needs for pre-disaster contracts to support debris management and removal.

7. Security

a) Modify security plans to transition from the response phase to recovery. Consider using private and contract security for access control and site security.

b) Consider a credentialing or identification system for identification of personnel that are not regularly in an emergency operation position.

c) Planners should consider private security when viable in the event first responders are not available.

8. Financial Infrastructure

a) Commercial facilities: determine regulations for opening commercial facilities and consider seeking temporary waivers to reduce the time required to secure certain permits and licenses.

b) Provide mobile ATMs in priority locations and areas.

9. Commercial and Industrial Facilities

a) Hazardous materials (chemical, metals, etc.)

(1) Prepare for secondary impacts of damage to facilities that could cause chemical releases either upon impact or after the event and once operations are restarted.

(2) Consider recovery and remediation for areas where a release has occurred.

(3) Identify primary hazardous materials transportation routes and alternative routes or storage needs that could be implemented in the interim.

(4) Inspect, assess, and repair or rebuild underground pipes.

(5) Consider longer-term rezoning should a hazardous materials facility be impacted to allow for it to be rebuilt or moved out of the area.

b) Critical manufacturing, to include: primary metal; machinery; electrical equipment, appliance, and component, and transportation equipment

10. Nuclear Reactors, Materials and Waste

a) Identify power requirements should electrical or other utilities be out for an extended period of time.

b) Coordinate with local jurisdictions and their planning efforts around nuclear plants.

11. Defense Industrial Base

a) Determine coordination points with existing bases and de-conflict personnel and resource availability and uses.

b) Determine expectations of the local jurisdictions if they are impacted.

12. Postal and Shipping

a) Determine priorities and needs for transportation, fuel, and hubs for transit resources.

b) Coordinate with jurisdiction for access and availability of routes.

c) Identify coordination to ensure mail and packages are properly delivered to residents who have been displaced as part of the incident.

d) Consider temporary mobile post offices near temporary housing.

13. Private Nonprofit Organizations

a) It is important to identify which nonprofit organizations have a major role in recovery and determine coordination with local government. Determine the health and social services provided that are vital to recovery (coordination point with HSS RSF).

b) Determine who is eligible for additional funding.

c) Determine what services can be provided or are important to recovery.

d) Determine the long-term plans of the organization to rebuild in the same location.

14. Mitigation Standards

Develop and maintain appropriate mitigation standards for new and existing government facilities and public improvements commensurate with the degree of hazards.

a) Periodically review design standards for bridges; tunnels; wastewater, and solid-waste facilities; public streets, and other public infrastructure in relation to potential hazards.

b) Establish criteria for prioritizing which public facilities and improvements should be mitigated first.

15. State Public Assistance Process

Cal OES's Public Assistance Branch provides assistance to State agencies, local governments, special districts, and eligible private nonprofit organizations that have been impacted by a disaster to achieve a safer future for all California communities. The Public Assistance Branch ensures that State and Federal support are provided to applicants in an efficient and timely manner to assist in recovery from a major disaster or emergency.

The California Disaster Assistance Act (CDAA) provides State financial assistance for recovery efforts to counties, cities, special districts, and certain eligible private nonprofit agencies after a Cal OES Agency Secretary's Concurrence or a Governor's Proclamation. CDAA may be implemented as a standalone funding source following a State disaster.

After a natural or man-made event causes extensive damage and a State disaster has been declared, Cal OES has the regulatory responsibility to act as the grantor for the CDAA program. A local agency must submit a Project Application (Cal EMA 126) to Cal OES within 60 days after the date of a local proclamation. The applicant must incur a minimum aggregate total damage cost of $2,500 State share for each declared disaster for costs to be eligible under CDAA. Applicants are also required to have on file with Cal OES, a resolution designating an authorized representative (Cal EMA 130) for each disaster.

More information on the CDAA process can be found at http://www.calema.ca.gov/Recovery/Pages/California-Disaster-Assistance-Act-%28CDAA%29.aspx.

16. Federal Public Assistance Program and Process

The Public Assistance (PA) Program is administered through a coordinated effort between FEMA, the State (grantee), and applicants (sub-grantees). FEMA provides supplemental Federal disaster grant assistance for debris removal; emergency protective measures; and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private nonprofit organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery

The Federal recovery programs discussed in this Guidance are those that have historically been available following a disaster. Program availability is subject to change.

Federal financial disaster assistance for recovery efforts is made available to cities, counties, State agencies, and eligible private nonprofit organizations after a Federal disaster has been declared. In a catastrophic disaster and if the State's governor requests, Federal resources may be mobilized through FEMA for Federal assistance to State or local governments to pay part of the costs of rebuilding a community's damaged infrastructure. Federal assistance may include funding for debris removal, emergency protective measures, roads and bridges, water control facilities, public buildings and equipment, public utilities, parks, recreation facilities, and loans needed by communities for essential government functions and public schools.

FEMA coordinates with Cal OES to implement the PA Grant Program. A description of the full process with additional guidance can be found at http://www.fema.gov/public-assistance-grant-application-process. Accessed September 4, 2012.

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XI. NATURAL AND CULTURAL RESOURCES RSF

A. Purpose and Overview

The purpose of this RSF is to provide emergency managers and planners with a general overview of Federal, State, and local environmental laws and regulations for consideration in preparing for, responding to, and recovering from disasters. These guidelines include Federal environmental laws and regulations deemed to be the most relevant for most types of emergency operations. Also included are executive orders and relevant California laws, where appropriate.

In general, compliance with Federal laws and regulations is necessary when an activity requires Federal approvals (e.g., permits, licenses, easements, etc.) or funding. The approving or funding Federal agencies are required to ensure that actions comply with applicable Federal environmental laws and regulations. Failure to comply may jeopardize Federal funding.

There are many different environments in which we live. As a result, there are many different terms that often refer to the same thing by many people and in this case, by agency. For the purposes of this RSF, “natural resources” means land, fish, wildlife, biota, and water. “Water” means salt and fresh water, surface and ground water used for drinking, irrigation, aquaculture and recreational purposes, as well as its capacity as fish and wildlife habitat.

There are also different terms that may refer to “cultural resource.” For the purposes of this RSF, “cultural resources” means aspects of a cultural system that are valued by or significantly representative of a culture or that contain significant information about a culture. Cultural resources may be tangible entities or cultural practices. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places and as archeological resources, cultural landscapes, structures, museum objects and archives, and ethnographic resources for Federal management purposes. This also includes cultural items as that term is defined in section 2(3) of the *Native American Graves Protection and Repatriation Act* [25 USC 3001(3)]; and archeological resources, as that term is defined in section 3 (1) of the *Archaeological Resources Protection Act* of 1979 [16 USC 470bb(1)].

“Debris management” is the term for material accumulated post-disaster for which activities to clean up and dispose of debris may be reimbursable under the CDAA or Stafford Act. Monitoring during debris removal is required to prevent comingling of non-disaster waste with disaster debris to qualify for reimbursement under Public Assistance. In non-emergencies, solid waste management generically applies to recycling, landfill disposal, composting, energy recovery facilities (waste-to-energy), CNG/LNG facilities, and refuse pick-up.

The core recovery capability for natural and cultural resources is the ability to protect natural and cultural resources and historic properties through appropriate response and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and in compliance with appropriate environmental and cultural resources laws. The Natural and Cultural Resources RSF coordinates departments and agencies working together to provide information and assistance to communities seeking to preserve, protect, conserve, rehabilitate, recover, and restore natural and cultural resources during recovery.

Relevant agencies and partners are those tasked with overseeing physical resources, such as surface water quality, air quality, and hydrology; biological resources, such as endangered species and sensitive habitats; cultural resources, such as historic buildings, and buried archaeological sites; and toxic wastes (chemical, biological, or radioactive waste) and chemicals.

This section focuses on accommodating avoidance and protection of natural and cultural resources for activities associated with recovery operations: clean up, restoration, repair, replacement, demolition, and disposal. It is important to inspect, gather information, and provide systematic evaluation of natural and cultural resources on a priority basis in coordination with the safety/damage assessment process.

B. Roles and Responsibilities

1. Debris Staging, Processing, Disposal, and Burning
   a) Primary: Public Works Board/Department of Public Health
   b) Support: Public Works Board, sanitation, street services
2. Waste Management (solid, household hazardous waste, toxic, radioactive, and biomedical)
   a) Primary: Department of Public Health, sanitation, Public Works Board, fire/health, hazardous materials
   b) Support: Street Services, Department of Parks and Recreation
3. Vector Control
   a) Primary: Vector Control/Environmental Health
   b) Support: Local health department
4. Air Quality
   a) Primary: Air Quality Management District
   b) Support: Local health department/Environmental Health

5. Demolition and Renovation
    a) Primary: Public Works Board, Bureau of Engineering
    b) Support: Department of Parks and Recreation, Office of Planning and Research, California Historical Society
6. Surface Water (lakes, streams, intertidal areas and wetlands)
    a) Primary: Department of Parks and Recreation, Department of Forestry and Fire Protection
    b) Support: USCG, Department of Planning and Research
7. Water Quality (actions affecting waters, including construction, demolition, dredging, and filling)
    a) Primary: Department of Parks and Recreation, USCG, USACE, EPA, Los Angeles Regional Water Control Board
    b) Support: USCG, Department of Water Resources, Department of Public Health, Department of Forestry and Fire Protection
8. Floodplain Management (new construction)
    a) Primary: Flood Control District
    b) Support: Public Works Board, USACE
9. Protection of Wetlands (debris removal and modification)
    a) Primary: Agencies responsible for land use management and development decisions.
10. Bridge Permits (bridges that cross navigable waters)
    a) Primary: Cal Trans, USACE
11. Activities in Coastal Areas/Navigable Waters
    a) Primary: California Coastal Communities, Inc., Beach Department, USCG
12. Petroleum Storage Tanks
    a) Primary: Environmental Programs Division (EPD)
13. Oil and Gas Facilities
    a) Primary: EPD
14. Threatened and Endangered Species (mammals, fish, reptiles, amphibians, and plants)
    a) Primary: Department of Fish and Game, Department of Food and Agriculture
15. Historic Preservation and Cultural Resources (buildings, monuments, bridges, dams, and archeological sites)

a) Primary: Department of Parks and Recreation, California Historical Society

C. Agency Information

The following are key agencies to consult with relative to tasks involving natural and cultural resources:

1. U.S. Army Corps of Engineers (USACE): USACE has responsibilities and authorities granted under the Federal Water Pollution Control Act, Section 404 (33 USC §1251 as amended; commonly referred to as the Clean Water Act [CWA]). Under CWA, USACE authorizes the discharge of fill into waters of the United States. Recovery operations that occur in or within the vicinity of rivers, creeks, lakes, or wetlands may be subject to permitting requirements from USACE pursuant to Section 404 of CWA.

2. U.S. Fish and Wildlife Service (USFWS): USFWS is the Federal agency whose mission is to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the nation and its citizens. The Endangered Species Act (16 USC §1531-1544 as amended; ESA) emphasizes early coordination/consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-related losses of listed species and their habitats. The consultation process thus renders the USFWS as a principal and compulsory stakeholder in any action where the natural resources are either positively or negatively affected. Recovery operations within most natural areas (e.g. forests, deserts, and waterways) and some built environment (e.g., harbors) may require coordination with the USFWS. Typical activities that may affect endangered species and protected habitats are those that entail removal of earth, vegetation, and in some instances, man-made structures.

3. U.S. Environmental Protection Agency (EPA): In addition to the Corps' CWA responsibilities, the EPA also retains and establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. In general, the objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

4. Regional Water Quality Control Board (RWQCB): In California, the RWQCB regulates wastewater discharges to both surface water (lakes, streams, intertidal areas, and wetlands) and to groundwater. The RWQCB also regulates storm water discharges from

construction, industrial and municipal activities, discharges from irrigated agriculture, dredge and fill activities, and several other activities with practices that could degrade water quality under Sections 401and 402 of the CWA. Tantamount with the Corps' CWA, Section 404 responsibility, the RWQCB regulates water quality and considers ecosystem functions in evaluating projects. Recovery operations that occur in or within the vicinity of rivers, creeks, lakes, or wetlands may be subject to permitting requirements from the RWQCB pursuant to Section 401 of CWA.

D. California Office of Historic Preservation

The California Office of Historic Preservation is responsible for administering Federal- and State-mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO). Historic structures (e.g., buildings, monuments, bridges, dams, etc.) affected by an event where Federal funds may be used to restore, repair, reconstruct, and/or replace and that are eligible for listing on the National Register of Historic Places must be coordinated with the SHPO for review under Section 106 of the National Historic Preservation Act.

1. Preparedness

a) Identify the natural and cultural resources in your jurisdiction. Planners need to determine if there are any sites or resources that should not be publically listed.

b) Consider using the Hazard Mitigation Plan and Emergency Operations Plan to identify likely disasters and impacts to natural and cultural resources for your jurisdiction.

c) Determine the scope, design, development, and responsibilities of post-event hazard evaluation systems and teams organized to inspect, compile information, and evaluate hazards.

d) Develop criteria for evaluating long-term hazardous conditions. Consider the scalability of the criteria and adaptability to a variety of locations.

e) Complete the design and development of the Hazards Identification Reporting System to ensure rapid recording of mapped and tabular information describing the location and intensity of natural and toxic hazards.

f) Identify existing MOUs/MOAs for specific recovery resources for natural and cultural elements. Consider if there are nontraditional partners that could serve a role.

g) Develop mutual aid agreements so that local qualified staff and experts can support other jurisdiction's recovery efforts. Subsequent training and briefing of staff on the operational process is important for its implementation.

h) Draft an environmental plan to address all stages of recovery. This should include a communications and outreach element that encompasses both public outreach and coordination between jurisdictions. This becomes vital during a hazardous materials incident that could directly or indirectly impact another jurisdiction. This should include a notification process and list of contacts. Identify who is responsible for notifying the recovery organizations that are not traditionally part of response.

i) Identify departments, agencies, or organizations that provide support personnel and resources. Planners should consider nontraditional partners who can provide recovery support, but who are not traditionally part of response. This should include those with specialties in environmental and legislative bodies, ecological, natural and cultural resources, and historical properties. Technical and subject-matter experts (SMEs) should be included to ensure compliance with standards and regulations. Consider contacting utility companies for working lists of agencies or companies that are part of their notification protocol

j) Identify local laws related to natural and cultural resources that need to be adhered to during recovery. This could include regulations or permitting requirements.

k) Notification to Federal agencies and organizations is required even if California standards have been used. To receive Federal funding or receive Federal approvals (e.g., permits, licenses, etc.), it is important for local agencies to document compliance with applicable Federal environmental and historic preservation laws. These laws include the following:

(1) National Environmental Policy Act (NEPA)

(2) Endangered Species Act (ESA)

(3) Clean Water Act

(4) National Historic Preservation Act

(5) Coastal Zone Management Act

(6) Coastal Barrier Resources Act (CBRA)

(7) Executive Order (EO) 11990 Wetlands Protection

(8) EO 11988 Floodplain Management

(9) EO 12898 Environmental Justice

(10) Clean Air Act

(11) Rivers and Harbors Act

For a brief description of these laws and applicable Executive Orders, please see Appendix 5: Natural and Cultural Resources Planning Resources And Local Points Of Contact.

l) For reimbursement purposes, applicants should understand that there will be varying levels of documentation to ensure compliance and program eligibility. Consult with local department and SMEs to identify what those programs are.

m) Identify any waivers or exemptions from State or Federal requirements or emergency permit procedures that could be used during a disaster or that planners should be ready to request given the nature of the event. Consider pre-designating specific hazards or facilities that are known to request waivers.

n) Determine what credentials and specialized training will be necessary to identify what personnel and resources can be used for recovery. Planners should determine if additional human resource considerations need to be made.

2. Short-Term Recovery

a) Categorize the level of requirements for the event and the associated resources and teams that would be needed.

(1) In-depth assessment of the impacted area in a timely manner is paramount to recovery operations.

(2) Identifying whether complications are short- or long-term issues is important to understanding the necessary personnel and resources to support the effort.dentify prioritized approach to meeting needs. Water supply, water quality and air quality are high priority areas to be addressed.

b) Deploy hazard evaluation teams with the assistance of cooperating local, State, and Federal agencies for detailed identification and evaluation of natural and toxic hazards.

c) Establish a regular process for reevaluating impacts and conducting ongoing assessments. Identify necessary frequencies from a site maintenance or regulatory requirement in cooperation with local SMEs.

d) Facilitate coordination meetings between local departments, county offices, regional offices, and State and Federal departments to expedite environmental permitting and streamline procedures.

e) Create a contact list of relevant agencies in your area.

3. Long-Term Recovery

a) Ongoing monitoring of impacts from an incident needs to be considered. These will range from acute (immediate, known risks) to chronic (longer term, less potential impact) that will drive the level and type of monitoring.

b) Consult with appropriate agencies and organizations to create a list of ongoing activities, responsibilities for monitoring, and status reporting requirements.

c) Ensure that the requirements of environmental and historic preservation laws and executive orders are met.

E. Public Education and Awareness

Strengthen and enhance public education to the community regarding natural and cultural resources to help protect them, and ease recovery efforts.

Establish pre-event plans and procedures for developing and disseminating public health and environmental advisories in cooperation with the relevant agencies, advocacy groups, and media outlets.

Establish and maintain liaisons with public information officers within various jurisdictional departments (State and Federal) to provide assistance in developing environmental information or assessments. Maintain contact lists and regularly validate contact information.

The following is a list of specific areas public education and awareness should focus on:

1. Environmental and historical standards and requirements for recovery efforts, as well as proper codes and considerations that should be followed
2. Guidelines for waste water runoff procedures and measures to keep hazardous materials out of the sewer and water systems
3. Directions for debris management, disposal, reduction, and collection
4. Air and water quality issues
5. Status of natural and cultural resources reopening to the public (i.e., parks, libraries, museums)
6. Common household debris that could be hazardous and directions for disposing of those hazardous materials

F. Resources

1. Create a contingency contracting packet identify programs, funding, and resources at all levels to support efforts.
2. Work with organizations to identify roles that could be filled by volunteers and determine how volunteers can be leveraged to accomplish tasks. Identify specific training and skills that may be required for more technical activities. Coordinate with Volunteer Center to obtain trained and vetted staff that can support recovery efforts.
3. Outline specific, technical personnel and resources required.
4. Develop MOUs/MOAs with identified available resources.

G. Actions Requiring Natural, Cultural, and Environmental Considerations

To use Federal funds in responding to and recovering from emergencies and disasters, it is necessary for applicants receiving assistance to comply will all applicable local, State, and Federal laws, requirements, and permits. Typical actions may include the following:

1. Debris staging, processing, disposal, and burning[156]—Debris may include trees, construction and demolition material, and personal property. Hazardous waste includes wastes that appear on the Resource Conservation and Recovery Act hazardous wastes list and may include wastes that exhibit at least one of the following characteristics: ignitability, corrosiveness, reactivity, or toxicity. Household hazardous waste includes small quantities of normal household cleaning and maintenance products, latex and oil-based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders.
   a) Develop and maintain a debris management plan.[157]
   b) Identify Federal and State agencies that play a role in debris management.
   c) Determine applicable Federal and State laws to debris management.
   d) In the debris management planning process, the following are important considerations:

[156] "Debris removal operations generally occur in two phases: (1) initial debris clearance activities necessary to eliminate life and safety threats; and (2) debris removal activities as a means to recovery….The transition period from initial clearance activities to debris removal depends on the magnitude of disaster impact. Typically, the debris removal recovery phase begins after the emergency access routes are cleared and police, firefighters, and other first responders have the necessary access." Federal Emergency Management Agency. (2007). *Public Assistance Debris Management Guide, FEMA-325*. Washington, DC.

[157] California Emergency Management Agency. (2010). *Disaster debris management concept of operations*. Sacramento, CA. http://www.calema.ca.gov/Recovery/Documents/DisasterDebrisMgmtConceptofOps.pdf. Accessed on July 12, 2012.

(1) Determine available pre-established sites for debris prior to a large-scale incident.[158]

(2) Consider pre-establishment of a formal agreement with local and State Department of Transportation facilities as staging areas for material and equipment during an incident.[159]

(3) Prepare a list of local agencies that are likely to have equipment suitable for debris removal such as local departments of transportation, parks, utilities, etc. Consider entering into debris management pre-disaster contracts. At a minimum, create a list of companies that can provide debris management services.

(4) Identify local landfills authorized to accept hazardous materials. With respect to environmental laws, it is important to know whether the debris qualify as hazardous materials per the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous materials must be disposed in Class I landfills. CERCLA establishes requirements for handling and tracking of such materials.

(5) Coordinate with local fire departments, local public health, or environmental health departments to determine materials that constitute hazardous and toxic waste. Handling, transportation, and disposal of such waste should be coordinated with these agencies.

(6) Note that local departments are responsible for permitting debris management sites and Cal Recycle has to review and approve the assessment and plan.

(7) Consider State requirements for debris management sorting to be eligible for public assistance funding. There are specific directives for a catastrophic event and the approach that needs to be taken for diversion.

(8) Consider requirements, including time of day, air-quality impacts, impact on the roadways and traffic, fuel needs, etc., when transporting debris and needs for additional infrastructure such as access roads.

[159] Federal Emergency Management Agency. (2009). *Iowa 2008 Summer Storms After-Action Report*. Washington, DC. https://www.llis.dhs.gov/docdetails/details.do?contentID=36042. Accessed on July 12, 2012.

(a) Extensive coordination with jurisdictions that will be impacted by the movement of debris needs to be done.

(9) Consider other factors with regards to chosen debris facilities, such as proximity to populations, schools, outdoor event venues, and sensitive environmental resources.

(10) Determine unique jurisdictional considerations such as methods to dispose of animal carcasses.

e) Recycling

(1) Consider the trash hierarchy for solid waste management. Source reduction is the desired approach to handling debris. Common types of recyclable materials include metals, soil, concrete, asphalt, and masonry.

(2) Recycling allows materials to be used or sold for other purposes, and reduces the impact on materials entering landfills.

f) Clearance

Disaster debris may fall on roadways and block access to certain neighborhoods or communities. Clearance of this debris from public roadways to allow the safe passage of emergency vehicles is a response function and responsibility of local government.

g) Curbside Removal

Removal of debris located within public rights-of-way is referred to as “curbside debris removal.” Debris may be placed within the right-of-way by the disaster or by residents and businesses as private lots are cleaned. Debris located within the public right-of-way is a threat to general public health and safety, and its removal is considered a short-term recovery function.

h) Private Property Debris Removal

Private property debris removal (PPDR) is generally not eligible for public assistance funding because removing private debris is the responsibility of the individual property owner. If the debris on private business and residential property is so widespread that public health, safety, or the economic recovery of a community is threatened, FEMA may fund PPDR; however, FEMA must approve this activity

in advance, and all appropriate rights of entry must be secured.[160]

i) Direct Federal Assistance

When the State and local government lack the capability to perform or contract for eligible emergency work and/or debris removal, Direct Federal Assistance (DFA) may be available for curbside debris removal, PPDR, demolition, or vessel salvage operations. FEMA will provide DFA through a mission assignment to another Federal agency upon request of the State when the State and local government certify they lack the capability to perform or contract for the requested work. The duration of mission assignments for debris removal is limited to 60 days from the disaster declaration date. The FCO may approve extensions for up to an additional 60 days if a State or local government demonstrates a continued lack of capability to assume oversight of any debris removal mission.

2. Waste Management

This aspect of this RSF encompasses solid, household, hazardous, toxic, radioactive, and biomedical wastes. Environmental issues are inherent in disaster recovery, especially during debris removal. The Resource Conservation and Recovery Act (RCRA) of 1976 requires the safe disposal of waste materials, promotes the recycling of waste materials and encourages cooperation with local agencies. It applies to disposal of disaster-generated debris and is of particular concern when hazardous materials may be present.

a) Identify jurisdictional lead departments with roles, responsibilities and authorities. Work with local agencies to outline and identify those to include in the planning process.

(1) Ensure that State and Federal organizations are included. These should include certified unified program agencies, the Department of Toxic and Substance Control, and EPA.

(2) Determine technical specialists available and those that will be needed based on the impacts of the incident.

b) Solid waste disposal includes debris, household waste, garbage, trash, etc. This type of waste can be hauled by any hauler.

c) Hazardous solid waste must be handled by certified haulers.

