

Workshop 2: Changes in Legislation & Recent Disasters

Houston-Galveston Area Council Annual Debris Training Workshop Series June 19, 2013





- Introductions and Purpose
- Recent Changes to Federal Disaster Assistance Programs
- Break
- In-Depth Discussion on Debris Reimbursement Options
- Impacts of Recent Disasters
- Next Steps/Adjourn



Part 1: Introduction and Purpose





The Stafford Act

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended

April 2013



FEMA



FACILITATORS

4

John Buri

- Supported debris management operations in every SAIC disaster response since 2004 throughout the country.
- Assisted municipalities throughout the state with debris management programs during Hurricane Ike, Hurricane Alex, and the wildfires in Bastrop, Texas.
- Serves as the debris program manager for H-GAC

Donald Kunish

- Most recently served as a debris project manager in New Jersey for Hurricane Sandy, in Louisiana for Hurricane Isaac and in Alabama for the 2011 Tornadoes
- Managed major debris removal projects and served as a technical advisor on disaster assistance grants throughout the country for 15 years
- Lead the State of Florida Emergency Response Commission

Caryn Messer

- Serves as a technical lead for emergency management planning including disaster debris management and recovery programs throughout the country
- Has supported the H-GAC annual debris training workshops for the past 4 years
- Assisted state agencies throughout Florida with the FEMA Public Assistance Program following the 2004 and 2005 hurricane seasons

PARTICIPANTS

- Name
- Agency
- Position/role in disaster debris management





- Provide detailed information on the recent changes to federal disaster assistance programs.
- Discuss the impacts of the Sandy Recovery Improvement Act.
- Analyze the pros and cons of different funding options based on type and level of disaster debris.
- Review the lessons learned from Hurricane Isaac and Hurricane Sandy.

Part 2: Recent Changes to Federal Disaster Assistance Programs



The Stafford Act

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended

April 2013



FEMA



2012 YEAR IN REVIEW

- 47 major disaster declarations fewest since 2001.
- Hurricanes Isaac and Sandy and Tropical Storm Debbie made landfall.
- 10 states and the District of Columbia received major disaster declarations for Hurricane Sandy.
 - -4 states received major declarations for Katrina.
- Debris operations remain ongoing for Hurricanes Isaac and Sandy.
- The Federal Highway Administration (FHWA) made significant changes to the Emergency Relief (ER) program.
- Sandy Recovery Improvement Act was signed into law.

- Objectives of the Sandy Recovery Improvement Act:
 - Reduce the cost of federal government assistance
 - Increase the administrative flexibility of the FEMA Public Assistance program
 - Expedite the process of providing and using the assistance
 - Create incentives for applicants to complete projects in a timely and cost-effective manner

- Outcomes of the Sandy Recovery Improvement Act:
 - Streamlines environmental review process
 - Allows greater flexibility to reduce rebuilding time and lower costs
 - Reduces debris removal costs
 - Provides flexibility for less expensive housing options
 - Improves dispute resolutions to avoid cost overruns
 - Recommendations for reducing costs of future disasters

- Robert T. Stafford Act as Amended April 2013
 - Defines the requirements for new alternative procedures
 - Changes that apply to Section 406 permanent work
 - Addition of Section 428(e)(2) which applies to Sections 403(a)(3)(A), 407, and 502(a)(5) - <u>debris</u> <u>removal assistance</u>
 - Reauthorizes similar authorities to those granted by the PA Pilot Program

- Overview of Changes that Apply to Section 406
 - Subrants based on fixed estimates, with the Subgrantee accepting responsibility for costs above the estimate
 - Use of surplus funds for hazard mitigation and activities to improve future PA operations
 - Consolidation of multiple permanent work facilities into a single subgrant
 - Elimination of the penalty for alternate projects based on fixed-grant estimates
 - Acceptance of mutually agreed-upon cost estimates prepared by the Subgrantee's licensed engineer
 - Use of an expert panel to validate cost estimates with a federal share of \$5 million or more

- Applicable to state, tribal, and local governments and private non-profit facilities
- Participation is voluntary for each facility
- Applicable to large projects only
- Subgrantee must agree to participate in the grants based on fixed estimates procedure before having access to other alternative procedures.

ALTERNATIVE PROCEDURES FOR PERMANENT WORK

 Relationship of elements of the alternative procedures for permanent work

Alternative Procedures Subgrant

Subgrant based on fixed estimate (required)

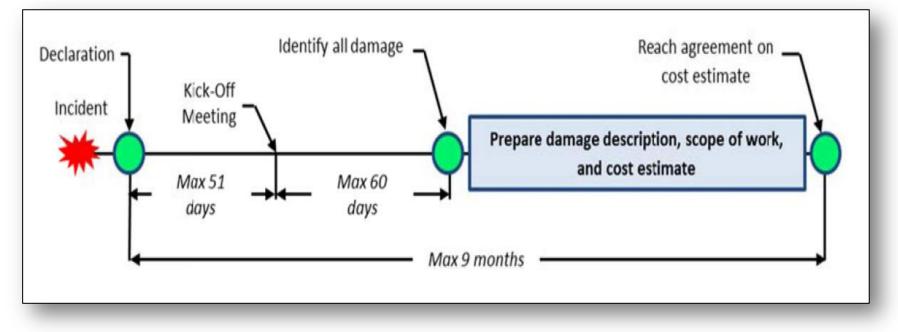
Optional features:

- Consolidation of multiple fixed subgrants
- FEMA validation of Subgrantee-provided estimates²
- Elimination of reduced eligible funding for alternate projects
- Use of excess funds
- Review of estimates by an expert panel for projects with a Federal share of \$5 million or greater

Participation is required to access all other permanent project alternative procedures

ALTERNATIVE PROCEDURES FOR PERMANENT WORK

Timeline for preparing cost estimates for permanent work



Agreement on the estimate must be reached within nine months.