[160] Federal Emergency Management Agency. (2007). *FEMA 325: Debris Management Guide*. Washington, DC.

d) Liquid waste

(1) Consider containment and management of potential run off from waste management sites.

(2) Coordinate with the local water quality control board to ensure runoff from waste management sites comply with applicable water quality regulations.

e) Determine what permits may need to be completed ahead of time.

f) Recommend local jurisdictions identify their current inventory and capacity for supporting waste management operations.

g) This should also include what type of materials the landfill can accept.

h) Pre-identify alternate facilities that can accept solid and hazardous waste.

i) Establish a pre-event plan for streamlined emergency contingency procedures for disposal of solid waste in public and private facilities in and near the jurisdiction, including emergency increases for landfill capacity during the emergency period.

j) Establish a plan for mitigation of adverse effects of solid waste collection/transport/and temporary storage in environmentally sensitive areas within jurisdictions.

3. Vector Control

Review the Health and Social Services RSF section for additional discussion on vector control.

a) Determine organizations that have oversight and responsibilities. The local public health agency will often serve a lead role (see Appendix 5: Natural and Cultural Resources Planning Resources And Local Points Of Contact). This could include special districts that have roles (mosquito abatement).

b) Monitor sites and regulate vectors.

c) The nature of the waste, timeline for holding it, and location of the debris dictate how vector control will occur.

d) An assessment should be done to ensure that proper safeguards and approaches are taken for its storage and management.

e) Timely identification is important to determine high-risk areas.

f) Long-term phase deals with determining methodology to treat or prevent infestations and other issues.

g) Work with local public health agenda to develop specific public messaging to the outreach and education to provide information about what steps can be taken to reduce risks to humans and animals given the time it will take to complete the debris removal mission. Aggressive public education campaigns play a major role in reducing the impacts on the area.

h) Identify and monitor potential vector-borne human and/or animal diseases in the impacted area.

i) The impact of vector-borne diseases will be enhanced by the weather and environmental conditions.

j) Vector control operations often take place in wetlands that may be within the geographic jurisdiction of USACE pursuant to Section 404 of the Clean Water Act. Therefore, ensure that vector control operations in wetlands comply with Section 404 CWA.

4. Demolition

a) Establish criteria for demolition contracts and establish them.

b) Establish due process and procedures for demolition through local ordinances and laws. Develop forms and documentation that building owners would complete for any buildings that need to be demolished that outlines the hazards that may exist in the building.

c) Identify environmental and historical regulations. Applicable environmental and cultural resource relations may include the National Historic Preservation Act, Clean Air Act, Clean Water Act, and laws that govern hazardous and toxic wastes such as RCRA and CERCLA.

d) Identify and obtain clearance ahead of time.

e) Establish procedures for hazardous materials (e.g., asbestos, lead) identification, demolition, and abatement.

(1) Air Quality Management Districts provide oversight.

(2) Coordinate with local fire agencies, public health agencies, environmental health agencies, and the California State Department of Toxic Substances Control.

f) Ensure that secondary impacts of building demolition are accounted for.

5. Bridge Permits

   This includes permitting for all bridges that cross navigable waters.[161]

   a) USCG is involved in this process.

   b) USACE may need to issue permits under Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act.

6. Activities in Coastal Areas: Consider the impacts of Coastal Zone Management Act.

7. Petroleum Storage Tanks: The following departments and their statutory requirements or limitations should be included:

   a) Regional Water Quality Control Board

   b) State Water Resources

   c) Department of Gas and Thermal Resources

   d) State Land Commission

8. Oil and Gas Facilities: The State Land Commission and its statutory requirements or limitations should be included in planning.

H. Environmental Resources to Consider in All Actions

1. Air Quality

   Additional information and resources can be found in the Health and Social Services RSF chapter.

   a) Determine lead group for overseeing and regulation air quality (see Appendix 5: Natural and Cultural Resources Planning Resources And Local Points Of Contact).

      (1) There are Air Quality Management Districts that oversee exterior air quality and should be consulted.

      (2) The EPA can serve in a technical role as needed on air quality.

   b) It is important to account for both outdoor and indoor air quality issues.

   c) Identify existing systems to monitor air quality control and the necessary monitoring steps. Many of these resources are in the private sector.

[161] "Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water body, and is not extinguished by later actions or events which impede or destroy navigable capacity." 33 U.S.C. 329.4 – Definition of Navigable Waters in the United States. http://www.wetlands.com/coe/coe329p0.htm. Accessed on August 27, 2012.

d) Determine levels of toxicity that would require public notification of unsafe levels and quarantining of areas.

e) Identify needs for interior air quality monitoring and available local resources. This is often overseen by the industrial hygienists. Consider what private resources exist and can be leveraged if public resources are insufficient.

f) Consider specific permits or requirements that need to be considered.

2. Surface Water

This includes lakes, streams, intertidal areas, and wetlands.

a) Identify bodies of waters and trustee maintenance and ownership.

b) Some of these resources are State (Department of Fish and Game and Regional Water Quality Control Board) and Federal (USACE and USCG) controlled and coordination should occur with appropriate entities. Others to consider are the California Coastal Commission, the Department of Water Resources, USFWS, and the National Marine Fisheries Service (see Appendix 5: Natural and Cultural Resources Planning Resources And Local Points Of Contact).

c) Identify opportunities and constraints to avoid, protect, or restore surface waters. Permits for certain activities affecting surface waters may be required. Impacts to surface waters may require mitigation.

d) Identify potential impacts to the water supply from contamination.

3. Groundwater Quality

This includes actions affecting waters, including construction, demolition, dredging, and filling.

a) Planners need to identify appropriate permitting through local, State and Federal agencies. Identify regional water quality control board contacts (see Appendix 5: Natural and Cultural Resources Planning Resources And Local Points Of Contact).

b) Groundwater impacts usually take longer to register than surface water.

c) Planners should know that it often takes a while to determine the capacity of the laboratories to test samples and where there may be gaps in assessing impacts.

d) Prepare a list of laboratories that can do sampling and analysis.

4. Floodplain Management

This includes rezoning, mitigation projects, and new construction.

a) "Executive Order 11988 requires Federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities…"[162]

b) USACE is a good contact, as well as local agencies.

5. Protection of Wetlands

This includes actions affecting wetlands, including construction, debris removal, modification, and discharge of dredge or fill material.

a) Planners need to identify appropriate permitting through local, State and Federal agencies. Consider Executive Order 11990 regarding Wetlands Protection, Section 1600 of the California Fish and Game Code and Sections 404 and 401 of the Clean Water Act.

b) Identify opportunities and constraints to avoid, protect, or restore wetlands

(1) Identify wetlands using the latest State and Federal guidance and how the wetlands relate to the ecosystem

(2) Coordinate with resource agencies (California Department of Fish and Game, Department of the Interior, EPA, Regional Water Quality Control Board, USACE Regulatory Division) early and often for permits

(3) Impacts to wetlands may require mitigation

6. Threatened and Endangered Species

This includes mammals, birds, fish, reptiles, amphibians, and plants.

[162] Federal Emergency Management Agency. (2010). "Executive Order 11988: Floodplain Management."

a) Planners need to identify appropriate permitting requirements through local, State, and Federal agencies.

(1) U.S. Fish and Wildlife Service

(2) National Marine Fisheries Service

(3) California Department of Fish and Game

b) Identify opportunities and constraints to avoid, protect, and restore sensitive species and their habitat .

(1) Identify sensitive species and their habitat using the latest State and Federal databases

(2) Coordinate with resource agencies (California Department of Fish and Game and U.S. Fish and Wildlife Service) early and often for permits and reporting requirements

(3) Access the County Multi-Species Habitat Conservation Plan for endangered species and critical habitat locations.

(4) Prepare a list of Federal endangered species in your city or county with pertinent information such as species nesting/breeding season dates.

(5) Impacts to sensitive species may require mitigation

I. Historic Preservation and Cultural Resources

This includes buildings, monuments, bridges, dams, archeological sites and other identified resources (paintings, art, sculptures, etc.).

1. Coordinate with Tribal Nations on historical and cultural resources.
2. Conduct hazard assessment and structural survey of sites to understand potential impacts.
3. Inventory contents of sites containing natural and cultural resources.
4. Develop an inventory of local and State natural and cultural resources.
5. Identify sites that are listed on or eligible for listing on the National Historic Register, both State and local.
6. Identify public and private associations and organizations that have similar natural and cultural resources and could support recovery operations.
7. Assess security needs of impacted resources.
8. Determine data management and recovery requirements.
9. Consider awareness training for staff support recovery activities.

10. Create database of personnel and resources that can support collection, restoration and assessment of specialty resources.
11. Consider the needs of handling sites differently and complying with regulations for debris removal. This could be impacted if it is a necessary emergency action.
12. The Environmental Planning and Historical Preservation departments and their statutory requirements or limitations should be included.
13. The restoration process for impacted cultural resources should be carefully considered and adhere to all applicable local, State, and Federal standards.
14. Many of the cultural resources are privately owned.
15. Planners need to account for how cultural resources (paintings, art, sculptures, etc.) that will need to be assessed and restored.
    a) Identify steps in the insurance process that are required to be followed. Specialty insurance should be considered for these sites.
    b) In conjunction with identifying historical sites, the responsible agency or organization should also be identified to coordinate and work with them on issues related to the recovery and restoration process.

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XII. MITIGATION PLANNING

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to people and property from hazards. It takes place both in advance and in response to human-caused and natural hazards. Hazard mitigation planning is the process jurisdictions use to identify and analyze the consequences of the risks and vulnerabilities associated with the hazards. It includes the development of long-term strategies for protecting people and property from future hazards. Mitigation strategies support a community's approach for implementing mitigation activities that are cost-effective, technically feasible, and environmentally sound. The planning process builds partnerships and thereby maximizes opportunities to leverage data and resources; expands potential risk reduction measures, including structural and regulatory tools; and aids in the development, prioritization and implementation of mitigation projects. By reducing the vulnerability to hazards, jurisdictions are able to recover more quickly and the social, economic, and environmental impacts will be minimized, ensuring a safer and more sustainable future.

Following a large-scale or catastrophic event, the infusion of Federal and State development capital may be the most communities will ever see at one time. During this "window of opportunity" jurisdictions need to pay careful attention to hazard mitigation actions that could be implemented and be able to quickly articulate their needs to State and Federal officials. By addressing issues before a disaster strikes, jurisdictions can rally around a recovery strategy that considers long-term sustainable development objectives and may have a competitive edge when post-disaster funding and technical assistance becomes available rather than rebuilding back to pre-disaster conditions.

Local hazard mitigation plans provide goals, objectives, strategies, and actions to reduce exposure or vulnerability to hazards. Policies, programs, and physical projects identified in the plan will help meet a jurisdictions vision and goals. It will identify how to leverage funding. Post-incident revisions to the plans may reflect new hazard data, alterations to the vision and goals, new strategies or project initiatives and actions. Mitigation planning can reduce the physical, financial, and emotional losses caused by an event.

Following an incident, jurisdictions should take advantage of the opportunity to pursue mitigation projects. This could include evaluating hazards and their risks and determining appropriate strategies to counteract them, updating hazard mitigation plans, identifying high-priority projects based on the damages from the incident, and pursuing funding opportunities brought about by the incident to accomplish known needs. This could also be an opportunity for a community to plan for improved and enhanced redevelopment options versus simply returning an area to its former state or rebuilding it back quickly just to "get it done." This could include a "new normal" if it is not possible to return to a former state.

Mitigation and resilience-building measures should be incorporated in recovery planning and is a natural and important fit in all four recovery phases: preparedness, short-term, intermediate and long-term. It is also important to

integrate mitigation throughout the recovery plan to include individual support functions and also into other plans such as a jurisdictions comprehensive plan.

The hazard mitigation planning process includes the following:

- Organizing resources: For a successful mitigation planning process communities should focus on the needed resources. This includes identifying and organizing interested members of the community, including technical experts; integration with other planning efforts; involving the public throughout the planning process; and coordination with the State and other agencies and organizations.
- Assessing risks: Profile and identify the characteristics and potential consequences of specific hazards and how the community can be affected to include impacts to important community assets. Assess vulnerabilities and estimate potential losses.
- Developing a mitigation plan: A hazard mitigation plan and strategy for implementation will be the result of understanding of the risks posed by hazards, documenting the planning process, identifying mitigation goals, and identifying and analyzing local mitigation capabilities, mitigation actions, and funding sources.
- Implementing the plan and monitoring progress: Implementation of the plan occurs in a variety of ways, including plan adoption; implementation of mitigation actions; implementation through existing planning mechanisms; monitoring, evaluation, and updating the plan; continued public involvement; and periodic plan evaluations and revisions.

Mitigation should be integrated within and throughout recovery planning.[163] Examples of this include the following:

A. Community Planning and Capacity Building RSF

1. Hazard mitigation and risk reduction opportunities have been integrated into all major decisions and reinvestments during the recovery process.
2. Increased community-wide support and understanding of sustainability and resiliency principle applicable to the opportunities presented during disaster recovery.

B. Economic RSF

1. Sustained pre- and post-disaster mitigation actions create a community less at risk, strengthen future economic stability and create possible insurance benefits.
2. Promote the establishment of pre-packaged incentive plans to provide state-based incentives post-disaster. This can include discounted or guaranteed lending, direct government lending at

[163] See individual RSFs for more examples of mitigation.

discounted rates, tax deductions, accelerated depreciation, and deductions for hiring and capital spending.[164]

3. Long-term recovery is about restoring neighborhoods and businesses, and helping residents and communities return to a pre-disaster state. Pre-planning for a smooth economic recovery process will instill confidence in residents and business that the city can successfully return to normalcy.[165]

C. Health and Social Services RSF

1. Promote a wide range of participants in health and social services in the building of community partnerships in order to identify potential risks, and potential assets in resources and services.

2. Leverage post-event hazard mitigation response and recovery resources to support sustainability of health services, resilience through healthy communities, and mitigation through enhanced health and human/social services post-disaster.

D. Housing RSF

1. Pre-coordination of the multiple stakeholders required for effective collaboration in planning, zoning, inspection, design, logistics, building codes and permits, financing, and interim-short-term housing.

2. Pre- and post-disaster interaction and problem solving among agencies, organizations and stakeholders with a focus on reconstructing permanent housing that incorporates and facilitates resilience, sustainability and mitigation concepts.

E. Infrastructure Systems RSF

Resilience, sustainability and mitigation should be part of the design for infrastructure systems and as part of the community's capital planning process.

F. Natural and Cultural Resources RSF

1. Identify technical experts in multiple disciplines to insure compliance through all phases of debris management, and to identify updated mitigation measures that can be implemented.

2. Identify opportunities to leverage natural and cultural resource protection with hazard mitigation strategies.

[164]Cho, G., Koestler, R., & Morales, L. *L.A. Lives: Advance Economic Recovery Framework*. Cambridge, MA: Harvard Kennedy School. http://www.catastrophicplanning.org/products/harvard_report.pdf. Accessed on August 10, 2012.
[165] Ibid.

Mitigation planning resources are available online:

- California Emergency Management: “State Emergency Plan,” “Disaster Recovery and Mitigation Handbook,” and “California Earthquake Loss Reduction Plan” (recovery element)
- FEMA hazard mitigation planning resources: Mitigation Planning “How-To” Guides, Mitigation Fact Sheets, “Mitigation Grant Programs,” and “Sustainability in Mitigation Planning”

XIII. LONG-TERM COMMUNITY RECOVERY

The Long-Term Community Recovery (LTCR) process is an important step to returning a community to its "new normal" condition. Engaging in this process goes beyond the traditional recovery process given the breadth and depth of needs and requirements. FEMA has compiled a *Long-Term Community Recovery Self-Help Guide* that serves as a planning template summarizing the process, offering best practices and lessons learned, and supporting State, Tribal, and local governments with qualified staff to undertake the long-term community recovery process themselves.[166] A cadre of experienced technical experts is available to support the efforts of jurisdictions that do not have the personnel, resources, or time to conduct the process themselves.

LTCR focuses on reestablishing a healthy, resilient community. Communities should focus on identifying and pursuing what their desired "new normal" is as they design their community, recruit businesses, and rebuild. Some examples from the *Self-Help Guide* of actions in LCTR are:[167]

- Providing permanent disaster-resistant housing units to replace those destroyed
- Initiating a low-interest facade loan program for the portion of the downtown area that sustained damage from the disaster (and thus encouraging other improvements that revitalize downtown)
- Initiating a buy-out of flood-prone properties and designating them community open spaces
- Widening a bridge or roadway that improves both residents' access to employment areas and improves a hurricane evacuation route

The following is an outline of the 13-step process for planners to consider in recovery. A detailed review and consultation of the *Self-Help Guide* is recommended for a more thorough explanation.

Step 1: Assessing the Need

This step asks, "Do we need long-term community recovery planning?" This step focuses on assessing the damages and resources in the housing, infrastructure/environment, and economy sectors to determine specific needs and capabilities.

Step 2: Selecting an Overall Leader and Outlining a LTCR Program

This step asks, "Where do we begin?" Much like the planning process, a LTRC program should have a designated leader and core team to build support and drive the project.

[166] Federal Emergency Management Agency. (2005). *Long-term community recovery self-help guide*. Washington, DC. http://www.fema.gov/pdf/rebuild/ltrc/selfhelp.pdf. Accessed on July 12, 2012.
[167] Ibid.

Step 3: Securing Outside Support

This step asks, "Where can we get help?" This process should not be an effort within the isolated community but should include all levels of government, NGOs, and private-sector representatives. All those in the community or affected by it should be considered.

Step 4: Establishing a Public Information Campaign

This step asks, "How do we keep the community informed and involved in the process?" Clear, consistent messages should be sent out to the community and the team. Establishing a clear theme and coordinating it among stakeholders will strengthen the process. This should include ways to reach people with disabilities and others with access and functional needs.

Step 5: Reaching a Consensus

This step asks, "How do we secure community buy-in to move forward?" Inevitably, consensus is difficult, but by clearly identifying goals and objectives, engaging the whole community, and working collaboratively, actions that benefit the community as a whole can be identified and agreed upon.

Step 6: Identifying LTCR Issues

This step asks, "What are our opportunities?" The rebuilding process allows communities to evaluate and reconsider their core values and vision. Engaging the public in what they would like to see the community become, what business they would like to attract, and what infrastructure could improve everyday life are just some of the concepts that can be considered as the LTCR process moves forward.

Step 7: Articulating a Vision and Setting Goals

This step asks, "What will strengthen and revitalize our community?" A logical framework outlining goals and objectives for rebuilding the community and corresponding projects is important for decision-making and progression on accomplishing the end state.

Step 8: Identifying, Evaluating, and Prioritizing LTCR Projects

This step asks, "What makes a good project?" Determining the ability of a project not only to meet goals but also jump-start the community's recovery is important. The LTCR team should evaluate areas like need, sustainability, feasibility, and benefits.[168]

Step 9: Developing a Recovery Plan

This step asks, "How do we put it all together?" Much like any plan, the long-term community recovery plan should clearly outline the why, what, how, where, and when of the approach. This should be drafted by the core

[168] A sample worksheet can be found in Appendix 14: FEMA Long-Term Community Recovery Project Value Worksheet.

team and reviewed by the public to allow comment and refinement of ideas.

Step 10: Choosing Project Champions

This step asks, “Who will provide leadership for each project?” The champions of the LTCR process will help the plan gain the support and backing necessary to be successful and embraced by the community.

Step 11: Preparing a LTCR Funding Strategy

This step asks, “Where do we get funding for these projects?” As with any project, securing the necessary funding is necessary for the completion of activities. The team should consider public, nongovernmental, and private-sector options for funding and thinking creatively and outside the box.

Step 12: Implementing the Plan

This step asks, “How do we make it all happen?” As in the champion process (Step 10), a leader should be identified to oversee the implementation process and ensure projects are moving forward, funded, and successful.

Step 13: Updating the Plan

This step asks, “When are we finished?” Planning is an ongoing process. The plan should be updated and reviewed regularly based on changes, new information, and completed projects.

Recovery planners should review FEMA’s *Long-Term Community Recovery Self-Help Guide* to help understand the LTCR planning process, to read about what other jurisdictions did and learned, and for a detailed checklist to guide the planning effort.

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XIV. INFORMATION COLLECTION, ANALYSIS, AND DISSEMINATION

Information collection, analysis, and dissemination activities include identifying the type of information needed, the information source, how the information is shared, the format for providing the information, and any specific times the information is needed. This process can be hindered by many factors, including damage to or overlooking communication systems and environmental or weather factors.

The Planning Section of the EOC should designate a staff member responsible for handling or coordinating these efforts.

This process should be ongoing and evaluated for updating data points needed. This information can be displayed in tabular format with the following components (see Table 10):

- Identify the data point or information element to be collected, analyzed, confirmed, and disseminated.
- Determine who is responsible for collecting that data point or information element.
- Outline what is the source of the information. This could be site, drive-by, or social media reporting.
- Determine who needs to receive the information.
- Identify how often the information will be reported or disseminated (e.g., every 2, 4, 12, or 24 hours).
- Stipulate how the information will be shared: electronically, person-to-person, form submission, etc.

Table 10: Sample Format for Information Collection, Analysis, and Dissemination

Information Element	Responsible for Collection	Information Source	Recipient	Frequency of Sharing	Mode of Sharing
Affected population demographics					
Evacuated critical facilities					
Local declarations and activations					
Requests and/or need for State and Federal assistance					
Damage to ports					
Damage to airfields					
Damage to hospitals					

Information Element	Responsible for Collection	Information Source	Recipient	Frequency of Sharing	Mode of Sharing
Damage to government buildings					
Road closures					
Damaged roads					
Other impacted critical infrastructure					
Shelter populations					
Status of houses without power, and restoration timelines					
Number of people with disabilities and others with access and functional needs requiring housing					
Status of utilities					
Damage to residential dwellings					
Availability of temporary housing sites					
Impact to economic stability, businesses, etc					

Information management for a specific incident will transition from the EOC to the Recovery Agency at the same time management of the incident transfers from the response phase Incident Command to the recovery phase Incident Command.

The collection, combination, confirmation, and analysis of safety/damage assessments and estimates are vital to eligibility for many disaster recovery programs. This information should indicate the level of damages that occurred, and estimated repair and rebuilding costs. Information needs should be coordinated with the Administration and Finances Section.

XV. COMMUNICATIONS

Communications describes the protocols and coordination procedures used among recovery organizations during the recovery phase and how a jurisdiction's communications integrate into the regional, State, and national disaster communications network. Communicating information throughout the recovery phase among all stakeholders is one of the most important activities for effective disaster recovery. Collaboration is necessary to best serve the impacted communities and facilitate a return to normalcy.

Communication for recovery needs to be as clear as it is during the response phase. Information needs during the immediate recovery phase will continue to address life-safety issues. Short-term through long-term recovery phases will address human and social services-related issues, some of which will reach far into the future.

Interoperable, reliable, timely, and redundant communications and information management are essential to a successful recovery. Communications consists of two parallel and interrelated functions. One system involves communicating essential information and instructions to the public, including those people with disabilities and others with access and functional needs. The other system involves operational communications and development and coordination of a common operating picture. A basic, flexible organizational structure or mechanism for internal and external coordination and communications needs to be in place and include all those involved in recovery operations, including local agencies/organizations, the private sector, NGOs, and State and Federal agencies.

A. Planning Considerations

1. Communications infrastructure may be compromised or nonfunctional.
2. Many agencies and organizations—including news media and NGOs—have plans to use the same back-up communications tools and technologies, including walkie-talkies and satellite phones.
3. All programs, services, and activities related to dissemination of information that are provided by public entities should comply with Title II of the ADA of 1990 and local statutes and be physically and programmatically accessible to people with disabilities and others with access and functional needs.
4. The use of communications resources will need to be prioritized due to competition among other groups causing delays during a disaster.
5. Identify logistical support is available for external public messaging.
6. Many warning systems and methods used locally are not interconnected among neighboring jurisdictions.

7. Mobile or satellite JICs may need to be established.
8. The Governor's Office will need to be supplemented by State Public Information Officers to handle the traffic through California Emergency Function 15, Public Information.

B. Internal

1. Departments should provide information to their staff on government-related recovery efforts.
2. During disaster recovery, government departments and partner agencies should ensure that employees, executives, elected officials, and partners are kept apprised of recovery and reconstruction efforts, strategies, and plans.
3. Executive-level briefings are paramount to the recovery effort. Informing elected leaders of the potential consequences of an incident, the actions that will be taken to respond and recover, and the decisions that will be coming helps them understand the importance and level of catastrophe they can be dealing with. Obtaining feedback and consensus on controversial concepts or practices before an incident is important to implementing an approach post-disaster that will be accepted and successful.
4. When communicating with executives, the following ideas should be stressed:
   a) Resources will be scarce, and competing for them will rely on forward thinking and proactive approaches and policies.
   b) Current disaster planning will provide an opportunity to consider what the community would look like in the future and correct known shortcomings or gaps from previous plans or efforts.
   c) Local officials will want to communicate with and provide updates on a regular basis with their constituents regarding the progress of recovery efforts.
   d) Recovery programs and insurance coverage are important elements to quick and successful recovery. Understanding their limitations and opportunities is vital.

C. External

1. The public should be kept apprised of recovery efforts and programs and should receive sufficient information regarding eligibility standards and requirements of assistance programs.
   a) All communication should be accessible in a variety of formats to the general public. The messages should be shared in a clear, consistent, culturally sensitive, and frequent manner.

b) A lead department or agency should be identified as responsible for coordinating all public information regarding recovery.

2. Develop a public information campaign and communications plan to encourage public and stakeholder involvement, and educate community members (including those displaced by the disaster) in a variety of accessible formats. This will establish community ownership and support for the planning process as a component of the public information campaign. It is critical to establish positive relationships with a variety of media sources and to consider them partners in the public information campaign by keeping the media informed throughout the process.

3. For people that will be relying on recovery assistance, it is important that they are informed about:

   a) The types of recovery assistance available and the capabilities and limitations of assistance programs

   b) The requirements to qualify for recovery assistance

   c) The required documentation to apply for assistance

   d) The location of LACs where they can speak with recovery assistance representatives

4. The public should also be provided information on what documentation and information they will need for specific elements of recovery assistance, which may include the following:

   a) Government-issued identification for government-provided services (NGOs such as nonprofits and FBOs may not require identification)

   b) Social security number

   c) Contact telephone number

   d) Pre-disaster address

   e) Post-disaster address

   f) Contact information

   g) Employment information (if available)

   h) Insurance information

   i) Household income

   j) A description of losses that were caused by the disaster

5. Available communication capabilities that may be used to notify the general public include:

   a) Variable message boards

b) Digital billboards

c) Telephone (i.e., 2-1-1)

d) Social networking, including Twitter, Facebook, really simple syndication (RSS) newsfeeds, and the Internet (e.g., EOC websites, e-mail, and short message service [SMS] text messaging)

e) Television, including closed-caption and/or sign-language interpreters at all times

f) Reverse 9-1-1 system

g) Radio

h) Ham radio

i) Public address systems

j) Low-power local radios

k) Door-to-door notification

6. The following describes the process of communicating with people with disabilities and others with access and functional needs.

a) Disaster communication plans and procedures must focus on all audiences by addressing language, physical, and technological challenges. Alert and notification can occur through the Emergency Alert System mass notification systems and other forms of communication, including telephone, television messages with open or closed captioning or sign language, auto-dialed TTY messages, text messages, e-mail, or direct door-to-door notification. Individual response is faster when messages are received by more than one method. People with disabilities and others with access and functional needs may require redundant communications and notification.

b) The following are general principles for communicating with people with disabilities and others with access and functional needs.

(1) People in this community should be given information that is functionally equivalent in content and detail to that given to the general public, as well as accessible, understandable, and timely.

(2) In addition, people in this community should be provided closed captioning, sign-language interpreters, and other methods of visual presentation for all emergency information given in audio format.

(3) Qualified individuals with diverse access and functional needs expertise and advocacy groups should be involved as part of the planning and decision-making process to determine the most effective and appropriate communication procedures.

(4) Media releases should include the concept of encouraging people to share emergency information with their families, neighbors, friends, and colleagues, especially those who may have difficulty receiving and/or understanding the information.

c) Appropriate terminology should be used by saying "people" first, followed by disability-related neutral language.

(1) "People with disabilities" should be used in lieu of "disabled."

(2) "People who use a wheelchair or wheelchair-user" should be used in lieu of "people confined to a wheelchair or wheelchair-bound."

(3) Generally, certain terms (e.g., "handicapped" and "mental retardation") should not be used in any context.

(4) "Accessible" should be used in lieu of "handicapped" to refer to physical locations such as shelters, restrooms, and parking.

d) Easy-to-understand messages should be used to accommodate language and comprehension barriers. Messaging should be provided in an easy-to-understand, elementary comprehension level.

e) Access California (http://www.accesscal.org) is a resource for communications to the access and functional needs community.

f) When a voice line is provided to call for information, a staffed TTY line, e-mail address, or live online response should be provided for questions and answers.

g) Any announcements through televised media should include qualified sign-language interpreters. Captions are used to ensure that people who are deaf and hard of hearing have access to information.

h) Redundant forms of public alert and notification warnings should be used.

i) Messages should be repeated frequently.

7. Some cities have a mass-notification system that is capable of calling large sections of populations and delivering a prerecorded message about the current status of emergency within their areas. In some areas, community emergency response teams are available options for making emergency notifications during an evacuation effort.

8. Planners are encouraged to devote resources to sustain and maintain an outreach of emergency warning notification to potential users that urge people not only to register, but also to register for all available services, and also all of their devices. The system should be tested regularly and include participation and feedback from people who are deaf or hard of hearing, people who are deaf-blind, and people who are blind or visually impaired, as well as those who have cognitive disabilities.

9. The public must be provided with coordinated, frequent, and accurate information during recovery. Real-time informational updates should be provided through emergency radio stations, television, and social network sites like Facebook and Twitter, websites, 2-1-1 informational lines, and digital billboards.

10. Interjurisdictional and interagency coordination should be conducted through the jurisdictional EOCs, department operations centers (DOCs), and incident command posts using available communication equipment and infrastructure and established procedures. Agency representatives and/or liaisons should also be present in the jurisdictional EOC and in impacted jurisdictional EOCs to facilitate evacuation communication between agency operation centers. Situational awareness and the development of a common operating picture concerning evacuation status, issues, and updates will be supported through data-sharing systems as well as the integration of GIS, when available.

11. Effective and efficient communication is essential for information sharing and status updates to all affected jurisdictions and for:

    a) Facilitating public awareness of the opening and closing of the LAC

    b) Ensuring responses to press inquiries are coordinated in accordance with media procedures

    c) Facilitating LAC visits of elected officials and the press

    d) Regularly evaluating public announcements and media releases

    e) Including local, State, and Federal government public information representatives in appropriate internal briefings

f) Coordinating with the LAC Manager to identify any public information issues or media needs

12. Coordinated public information systems should be developed to include public service announcements, hotlines, automated call directors, and other communication media to keep jurisdiction employees and the general public informed of ongoing recovery and reconstruction activities and jurisdiction employees advised of their assignments and responsibilities.

a) Preparedness

(1) Develop a comprehensive strategy for acquiring up-to-date information from all jurisdiction departments for distribution to the media.

(2) Develop a list of designated spokespersons in the various fields of expertise that would be used to prepare public information after a major disaster.

(3) Develop and regularly broadcast a pre-event public information/education program, including disaster preparedness information that is distributed via public media and pre-printed materials.

b) Post-Event Short-Term

(1) Assign and release public information announcements as appropriate.

(2) Work with the media to keep the public informed of the status of restoration of basic services.

(3) Develop a public service announcement that include the address, phone numbers, and hours of operations for government offices that have been relocated and that informs jurisdiction employees where to report to work after a major disaster.

13. Coordinate, where appropriate, with other city, county, State, and Federal governments and the media to ensure accurate and timely public information is disseminated.

Preparedness

(1) Coordinate with other governmental entities to develop a plan for coordinating the release of joint official statements as needed.

(2) Coordinate with other governmental entities to improve activation and use of the Emergency Alert System.

(3) Coordinate with public information officers to ensure appropriate languages are used in sending emergency messages to citizens.

(4) Investigate “hotline” or other capabilities for providing information to the public and/or press.

(5) Develop liaisons with other local governments and the media for public information programming immediately after a natural disaster.

14. Resources

a) Local telephone information hotline (e.g., 2-1-1)

b) Dedicated toll-free hotline established for information

c) Network of community agencies and departments to their respective clients

d) Media outlets

e) Hard-copy materials for distribution (brochures, flyers, etc.)

f) Websites

g) Social media

h) Neighborhood councils and CERT

i) Nixle

XVI. ADMINISTRATION AND FINANCE

It is paramount that detailed records that track personnel hours, supplies, materials, equipment, and other disaster-related costs are kept and backed up with detailed documentation that supports the incurred disaster event-related cost. This detailed cost-tracking approach is necessary for jurisdictions to be able to obtain State and/or Federal disaster declarations and support and receive reimbursements and payments for staff and projects during recovery. Jurisdictions should work with each program to determine eligibility of damages and expenses.

Qualifying for and obtaining public assistance from the State and Federal government relates directly to the approach and details of cost tracking.

A. Eligibility

To qualify for disaster-related assistance through State and Federal programs, eligible expenses must be:

1. Required as the direct result of the declared emergency or major disaster
2. Located within the designated disaster area, except for sheltering, evacuation activities, and mobilization centers, which may be located outside the designated disaster area
3. The legal responsibility of the eligible applicant at the time of the disaster

B. Documentation

Departments and agencies must keep accurate and extensive records to justify and receive State and Federal financial assistance following a disaster. Jurisdictions should maintain documentation of resource condition and status at all times to compare to post-disaster condition.

Each assistance program has documentation requirements that need to be followed to maximize reimbursement. It is important that the agencies and individuals executing recovery functions are aware of the recordkeeping requirements. Documents such as the following should be carefully maintained and, whenever possible, tied to specific sites or projects:

1. Employee timesheets
   a) Timesheets are needed to track regular hours and overtime, tasks that a person actually performed, where they were performed, how long a person was assigned to a particular task, and the address a person was assigned to a particular task.
   b) Information on timesheets should include if the employee was Staff Force Account, Hiring Hall, or borrowed from another department.

c) Timesheets should indicate whether a position is grant-funded or a temporary hire.

2. Equipment cards

a) Equipment cards identify serial numbers of equipment and provide description, model, make, year, department it belongs to, and length of time that the equipment was actually in use. There is no payment/reimbursement for standby or idle time.

b) Equipment cards identify equipment used for eligible disaster recovery work, hours of use, applicable equipment rates charged (local rates or government cost code), location of work, and name of employee operator.

c) Equipment cards identify services contracted for and/or purchased for use on eligible work, location of work purchase orders, costs, and invoices to support the costs.

d) Equipment cards list equipment damaged and cost to repair or replace.

e) The contractual scope of work should be included to document the specifics of the work and services provided.

3. Material requisitions

4. Pay stubs

5. Journal vouchers (logbook)

6. Purchase orders

7. Labor policies in effect at the time of disaster

8. Emergency contracts

9. MOUs

According to the California Disaster Recovery and Mitigation Handbook,[169] to be eligible for the maximum State and Federal reimbursement for recovery (and all disaster-related) expenditures, it is critical that each department accomplish the following:

1. Implement its disaster documentation system during a disaster that was already pre-established.

2. Ensure disaster-related expenditures are easily distinguished from regular, ongoing activities. For example, a tractor-trailer driver loads a bulldozer and hauls it to firefight command center. The bulldozer is unloaded, but the driver has to stay at the command center. The

[169] California Governor's Office of Emergency Services. (2004). *Disaster recovery and mitigation handbook*. Sacramento, CA. http://hazardmitigation.calema.ca.gov/docs/Disaster_Recovery_and_Mitigation_Handbook.pdf. Accessed on July 12, 2012.

driver is only paid for the actual work, not for standing by. The bulldozer operator is only paid for operating the bulldozer. The tractor-trailer driver is only reimbursed gas/mileage for use and not for standing by. Bulldozer equipment is only paid for gas, etc., for use and not for down time. It does not matter whether the employee had to wait 15 hours before using the bulldozer; if a person or equipment is standing still, there will not be reimbursement.

3. Maintain accurate accounting records on all disaster-related expenses, including the following:

   a) Force account labor (timesheets) and equipment. Labor for Hiring Hall needs to also be recorded and temporary workers or employees that are in grant-funded positions with no association with disaster management or involvement—that are on loan to help with disaster event—are a reimbursement cost as well.

   b) Invoices for rented equipment, materials, and purchases

   c) Photographs or videos of damage and repair (damage must be to public infrastructure that the jurisdiction is legally responsible for and owned by the jurisdiction)

   d) Pre-incident photographs, if available, of damaged areas (photographs of work sites, before and after, must be labeled with location and date)

   e) Maintenance records for government facilities and equipment for which reimbursement may be sought

   f) Insurance information

      (1) Is our jurisdiction self-insured? Is the risk manager involved and know about the disaster?

      (2) Insurance adjustments, settlements, and other documents and records related to project worksheets

   g) Environmental and historical preservation records

   h) Records of donated goods and services

Departments and agencies should employ their own internal process for recording and documenting expenditures and should maintain all recovery-related records for a minimum of 3 years after the last action on the disaster application (as deemed by Cal OES). This process for recording and documenting expenditures by departments and agencies must be consistent with the overall jurisdictions disaster recovery policy and procedures.

Cal OES releases an Audit Waiver Letter that destruction of records may take place 3 years from the date of the Audit Waiver Letter, not beforehand, regardless if there was a final action.

C. Required Documentation for Assistance

The following are the components the jurisdiction must include when making a formal request to the Operational Area for assistance or reimbursement, as outlined by the California Mitigation and Recovery Handbook:

1. A signed and dated copy of the local proclamation (if required)
2. Initial Damage Estimate (IDE): At this point, cost reports are critical estimates, and the EOC Finance/Administration Section should be working with staff to have this prepared if the EOC is still active.
3. Written request/resolution by designated official
4. Type of disaster
5. Date of occurrence and whether situation is continuing
6. Areas affected
7. Type of assistance needed

Upon submission of a request for aid, FEMA coordinates with the State to conduct a Preliminary Damage Assessment (PDA) and determine if the incident is of sufficient severity to require Federal assistance under the Stafford Act. FEMA uses the results of the PDA to determine if the situation is beyond the combined capabilities of the State and local resources and to verify the need for supplemental Federal assistance. The PDA also identifies any unmet needs that may require immediate attention. The PDA may not be required if immediate response assistance is necessary. A jurisdiction's records of costs and damages to public infrastructure will be requested most likely during the IDE and again at the PDA.

D. Administration

Jurisdictions should consider adding an emergency response and recovery clause into new contracts that have missions or functions that could be used in a post-disaster environment. This will provide flexibility in calling on additional resources and staff after an incident to support the response and recovery efforts.

E. Volunteers

Identify pre-incident the required documentation for volunteer hours to use toward cost-share. This process needs to be outlined, evaluated and developed to appropriately account for it. Volunteer labor to include, for each volunteer, a record of hours worked, location, description of work performed, and equivalent information for equipment and materials. FEMA recommends that each volunteer's time in and time out be recorded as a means to capture the total hours worked per day.

XVII. APPENDIX 1: AUTHORITIES

A. Federal

1. Age Discrimination Act of 1975[170]

   The purpose of this act is to prohibit discrimination on the basis of age in programs or activities receiving Federal financial assistance.

2. Americans with Disabilities Act of 1990, as Amended[171]

   The Americans with Disabilities Act (ADA) is a wide-ranging civil rights law that prohibits, under certain circumstances, discrimination based on disability. Disability is defined by the ADA as "a physical or mental impairment that substantially limits a major life activity." Title II requires a public entity to ensure that its communications with individuals with disabilities are as effective as communications with others. To provide equal access, a public accommodation is required to make available appropriate auxiliary aids and services where necessary to ensure effective communication. This law also defines service animals as animals that are individually trained to provide assistance to an individual with disabilities. A person with a disability cannot be asked to remove their service animal from the premises unless the animal is out of control and the animal's owner does not take effective action to control it or the animal poses a direct threat to the health or safety of others. State and local governments must comply with Title II of the ADA in the emergency- and disaster-related programs, services, and activities they provide.

3. Architectural Barriers Act of 1968[172]

   The Architectural Barriers Act requires access to facilities designed, built, altered, or leased with Federal funds and is one of the first efforts to ensure access to the built environment. Four Federal agencies are responsible for these standards: the U.S. Department of Defense, the U.S. Department of Housing and Urban Development, the General Services Administration, and the U.S. Postal Service.

[170] *Age Discrimination Act of 1975*. U.S. Department of Labor. http://www.dol.gov/oasam/regs/statutes/age_act.htm. Accessed on December 9, 2011.
[171] *American with Disabilities Act of 1990, as Amended*. U.S. Congress. http://www.ada.gov/pubs/ada.htm. Accessed on July 26, 1990.
[172] *Architectural Barriers Act (ABA) of 1968*. U.S. Access Board. http://access-board.gov/about/laws/ABA.htm. Accessed on December 6, 2011.

4. Fair Housing Act of 1968, as amended[173]

   This act prohibits housing discrimination on the basis of race, color, religion, sex, disability, familial status, and national origin. Its coverage includes housing regardless of type of funding, including privately owned housing, housing that receives Federal financial assistance, and housing owned or operated by State and local governments.

5. National Historic Preservation Act of 1966[174]

   The National Historic Preservation Act sets out the broad historic preservation responsibilities of Federal agencies and is intended to ensure that historic preservation is fully integrated into the ongoing programs of all Federal agencies.

6. Rehabilitation Act of 1973, as amended, Section 504 and Section 508)[175]

   The U.S. Rehabilitation Act of 1973 prohibits discrimination on the basis of disability in programs conducted by Federal agencies and in programs receiving Federal financial assistance. Section 504 provides opportunities for children and adults with disabilities in education, employment, and various other settings. It allows for reasonable accommodations, such as special study areas and assistance as necessary for each student. Section 508 requires Federal electronic and information technology to be accessible to people with disabilities, including employees and members of the public

7. Resource Conservation and Recovery Act of 1976[176]

   The Resource Conservation and Recovery Act (RCRA) gives the Environmental Protection Agency the authority to control hazardous waste from the "cradle to the grave. This includes generating, transporting, treating, storing, and disposing of hazardous waste. RCRA also set forth a framework for the management of nonhazardous solid wastes.

[173] *Fair Housing Act of 1968, as amended*. http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/FHLaws. Accessed on December 6, 2011.
[174] *National Historic Preservation Act of 1966*. http://www.achp.gov/nhpa.html Accessed on September 5, 2012.
[175] *Rehabilitation Act of 1973, as amended, Sections 504 and 508*. http://access-board.gov/enforcement/rehab-act-text/intro.htm Accessed on September 5, 2012.
[176] *Resource Conservation and Recovery Act of 1976*. http://www.epa.gov/lawsregs/laws/rcra.html Accessed on September 5, 2012.

8. Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended)[177]

   The Robert T. Stafford Disaster Relief and Emergency Assistance Act amended the Disaster Relief Act of 1974 and constitutes the statutory authority for most Federal disaster response activities, especially as they pertain to FEMA and FEMA programs.

9. Title VI of the Civil Rights Act of 1964[178]

   Title VI, 42 U.S.C. § 2000d et seq., was enacted to prohibit discrimination on the basis of race, color, and national origin in programs and activities receiving Federal financial assistance.

B. State

1. California Code of Regulations Title 19, Division 2, Chapter 6, Article 1 - State Public Assistance Program[179]

   This section specifically defines eligibility criteria for debris removal under the State Public Assistance Program.

2. California Code of Regulations Title 19, Division 2, Chapter 6, Article 2- State Private Nonprofit Organizations Assistance Program[180]

   This section defines terms within the article such as "private nonprofit" and "intermediary private nonprofit".

3. California Government Code Title 2, Division 1, Chapter 7.5 - California Disaster Assistance Act[181]

   This section specifically defines the funding authority and allocations to local and State agencies and nonprofit organizations.

4. Standardized Emergency Management System (SEMS) Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations and Government Code Section 8607(a))[182]

   These regulations establish the Standardized Emergency Management System (SEMS) based upon the Incident Command

[177] *Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended*. http://www.fema.gov/robert-t-stafford-disaster-relief-and-emergency-assistance-act-public-law-93-288-amended Accessed on September 5, 2012.
[178] Title VI of the Civil Rights Act of 1964. U.S. Department of Justice. http://www.justice.gov/crt/about/cor/coord/titlevi.php. Accessed on December 9, 2011.
[179] California Code of Regulations. http://www.calema.ca.gov/Recovery/Documents/Public%20Assistance/Regulations/Title%2019,%20div%202,%20ch.%206.%20Art.%201.%202925%20Debris%20Removal.pdf. Accessed on December 6, 2011.
[180] California Code of Regulations. http://www.calema.ca.gov/Recovery/Documents/Public%20Assistance/Regulations/Title%2019,%20Division%202,%20Chapter%206,%20Article%202,%202991%20Definitions.pdf. Accessed on December 6, 2011.
[181] *California Disaster Assistance Act*. http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=gov. Accessed December 6, 2011.
[182] Standard Emergency Management System (SEMS) Regulations. http://www.calema.ca.gov/PlanningandPreparedness/Documents/Ch1_SEMS.pdf. Accessed on December 6, 2011.

System (ICS) adapted from the system originally developed by the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program including those currently in use by State agencies, the Multi-Agency Coordination System (MACS) as developed by FIRESCOPE program, the operational area concept, and the Master Mutual Aid Agreement and related mutual aid systems.

5. California Building Code Regulation - Title 24[183]

   California Code of Regulations (CCR), Title 24, also known as the California Building Standards Code, is a compilation of three types of building standards from three different origins: building standards that have been adopted by State agencies without change from building standards contained in national model codes; building standards that have been adopted and adapted from the national model code standards to meet California conditions; and building standards authorized by the California legislature that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

6. California Code of Regulations - Title 8, Section 5192[184]

   Hazardous Waste Operations and Emergency Response

   Employers should develop and implement a written safety and health program for their employees involved in hazardous waste operations. The program should be designed to identify, evaluate, and control safety and health hazards and provide for emergency response for hazardous waste operations.

7. California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code) in Article 3, Section 8568[185]

   This chapter states: "The State Emergency Plan should be in effect in each political subdivision of the State, and the governing body of each political subdivision should take such action as may be necessary to carry out the provisions thereof." The City's Emergency Operations Plan (EOP) and this Annex are consistent and compatible with the State Emergency Plan.

8. California Natural Disaster Assistance Act (CDAA)[186]

[183] California Building Code Regulation, Title 24. http://www.bsc.ca.gov/. Accessed on December 6, 2011.
[184] California Code of Regulations. http://www.dir.ca.gov/title8/5192.html. Accessed on December 6, 2011.
[185] *California Emergency Services Act*.
http://www.calema.ca.gov/PlanningandPreparedness/Documents/2011%20ESA.pdf Accessed on September 5, 2012.
[186] *California Natural Disaster Assistance Act (CDAA)*.
http://www.calrecycle.ca.gov/disaster/disasterplan/PDF/Chapter15.pdf Accessed on September 5, 2012.

The CDAA provides State financial assistance for recovery efforts to counties, cities and/or special districts after a State disaster has been proclaimed.

9. California State Emergency Plan (2009)[187]

The California State Emergency Plan (Section 9 Emergency Preparedness, Subsection 1 Emergency Planning) indicates that local governments and other agencies are encouraged to develop recovery plans prior to the occurrence of a disaster. Such a plan should establish mechanisms for recovery decision making and identify key participants in the recovery organization, including nonprofit and private-sector entities. The plan should also identify processes and procedures for requesting State and Federal recovery assistance and ensuring that recovery activities are carried out in accordance with the requirements of these programs.

C. Local

1. Los Angeles County Code Title 2 - Administration, Chapter 2.68 Emergency Services[188] ("Emergency Ordinance")

This chapter intends to "provide for the preparation and carrying out of plans for the protection of life and property within the county of Los Angeles in the event of an emergency; the establishment, coordination and direction of the Los Angeles County operational area and emergency organization; the establishment, coordination and direction of the county of Los Angeles emergency management council; the establishment, coordination and direction of the county of Los Angeles office of emergency management; and the coordination of the preparatory and emergency functions of the county of Los Angeles with all other public agencies, organizations and individuals."

2. Los Angeles County Ordinance - Title 2, Administration 2.77.050[189]

The director of public health, either directly or through a duly authorized representative, shall perform all duties now or hereafter delegated to the county veterinarian by Ordinance 4099 or any other ordinance of the county or any State statute or regulation. (Ord. 2006-0040 § 17, 2006)

3. Los Angeles County Ordinance- Title 10, Division 2. Animal Health 10.48.040, 10.64.030, 10.68.020[190]

[187] *California State Emergency Plan (2009)*. http://cms.calema.ca.gov/prep_sep.aspx
[188] Los Angeles County Code, Title 2. http://lacoa.org/PDF/NN/CountyCode268.pdf. Accessed on December 6, 2011.
[189] Los Angeles County Ordinance Title 2, Administration. http://search.municode.com/html/16274/_DATA/TITLE02/Chapter_2_77_DEPARTMENT_OF_PUB.html. Accessed on August 20, 2012.

The director of public health, acting in cooperation with the [State Veterinarian of the California Department of Food & Agriculture] is responsible for enforcing all State laws and all orders and ordinances of the board of supervisors of the county of Los Angeles pertaining to the health and sanitary surroundings of the animals in the County. Responsibilities applicable to emergency response for controlling and eradicating animal diseases and/or animal diseases that pose a risk to public health include:

a) Investigate within the State of California any reported outbreak of contagious, infectious or communicable disease, the presence of which in the State may constitute a menace to the health of animals in the County of Los Angeles

b) Establish, maintain and enforce quarantines, sanitary, testing and immunizing measures or to promulgate such rules and regulations as the director of public health may deem proper and necessary

c) Regulate the movement of animals from stockyards, corrals and feed yards

d) Supervise examination and testing of animals or premises for the presence of contagious, infectious or communicable diseases

e) Provide for the sanitation of plants and premises upon which animals are kept or upon which such slaughtering and preparation are conducted

f) Provide for the identification and disposition of diseased animals, meats and meat products

4. Los Angeles County California. Title 10[191]

It is hereby made the duty of any person suspecting or having knowledge of the presence of any infectious diseases in animals to report same to the director of public health. It shall be the duty of any person owning or having control of animals to assist the director of public health to enforce the provisions of this Division 2, to obey all orders of the director of public health made for the control and eradication of infectious diseases, the sanitation of premises, destruction of animals, and disposal of carcasses, manure, offal, refuse, condemned meat and meat products. (Ord. 8962 § 1 (part), 1965; Ord. 8397 § 1 (part), 1963: Ord. 1415 Art. 3 § 42, 1926)

[190]Los Angeles County Ordinance, Title 10. http://www.animallaw.info/local/louscalosangelescounty.htm. Accessed on August 20, 2012.
[191] Los Angeles County Ordinance, Title 10. http://www.animallaw.info/local/louscalosangelescounty.htm. Accessed on August 20, 2012.

5. Orange County Codified Ordinance (OCCO), Title 3, Division 1 (Emergency Services)[192]

   This article provides "for the direction of the emergency organization; the coordination of the emergency functions of this County with all other public agencies, corporations, organizations, and affected private persons; and the preparation and implementation of plans for the protection of persons and property within this County in the event of an emergency."

6. Riverside County Emergency Services Ordinance 533.5[193]

   The ordinance provides "for the preparation and carrying out of plans for the protection of persons and property within the County of Riverside in the event of the emergency or disaster conditions hereinafter referred to; the direction of the Emergency Management Organization; and the coordination of the disaster functions of the County of Riverside with all other public agencies, corporations, organizations, and affected private persons."

[192] Orange County Codified Ordinance, Title 3, Division 1. http://library.municode.com/index.aspx?clientID=11378&stateID=5&statename=California. Accessed on August 27, 2012.
[193] Riverside County Emergency Services Ordinance 533.5. http://rivcocob.com/ords/500/533.5.pdf. Accessed on December 7, 2011.

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XVIII. APPENDIX 2: REFERENCES AND ADDITIONAL INFORMATION

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3. A reference guide titled *Accommodating Individuals with Disabilities in the Provision of Disaster Mass Care, Housing, and Human Services* is available at http://www.fema.gov/oer/reference/index.shtm.
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7. *Developing and Promoting Mitigation Best Practices and Case Studies: Communication Strategy Toolkit.* Federal Emergency Management Agency. September 2004. http://www.fema.gov/library/viewRecord.do?id=1774.
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[194] Center for Personal Assistance Services. *Welcome to the Center for Personal Assistance Services*. San Francisco, CA. http://www.pascenter.org/home/index.php. Accessed on July 12, 2012.

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28. National Response Framework (NRF), U.S. Department of Homeland Security. January 2008. http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf

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18. Orange County Operational Area Mass Care and Shelter Annex. County of Orange, August 2007.

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XIX. APPENDIX 3: SAMPLE COOPERATIVE AGREEMENT

PLAN OF COOPERATION

Between the County of Orange/Orange County Operational Area

And

The Orange County Rescue Mission/OperationOC

Background

On February 28, 2003, the President issued Homeland Security Presidential Directive (HSPD)-5, which directs the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). According to HSPD-5:

> This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multiagency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.

Among the core principles of NIMS is the development of mutual aid agreements, to include agreements with private sector and nongovernmental organizations. The Orange County Rescue Mission/OperationOC has been recognized as a regional partner for the County of Orange emergency management program.

Accordingly, the Orange County Rescue Mission/OperationOC, as a partner in preparedness has developed an Emergency Operations Plan, which is based on the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), and is being integrated into the emergency planning and response process of the Orange County Operational Area.

The County of Orange places disaster planning responsibility for the Orange County Operational Area (OC OA) as the lead agency for disaster preparedness and coordination with the Orange County Sheriff's Department Emergency Management Bureau (OC EMB). OC EMB is also responsible for activating the Emergency Operations Center (EOC), which is the centralized control and coordination point for emergency operations and decision-making for the Orange County Operational Area. Activating the EOC, and its corresponding functional responsibilities, are clearly described in the OC OA Emergency Operations Plan (EOP) and follows the guidelines of SEMS and NIMS.

Purpose of Plan of Cooperation

The County of Orange recognizes the Orange County Rescue Mission/OperationOC as an established Private Nonprofit as described in the California Code of Regulations, Title 19, Division 2, Chapter 6, Article 2, §2991 et seq. (State Private Nonprofit Organizations Assistance Program) and its role as an Intermediary Private Nonprofit. In addition, the County of Orange supports the right of the Orange County Rescue Mission/OperationOC to pursue reimbursement for essential community services provided during a disaster pursuant to the California Disaster Assistance Act, the State Public Assistance Program, and the State Private Nonprofit Organizations Assistance

Program given that the Orange County Rescue Mission/OperationOC follows established guidelines contained within this Plan of Cooperation.

A. To recognize the respective roles and responsibilities of Orange County Rescue Mission/OperationOC and the OC EMB in disaster preparedness, planning and operations for natural disasters, nuclear accidents, civil disorder, terrorism and other emergencies

B. To serve as the basis for mutual understanding and collaboration by which resources of Orange County Rescue Mission/OperationOC and OC EMB can be most effectively deployed to assist the community members of Orange County in the event of a disaster

Role of Orange County Rescue Mission/OperationOC

In a disaster scenario, Orange County Rescue Mission/OperationOC's primary role will be to maximize access to community resources for those affected by the disaster.

Once the OA EOC is activated, Orange County Rescue Mission/OperationOC will serve as support to the EOC by providing a link to coordination with community based organizations, the private sector, and nonprofit entities.

Orange County Rescue Mission/OperationOC will also actively seek to employ key principles for emergency preparedness, including:

- Encouraging emergency planning for all hazards, all phases, and all stakeholders, and all impacts relevant to disaster recovery
- Employing sound risk management principles in assigning priorities and resources
- Ensure unity of effort among all elements of the community
- Create and sustain emergency preparedness partnerships with community based organizations, the private sector, and nonprofit entities
- Encourage the synchronization of emergency preparedness and recovery activities of relevant stakeholders to achieve milestones towards disaster preparedness and recovery
- Use creative and innovative approaches to solving disaster recovery challenges

Scope of Plan of Cooperation

Both agencies recognize the importance of partnering to serve the needs of the Orange County community during a disaster situation. Further, it is recognized by OC EMB that the Orange County Rescue Mission/OperationOC has access to resources necessary for disaster recovery and the Orange County Rescue Mission/OperationOC is prepared to serve as a major emergency management resource for those most in need during times of crises.

The following actions are agreed upon by both agencies and will ensure the partnership is mutually beneficial:

A. OA Emergency Operations Center seat assignment when the OA Emergency Operations Center is activated and the level of response requires this position be filled.

B. Use established activation and coordination procedures when the OA Emergency Operations Center is not activated with the Orange County Rescue Mission/OperationOC point of contact for coordination with Private Non Profits during recovery efforts in the affected disaster areas.

C. Integration of Orange County Rescue Mission/OperationOC into the Operational Area Emergency Operations Plan.

D. Provision of training courses through the OC Emergency Management Bureau.

E. Integration of Orange County Rescue Mission/OperationOC into existing information dissemination systems.

F. OA Emergency Operations Center seat assignment

1. OC EMB agrees to create a seat for Orange County Rescue Mission/OperationOC within the Logistics Section area of the EOC, including a workstation and associated equipment and supplies required to fully execute the agency's emergency operations functional responsibilities as they relate to the OA EOC.

2. OC EMB agrees to notify the designated Orange County Rescue Mission/OperationOC representative once the EOC has been activated at a sufficient level to require the need for advanced coordination with community based organizations, the private sector, and nonprofit entities.

3. Orange County Rescue Mission/OperationOC agrees to assign one staff member, designated as the liaison, who will be fully trained and available to perform coordination duties required in the Logistics Section of the EOC.

4. Orange County Rescue Mission/OperationOC will supply the OC EMB with the necessary contact information for the designee and will ensure that the contact information is current and up-to date at all times.

5. Orange County Rescue Mission/OperationOC will include two individuals as back-up for the primary designees when the designated representative is unavailable or incapable of responding to the EOC activation request.

6. The Orange County Rescue Mission/OperationOC designated liaison will maintain contact OC EMB Emergency Management Team to receive updated information on the status of agencies, and to disseminate "EOC Approved" information only.

7. The Orange County Rescue Mission/OperationOC agrees that its representative at the Operational Area Emergency Operations Center in the Logistics Section and will coordinate with the Logistics Section Chief to facilitate real time linkages of providers of disaster resources with community based organizations, the private sector, and nonprofit entities that have disaster needs.

8. The Orange County Rescue Mission/OperationOC agrees to provide real time updates on the OperationOC website at www.OperationOC.org using the approved press releases and public information from the Operational Area EOC.

9. The Orange County Rescue Mission/OperationOC agrees to provide a representative to the location of the established Local Assistance Center when the Operational Area EOC activates this function.

C. OC EMB and the Orange County Rescue Mission/OperationOC agree to use established activation and coordination procedures when the OA Emergency Operations Center is not activated with the Orange County Rescue Mission/OperationOC point of contact for coordination with Private Non Profits during response/recovery efforts in the affected disaster areas.

1. The Orange County Rescue Mission/OperationOC understands the importance of coordination within Orange County and how resources should be requested prior to deployment.

2. OC EMB agrees to notify the Orange County Rescue Mission/OperationOC point of contact if or when Private Non Profit resources may be used to assist a community affected by the disaster.

3. Both parties agree the request process from OCEMB to the Orange County Rescue Mission/OperationOC may be in written or verbal form as long as all conversations are documented by both parties.

4. The Orange County Rescue Mission/OperationOC point of contact will only coordinate Private Non Profits they have cooperative agreements with within Orange County and any additional aid outside of Orange County will be coordinated or directed to OC EMB.

5. The Orange County Rescue Mission/OperationOC agrees to maintain an accurate list of Private Non Profit organizations they have cooperative agreements with and provide OC EMB a copy to keep with this Plan of Cooperation as new organizations are added or changes are made.

D. Integration of Orange County Rescue Mission/OperationOC into the Operational Area Emergency Operations Plan.

1. OC EMB agrees to include the roles and responsibilities of Orange County Rescue Mission/OperationOC as set forth in this Plan of Cooperation in the OA EOP, including seat assignment and functional responsibilities, and a signed copy of this Plan of Cooperation will serve as an attachment to the OC OA EOP.

2. OC EMB agrees to include Orange County Rescue Mission/OperationOC or its designee in table-top or other disaster preparation and planning exercises.

3. Similarly, Orange County Rescue Mission/OperationOC agrees to integrate this Plan of Cooperation and the associated functional responsibilities into its EOP, including a signed copy of this Plan of Cooperation as an attachment to the plan.

4. The Orange County Rescue Mission/OperationOC agrees to participate in monthly Orange County Emergency Management Organization planning and coordination meetings.

E. Provision of training courses through OC Emergency Management Bureau

1. OC EMB agrees to notify Orange County Rescue Mission/OperationOC of training courses hosted by the OC OA at the EOC, including the EOC overview and Support Staff Training Courses.

2. OC EMB agrees to provide the Disaster Service Worker Volunteer Oath to Orange County Rescue Mission/OperationOC representatives and volunteers.

F. Integration of Orange County Rescue Mission/OperationOC into OA emergency operations.

1. The Orange County Rescue Mission/OperationOC agrees to maintain communications with the Operational Area through the Operational Area Emergency Manager and/or the Logistics Section Chief during real emergency situations.

2. The Orange County Rescue Mission/Operation OC agrees to operate an emergency communication notification and information dissemination system for OperationOC participating community based organizations, the private sector, and nonprofit entities.

3. OC EMB agrees to integrate Orange County Rescue Mission/Operation OC into its EOC overview and Support Staff training courses, dissemination/notification systems, including those used for press releases and OA Status Report Updates.

4. OC EMB agrees to recognize and support Orange County Rescue Mission/OperationOC as a primary disaster coordination system.

The EOC shall support collaboration and integration of other information systems within the Orange County Rescue Mission/OperationOC.

Non-contractual Nature of Plan of Cooperation

This Plan of Cooperation is intended only as a framework within which the parties intend to pursue a common objective. It has not been reviewed or approved by the Orange County Board of Supervisors, is not intended as a contract, and does not create any mutual obligations. There shall be no legal sanctions available for its enforcement or for any alleged breach. Either party may cease compliance with the terms of this Plan of Cooperation without notice to the other party.

Effective this _____ day of _____, 2011.

_____	_____
Jim Palmer	**Donna Boston**
President	**Emergency Manager**
Orange County Rescue Mission/OperationOC	**County of Orange**
	Orange County Operational Area

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XX. APPENDIX 4: OVERVIEW OF HEALTH AGENCY PREPAREDNESS AND RECOVERY

A. Overview of Health Agency Preparedness

Health agencies should become familiar in preparedness planning with the multitude of local, State, and Federal agencies whose oversight or regulatory roles will be relevant to local recovery operations for health related activities. Coordination and requests for agency support to the Recovery Support Function (RSF) will be through local and State Disaster Recovery Managers and the Federal Disaster Recovery Coordinator as described in the National Disaster Recovery Framework of 2011. It will also be necessary to coordinate across RSFs. A *Health Agencies Preparedness Worksheet* (Table 11) is provided as an example. The worksheet provides a description of public health and environmental health operations, and associated regulatory agencies in which the planner should be familiar with in their own jurisdictions. Awareness of these associated agencies may assist in preparation, education, training, and exercise activities.

Table 11: Health Agencies Preparedness Worksheet

Facility/Operation Types	Oversight/Regulatory Agencies
Building integrity and safety** (All buildings and structures to include structural, lead, habitability, and asbestos)	▪ Local building and public works department ▪ Planning and zoning departments ▪ Local sanitation districts ▪ Licensing and Certification Division of Public Health (California) ▪ Local environmental health and public health agencies ▪ California Environmental Protection Agency o Air Resources Board (local air quality management districts) (outdoor air quality) o Department of Toxic and Substances Control ▪ U.S. Environmental Protection Agency (lead paint disclosures)
Air Quality*** (Indoor and outdoor air quality)	▪ California Environmental Protection Agency—Air Resources Board/local air quality management districts (outdoor air quality) ▪ Local environmental health and public health agencies (indoor air quality) ▪ California Occupational Safety and Health Administration (indoor air quality, worker safety)
Potable Water Supply* (Municipal water systems, private water systems, potable water haulers, well drilling and protection)	▪ California Department of Public Health—Drinking Water Program (water systems with service for 200 or more connections) ▪ Local environmental health and public health agencies (water systems with service for less than 200 connections) ▪ U.S. Environmental Protection Agency
Wastewater/Sanitary Drainage***	▪ Local sanitation districts or agencies (public sewers and wastewater treatment plants)

Facility/Operation Types	Oversight/Regulatory Agencies
(Sewage collection vehicles, portable toilets, liquid waste collection centers)	▪ Local environmental health and public health agencies (commercial and residential septic systems) ▪ California Regional Water Quality Control Board
Hazardous Materials* ***** (Hazardous materials in facilities, hazardous waste disposal, underground fuel tanks, above ground tank facilities)	▪ California Environmental Protection Agency o California Regional Water Quality Control Board (underground and above-ground storage tanks, site remediation) o Department of Toxics and Substances Control (hazardous waste/disposal, site remediation) o California Office of Emergency Services (hazardous materials inventory and emergency response) o Air Resources Board (Air Quality Management Districts—underground storage tanks, air emissions, equipment permits) ▪ Local Certified Unified Program Agency oversight (environmental health, public works, fire departments)
Storm water Quality* ***** (Protection of rivers, streams, lakes and storm water discharge quality)	▪ California Regional Water Quality Control Board ▪ Local environmental health agency or storm water quality programs ▪ Local flood control districts ▪ California Department of Fish and Game ▪ U.S. Environmental Protection Agency
Vector Control*	▪ Local environmental health and public health agencies ▪ Local Mosquito Abatement District ▪ Other vector programs and systems of surveillance
Retail Food Facilities* (Restaurants, grocery stores, cafeterias, catering trucks, food carts)	▪ Local environmental health and public health agencies ▪ California Department of Public Health—Food and Drug Branch ▪ California Department of Food and Agriculture ▪ U.S. Food and Drug Administration
Wholesale food facilities* (Food processors, food warehouses, distributors)	▪ Local environmental health and public health agencies ▪ California Department of Public Health—Food and Drug Branch ▪ California Department of Food and Agriculture ▪ U.S. Food and Drug Administration ▪ U.S. Department of Agriculture
Schools* (Universities, children daycare centers[195], pre-schools, private schools)	▪ School districts and in-house environmental health units ▪ California Division of State Architect ▪ Local environmental health and public health agencies ▪ Local and State Departments of Education
Healthcare Facilities*, (Hospitals, Clinics, Skilled Nursing Facilities)	▪ Licensing and Certification, California Department of Public Health ▪ Local environmental health and public health agencies ▪ Local Department of Mental Health ▪ California Office of Statewide Health Planning and Development ▪ Local and State Emergency Medical Service agencies (EMS)

[195] California Department of Social Services (CDSS) oversees child care licensing.

Facility/Operation Types	Oversight/Regulatory Agencies
	▪ Medi-Cal, Medicare local offices ▪ Office of the Public Guardian
Parks and beaches*** (Recreational areas, swimming areas, beach area water quality)	▪ Local parks and recreational agencies ▪ U.S. Forest Service (national forest areas) ▪ California Department of Parks and Recreation ▪ Local environmental health and public health agencies
Solid Waste*** (Household trash/garbage, solid waste haulers, landfills)	▪ Local environmental health and public health agencies ▪ California Environmental Protection Agency—Integrated Waste Management Board ▪ California Regional Water Quality Control Board
Multiple Family Dwellings* (Apartments, condos, dorms, residential hotels, etc.)	▪ Local building and public works department ▪ Local environmental health and public health agencies (public swimming pools)
Food-borne Illness/Investigations*	▪ Local environmental health and public health agencies ▪ California Department of Public Health—Food and Health Branch ▪ Centers for Disease Control (major outbreaks) ▪ County Agricultural Commissioner ▪ State and Federal Departments of Agriculture
Communicable Disease and Surveillance*	▪ California Department of Public Health ▪ Local environmental health, public health and EMS agencies ▪ Centers for Disease Control and Prevention ▪ Local department of Mental/Behavioral Health
* These areas are primarily a function within Public Health or Environmental Health **These areas primarily a function within the Infrastructure RSF (Environmental Health) ***These areas are primarily addressed in the Natural and Cultural Resources RSF	

B. Overview of Health Agency Recovery

A number of factors encountered during the response phase will continue as priorities well into the recovery period. In many ways, response activities will be simultaneous with recovery efforts to restore facility and utility components within damaged infrastructure that have effects on human and animal health. Examples of infrastructure causes would be structural/physical damage, power failures, water loss or contamination, and other conditions such as leaking gas lines, sewage overflows, inadequate trash collection, vector infestations, and mold damage. It is important to remember that these will require coordination with other RSFs given the missions and capabilities.

Public health recovery activities may include disease surveillance and response, health facilities inspection, vector control, and public health communication. Throughout recovery, continued monitoring for human and animal health effects from contaminants will be expected. The Health Agency Recovery Worksheet (Table 12) makes no distinction as to where public health and environmental health reside in each department in the

five county operational areas in this guidance, however the types of functions will need to be considered depending on the impacted area and type of event.

Below is a comprehensive worksheet of various public health and environmental health related activities that should be considered in surveying activities during the phases of recovery. Jurisdictions should itemize and prioritize their public health and environmental operations in recovery based on their own jurisdictional needs to maintain the health of both human and animal populations.

Table 12: Health Agency Recovery Worksheet

Facility/Operation Types	Recovery Activities to Consider
Building integrity and safety (All buildings and structures, including structural, lead, habitability, and asbestos)	▪ Coordinate with other agencies such as zoning, planning, and environmental health and establish one-stop/express permitting process ▪ Develop an expedited and fee-relief process ▪ Develop public service announcements on a variety of topics aimed in protecting consumers and the public ▪ Generate a checklist to assist homeowners and contractors in navigating through an expedited permitting process
Air Quality (Indoor and outdoor air quality)	▪ Coordinate with the local air districts and environmental and public health agencies in identify hazardous or safe working and living conditions relative to indoor and outdoor air. ▪ Encourage the coordination and participation in the establishment of a one-stop/express permitting process with the local building department ▪ Distribute relevant public service announcements in coordination with public health, as appropriate
Potable Water Supply (Municipal water systems, private water systems, potable water haulers, well drilling and protection)	▪ Coordinate with the local municipal water service providers and the regulatory oversight relative to the safety status of water delivered to the dwelling ▪ Maintain public notification of the safety of the potable water system; update as frequently as possible in coordination with local public health ▪ Generating a list of water providers and their service areas ▪ Coordinate with local and State agencies relative to emergencies, complaints, and water-related illness responses
Wastewater/Sanitary Drainage (Sewage collection vehicles, portable toilets, liquid waste collection centers)	▪ Coordinate with the local sanitation district and maintain an updated status of the wastewater infrastructure conditions ▪ Encourage coordination and participation in the establishment of a one-stop/express permitting process with the local building department ▪ Distribute relevant public service announcements in coordination with local public health

Facility/Operation Types	Recovery Activities to Consider
Hazardous Materials (Hazardous materials in facilities, hazardous waste disposal, underground fuel tanks, above ground tank facilities)	▪ Coordinate with the Certified Unified Program Agency to ensure that the handling and disposal of hazardous materials and wastes in commercial and industrial facilities are conducted according to current law ▪ Develop public service announcement and relative guidance for business during the recovery process
Storm water Quality (Protection of rivers, streams, lakes and storm water discharge quality)	▪ Assure that during the recovery process, construction and clean-up activities are compliant with best management practices prescribed by the Regional Water Quality Control Board and local storm water oversight ▪ Coordinate with the local storm water quality agencies as necessary
Vector Control	▪ Coordinate with local environmental health and public health agencies in the distribution of appropriate public service announcements relative to the control of vectors (mosquitoes, rats, mice) ▪ Develop a response to significant rodent infestations and mosquito breeding areas
Retail Food Facilities (Restaurants, grocery stores, cafeterias, catering trucks, food carts)	▪ Include local environmental health and public health agencies in the expedited permitting process with the local building departments ▪ Encourage local environmental health and public health agencies in developing recovery plans relative to expedited facility permitting and relief of associated fees
Wholesale food facilities (Food processors, food warehouses, distributors)	▪ Include local environmental health and public health agencies in the expedited permitting process with the local building departments ▪ Encourage local environmental health and public health agencies in developing recovery plans relative to expedited facility permitting and relief of associated fees
Schools (Universities, children daycare centers,[196] child care facilities, centers and family homes)	▪ Include local environmental health and public health agencies in the expedited permitting process with the local building departments ▪ Encourage local environmental health and public health agencies in developing recovery plans relative to expedited facility permitting and relief of associated fee ▪ Distribute relevant public service announcements in coordination with public health ▪ Coordinate with the Department of Social Services or child care licensing to determine child care closures and reopening
Hospitals (Clinics, healthcare facilities)	▪ Include local environmental health, public health, and mental health agencies in the expedited permitting process with the local building departments ▪ Include the Local Emergency Medical Service Agency ▪ Encourage local environmental health, public health, and mental health agencies in developing recovery plans relative to expedited facility

[196] California Department of Social Services (CDSS) oversees child care licensing.

Facility/Operation Types	Recovery Activities to Consider
	permitting and relief of associated fees ▪ Distribute relevant public service announcements (PSAs) in coordination with local public health and EMS agencies.
Parks (Recreational areas, swimming areas (beach area water quality, campgrounds)	▪ Coordinate with the appropriate oversight agencies in the reopening of these areas. For instance, beach areas that may be under the control of the State parks agency may be opened to users with the approval of the local environmental health agency after the appropriate water quality test as conducted and provide acceptable water quality results.
Solid Waste (Household trash/garbage, solid waste haulers, landfills)	▪ Coordinate with the appropriate regulatory agency in ensuring trash services and landfills continue to meet the expected demands of waste disposal ▪ Maintain a list of alternative waste haulers and landfills outside your jurisdictions if the waste handling and landfill capacities are exceeded. ▪ Distribute relevant public service announcements
Multiple-family Dwellings (Apartments, condos, dorms, residential hotels, etc.)	▪ Coordinate with other agencies such as zoning, planning, environmental health and establish one stop/express permitting process ▪ Typically, local environmental health agencies review and approve the construction/reconstruction of swimming pools or spas in multiple-family dwellings, fitness centers, baths, and gyms ▪ Develop an expedited and fee-relief process ▪ Develop public service announcements on a variety of topics aimed in protecting consumers and the public ▪ Generate a checklist to assist homeowners, business owners, and contractors in navigating through an expedited permitting process
Food-borne Illness/Investigations Communicable Disease and Surveillance	▪ Coordinate with local environmental health and public health agencies in establishing procedures in the investigation of food- and water-borne illness complaints and investigations ▪ Distribute relevant public service announcements

XXI. APPENDIX 5: NATURAL AND CULTURAL RESOURCES PLANNING RESOURCES AND LOCAL POINTS OF CONTACT

A. Resources

1. National Environmental Policy Act (NEPA)

   a) Natural Resources Conservation Service, Web Soil Survey, 2009, Available at: http://websoilsurvey.nrcs.usda.gov/app/

   b) Southern California Earthquake Data Center (SCEDC), Southern California Earthquake faults, 2010, at: http://www.data.scec.org/significant/

   c) California Department of Conservation (CADC), Fault Zone Index, 2010, at: http//www.conservation.ca.gov/cgs/rghm/ap/Pages/preliminary_maps.aspx

   d) U.S. Geological Survey, Earthquakes Hazard Program. Quaternary Fault and Fold Database, 2010, at: http://gldims.cr.usgs.gov/qfault/viewer.htm

   e) Natural Resources Conservation Service, Web Soil Survey, 2009, at: http://websoilsurvey.nrcs.usda.gov/app/

2. Biological Resources

   a) California Department of Fish and Game (CDFG 2010b), California Natural Diversity Database (CNDDB), A Program that Inventories the Status and Locations of Rare Plants and Animals in California, 2010, Website at: http://www.dfg.ca.gov/biogeodata/cnddb/plants.asp

   b) California Department of Fish and Game (CDFG), List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database, Biogeographic Data Branch; Vegetation Classification and Mapping Program, September 2003 Edition http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp

   c) California Gap Analysis Project (CGAP), California Gap Analysis Project Home Page; Community Types Mapped for the California Gap Analysis Project, 2009, http://www.biogeog.ucsb.edu/projects/gap/data/cnddb/list.html

   d) California Native Plant Society (CNPS), *Inventory of Rare and Endangered Plants of California* (6th ed.), Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor, California Native Plant Society, Sacramento, CA, 2001.

e) Sawyer, J. O., Keeler-Wolf, T., & Evens, J. M. *A Manual of California Vegetation* (2nd ed.), California Native Plant Society Press, Sacramento, California, 2009, U.S. Fish and Wildlife Service (USFWS). 2010. Species by County Report, Website located at: http://ecos.fws.gov/tess_public

3. Water Resources

a) A summary table of nationwide permits is available at http://www.usace.army.mil/CECW/Pages/nw_permits.aspx

b) California Environmental Protection Agency, California 303(d) Listed Impaired Waterbodies Database, 2006, Internet website located at: http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/303d_list.shtml

c) California Environmental Protection Agency, TMDL Database, 2006, Internet website located at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml

d) National Wetland Inventory (NWI), U.S. Fish and Wildlife Service Wetlands Mapper, 2010, Website located at: http://www.fws.gov/wetlands/index.html

4. Air Quality

a) Air Quality Management District (AQMD), *2008 Air Quality, South Coast Air Quality Management District*, 2008 Internet website located at: http://www.aqmd.gov/smog/historicaldata.htm

b) Bardini, G., Guillen, S., Pierotti, B., Rooks, H., & Sou, S. *Climate Change in California: Potential Consequences and Strategies to Cope and Adapt,* California Department of Water Resources Report, 2001

c) California Air Resources Board (CARB), *California Ambient Air Quality Standards (CAAQS),* 2010, Internet website located at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm

d) California Air Resources Board (CARB), *2006 State Area Designations,* 2006 Internet website located at: http://www.arb.ca.gov/desig/adm/adm.htm#state

e) Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Synthesis Report,* The Scientific Basis, 2007, Internet website located at: http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

f) National Weather Service, Available at http://www.nws,noaa.gov

g) U.S. Department of State, *U.S. Climate Action Report 2010,* 5th ed., Washington: Global Publishing Services, January 2010, Internet website located at: http://www.state.gov/documents/organization/140636.pdf

h) U.S. Environmental Protection Agency, Non-*Attainment Status for Each County by Year*, Internet website located at: http://www.epa.gov/oaqps001/greenbk/anayo_ca.html

i) U.S. Environmental Protection Agency, *National Ambient Air Quality Standards* (NAAQS), 2010 Internet website located at: http://www.epa.gov/air/criteria.html

j) USEPA, "Mandatory Reporting of Greenhouse Gases", EPA-HQ-OAR-2008-0508, 2009

k) USEPA, "Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act,"EPA-HQ-OAR-2009-0171, 2009

l) USEPA, *Climate Action Team Report to Governor Schwarzenegger and the California Legislature,* California Environmental Protection Agency, 2006 March 2006. Internet website located at: http://www.climatechange.ca.gov/climate_action_team/reports/#2009

m) USEPA, Mandatory Reporting of Greenhouse Gases, EPA-HQ-OAR-2008-0508, 2009

5. Hazardous Waste

a) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS): This is a nationwide database of sites identified by EPA as abandoned, inactive, or uncontrolled hazardous waste sites that may require cleanup.

b) National Priorities List (NPL): This is a database maintained by EPA under the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). Those CERCLIS sites that contain the greatest potential risk to human health and the environment become part of the NPL.

c) Resource Conservation and Recovery Information System (RCRIS): In this database, EPA maintains information on those sites across the Country that may generate, transport, store, treat, and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

d) Emergency Response Notification System (ERNS): This database is maintained by EPA that covers reported unauthorized releases of oil and hazardous substances.

e) ENVIROSTOR: The California Department of Toxic Substance Control (DTSC) manages information on this list of known hazardous waste sites that are present throughout California. This list is California's equivalent of EPA's CERCLIS. On this list, priority sites planned for cleanup; to be paid either by the State or by potentially responsible parties.

f) CERCLIS-NFRAP: This database tracks those sites where EPA has determined that no further action is needed. However, hazardous material may still be present but in a manageable form.

g) CAL FID UST: This system, maintained by the California Water Resources Control Board (CWRCB), keeps track of active and inactive underground storage tanks.

h) Leaking Underground Storage Tanks (LUST): Information is maintained at the (CWRCB) on reported leaking underground storage tank incidents. The information is typically collected quarterly by regional offices of the WRCB.

i) Solid Waste Information System (SWIS): The California Integrated Waste Management Board (IWMB) maintains a list of, and information on solid waste amenities and landfills in the State. Data maintained include location, type and age of landfill, if it is a permitted facility, and the status of its permit.

j) CAL Voluntary Cleanup Program (VCP): These are sites listed by DTSC that have confirmed or unconfirmed releases where a project proponent has requested the State to oversee investigation and/or cleanup activities at the proponent's expense.

k) National Pollutant Discharge Elimination System (NPDES): The California RWQCB maintains a list of all NPDES permits within the State, including storm water.

6. Environmental Justice

a) Council on Environmental Quality (CEQ), *Environmental Justice, Guidance under the National Environmental Policy Act*, 1997, Available at: http://www.epa.gov/environmentaljustice/resources

b) U.S. Census: http://www.census.gov

c) Local Chambers of Commerce

7. Americans with Disabilities and Vector Control
   a) http://www.ADA.gov
   b) http://www.access-board.gov/ABA
   c) http://www.access-board.gov/ada-aba/aba-standards-gsa

B. Local Points of Contact

1. Biological Resources
   a) USFWS—Carlsbad Office http://fws.gov/carlsbad (760) 431-9440
   b) USFWS—Ventura Office http://www.fws.gov/ventura (805) 644-1766
   c) NMFS—Long Beach http://www.nmfs.noaa/swr (562) 980-4000
2. Water Quality
   a) Los Angeles RWQCB
   b) Ventura RWQCB
   c) Santa Ana RWQCB
   d) San Bernardino RWCB
   e) Riverside RWQCB
3. Air Quality

   South Coast Air Quality Management District—http://www.aqmd.gov (909) 396-2000
4. Cultural Resources

   In the event of an emergency, the local authority should contact the State Historic Preservation Officer, or their representative for immediate guidance. This contact information should be in their guidance: Milford Wayne Donaldson, FAIA, LEED AP (916-445-7050), Department of Parks and Recreation, Office of Historic Preservation, 1416 9th Street, Sacramento, California, 95814
5. Vector Control
   a) Los Angeles County http://www.glavcd.org
   b) Los Angeles County http://www.lawestvcd
   c) Los Angeles County http://www.lacounty.gov/lac/VCD_ZIP
   d) Orange County http://www.ocvcd.org (714) 971-2421, (949) 654-2421
   e) Ventura County http://www.ventura.org/rma/envhealth

f) San Bernardino County
http://www.sbcounty.gov/main/services

g) West Nile Virus http://www.westnile.ca.gov/downloads

h) San Diego County
http://www.sdcounty.ca.gov/deh/pests/vector

i) San Diego County
http://www.sdcounty.ca.gov/deh/pests/habitat_remediation.html, (858) 694-2888

j) Riverside County http://www.rivcoeh.org/opencms/rivcoeh

k) City of Riverside http://www.riversideca.gov/pwork/vector-control

XXII. APPENDIX 6: NATURAL AND CULTURAL RESOURCES COMMON APPLICABLE FEDERAL LAWS AND EXECUTIVE ORDERS

A. National Environmental Policy Act

The overriding environmental policy/law of the Nation is the National Environmental Policy Act (NEPA). Signed into law by President Nixon in 1969, NEPA is the nation's primary charter for protection of the environment. The act also established the President's Council on Environmental Quality (CEQ) to advise the President in the preparation of an annual environmental quality report addressing the state of Federal agencies in implementing the act and other reports. The CEQ developed Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508).

NEPA requires the preparation of an environmental statement when a project implemented by a Federal agency, State or local government, or private entity would be funded by or through a Federal agency. This document may be an environmental assessment when there are no un-mitigatable impacts on resources or an environmental impact statement when impacts on resources are so significant they cannot be mitigated.

NEPA covers a vast array of Federal agency actions, but not all actions are necessarily covered under NEPA. The act does not apply to purely private or purely public State action, meaning that there is a complete absence of government influence or funding concerning that specific action. Exemptions and exclusions are also present within NEPA's guidelines and include specific Federal projects detailed in legislation, U.S. Environmental Protection Agency (EPA) exemptions, and functional equivalent exemptions. NEPA does not apply to the President, Congress, or the Federal courts.

From Sec. 1506.11 Emergencies: Where emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the Federal agency taking the action should consult with the Council about alternative arrangements. Agencies and the Council will limit such arrangements to actions necessary to control the immediate impacts of the emergency. Other actions remain subject to NEPA review.

B. Land Use

Land use covers a large range of resources and areas of potential impacts to the physical ground, including topography, geology and soils, faults and seismicity, liquefaction, mineral resources, land use, and farmland. It also includes the built/developed environment per county or city general plans.

1. Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) encourages the management of coastal zone areas and provides grants to be used

in maintaining coastal zone areas. CZMA requires that Federal agencies be consistent with the enforceable policies of State coastal zone management programs when conducting or supporting activities that affect a coastal zone CZMA-designated area includes islands, beaches, transitional and intertidal areas, and salt marshes and may extend several miles inland.

2. Coastal Barrier Resources Act

The purpose of the Coastal Barrier Resources Act (CBRA) is to protect ecologically sensitive coastal barriers. CBRA establishes the Coastal Barrier Resource System and, with certain exceptions, prohibits new Federal expenditures and financial development within the system. CBRA is administered by the U.S. Department of the Interior through the U.S. Fish and Wildlife Service (USFWS). CBRA-designated areas are located along the coastal areas and include islands, beaches, transitional and intertidal areas, and salt marshes.

3. Farmland Protection Policy Act

The purpose of this Act is to minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to non-agricultural uses and to assure that Federal programs are administered in a manner that will be compatible with State and local programs and policies protecting farmland

4. Federal Land Policy and Land Management Act of 1976 (43 USC 1701 et seq.)

This act regulates management of the public lands and their various resource values so that resources are used in a combination that will best meet the present and future needs of the American people.

5. Executive Order 11988, Floodplain Management

This executive order outlines the responsibilities of Federal agencies in the role of floodplain management. Federal agencies are required to evaluate the potential effects of actions on floodplains, and should avoid undertaking actions, which directly or indirectly induce growth in the floodplain or adversely affect natural floodplain values. Construction of structures and amenities in floodplains must consider alternative approaches that avoid adverse effects and incorporate flood proofing and other accepted flood risk management measures. This executive order requires Federal agencies to provide leadership and take action to avoid development in the base (100-year) floodplain unless it is the only practicable alternative; reduce the hazards and risk associated with floods; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values

of the base floodplain. Any new construction in a floodplain must comply with the executive order and must follow an 8-step process, including public notification, as identified in 44 CFR Part 9.

6. Alquist-Priolo Earthquake Fault Zoning Act

This act was passed in 1972 to identify hazard areas along active faults (fault zones) that should be avoided when planning areas of human occupancy. This California State law was chiefly influenced by the devastating impacts of the 1971 San Fernando Earthquake. The act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years.

7. The Seismic Hazards Act of 1990

The act requires the California Department of Conservation to identify and map the State's most prominent seismic hazards to help avoid damage resulting from earthquakes.

C. Water Resources

Water resources include rivers, streams, creeks, lakes, ponds, freshwater and tidal wetlands, bays, and oceans.

There are many Federal, State, and local guidelines and rules regarding protection of water resources. Applicants for Federal licenses and permits need to ensure that all consultation and permit requirements are met. This may be as simple as a phone call to a regulatory agency to determine needed permitting or a requirement to obtain and comply with several permits.

Common repair-to-existing-condition projects may be covered under a USACE Nationwide Permit and require less time to obtain permits from the Corps. Unique projects or projects with potential to adversely affect a natural or historic resource may require more time and intensive individual permits.

Obtaining permits is the responsibility of the applicant. Unless it is an emergency action (i.e., immediate threat to life or property), obtaining permits must be done prior to initiating any physical disturbance. If a project falls under a USACE Nationwide Permit, records of the permit number that goes with each project must be kept. Dredging or construction activities in or over any navigable waterway of the United States are regulated by the Corps under Section 10 of the Rivers and Harbors Act. Placement of any dredged or fill material in any waters of the United States, including coastal and inland wetlands, is regulated by the Corps under Section 404 of the Clean Water Act.

1. Clean Water Act (33 USC 1251 et seq.)

The Clean Water Act (CWA), as amended, authorizes water quality programs; requires certification from State water control agencies

that a proposed water resource project is in compliance with established effluent limitations and water quality standards (Section 401); establishes conditions and permitting for discharges of pollutants under the National Pollutant Discharge Elimination System (NPDES) (Section 402); and requires that any non-Corps entity acquire a permit from the Corps for any discharges of dredged materials into the waters of the United States, including wetlands (Section 404).

Section 401 of the CWA requires every applicant for a Federal license or permit that may result in a discharge into navigable waters to obtain a State Water Quality Certification or waiver that the proposed activity will comply with State water quality standards (i.e., beneficial uses, water quality objectives, and anti-degradation policy).

Section 402 of the CWA prohibits the discharge of pollutants into waters of the United States from any point source unless the discharge is in compliance with the NPDES Permit. Section 402 requires a NPDES Permit for the discharge of storm water from municipal storm sewer systems serving urban areas with a population greater than 100,000; construction sites that disturb 1 acre or more; and industrial facilities. The Regional Water Quality Control Board (RWQCB) administers these permits with oversight provided by the State Water Resources Control Board (SWRCB) and EPA, Region IX.

Section 404 of the CWA and Section 10 of the Rivers and Harbors Act applies to actions affecting waters of the United States. The U.S. Corps of Engineers administers both laws. Examples of actions requiring permits include construction, demolition, and any dredging or filling in any part of surface water tributaries, including small streams, lakes, ponds, stock tanks, construction and mining pits, and wetlands. Section 404 authorizes the Secretary of the Army acting through the Corps to issue permits for the discharge of dredged or fill materials into the waters of the United States, including wetlands at specified disposal sites. The selection and use of disposal sites must be in accordance with guidelines developed by the Administrator of the EPA in conjunction with the secretary of the Army and published in 40 CFR Part 230 (known as the 404(b)(1) guidelines). Under Section 404(b)(1) guidelines, the Corps shall examine practicable alternatives to the proposed discharge and only the least environmentally damaging practicable alternative should be recommended.

2. Rivers and Harbor Act of 1899

Section 9 of the River and Harbors Act prohibits the construction of any dam or dike across any navigable water of the United States in

the absence of Congressional consent and approval of the plans by the Chief of Engineers and the Secretary of the Army. Where the navigable portions of the water body lie wholly within limits of a single State, the structure may be built under authority of the legislature of the State if the location plans or any modification thereof are approved by the Chief of Engineers and by the Secretary of the Army. Section 9 also pertains to bridges and causeways with the authority of the Secretary of the Army and the Chief of Engineers with respect to bridges and causeways was transferred to the Secretary of Transportation under the Department of Transportation Act of October 1966

Section 10 of the Rivers and Harbors Act prohibits the unauthorized obstruction or alteration of any navigable waters of the United States. This section provides that the construction of any structure in or over any water of the United States or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful, unless the work has been recommended by the Chief Engineers and authorized by the Secretary of the Army. The Secretary's approval authority has since been delegated to the Chief of Engineers.

3. California Toxics Rule

The California Toxics Rule is within the Code of Federal Regulations (40 CFR 131.38) and was issued by the EPA to provide water quality criteria for potentially toxic constituents in receiving waters with human health or aquatic life designated uses in California. It includes criteria for 57 constituents based on human health and 23 constituents based on the health of aquatic life.

4. California Water Code/Porter-Cologne Water Quality Control Act

California’s primary statute governing water quality and water pollution issues is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) with numerous amendments and additions since initial adoption. The Act is contained in Section 13000 (“Division 7 Water Quality”) et seq. of the California Water Code.

The Porter-Cologne Act grants the California SWRCB and nine California RWQCBs broad powers to protect water quality and is the primary vehicle for implementation of California’s responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes

reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

5. Executive Order 11990, Protection of Wetlands

This Executive Order states that Federal agencies shall take action to minimize destruction and loss or degradation of wetlands to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies responsibilities. Each agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds that there is no practicable alternative to such construction and that the proposed action includes all practicable measures to minimize harm to wetlands, which may result from such use. Debris cannot be stored in a wetland, even temporarily. Federal agencies shall also provide opportunity for early public review of any plans or proposals for new construction in wetlands.

D. Biological Resources

Biological resources include the flora and fauna of an area. Of particular concern are areas that have species of concern such as those considered threatened or endangered. There are 72 identified endangered species of plants and animals in southern California, including such birds as the least Bell's vireo, the southwestern willow flycatcher, and the coastal California gnatcatcher. Endangered coastal bird species include the least tern and the snowy plover. Endangered fish include the Santa Ana sucker. The numerous endangered native plants include Nevin's barberry, the Santa Ana wooly-star, and the slender-horned spineflower. Often, the habitat area of a threatened or endangered species may also be identified as critical habitat, which falls under a similar protection as an endangered species.

1. U.S. Fish and Wildlife Coordination Act (16 U.S.C. 661)

This Act requires Federal agencies to coordinate with USFWS and State and local agencies when any stream or body of water is proposed to be modified. The intent is to give fish and wildlife conservation equal consideration with other purposes of water resources development projects.

2. Endangered Species Act

The Endangered Species Act (ESA) protects threatened and endangered species and their designated critical habitat from unauthorized take. Section 9 of the Act prohibits such take, and defines take as to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in such conduct. Section 7 of the ESA requires Federal agencies to insure that any action authorized, funded or carried out by them is not likely to

jeopardize the continued existence of listed species or modify their critical habitat. Consultation with the USFWS or National Marine Fisheries Service (NMFS) is required if the Federal action may affect a federally listed species or designated critical habitat. NMFS and USFWS share responsibility as lead agencies in accordance with the ESA. Consultation with one or both agencies may be required if the project may affect species or critical habitat.

3. Magnusson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act established measures to protect marine and estuarine Essential Fish Habitat (EFH). EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Federal agencies are required to consult with the National Oceanic and Atmospheric Administration/NMFS to coordinate projects that may adversely affect EFH

4. Marine Mammal Protection Act

The Act establishes a moratorium on the taking and importation of marine mammals and marine mammal products, with exceptions for scientific research and allowable incidental taking and exemptions for subsistence activities by Alaskan natives and hardship (16 U.S.C. 1371)

E. Air Quality

Air quality covers a broad range of concerns from air pollution standards to climate change and greenhouse gas emissions. Various Federal, State, and local laws may apply.

1. Clean Air Act of 1970 (42 U.S.C. 7401 et seq.)

a) The 1977 Amendments to the Clean Air Act enacted legislation to control seven toxic air pollutants. The EPA adopted National Emission Standards for Hazardous Air Pollutants, which has been designed to control hazardous air pollutants' emissions to prevent adverse health effects in humans.

b) The 1990 Amendments to the Clean Air Act determine the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) (Title I), motor vehicles and reformulation (Title II), hazardous air pollutant (Title III), acid deposition (Title IV), operating permits (Titles V), stratospheric ozone protection (Title VI), and enforcement (Title VII).

c) Under Section 176(c) of the Clean Air Act Amendments (CAAA) of 1990, the Lead Agency is required to make a determination of whether the Proposed Action conforms to

the State Implementation Plan (SIP). Conformity is defined in Section 176(c) of the CAAA as compliance with the SIPs purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. However, if the total direct and indirect emissions from the Proposed Action are below the General Conformity Rule *de minimis* emission thresholds, the Proposed Action would be exempt from performing a comprehensive Air Quality Conformity Analysis and would be considered to be in conformity with the SIP.

2. Executive Order 12088, Federal Compliance with Pollution Control Standards,

   The Act requires all Federal agencies to ensure that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to Federal amenities and activities under control of the agency.

F. Climate Change

Climate change is a change in the average climatic conditions of the earth, characterized by changes in wind patterns, storms, precipitation, and temperature. The baseline by which these changes are measured originates in historic records identifying temperature changes that have occurred in the past, such as during previous ice ages. Many of the recent concerns over global climate change use this data to extrapolate a level of statistical significance, focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

International and Federal Regulations and Directives

In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess "the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation."

In November 2007 and August 2008, the Ninth Circuit U.S. Court of Appeals ruled that a NEPA document must contain a detailed greenhouse gas (GHG) analysis. (*Center for Biological Diversity v. National Highway Safety Administration* 508 F. 3d 508 [2007] was vacated and replaced by *Center for Biological Diversity v. National Highway Safety Administration* 2008 DJDAR 12954 [August 18, 2008]). Despite the Supreme Court and circuit court rulings, to date there are no promulgated Federal regulations limiting GHG emissions.

G. Noise

Noise can be defined as unwanted sound or combination of sounds that may interfere with conversation, work, rest, recreation, and sleep or in the extreme may produce physiological or psychological damage. Sound travels from a source in the form of wave, which exerts a pressure on a receptor such as a human ear. The amount of pressure a sound wave exerts is referred to as sound level, commonly measured in decibels (dB). As a reference, a sound level of 0 dB corresponds roughly to the threshold of human hearing, and a sound level in the range of 120 to 140 dB can produce human pain.

Noise can be one of the most widespread environmental pollutants affecting communities. Community noise or environmental noise in any given area varies continuously over a period of time depending on the contributing sound sources within and surrounding the area.

1. Federal Standards

There are no Federal noise standards that directly regulate environmental noise from construction. However, the EPA has developed guidelines on recommended maximum noise levels to protect public health and welfare (EPA, 1974). With regard to noise exposure and workers, the Occupational Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise.

2. Noise Control Act of 1972, as amended (42 USC 4901 et seq.)

The Act establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. Noise generated by any activity that may affect human health or welfare on Federal, State, county, local, or private lands must comply with noise limits specified in the Noise Control Act.

3. State Standards

Noise is defined by the California Noise Control Act of 1973 as “excessive undesirable sound, including that produced by persons, pets and livestock, industrial equipment, construction, motor vehicles, boats, aircraft, home appliances, electric motors, combustion engines, and any other noise-producing objects”(California Noise Control Act of 1973). The California Office of Safety and Health Administration (Cal/OSHA) also regulates employee noise exposure, as mandated by Title 8 of the California Code of Regulations, Group 15, Article 105 §§ 5095-5100. Cal/OSHA stipulates the same requirements as Federal OSHA (above). In addition, a Hearing Conservation Program must be instituted when employees are exposed to noise levels of an 8-hour time weighted average at or greater than 85 dBA. California

Government Code (§65030 et seq.) requires each local government entity to implement a noise element as part of their general plan.

H. Cultural Resources

Cultural resources include buildings, monuments, bridges, dams, archeological sites, and other identified resources (paintings, art, and sculptures).

1. National Historic Preservation Act (16 U.S.C. 460b, 470l-470n)

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take responsibility for the impact of their decisions on historic resources. Under § 106, Federal agencies are prohibited from approving any Federal undertaking (including the issuance of any license, permit, or approval) without taking into account the effects of the undertaking on the historic property and affording the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. The NHPA forces an agency to stop and consider the consequences of its undertakings on any historic property, and assures that the agency does so by requiring it to receive comment from the ACHP or agencies acting in its stead and from the public before proceeding with any such undertaking. To comply with the NHPA, a Federal agency considering an undertaking must go through the process outlined in the ACHP's regulations at 36 CFR Part 800.

2. Archeological Resources Protection Act, as amended

The Act requires the preservation of historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed when working on Federal lands or a Federal action.

3. Emergency Operations Guidance from 36 CFR 800

a) § 800.12 Emergency situations.

(1) *Agency procedures.* The agency official—in consultation with the appropriate State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) for affected Indian Tribes and Native Hawaiian organizations and the Council—is encouraged to develop procedures for taking historic properties into account during operations which respond to a disaster or emergency declared by the President, a Tribal government, or the Governor of a State or which respond to other immediate threats to life or property. If approved by the Council, the procedures shall govern the agency's

historic preservation responsibilities during any disaster or emergency in lieu of §§800.3 through 800.6.

(2) *Alternatives to agency procedures.* In the event an agency official proposes an emergency undertaking as an essential and immediate response to a disaster or emergency declared by the President, a Tribal government, or the Governor of a State or another immediate threat to life or property, and the agency has not developed procedures pursuant to paragraph (a) of this section, the agency official may comply with section 106 by:

(a) Following a programmatic agreement developed pursuant to §800.14(b) that contains specific provisions for dealing with historic properties in emergency situations; or

(b) Notifying the Council, the appropriate SHPO/THPO and any Indian Tribe or Native Hawaiian organization that may attach religious and cultural significance to historic properties likely to be affected prior to the undertaking and affording them an opportunity to comment within seven days of notification. If the agency official determines that circumstances do not permit seven days for comment, the agency official shall notify the Council, the SHPO/THPO and the Indian Tribe or Native Hawaiian organization and invite any comments within the time available.

(c) *Local governments responsible for section 106 compliance.* When a local government official serves as the agency official for section 106 compliance, paragraphs (a) and (b) of this section also apply to an imminent threat to public health or safety as a result of a natural disaster or emergency declared by a local government's chief executive officer or legislative body, provided that if the Council or SHPO/THPO objects to the proposed action within seven days, the agency official shall comply with §§800.3 through 800.6.

(d) *Applicability.* This section applies only to undertakings that will be implemented within 30 days after the disaster or emergency has been

formally declared by the appropriate authority. An agency may request an extension of the period of applicability from the Council prior to the expiration of the 30 days. Immediate rescue and salvage operations conducted to preserve life or property are exempt from the provisions of section 106 and this part.

b) Federal and State Terms

(1) The term "cultural resource" means any tangible or observable evidence of past human activity, *regardless of significance*, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values. Once a cultural resource is evaluated, if it is found to be significant, it is then called a historic property under Section 106, or a historical resource under CEQA, depending on whether Federal and/or State regulations apply. Using the definitions contained in the National Register of Historic Places (National Register) and California Register of Historical Resources (California Register) criteria, which are quite similar, can further refine the definition of "cultural resource."

c) National Register Definition of Resource Types

(1) The National Register and California Register criteria for evaluation use the same categories for types of cultural resources: building, structure, object, site and district. The following definitions have been excerpted from National Register Bulletin 15: *How to Apply the National Register Criteria for Evaluation:*

(2) Building: "A building, such as a house, barn, or similar construction, is created principally to shelter any form of human activity. ' Building' may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn." (Examples: houses, stables, garages, city halls, commercial buildings, factories, hotels, mills, and train depots).

(3) Structure: "The term 'structure' is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter." (Examples: bridges, tunnels, gold dredges, fire lookout towers, canals, ditches, dams, power plants, silos, systems of roadways and paths, kilns, earthworks, and bandstands).

(4) Object: "The term 'object' is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment." (Examples: sculpture, statuary, monuments, boundary markers, and fountains).

(5) Site: "A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure." (Examples: habitation sites, rock shelters, cemeteries, gardens, battlefields, ruins of historic buildings and structures, mining sites, shipwrecks, locations of treaty signings, trails, designed landscapes, and land areas having traditional cultural significance).

(6) District: "A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." (Examples: college campuses, central business districts, large forts, industrial complexes, rural villages, canal systems, large farms, ranches, estates or plantations, transportation networks, large landscaped parks, and collections of habitation and limited activity sites).

I. Hazardous and Toxic Waste

1. Comprehensive Environmental Response, Compensation and Liability Act (42 U. S. C. 9601 et seq.)

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and cleanup of inactive hazardous substance disposal sites. Contaminated dredged material and sediments beneath navigable waters proposed for dredging may qualify as a hazardous substance, unless materials are designed designated as part of a Federal permitted release.

2. Superfund Amendments and Reauthorization Act of 1986 (SARA*)*

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III and Clean Air Act of 1990 established a nationwide

emergency planning and response program and imposed reporting requirements for businesses which store, handle, or produce significant quantities of extremely hazardous materials. The Act (codified in 40 C.F.R., §68.110 et seq.) requires States to implement a comprehensive system to inform local agencies and the public when a significant quantity of such material is stored or handled at a facility. The requirements of these Acts are reflected in the California Health and Safety Code, Section 25531, et seq.

3. Uniform Fire Code

The Uniform Fire Code (UFC) contains provisions regarding the storage and handling of hazardous materials. These provisions are contained in Articles 79 and 80. The latest revision to Article 80 was in 1997 (UFC 1997). These articles contain minimum setback requirements for storage of materials.

4. Resource Conservation and Recovery Act

This Act governs the disposal of solid waste. It establishes Federal standards and requirements for State and regional solid waste authorities and to assist in the development and encourage methods for the disposal of solid waste which are environmentally sound and which maximize the use of valuable resources recovered from solid waste.

J. Environmental Justice

Executive Order 12898, Environmental Justice in Minority Populations and Low-Income Populations

This Executive Order requires Federal agencies to identify and address disproportionately high and adverse impacts of Federal Actions, including Federal licensed actions, programs, policies, or activities, on minority or low-income populations in the United States.

K. Public Health and Safety

1. Americans with Disabilities Act of 1990 as amended, (42 U.S.C. 126 et seq.)

The Act prohibits public entities, defined as any State or local government, or division thereof, from excluding any individual with a disability from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity. A "qualified individual with a disability" is an individual with a disability who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential

eligibility requirements for the receipt of services or the participation in programs or activities provided by a public entity.

2. Architectural Barriers Act of 1968, as amended 42 U.S.C. §§ 4151 et seq.

   Passed by Congress in 1968, the Architectural Barriers Act (ABA) marks one of the first efforts to ensure access to the built environment. An Access Board develops and maintains accessibility guidelines under this law. These guidelines serve as the basis for the standards used to enforce the law. The ABA requires access to facilities designed, built, altered, or leased with Federal funds. Federal agencies are responsible for ensuring compliance with the ABA standards. Four Federal agencies are responsible for these standards: the U.S. Department of Defense, the U.S. Department of Housing and Urban Development, the U.S. General Services Administration, and the U.S. Postal Service.

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XXIII. APPENDIX 7: NATIONAL ENVIRONMENTAL POLICY ACT TERMINOLOGY AND OVERVIEW

PART 1508—TERMINOLOGY AND INDEX

1. Sec. 1508.1 Terminology

   The terminology of this part shall be uniform throughout the Federal Government.

2. Sec. 1508.2 Act

   "Act" means the National Environmental Policy Act, as amended (42 U.S.C. 4321, et seq.) which is also referred to as "NEPA."

3. Sec. 1508.3 Affecting

   "Affecting" means will or may have an effect on.

4. Sec. 1508.4 Categorical exclusion

   "Categorical exclusion" means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (Sec. 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in Sec. 1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.

5. Sec. 1508.5 Cooperating agency

   "Cooperating agency" means any Federal agency other than a lead agency, which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. The selection and responsibilities of a cooperating agency are described in Sec. 1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

6. Sec. 1508.6 Council

   "Council" means the Council on Environmental Quality established by Title II of the Act.

7. Sec. 1508.7 Cumulative impact

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

8. Sec. 1508.8 Effects

"Effects" include:

a) (a) Direct effects, which are caused by the action and occur at the same time and place.

b) (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

9. Sec. 1508.9 Environmental assessment

"Environmental assessment":

a) Means a concise public document for which a Federal agency is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid an agency's compliance with the Act when no environmental impact statement is necessary.

(3) Facilitate preparation of a statement when one is necessary.

b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

10. Sec. 1508.10 Environmental document

    "Environmental document" includes the documents specified in Sec. 1508.9 (environmental assessment), Sec. 1508.11 (environmental impact statement), Sec. 1508.13 (finding of no significant impact), and Sec. 1508.22 (notice of intent).

11. Sec. 1508.11 Environmental impact statement

    "Environmental impact statement" means a detailed written statement as required by section 102(2)(C) of the Act.

12. Sec. 1508.12 Federal agency

    "Federal agency" means all agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office. It also includes for purposes of these regulations States and units of general local government and Indian Tribes assuming NEPA responsibilities under section 104(h) of the Housing and Community Development Act of 1974.

13. Sec. 1508.13 Finding of no significant impact

    "Finding of no significant impact" means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (Sec. 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (Sec. 1501.7(a)(5). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.

14. Sec. 1508.14 Human environment

    "Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (Sec. 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

15. Sec. 1508.15 Jurisdiction by law

    "Jurisdiction by law" means agency authority to approve, veto, or finance all or part of the proposal.

16. Sec. 1508.16 Lead agency

"Lead agency" means the agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

17. Sec. 1508.17 Legislation

"Legislation" includes a bill or legislative proposal to Congress developed by or with the significant cooperation and support of a Federal agency, but does not include requests for appropriations. The test for significant cooperation is whether the proposal is in fact predominantly that of the agency rather than another source. Drafting does not by itself constitute significant cooperation. Proposals for legislation include requests for ratification of treaties. Only the agency which has primary responsibility for the subject matter involved will prepare a legislative environmental impact statement.

18. Sec. 1508.18 Major Federal action

"Major Federal action" includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly (Sec. 1508.27). Actions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act or other applicable law as agency action.

a) Actions include new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals (Secs. 1506.8, 1508.17). Actions do not include funding assistance solely in the form of general revenue sharing funds, distributed under the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221 et seq., with no Federal agency control over the subsequent use of such funds. Actions do not include bringing judicial or administrative civil or criminal enforcement actions.

b) Federal actions tend to fall within one of the following categories:

(1) Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 et seq.; treaties and international conventions or agreements; formal documents establishing an agency's policies

which will result in or substantially alter agency programs

(2) Adoption of formal plans, such as official documents prepared or approved by Federal agencies which guide or prescribe alternative uses of Federal resources, upon which future agency actions will be based

(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive

(4) Approval of specific projects, such as construction or management activities located in a defined geographic area; projects include actions approved by permit or other regulatory decision as well as Federal and federally assisted activities

19. Sec. 1508.19 Matter

"Matter" includes for purposes of Part 1504: (a) With respect to the Environmental Protection Agency, any proposed legislation, project, action or regulation as those terms are used in section 309(a) of the Clean Air Act (42 U.S.C. 7609). (b) With respect to all other agencies, any proposed major Federal action to which section 102(2)(C) of NEPA applies.

20. Sec. 1508.20 Mitigation

"Mitigation" includes:

a) Avoiding the impact altogether by not taking a certain action or parts of an action

b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation

c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment

d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action

e) Compensating for the impact by replacing or providing substitute resources or environments

21. Sec. 1508.21 NEPA process

"NEPA process" means all measures necessary for compliance with the requirements of section 2 and Title I of NEPA.

22. Sec. 1508.22 Notice of intent

"Notice of intent" means a notice that an environmental impact statement will be prepared and considered. The notice shall briefly:

a) Describe the proposed action and possible alternatives

b) Describe the agency's proposed scoping process including whether, when, and where any scoping meeting will be held

c) State the name and address of a person within the agency who can answer questions about the proposed action and the environmental impact statement

23. Sec. 1508.23 Proposal

"Proposal" exists at that stage in the development of an action when an agency subject to the Act has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated. Preparation of an environmental impact statement on a proposal should be timed (Sec. 1502.5) so that the final statement may be completed in time for the statement to be included in any recommendation or report on the proposal. A proposal may exist in fact as well as by agency declaration that one exists.

24. Sec. 1508.24 Referring agency

"Referring agency" means the Federal agency which has referred any matter to the Council after a determination that the matter is unsatisfactory from the standpoint of public health or welfare or environmental quality.

25. Sec. 1508.25 Scope

Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (Secs.1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

a) Actions (other than unconnected single actions) which may be:

(1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

(a) Automatically trigger other actions which may require environmental impact statements

(b) Cannot or will not proceed unless other actions are taken previously or simultaneously

(c) Are interdependent parts of a larger action and depend on the larger action for their justification

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography (an agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement)

b) Alternatives, which include:

(1) No action alternative

(2) Other reasonable courses of actions

(3) Mitigation measures (not in the proposed action)

c) Impacts, which may be direct, indirect, or cumulative

26. Sec. 1508.26 Special expertise

"Special expertise" means statutory responsibility, agency mission, or related program experience.

27. Sec. 1508.27 Significantly

"Significantly" as used in NEPA requires considerations of both context and intensity:

a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse (a significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial)

(2) The degree to which the proposed action affects public health or safety

(3) Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts (significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment; significance cannot be avoided by terming an action temporary or by breaking it down into small component parts)

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment (43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979)

28. Sec. 1508.28 Tiering

"Tiering" refers to the coverage of general matters in broader environmental impact statements (such as national program or

policy statements) with subsequent narrower statements or environmental analyses (such as regional or basin-wide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site- specific statement or analysis

b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe

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XXIV. APPENDIX 8: FEDERAL RECOVERY PROGRAMS

Please refer to FEMA publication 229, *Disaster Assistance—A Guide to Recovery Programs* (2005) for further details and descriptions concerning the programs listed below. Further information may also be found at the websites of the responsible agencies. Program availability will need to be verified with the responsible agency.

A. Disaster-Specific Recovery Programs

1. Beach Erosion Control Projects—U.S. Department of Defense (DOD)/U.S. Army Corps of Engineers (USACE)
2. Community Development Block Grants/Entitlement Grants—U.S. Department of Housing and Urban Development (HUD)/Community Planning and Development (CPD)
3. Community Development Block Grants/States Program—HUD/CPD
4. Community Disaster Loan Program—U.S. Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA)
5. Crisis Counseling Assistance and Training Program (CCP)—DHS/FEMA/U.S. Department of Health and Human Services (DHHS)/Center for Mental Health Services/Substance Abuse and Mental Health Services Administration (SAMHSA)
6. Disaster Assistance: Cora C. Brown Fund—DHS/FEMA
7. Disaster Assistance for Older Americans—DHHS/Administration on Aging
8. Disaster Assistance: American Red Cross Disaster Services Program—American Red Cross
9. Disaster Coordination: Voluntary Organizations—National Voluntary Organizations Active in Disaster
10. Disaster Legal Services—FEMA and Young Lawyers' Division of the American Bar Association
11. Economic Adjustment Assistance Program—U.S. Department of Commerce (DOC)/Economic Development Administration
12. Economic Injury Disaster Loans—Small Business Administration (SBA)
13. Employment: Disaster Unemployment Assistance Program—U.S. Department of Labor (DOL)/DHS/FEMA
14. Employment: Workforce Investment Act, Title I, National Emergency Grants—DOL/Employment and Training Administration (ETA)

15. Farming Operations: Emergency Loans—U.S. Department of Agriculture (USDA)/Farm Service Agency (FSA)
16. Finance: Regulatory Relief for Federally Insured Financial Institutions—Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, National Credit Union Administration, Office of the Comptroller of the Currency, Office of Thrift Supervision
17. Fire Management Assistance Grant Program—DHS/FEMA
18. Flood: Post-Flood Response—DOD/USACE
19. Flood: Rehabilitation of Flood Control Works or Federally Authorized Hurricane and Shore Protection Works—DOD/USACE
20. Housing: HOME Investment Partnerships Program—HUD/CPD
21. Housing: Individuals and Households Program—DHS/FEMA
22. Housing: Mortgage Insurance for Disaster Victims—HUD/Federal Housing Administration (FHA)
23. Loans: Physical Disaster Loans (Business)—SBA
24. Loans: Physical Disaster Loans (Individual)—SBA
25. Mental Health Disaster Assistance—DHHS/Public Health Service (PHS)/SAMHSA
26. Mitigation: Hazard Mitigation Grant Program (HMGP)—DHS/FEMA Public Assistance Program—DHS/FEMA
27. Savings Bond Replacement or Redemption—U.S. Department of the Treasury/Bureau of the Public Debt
28. Tax Refund: Alcohol and Tobacco—U.S. Department of the Treasury/Bureau of Alcohol, Tobacco, and Firearms
29. Taxes: Disaster Assistance Program—U.S. Department of the Treasury/Internal Revenue Service
30. Transportation: Emergency Relief Program—U.S. Department of Transportation (DOT)/Federal Highway Administration
31. Water: Emergency Community Water Assistance Grants—USDA/Rural Utilities Service (RUS)
32. Watercourse Navigation: Protection, Clearing and Straightening Channels—DOD/USACE
33. Watersheds: Emergency Watershed Protection Program—USDA/Natural Resources Conservation Service (NRCS)

B. Disaster-Applicable Recovery Programs

1. Animals: Emergency Haying and Grazing—USDA/FSA

2. Business and Industrial Loans—USDA/Rural Business-Cooperative Service (RBS)
3. Coastal Zone Management Administration Awards—DOC/National Oceanic and Atmospheric Administration (NOAA)
4. Community Development Block Grants/Section 108 Loan Guarantee Program—HUD/CPD
5. Community Relations Service (CRS)—U.S. Department of Justice/CRS
6. Community Services Block Grant—DHHS/Administration for Children and Families (ACF)/Office of Community Services
7. Community Services Block Grant Discretionary Awards—DHHS/ACF/Office of Community Services
8. Conservation: Cooperative Endangered Species Conservation Fund—Department of the Interior (DOI)/U.S. Fish and Wildlife Service (USFWS)
9. Conservation: Emergency Conservation Program—USDA/FSA
10. Conservation: Habitat Conservation—DOC/NOAA/National Marine Fisheries Service (NMFS)
11. Conservation: National Coastal Wetlands Conservation Grant Program—DOI/FWS
12. Conservation: Resource Conservation and Development—USDA/NRCS
13. Conservation Technical Assistance—USDA/NRCS
14. Conservation: Wetland Reserve Program—USDA/NRCS
15. Conservation: Wildlife Restoration—DOI/FWS
16. DAMS: National Dam Safety Program—DHS/FEMA
17. Earthquake Hazards Reduction Program—DOI/U.S. Geological Survey
18. Earth System Observations—National Aeronautics and Space Administration (NASA)/Science Mission Directorate (SMD)
19. Education: Extension Service Post-Crisis Education and Assistance—USDA/Cooperative State Research Education and Extension Service
20. Employment: Unemployment Insurance—DOL/ETA
21. Environmental Quality Incentives Program—USDA/NRCS
22. Family Assistance—DHHS/ACF/Office of Family Assistance
23. Farm Operating Loans—USDA/FSA

24. Farm Ownership Loans—USDA/FSA
25. Farming (Insurance): Federal Crop Insurance Program—USDA/Risk Management Agency
26. Farming (Insurance): Non-Insured Crop Disaster Assistance Program—USDA/FSA
27. Farming (Loans): Intermediary Re-lending Program—USDA/RBS
28. Flood: Automated Flood Warning System (AFWS)—DOC/NOAA/National Weather Service
29. Flood: Emergency Advance Measures for Flood Prevention—DOD/USACE
30. Flood Insurance: Community Assistance Program, State Support Services Element—DHS/FEMA
31. Flood Mitigation Assistance Program—DHS/FEMA
32. Flood: National Flood Insurance Program—DHS/FEMA
33. Food Distribution—USDA/Food and Nutrition Service (FNS)
34. Food Stamps—USDA/FNS
35. Hazardous Materials: State Access to the Oil Spill Liability Trust Fund—DHS/U.S. Coast Guard
36. Hazardous Waste Worker Health and Safety Training—DHHS/PHS/National Institute of Environmental Health Services
37. Health: Disease Control and Prevention—DHHS/PHS/Centers for Disease Control and Prevention
38. Health Program for Toxic Substances and Disease Registry—DHHS/PHS/Agency for Toxic Substances and Disease Registry
39. Historic Preservation Fund Grants-in-Aid—DOI/National Park Service (NPS)
40. Historic Preservation: National Register of Historic Places—DOI/NPS
41. Housing: Choice Program—HUD/Office of Public and Indian Housing
42. Housing: Direct Loans for Disabled Veterans—U.S. Department of Veterans Affairs (DVA)/Veterans Benefits Administration
43. Housing: Indian Housing Assistance—DOI/Bureau of Indian Affairs
44. Housing: Rural Housing Service Section 502 Direct and Guaranteed Loan Program—USDA/Rural Development/Rural Housing Service (RHS)

45. Housing: Rural Housing Service Section 504 Repair Grants and Loans—USDA/Rural Development/RHS
46. Parks: Land and Water Fund Grants—DOI/NPS
47. Parks: Urban Park and Recreation Recovery Program—DOI/NPS
48. Pre-Disaster Mitigation Program Competitive Grants—FEMA/DHS
49. Snow Survey and Water Supply Forecasts—USDA/NRCS
50. Social Security Assistance—Social Security Administration
51. Soil Survey—USDA/NRCS
52. Surplus Property: Disposal of Federal Surplus Real Property—General Services Administration (GSA)/Federal Supply Service (FSS)
53. Surplus Property: Donation of Federal Surplus Personal Property—GSA/FSS
54. Surplus Property: Use of Surplus Property for Public Health and Homeless Purpose—DHHS/Program Support Center
55. Veterans Medical Care: Grants to States for Construction of State Home Facilities—DVA/Veterans Health Administration
56. Water and Waste Disposal Loans and Grants—USDA/RUS
57. Water Pollution Control—Environmental Protection Agency/Office of Water
58. Watershed Operations: Small Watershed Program, Flood Prevention Program—USDA/NRCS
59. Watershed Surveys and Planning—USDA/NRCS

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XXV. APPENDIX 9: STATE RECOVERY PROGRAMS

A. The California Disaster Assistance Act

The California Disaster Assistance Act (CDAA) authorizes the State to provide financial assistance for costs incurred by local governments as a result of a disaster. Such assistance is provided through the California Office of Emergency Services (Cal OES) and may be implemented when local resources are exceeded but the President does not declare an emergency or major disaster under the Stafford Act. There are two levels of assistance through CDAA:

1. State of emergency: When the Governor proclaims a State of emergency, both emergency and permanent work is eligible for assistance. There is generally a 75–25 percent cost share between State and local governments.
2. Local emergency proclamation and Cal OES Secretary's Concurrence: The Cal OES Secretary may concur with a local government request for State assistance independent of a Governor's Proclamation of a State of emergency. A Secretary's Concurrence is limited to eligible permanent repair work. There is generally a 75–25 percent cost share between State and local governments.

In general, the State's share under CDAA is no more than 75 percent of the non-Federal share or 18.75 percent of total eligible costs. However, State funding up to 100 percent of the non-federal share has been authorized for specific events by special legislation.

Eligible costs under CDAA include:

1. Overtime and associated wage additive costs for emergency response personnel
2. Actual travel and per diem
3. Supplies, materials, and equipment
4. Repair, permanent restoration, and replacement costs for public facilities
5. Cost of basic engineering services when necessary for construction projects
6. Indirect and administrative costs (10% of total approved State share)
7. Costs for work performed under interagency assistance agreements for which an eligible applicant is legally obligated to pay
8. Local cost share required under Federal public assistance programs

In addition, when the Cal OES Secretary determines there are mitigation measures that are cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering in an area where a state of emergency has been proclaimed by the Governor, the Secretary may authorize the implementation of mitigation measures.

1. Application Process

   If State and/or Federal disaster assistance are available, Cal OES and the local emergency management agency will conduct a meeting to inform prospective applicants of available assistance and eligibility requirements. The meeting is held as soon as practical following the emergency or disaster declaration. During the briefing, the local emergency management agency/Cal OES will present the incident period and a description of the declared event. Applicant work, cost eligibility and the project formulation process will be reviewed. Cal OES and the local emergency management agency will also discuss funding options, record keeping, and documentation requirements. The application packages submitted by applicants may be routed through the local emergency management agency or directly to Cal OES. Cal OES administers the financial assistance provided through CDAA and the Federal Emergency Management Agency (FEMA).

   Depending on the nature of the disaster, special Federal funds may be appropriated for emergency response and recovery outside of the Stafford Act.

2. Application Forms

   If recovery funds are available, eligible applicants must complete specific forms to apply for assistance. The local emergency management agency cooperates with Cal OES to facilitate the process at the local government level to access funding provided through CDAA and FEMA Public Assistance grants. The forms listed below are examples of forms used by Cal OES; see www.calema.ca.gov for updated information following an emergency. Since the amount of funding, source(s) of funding, and application process may change depending on the disaster, local officials should check with Cal OES for the latest information relevant to a particular disaster and opportunities to recover eligible disaster-related costs.

   a) Cal EMA Form 126 – Project Application. This is the initial form used to apply for public assistance under the California Disaster Assistance Act. This form must be submitted to Cal OES within 60 days after the date of a local declaration. The Cal OES Secretary may extend this deadline for unusual or extraordinary circumstances.

b) Cal EMA Form 130—Designation of Applicant's Agency Resolution. This form is used to file a resolution designating an applicant's authorized representative to whom all official correspondence and funding will be directed. Funding will not be provided until this form has been approved by Cal OES.

c) Cal EMA Form 95—List of Projects. This form is used when filing an application for assistance. This form lists the applicant's projects for which financial assistance is being requested and should be filed with Cal EMA Form 126.

d) Cal EMA Form 89—Project Application for Federal Assistance. This form is used to apply for Federal assistance as a result of a federally declared disaster.

e) Cal EMA Form 131—Large Project Reimbursement Request/Federal Public Assistance Program. This form is used to apply for reimbursement from the Federal account in federally declared disasters.

f) Request for Public Assistance (RPA)—This is FEMA's official application form that public and private nonprofit organizations must use to apply for disaster assistance under the Federal Public Assistance Program. The RPA must be submitted to the State Public Assistance Officer at Cal OES within 30 days of the date of the designation of an area by the President, unless the deadline has been extended by FEMA.

Effective January 1, 2009, any entity requesting funding through a Federal grant must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number.

For more information, including current forms, consult the Cal OES web site, www.calema.ca.gov.

B. Reimbursement for Provision of Mutual Aid and Assistance

California's emergency management system is based on a statewide mutual aid system designed to ensure that additional resources are provided to the State's political subdivisions whenever their own resources are overwhelmed or inadequate. The California Disaster and Civil Defense Master Mutual Aid Agreement obligates each signatory entity to provide aid during an emergency without expectation of reimbursement, although no party is required to unreasonably deplete its own resources, facilities and/or services in furnishing mutual aid. Under specific conditions, Federal and State monies may be appropriated to reimburse public agencies that assist other jurisdictions. If other agreements, memoranda and contracts are used to provide assistance for consideration, the terms of those

documents may affect disaster assistance eligibility and local entities may only be reimbursed if funds are available.

C. State Private Nonprofit Organizations Assistance Program[197]

Recent State legislation created the State Private Nonprofit Organizations Assistance Program, which allows certain eligible private nonprofits (PNPs) or an intermediary PNP applicant to receive State assistance for costs incurred during a State disaster event. Cal OES acts as the grantor for the program.

After a State disaster has been declared, an eligible PNP applicant may apply for reimbursement for the cost of performing an essential community service. To apply, an eligible PNP must submit a PNP Application (Cal EMA PNP-2011-APP) and a PNP Applicant's Authorized Agent Resolution (Cal EMA PNP-2011- AAR) to Cal OES, within 60 days after the date of a Governor's Proclamation. The applicant must incur a minimum aggregate total damage cost of $1,000 for each declared disaster for costs to be eligible under this program.

D. Technical Assistance Programs[198]

Technical Assistance Programs (TAPs) work on issues that require a degree of technical expertise that may not be available within other discipline areas. TAP provides these services internally within Cal OES, and externally (other State agencies, local government, and the private sector when appropriate). TAP can provide expertise related to the items listed below.

E. Safety Assessment Program[199]

The Safety Assessment Program (SAP) uses volunteers and mutual aid resources to provide professional engineers and architects and certified building inspectors to assist local governments in safety evaluation of their built environment in an aftermath of a disaster. The program is managed by Cal OES with cooperation from professional organizations. SAP produces two resources, SAP Evaluators, described above, and SAP Coordinators, which are local government representatives that coordinate the program. Cal OES issues registration identification cards to all SAP Evaluators that have successfully completed the program requirements. Training for this program is now eligible for Homeland Security Grant Program funding.

[197] For more information: California Emergency Management Agency. (2011). *State Private Nonprofit (PNP) Organizations Assistance Program*. Sacramento, CA. http://www.calema.ca.gov/Recovery/Pages/State-Private-Nonprofit-(PNP)-Organizations-Assistance-Program-.aspx. Accessed on July 12, 2012.
[198] For more information: California Emergency Management Agency. (2011). *Technical assistance*. http://www.calema.ca.gov/Recovery/Pages/Technical-Assistance.aspx. Accessed on July 12, 2012.
[199] For more information: California Emergency Management Agency. (2011). *Safety Assessment Program (SAP)*. http://www.calema.ca.gov/Recovery/Pages/Safety-Assessment.aspx. Accessed on July 12, 2012.

F. Disaster Recovery Purchasing

Under the Disaster Recovery Purchasing Program, State and local government entities may purchase a variety of products and services from contracts awarded under GSA Federal Supply Schedules to facilitate recovery from a major disaster, terrorism, or nuclear, biological, chemical, or radiological attack.

This Disaster Recovery Purchasing authority is limited to GSA Schedule contracts and does not include any other GSA programs. GSA eLibrary (formerly Schedules e-Library) contains a list of all GSA Schedules subject to Disaster Recovery Purchasing.

Schedule contractors participating in the Disaster Recovery Purchasing Program are identified in GSA eLibrary with the Disaster Recovery Purchasing icon. This icon is also used to identify those products and services available for Disaster Recovery Purchasing on GSA *Advantage!®*, GSA's online shopping and ordering system.

Schedule contractors that previously declined to participate in the Disaster Recovery Purchasing Program, but now wish to do so, should contact their GSA Administrative Contracting Officers (ACOs) for instructions on modifying their contracts to allow participation in this program.

State and local government entities may use GSA Schedule contracts to purchase products and services in advance of a major disaster declared by the president, as well as in the aftermath of an emergency event. State and local government entities are responsible for ensuring that the products or services purchased are to be used to facilitate recovery.

For more information, see http://www.gsa.gov/portal/content/202321y.

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XXVI. APPENDIX 10: RECOVERY PROGRAM INFORMATION MATRIX

A. General Information

Grant and financial assistance programs may require Local Proclamations, State of Emergency, and/or Federal Declarations before becoming available. Once available, many may require Cost Share Requirements. Other programs may be available one year and not the next. As such, the information provided in this matrix is for reference only to assist in Recovery Planning research.

Organization	Website	Description
Grants.gov	www.grants.gov	Grants.gov was established in 2002 to improve government services to the public, and is a central storehouse for information on over 1,000 grant programs and provides access to approximately $500 billion in annual awards. Grants.gov is your source to FIND and APPLY for federal grants.
Catalog of Federal Domestic Assistance	www.cfda.gov	The Catalog of Federal Domestic Assistance is a government-wide compendium of Federal programs, projects, services, and activities that provide assistance or benefits to the American public. It contains Federal administered financial and nonfinancial programs.
Federal Emergency Management Agency (FEMA)	www.fema.gov	The Federal Agency responsible for disaster coordination and support on a Federal level to ensure capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. FEMA provides a host of programs for government and general public Recovery assistance once a Disaster Declaration has been made.
DisasterAssistance.gov	www.disasterassistance.gov	DisasterAssistance.gov provides information on how you might be able to get help from the U.S. Government before, during, and after a disaster. It also provides information to help you prepare for, respond to, and recover from disasters.
California Office of Emergency Services (Cal OES)	www.calema.ca.gov	The State Agency responsible for disaster coordination on the State level to ensure capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. Cal EMA is responsible for administering and managing State grants and the majority of Federal Grants for homeland security, emergency management, justice programs, and victim services.

B. Federal Agencies

*Note: Many Federal grants are only available by applying through the State.

Organization	Website	Type of Assistance
U.S. Department of Agriculture	www.usda.gov	Business and Industrial Loans, Crop Insurance, Disaster Supplemental Nutrition Assistance Program (D-SNAP), Emergency Conservation Program for Agricultural Producers, Farm Emergency Loans, Farm Operating Loans, Farm Ownership Loans, Noninsured Crop Disaster Assistance program, Rural Housing Loans and Grants, Rural Rental Housing, and Special Supplemental Nutrition Program for Women, Infants, and Children.
U.S. Department of Education	www.ed.gov	Federal Student Aid Loan and Grant Data
U.S. Department of Health and Human Services	www.hhs.gov	Disaster Assistance for Older Americans, Low Income Home Energy Assistance Program (LIHEAP), Substance Abuse and Mental/Behavioral Health Services Admin Disaster Relief Information, and Temporary Assistance for Needy Families.
U.S. Department of Homeland Security	www.dhs.gov	Disaster Recovery Center (DRC) Locator, FEMA Housing Portal, Individuals and Households Program-Housing and Other Needs Assistance, Disaster Legal Services (DLS), National Flood Insurance Program (NFIP), and the National Emergency Family Registry and Locator System.
U.S. Department of Housing and Urban Development	www.hud.gov	203(h) Mortgage Insurance for Disaster Victims and 203(k) Rehabilitation Mortgage Insurance, HUD Public Housing Program, Housing Choice Voucher Program (Section 8), and National Housing Locator System (NHLS): Disaster Resource Locator.
U.S. Department of Justice	www.usdoj.gov	International Terrorism Victim Expense Reimbursement Program (ITVERP), Public Safety Officers' Benefits Program, and State Crime Victims Compensation.
U.S. Department of Labor	www.dol.gov	Disaster Unemployment Assistance, One-Stop Career Center Initiative, and Unemployment Insurance.
U.S. Department of Interior	www.doi.gov	Bureau of Indian Affairs (BIA) Financial Assistance and Social Services, and funding opportunities to support Earthquake Hazards Research through the U.S. Geological Survey.
U.S. Department of Treasury	www.ustreas.gov	IRS Disaster Assistance and Emergency Relief Program, Go Direct, and Savings Bond Redemption and Replacement.
U.S. Department of Veterans Affairs	www.va.gov	Inquiry Routing and Information System (IRIS), My HealtheVet Website, Native American Veterans Housing Loan Program, VA Burial Benefits - Headstones/Markers for Placement in Private

Organization	Website	Type of Assistance
		Cemeteries - Partial Reimbursement of Expenses - Presidential Memorial Certificates – Veteran and Dependent Burial in VA National Cemeteries, and VA Change of Address.
U.S. Office of Personnel Management	www.opm.gov	Federal Retiree Benefits.
U.S. Postal Service	www.usps.com	U.S. Postal Service (USPS) Change of Address.
U.S. Small Business Administration	www.sba.gov	Business Disaster Loans, and Home and Property Disaster Loans.
U.S. Social Security Administration	www.socialsecurity.gov	Social Security (SS) Child's Insurance Benefits, SS Disability Insurance Benefits, SS Disabled Surviving Divorced Spouse Benefits, SS Disabled Widow(er)'s Insurance Benefits, SS Divorced Spouse Benefits, SS Independently Entitled Divorced Spouse's Benefits, SS Lump Sum death Payment, SS Medicare Program, SS Medicare Savings Program, SS Mother's or Father's Insurance Benefits, SS Parent's Insurance Benefits, SS Retirement Insurance Benefits, SS Special Benefits for Qualified WWII Veterans, SS Spouse's Insurance Benefits, SS Surviving Divorced Spouse Benefits, SS Widow(er)'s Insurance Benefits, and Supplemental Security Income (SSI).
U.S. Department of Commerce	www.commerce.gov	Economic Development Grants, Telecommunications Grants, Coastal Ocean Program Grant Program, Fisheries Saltonstall Kennedy Grant Program, National Sea Grant Program, and Small Business Resources and Opportunities.
U.S. Department of Defense	www.defense.gov	Programs for active military and family members, Guides for Business opportunities with the Department of Defense, and General services and Flood Prevention/Response/Recovery Services through the U.S. Army Corps of Engineers.

C. State

*NOTE: Cal OES is the primary grant/assistance program administration for the State of California; however, many of the programs available can only be obtained by a specific agency or group. That agency/group becomes responsible for managing the dispersal/use of funds

Organization	Website	Type of Assistance
California Department of Mental Health	www.dmh.ca.gov	Responsible for the statewide coordination of disaster mental/behavioral health preparedness, response, recovery, and mitigation in support of local mental/behavioral health government. Administer all FEMA funded disaster crisis counseling assistance and training grants.
California Department of Motor Vehicles	www.dmv.ca.gov	Responsible for issuing special vehicle permits for Disaster Relief Work, and the waiver of certain fees following a disaster.
California Department of Transportation	www.dot.ca.gov	Manages the state's highway systems and provides disaster services to repair local transportation facilities. Funding for disaster work is available if Emergency Declaration procedures are properly followed.
California Department of Veterans Affairs	www.calvet.ca.gov	Responsible for administering a number of special programs, benefits, and services for California veterans and their families.
California Department of Water Resources	www.water.ca.gov	Responsible for regulating the safety of dams, providing flood protection, and responding to emergencies to repair water conveyance and support structures. Grants and Loans available for various flood and water management projects.
California Employment Development Department	www.edd.ca.gov	Responsible for support and administration of services under the Job Service, Unemployment Insurance State Disability Insurance, Workforce Investment, and Labor Market Information programs. The department manages Disaster Unemployment Assistance, and supplies information on Job Search Assistance.
California Environmental Protection Agency	www.calepa.ca.gov	Responsible for developing, implementing, and enforcing the state's environmental protection laws. They supply technical assistance and manage public health and environmental consequences of a disaster through coordinated agency-wide preparedness, response, recovery and mitigation activities
California Franchise Tax Board	www.ftb.ca.gov	Responsible for State Income Tax collecting and provides disaster tax relief.
California's Contractors State License	www.cslb.ca.gov	Responsible for licensing and regulating California's construction

Organization	Website	Type of Assistance
Board		industry. After a disaster, they offer help and advice to victims, and coordinate enforcement efforts with other local, state and federal agencies.
California State Board of Equalization	www.boe.ca.gov	Responsible for collecting the State sales, use, fuel, alcohol and tobacco taxes, and special fees. Provides disaster tax relief and tax deferral for businesses.

D. Local, Private, and Other

Organization	Website	Description
American Red Cross	www.redcross.org	The American Red Cross is a private, national disaster relief organization. They provide material items which may include feeding, shelter, clean-up kits, comfort kits, and financial assistance. They also minimize immediate disaster caused suffering through listening, guidance, advocacy, and counseling.
Salvation Army	www.salvationarmyusa.org	The Salvation Army is a private, national disaster relief organization. They provide food, shelter, financial, emotional and spiritual care, emergency communications and cleanup/reconstruction services. They also manage donations, assist in long term recovery plan development for individuals, and have partnerships with other voluntary/charitable organizations.
National Voluntary Organizations Active in Disaster (VOAD)	www.nvoad.org	National VOAD is a leader, voice and primary contact for the non-profit organizations and volunteers that work in all phases of disaster—preparedness, response, relief, recovery, and mitigation.
Operational Areas	Refer to individual operational area	Disaster planning grant funds available to individual cities and government departments under a county operational area's grant management area.
City	Refer to individual city area	Disaster planning grant funds available to individual cities and government departments under a city's grant management area.

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XXVII. APPENDIX 11: SAFETY/DAMAGE ASSESSMENT DOCUMENTATION

According to the State of California Disaster Recovery and Mitigation Handbook, when requesting State or Federal disaster assistance, the jurisdiction must provide information to support the request. The chart below describes the mechanisms required to document damages and determine needed assistance in the impacted area.

Report Title	Responsible Party	Description Needed	Purpose of Report
Initial Damage Estimate	Local jurisdiction	▪ Type and extent of public- and private-sector damage ▪ Basic repair and emergency response costs ▪ Any acute public health issues ▪ Number of homes and businesses not insured or underinsured	Provides information for Cal OES to determine if State and/or Federal disaster assistance is warranted and to what external resources are needed. An IDE should be provided concurrently with request for assistance. Not providing this information promptly can delay assistance.
Preliminary Damage Assessment	Disaster Assistance Directorate (DAD) field staff assisted by Cal OES Regional staff; local, State, and/or Federal government staff	Preliminary detailed damage report including: ▪ Facility type and location ▪ Facility insurance and/or maintenance records ▪ Damage description and repair estimates ▪ City budget reports ▪ Destroyed/damaged residences, personal property, businesses ▪ Any identified environmental or historical issues	Provides information to determine extent and type of State and/or Federal disaster assistance.
Damage Assessment by Other Federal Agencies	Small Business Administration (SBA)	Includes the number of private homes and businesses damaged or destroyed and estimated uninsured losses. It also may include documentation showing economic injury to businesses.	Ensures minimum damage criteria have been satisfied to implement the Physical or Economic Injury Disaster Loan Program.

Report Title	Responsible Party	Description Needed	Purpose of Report
	U.S. Department of Agriculture (USDA) and/or local Agricultural Commissioner	Includes cause, type and value of crop/livestock losses.	Provides USDA with justification to implement emergency loan program.
Independent Damage Assessment	American Red Cross	Includes the number of private homes damaged or destroyed.	For internal estimates to determined level of support for mass care programs.

XXVIII. APPENDIX 12: LOCAL, STATE, AND FEDERAL FORMS AND DOCUMENTS

Name of Form or Document	Issuing Agency/ Department	Description of Required Information and Supporting Documents	Department(s) Responsible for Completion	Submit the Form or Document To	Required Timeline for Submission
Initial Damage Estimate	California Office of Emergency Services (Cal OES)	Chief Administrative Officer link on intranet for department-only form submission			As initial costs are incurred; as requested
Preliminary Damage Assessment	Cal OES and Federal Emergency Management Agency (FEMA)	Project listing (State-required form Cal EMA 95)			
Project Worksheets	Cal OES and/or FEMA	All source documentation that will support estimated scope of work		Cal OES	With 60 days of the kick-off meeting.
Final Project Worksheets	Cal OES and/or FEMA	Formal/final project worksheet provided by Cal OES and/or FEMA		Cal OES/FEMA	Three days upon receipt from Cal OES and/or FEMA for review. (subject to change)
Debris Management Plan		For all debris removal operations reimbursable by Cal OES/FEMA		Cal OES/FEMA	Pre-mobilization
Record of Contractor Certified Payrolls		Prevailing wages for labor must be validated and certified by this agency for all contractors paid with State and Federal reimbursement funds.			

Name of Form or Document	Issuing Agency/ Department	Description of Required Information and Supporting Documents	Department(s) Responsible for Completion	Submit the Form or Document To	Required Timeline for Submission
Record of Contractor Certified Living Wage Payrolls		Living wages for non-labor contractor employees must be validated and certified by this agency under jurisdictional ordinance-mandated provisions for all contractors paid with State and Federal reimbursement funds.			
Daily Project Report		Daily project records including all supporting documentation for work under contracts		Cal OES/FEMA	On request or prescribed schedule
Force Account Labor Summary Record (90-123)	Cal OES and FEMA	To record agency permanent or temporary labor costs			TBA
Contract Work Summary Record (90-126)	Cal OES and FEMA	To record costs of work done by contract			TBA
Materials Summary Record (90-124)	Cal OES and FEMA	To record the supplies and materials used out of stock or purchased			TBA
Rented Equipment Summary Record	Cal OES and FEMA				TBA
Force Account Equip. Summary (90-127)	Cal OES and FEMA	To record applicant-owned equipment costs			TBA

XXIX. APPENDIX 13: MASS FATALITY INFORMATION

In California, primary responsibility for the investigation, recovery and management of the deceased resides within the local coroner or medical examiner (California Government Code §27491). There are a total of 58 sheriff-coroners, coroners, and medical examiners throughout California. California Office of Emergency Services (Cal OES) provides coordination of the Statewide Coroners Mutual Aid System, although Cal OES's role is strictly advisory and limited to interagency coordination.[200]

The Coroners Mutual Aid System is administered by the Law Enforcement Division of Cal OES; however, it has rarely been used. The authority for this mutual-aid system is stated in the California Emergency Services Act (Government Code §8550, §8569, §8615-8619, §8632, §8668) and the Master Mutual Aid Agreement. The Coroners Mutual Aid System is divided into seven regions throughout the State and follows SEMS for requesting mutual aid. Each Operational Area has a sheriff-coroner, coroner, or medical examiner as its Coroner/Medical Examiner Mutual Aid Coordinator. At the region level, a sheriff-coroner, coroner, or medical examiner is elected by his or her peers within the region to serve as the Regional Coroner/Medical Examiner Mutual Aid Coordinator. The Chief of the Law Enforcement Division of Cal OES (or his or her designee) is tasked with coordinating coroner/medical examiner mutual aid above the region level. Interstate mutual aid is coordinated by Cal OES through the Emergency Management Assistance Compact (EMAC), unless interstate agreements are already in place. Requests for assistance must be made through the SEMS process. Federal resources may be applied at all levels of the Coroner/Medical Examiner Mutual Aid System.[201]

Significant disasters will likely require the use of private industry resources, interstate agreements under the EMAC, and deployment of Federal fatality management resources from National Guard Bureau, U.S. Department of Health and Human Services, and U.S. Department of Defense mortuary affairs assets.

Multiple participating agencies should have defined roles and functions. For example, to manage mass fatality following the Japan Tohoku Earthquake of March 2011, the Miyagi Prefecture defined the roles and responsibilities of the participating agencies and organizations. The Miyagi Prefecture developed a Disaster Task Force that carried out various functions, such as searching for bodies, identifying bodies, and the burial of these bodies. The Japanese Self Defense Force, Coast Guard, and the police cooperated to find bodies, while the police identified bodies.[202]

The ability to identify temporary morgue sites, assign roles and responsibilities among participating agencies, and have working mutual-aid systems can prove

[200] California Department of Public Health. (2001). *California public health and medical operations manual*. Sacramento, CA.
[201] Ibid.
[202] Great East Japan Earthquake and Tsunami. (2012). *Alliance ICAD Team After Action Report*. www.catastrophicplanning.org. Accessed on September 3, 2012.

integral in the management of mass fatality. Ishinomaki City, a population of 162,822 (February 2011) had 4,000 dead bodies that were sent to a gymnasium and remained there for approximately 1 week. The city's central gym was initially the designated storage site; however, due to the high number of deaths, eventually there were three separate facilities. Ishinomaki Red Cross Hospital had a designated area for corpses in the rear of their hospital, color-coded in black in their emergency plan. For the Miyagi Prefecture, the Prefectural Police and government cooperated to secure temporary morgues at schools, public facilities and private facilities. Two days after the earthquake, there were 515 bodies and 10 temporary morgues throughout the prefecture. By August 23, there were 9,409 bodies and 6 temporary morgues. Survivors who wanted to view bodies were allowed to do so during specified hours, an indication that a system and process to handle mass fatality was in place.[203]

In the event of a natural disease outbreak or bioterrorism event, animal carcasses should be removed by agencies with appropriate authority. Consult with the municipal or county public health department and Veterinary Services in coordination with municipal sanitation departments as to who will have oversight over mass burial. If a disease outbreak occurs in livestock, determine which local departments will oversee carcass removal and in coordination with the California Department of Food and Agriculture (CDFA) and/or the U.S. Department of Agriculture (USDA).[204]

To reduce the chance of the spread of disease and to protect the public health, the Department of Public Health, Veterinary Public Heath, or the jurisdictional lead agency for health issues should provide oversight and direction with local jurisdictions for coordinating the pickup and removal of dead animals. According to 2009 policy guidelines issued by the American Veterinary Medical Association, mass animal casualties due to fatal injuries sustained from disasters will not pose an immediate health risk for humans in most circumstances. Based on this guideline, the Operational Area emergency response should take into consideration the available resources and priorities of each disaster before diverting resources for immediate carcass removal.

The guidance that follows pertains mainly to healthcare entities, although it is conceivable that other first-responders and the general community may also be directly affected by mass fatality.[205]

A. Preparedness

1. Pre-event planning should include developing mass fatality management plans appropriate to the size of the facilities involved in the handling of decedents.

[203] Ibid.
[204] Adapted from the Los Angeles Operational Area (LAOA) *Animal Emergency Response Plan*. (2010). For a summary of CDFA guidance on disposal of animal carcasses, refer to: California Department of Food and Agriculture. (2012). *Emergency animal disposal guidelines*. Sacramento, CA. http://cdfa.ca.gov/ahfss/Animal_Health/Animal_Disposal_Guidelines.html. Accessed on July 13, 2012.
[205] Adapted from: Constant and Associates. (2012, draft). *Mass fatality management guide for healthcare entities.*

2. Develop pre-designated temporary morgue/storage sites for mass fatality.
3. Consider awareness-level training for management personnel on special situations with decedents and notification of other agencies involving:
    a) Decedents who are contaminated
    b) Decedents in suspected criminal involvement
    c) Decedents in pandemic influenza
4. Pre-identify staff members or departments (such as decedent affairs in hospitals) to be responsible at your facility authorized to activate a mass fatality management plan, or notify outside agencies of a need for fatality management support.
5. Identify the roles and responsibilities of participating agencies in the pre-disaster phase; this is especially important when the military is involved.[206]
6. Family Assistance Centers and Family Information Centers may be used as resources for decedent information.
7. Pre-event planning should consider the current status of fatality management operations including:
    a) Need for expanded storage capacity
    b) Supplies such as body bags
    c) Role of the chief medical examiner/coroner
    d) Role of local and State health departments
    e) Role of emergency management
    f) Cultural, religious, legal, and regulatory issues in activities such as:
        (1) Tracking of remains
        (2) Transportation of remains
        (3) Identification of remains
        (4) Death certificate completion
        (5) Handling and disposition of remains
8. Coordinate with local public health and/or EMS agencies that have coordinated with medical facilities to develop mass fatality management plans.

[206] Great East Japan Earthquake and Tsunami. (2012). *Alliance ICAD Team After Action Report*. www.catastrophicplanning.org. Accessed September 3, 2012.

9. Develop a regional information call center (e.g. 211) to support the increased call volume of missing persons reports in an emergency.

10. Develop a regional tracking and records management system (e.g. Unified Victim Identification System (UVIS)) to support mass fatality incidents.

B. Recovery

1. Use temporary morgue sites, assign roles/responsibilities among participating agencies, and have working mutual-aid systems for management of mass fatalities.

2. Coordinate with law enforcement and other first responders on identification and notification of next of kin issues.

3. Consider tiered responses based on exceeding storage and handling capacities.

4. Consider mechanisms to implement stress management and assess for mental/behavioral health needs and referral for further treatment if necessary for responders and the public.

5. Use communication systems for decedent information such as ReddiNet or Unified Victim Identification System (UVIS).[207]

6. Modify plans based on biological, chemical, or physical hazards in handling remains.

7. To reduce the chance of the spread of disease and to protect the public health, consider which agencies will have oversight and direction with local jurisdictions for coordinating the pickup and removal of dead animals. According to 2009 policy guidelines issued by the American Veterinary Medical Association, mass animal casualties due to fatal injuries sustained from disasters will not pose an immediate health risk for humans in most circumstances. Based on this guideline, the Operational Area emergency response should take into consideration the available resources and priorities of each disaster before diverting resources for immediate carcass removal.[208]

8. In the event of a natural disease outbreak or bioterrorism event, carcasses will be removed by agencies with appropriate authority. The Department of Public Health, Veterinary Public Health in coordination with municipal sanitation departments, will have oversight over mass burial. If a disease outbreak occurs in livestock, coordinate with the local municipal health department

[207] This information would be conveyed to a city/county Family Assistance Center via EMS. See http://www.reddinet.com/what-reddinet. Accessed on September 3, 2012.
[208] Los Angeles Operational Area. (2010). *Animal Emergency Response Plan*. Los Angeles, CA.

oversee carcass removal and will work in coordination with CDFA and/or USDA.[209]

9. Continue mechanisms to implement stress management and assess for mental/behavioral health needs and referral for further treatment if necessary.

[209] For a summary of CDFA guidance on disposal of animal carcasses, refer to California Department of Food and Agriculture. (2012). *Emergency animal disposal guidelines*. Sacramento, CA. http://cdfa.ca.gov/ahfss/Animal_Health/Animal_Disposal_Guidelines.html. Accessed on July 13, 2012.

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XXX. APPENDIX 14: FEMA LONG-TERM COMMUNITY RECOVERY PROJECT VALUE WORKSHEET

"Experience in past FEMA [Federal Emergency Management Agency] LTCR [Long-Term Community Recovery] initiatives has shown that projects identified during the planning process have varying levels of impact on the recovery of a community. Projects in these plans were assigned a 'recovery value' based on their importance to the community's recovery. Recovery Value is the designation assigned to a project that indicates its ability to help jump-start a community's recovery from a natural disaster or incident of national significance. Projects that positively contribute to recovery typically address a broad range of issues that promote a functioning and healthy economy, support infrastructure optimization, and encourage provision of a full range of housing opportunities.

"In past LTCR efforts, each project in a LTCR plan was assigned one of three Recovery Values: High, Moderate, and Low. A fourth category, 'Community Interest' is used to designate projects that have significant local support, but either cannot be implemented in a time frame that will substantively affect recovery or do not clearly promote any key disaster recovery goals.

"The value attached to each project is based on the degree to which it assists the community in its recovery from a disaster, and is predicated on a series of general criteria. This worksheet provides assistance as you assess the recovery value of your LTCR projects.

"The Project Recovery Value Checklist included in this section suggests questions you might consider in determining the recovery value of your LTCR projects. The actual 'scoring' of the projects can be accomplished in several ways.

"You could assign a '1' for all 'Yes' responses and a '0' for all 'No' responses and then determine what cumulative scores designate a High, Moderate, or Low Recovery Value designation. For example, Projects that score a '1' on 2/3 of the questions could be considered for High Recovery Value; Projects scoring a '1' on between ½ and 1/3 of the questions could be considered for Moderate; Projects scoring a '1' on 1/3 or less could be considered for Low.

"Responses to the questions could be scored with a 3, 2, or 1 representing High, Moderate, or Low. The average score for the project could indicate a possible recovery value; e.g., an average score of 2.5 or higher for High, 1.5 to 2.5 for Moderate, and less than 1.5 for Low. (These ranges can vary. That is up to you and your LTCR team.)

"Regardless of how you might assign values to the scoring, the process should not be limited to the checklist and should not be completely formulaic. The LTCR team also should incorporate their professional experience and community knowledge in arriving at a project's recovery value. For example, a housing development project proposed for a neighborhood adjacent to downtown may not score enough points to be designated a High Recovery Value Project, but the LTCR team knows that the impact of the project on a neighborhood and downtown that received extensive damage will be significant

and could generate other future projects. The LTCR team should identify such a project as High Recovery Value."[210]

FEMA Recovery Project Value Worksheet		
Project Name:		Score
Post Disaster Community Need		
1	Does the Project address a previously identified need/issue or has the project been validated by or attained new urgency from the disaster?	
2	Is the project necessary for community health and safety?	
3	Does the project leverage several sources of funding?	
4	Is the project related to physical damage from the disaster?	
5	Does the project provide an opportunity to improve upon pre-disaster conditions?	
6	Does the project have documented broad based community support?	
7	Does the project affect low- and moderate-income segment of the community?	
8	Does the project address or support distinct social or cultural community attributes?	
	Score for this Category	
	Average: Score/8	
Project Feasibility		
1	Does the project have access to the resources and funding sources necessary to cover project costs within the project timeframe, and/or can funding gaps be filled?	
2	Is the project compatible with government initiatives, regulations, and plans?	
3	Is the project scope clearly defined and achievable with measurable outcomes?	
4	Can the project be completed within a reasonable and practical timeframe?	
5	Does the project offer other characteristics related to feasibility such as design or plan flexibility, ease of implementation, and offering a sufficient range of options?	
6	Does the project have a committed "champion"?	
	Score for this Category	
	Average: Score/6	
Project Sustainability		
1	Can the project pay for itself over the long term/is it sustainable financially?	
2	Is the project identified in existing Mitigation or Safety plans? (Local Mitigation Plan; Hazard Mitigation Plan; Environmental Element of Comprehensive Plan; Safety plans, etc.)	
3	Does the project apply a mitigation or safety measure to avert future losses related to natural disasters or incidents of national significance?	
4	Does the project promote the efficient use of land; limit urban sprawl; promote mixed use and mixed income neighborhood; and/or promote other smart growth principles?	
5	Is the project geographically located to encourage safe, convenient, and efficient	

[210] Federal Emergency Management Agency. (2005). *Long-term community recovery planning process: A self-help guide*. Washington, DC.

	connectivity with other nodes of development within the community?	
6	Does the project protect (or does not harm) key ecosystems; protect wildlife and natural areas; or improves water and air quality?	
7	Does the project use innovative wastewater technology?	
8	Does the project improve the availability of mass transit or advance multiple transportation solutions for those in need?	
	Score for this Category	
	Average: Score/8	
Linkages Throughout the Community and Leverages Other Projects and Funding		
1	Does the project interconnect among and within the existing community development framework and physically connect neighborhoods, key feature, districts, etc.?	
2	Does the project support the existing resources of the community, including cultural, physical, natural, environmental, and geographic resources?	
3	Is the project a result of cooperative planning, development or implementation efforts among various local, State, or Federal agencies or organizations?	
4	Is the project of a regional nature that supports areas beyond just the disaster-affected community?	
5	Is the project related to other community projects, resources, or elements?	
	Score for this Category	
	Average: Score/5	
Enhances the Quality of Life in the Community		
1	Does the project build on existing strength in the community?	
2	Does the project provide or enhance community services (schools, libraries, cultural centers, community gathering places, recreational facilities)?	
3	Does the project provide or enhance a critical facility (hospitals, fire and police facilities, and other emergency response facilities)?	
4	Will the project enhance housing/shelter situations? Does it provide community shelters, enhanced mixed-income housing, or improve assisted living facilities?	
5	Does the project enhance a culturally significant place in the community? (places of historic importance, community gathering places or sites where significant community events took place)	
	Score for this Category	
	Average: Score/5	
	Project Recovery Value	
	Total Score	
	Average	

(Circle one)			
High	**Moderate**	**Low**	**Community Interest**

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XXXI. APPENDIX 15: RECOVERY TRAINING RESOURCES

The following is a list of selected online and classroom-based disaster recovery training from the Emergency Management Institute (EMI)

A. *E202–Debris Management.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMICourses/crsdetail.asp?cid=E202&ctype=R

B. *E210-Recovery from Disaster: The Local Government Role.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMICourses/crsdetail.asp?cid=E210&ctype=R

C. *E901–IEMC: All Hazards: Recovery and Mitigation*. Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMICourses/crsdetail.asp?cid=E901&ctype=R

D. *G203–Public Assistance Program Applicant Workshop.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/STCourses/crsdesc.asp?courseid=G203

E. *Holistic Disaster Recovery: Creating a More Sustainable Future*. Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/edu/sdr.asp

F. *IS-403: Introduction to Individual Assistance (IA*). Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/emiweb/IS/IS403.asp

G. *IS-556: Damage Assessment for Public Works.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/IS/IS556.asp

H. *IS-558: Public Works and Disaster Recovery.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/IS/IS558.asp

I. *IS-632. An Introduction to Debris Operations*. Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/IS/is632a.asp.

J. *IS-634: Introduction to FEMA's Public Assistance Program.* Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/IS/is634.asp

K. *IS-814: Long-term Community Recovery*. Federal Emergency Management Agency, Emergency Management Institute. http://training.fema.gov/EMIWeb/IS/IS814.asp

L. *Unit 6 Recovery. Emergency Manager Toolkit.* Federal Emergency Management Agency. http://training.fema.gov/EMIWeb/IS/is1Toolkit/index.htm

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XXXII. APPENDIX 16: ACRONYMS

AAA	Area Agency on Aging
ABA	Architectural Barriers Act
ACAMS	Automated Critical Asset Management System
ACF	Administration for Children and Families
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
AFWS	Automated Flood Warning System
AHMA	Affordable Housing Management Association
AoA	Administration on Aging
APHIS	Animal and Plant Health Inspection Service
APS	Adult Protective Services
ASL	American Sign Language
BRC	Business Recovery Center
CAAA	Clean Air Act Amendments
CAHAN	California Health Alert Network
Cal EMA	California Emergency Management Agency
CAL-MAT	California Medical Assistance Team
Cal OES	California Office of Emergency Services
Caltrans	California Department of Transportation
CAVMRC	California Veterinary Medical Reserve Corps
CBO	Community-Based Organization
CBRA	Coastal Barrier Resources Act
CDAA	California Disaster Assistance Act
CDC	Centers for Disease Control and Prevention
CDD	Community Development Department
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CDPH	California Department of Public Health
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERT	Community Emergency Response Team

CFR	Code of Federal Regulations
CMIPS	Case Management, Information and Payrolling System
CMS	Centers for Medicare and Medicaid Services
CNG	Compressed Natural Gas
COG	Continuity of Government
COOP	Continuity of Operations Plan
COR	California Office of Recovery
CPD	Community Planning and Development
CPG	Comprehensive Preparedness Guide
CPS	Child Protective Services
CRA/LA	Community Redevelopment Agency of the City of Los Angeles
CRS	Community Relations Service
CSS	Community and Senior Services
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DAD	Disaster Assistance Directorate (FEMA)
DAP	Disaster Assistance Policy
DART	Departmental Air Rescue Team
dB	Decibel
DCFS	Department of Children and Family Services
DFA	Direct Federal Assistance
DHHS	U.S. Department of Health and Human Services
DHS	U.S. Department of Homeland Security
DHV	Disaster Healthcare Volunteers
DIRS	Damage Incident Reporting System
DMAT	Disaster Medical Assistance Team
DME	Durable Medical Equipment
DMH	Department of Mental Health
DOC	Departmental Operations Center
DOC	U.S. Department of Commerce
DOD	U.S. Department of Defense
DOI	U.S. Department of the Interior
DOL	U.S. Department of Labor

DOT	U.S. Department of Transportation
DPSS	Los Angeles County Department of Social Services
DRC	Disaster Recovery Center
DSS	Department of Social Services
DSW	Disaster Service Worker
DUA	Disaster Unemployment Assistance
DVA	U.S. Department of Veterans Affairs
DWR	California Department of Water Resources
EAP	Employee Assistance Program
EDA	Economic Development Administration
EDO	Economic Development Organization
EF	Emergency Function
EHD	Emergency Health Department
EIDL	Economic Injury Disaster Loans
EMA	Emergency Management Agency
EMAC	Emergency Management Assistance Compact
EMI	Emergency Management Institute
EMS	Emergency Medical Services
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
EPD	Environmental Programs Division
ERT	Equine Response Team
ESA	Endangered Species Act
ESAR-VHP	Emergency System for Advance Registration of Volunteer Health Professionals
ESF	Emergency Support Function
ETA	Employment and Training Administration
FAA	Federal Aviation Administration
FAC	Family Assistance Center
FAST	Functional Assessment Service Team
FBO	Faith-Based Organization

FCO	Federal Coordinating Officer
FDA	U.S. Food and Drug Administration
FDB	Food and Drug Branch (California Department of Public Health)
FDRC	Federal Disaster Recovery Coordinator
FEMA	Federal Emergency Management Agency
FHA	Federal Housing Administration
FHWA	Federal Highway Administration
FMS	Field Medical Station
FNS	Food and Nutrition Service
FSA	Farm Service Agency
FSS	Federal Supply Service
GAIN	Greater Avenues for Independence
GHG	Greenhouse Gas
GIS	Geographic Information System
GR	General Relief
GROW	General Relief Opportunities for Work
GSA	General Services Administration
HSPD	Homeland Security Presidential Directive
HSS	Health and Social Services
HUD	U.S. Department of Housing and Urban Development
IA	Individual Assistance
ICAD	Information Collection, Analysis and Dissemination
ICS	Incident Command System
IDE	Initial Damage Estimate
IHP	Individuals and Households Program
IHSS	In-Home Supportive Services
IT	Information Technology
JIC	Joint Information Center
LAC	Local Assistance Center
LAOA	Los Angeles Operational Area
LART	Large Animal Response Team
LDRM	Local Disaster Recovery Manager
LEMSA	Local Emergency Medical Service Agency

LHD	Local Health Department
LRN	Laboratory Response Network
LTCR	Long-Term Community Recovery
MAC	Multi-Agency Coordination
MHOAC	Medical and Health Operational Area Coordinator
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRC	Medical Reserve Corps
NASA	National Aeronautics and Space Administration
NCMEC	National Center for Missing and Exploited Children
NDMS	National Disaster Medical System
NDRF	National Disaster Recovery Framework
NEPA	National Environmental Policy Act
NGO	Nongovernmental Organization
NHPA	National Historic Preservation Act
NIMS	National Incident Management System
NIPP	National Infrastructure Protection Plan
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRF	National Response Framework
NVOAD	National Voluntary Organizations Active in Disasters
OA	California Office for Access and Functional Needs
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
PA	Public Assistance
PATH	People Assisting the Homeless
PDA	Preliminary Damage Assessment
PHS	Public Health Service
PIO	Public Information Office
PNP	Private Nonprofit

POC	Plan of Cooperation
PPDR	Private Property Debris Removal
RBS	Rural Business-Cooperative Service
RCRA	Resource Conservation and Recovery Act
RD	Rural Development
RDHMC	Regional Disaster Medical and Health Coordinator
RHS	Rural Housing Service
RPA	Request for Public Assistance
RSF	Recovery Support Function
RUS	Rural Utilities Service
RWQCB	Regional Water Quality Control Board
SAMHSA	Substance Abuse and Mental Health Services Administration
SARA	Superfund Amendments and Reauthorization Act
SBA	U.S. Small Business Administration
SCIL	Services Center for Independent Living
SDRC	State Disaster Recovery Coordinator
SEMS	Standardized Emergency Management System
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SmART	Small Animal Response Team
SMD	Science Mission Directorate
SPCA	Society for the Prevention of Cruelty to Animals
SSGP	State Supplemental Grant Program
SWRCB	State Water Resources Control Board
TAP	Technical Assistance Program
TDD	Telecommunications Device for the Deaf
TDRC	Tribal Disaster Recovery Coordinator
THPO	Tribal Historic Preservation Office
TTY	Teletypewriter
U.S.C.	United States Code
UFC	Uniform Fire Code
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard

USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VMAT	Veterinary Medical Assistance Team
VOAD	Voluntary Organizations Active in Disaster
VRS	Video Relay Service
WPS	Wireless Priority System
WTW	Welfare to Work
YMCA	Young Men's Christian Association

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XXXIII. APPENDIX 17: GLOSSARY

Community (or Asset) Mapping - The term "community mapping" is used conceptually to refer to a process of inventorying resources or assets available to a specified neighborhood or community. This conceptual approach is identified as "community asset mapping" and includes the identification of community assets for individual development and the inventorying of public capital and cultural resources.[211]

Discharge - Volume of water that passes through a given cross-section per unit time; commonly measured in cubic feet per second or cubic meters per second; also referred to as flow. In its simplest concept, discharge means outflow; therefore, the use of this term is not restricted as to course or location, and it can be applied to describe the flow of water from a pipe or from a drainage basin.

Endangered Species - Any species that is in danger of extinction throughout all or a significant portion of its range and has been so listed by the U.S. Fish and Wildlife Service/National Marine Fisheries Service 50 CFR 17.11 and 17.12.

Flood Risk Management - Flood risk management is the process of identifying, evaluating, selecting, implementing, and monitoring actions taken to mitigate levels of risk. Scientifically sound, cost-effective, integrated actions are taken to reduce risks. Social, cultural, ethical, environmental, political, and legal considerations are accounted for in the process.

Floodplain - The lowland that borders a river, usually dry but subject to flooding.

Groundwater - Water in the ground that is in the zone of saturation from which wells, springs, and groundwater runoff are supplied.

Mitigation - Measures that compensate for ecological resources unavoidably and adversely affected by a project. Mitigation includes standalone projects; work undertaken concurrently with project construction; and operation, maintenance and management measures.

Outreach - **Activities** and communication efforts involving programs that reach diverse populations such as students; teachers; organized groups such as Boy Scouts, Girl Scouts, and 4-H; and the general public beyond the physical boundaries of USACE projects and amenities.

Watershed - An area characterized by all direct runoff being conveyed to the same outlet. Similar terms include basin, drainage basin, catchment, and catch basin. A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Zoning - The separation or division of a municipality into districts, the regulation of buildings and structures in such districts in accordance with their construction and the nature and extent of their use, and the dedication of such districts to particular uses designed to serve the General Welfare.

[211] Michigan State University. (1998–1999). *Best practice briefs, no. 4*. http://outreach.msu.edu/bpbriefs/issues/brief4.pdf. Accessed on July 13, 2012.