- Subgrants Based on Fixed Estimates
 - Subgrantee must agree with the Grantee and FEMA to the following:
 - Alternate procedures
 - Fixed amount
 - Scope
 - All disputes must be settled before the subgrant is considered.
 - Reimbursements are made on actual costs

- Subgrants Based on Fixed Estimates
 - Cost estimates will be considered that comply with the following:
 - Prepared by an agreed upon professionally licensed engineer
 - Properly conducted and certified
 - Comply with regulations, policy and guidance
 - Cost estimates are eligible for funding.
 - Subgrants over \$5 million are eligible to be validated by a FEMA funded independent expert panel.

- Consolidation of Fixed Subgrants
 - Subgrants with fixed estimates can be combined for traditional recovery or for a "fundamentally different concept."
 - Must be consolidated within 12 months.
 - Section 406 funds can not be used if a facility is replaced or relocated.

- Elimination of the Reduction in Eligible Costs
 - Under standard procedures, FEMA reduces eligible costs for alternate projects.
 - Under the alternative procedures, FEMA will no longer implement this reduction for subgrants funded under the pilot program.
 - Subgrants approved and obligated under standard procedures are not eligible.

Use of Excess Funds

- Hazard mitigation activities that will reduce the risk of damage in future disasters including facilities not damaged in the declared disaster.
- Activities that improve future PA Program permanent work operations, such as training and planning for future disaster recovery operations.
- Consolidated subgrants, otherwise-eligible PA Program project activities, such as improved projects, alternate projects, etc.

- Addition of Section 428 Debris Removal Assistance
 - Allows for the use of a *sliding scale* to determine cost share based on time.
 - Allows for the use of program *income from recycled debris*.
 - Allows for reimbursing base and overtime wages.
 - Allows for incentives to have an approved debris management *plan and pre-qualified contractors*.
 - Allows for making grants on the basis of *fixed estimates* and allows the use of the *excess funds for approved purposes*.

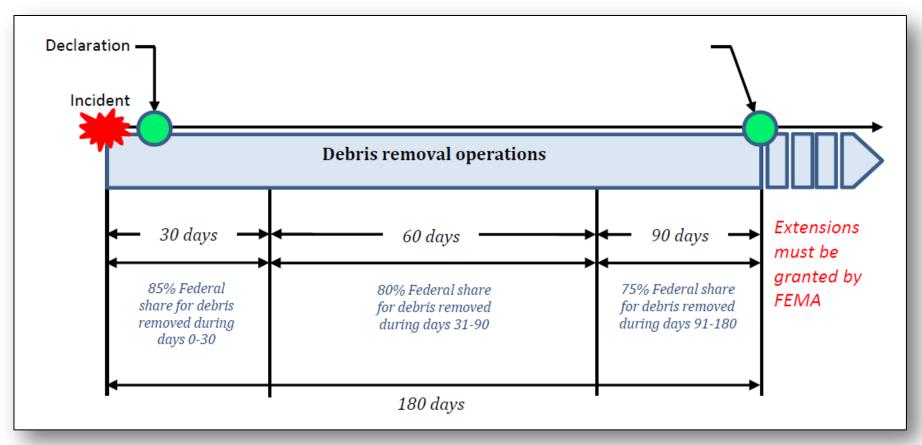
Sliding Scale

 Increased federal cost share for collection, hauling, processing and disposal within a specified timeline.

Debris Removal Completed* (days from start of Incident Period)	Federal Cost Share	
0 - 30	85%	
31 - 90	80%	
91 - 180	75%	
NO FEDERAL DOLLARS FOR DEBRIS REMOVAL AFTER 180 DAYS (UNLESS EXTENSION GRANTED)		

*Completed when accepted at final disposal site

Sliding Scale Timeline



- Recycling Revenues
 - Retain revenues received through recycling eligible disaster debris.
 - Must provide written notification to the state of the revenue.
 - Cost of recycling program cannot be claimed as direct project cost.



Recycling Revenues

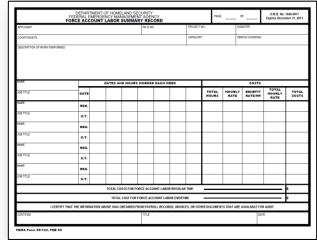
- May use revenues from recycling to:
 - Meet the cost sharing requirements of FEMA Public Assistance for debris removal
 - Develop comprehensive disaster preparedness and assistance plans, programs and capabilities
 - Activities that reduce the risk of future hardship or suffering from a major disaster
 - Activities to improve future debris removal operations or planning

Recycling Revenues

- Activities include:
 - Developing disaster debris management plans.
 - Updating or revising existing plans.
 - Enhancing landfill-management sites.
 - Installing mechanisms to control disaster debris.
 - Purchasing equipment that would facilitate sorting, volume reduction, or removing disaster debris.
 - Purchasing debris recycling equipment.
 - Purchasing products to facilitate quantifying disaster debris.
 - Purchasing onboard weight measurement systems.
 - Purchasing software systems to assist in tracking trucks, drivers and routes.

Straight Time Force Account Labor

- Reimbursement for base and overtime wages of existing employees and extra hires.
- Costs calculated based on labor classifications.
- Must track and maintain accurate hourly labor records.
- Procedure can be used with any other alternative procedure or on its own.
- Procedure can be applied to both large and small projects.



FEMA Force Account Labor Summary Record form (pictured) can be found at the following link: <u>http://www.fema.gov/library/viewRecord.do?id=2729</u>



Public Assistance Debris Management Guide FEMA-325 / July 2007



FEMA 325 provides guidance on debris management planning concepts. This document can be found at the following link:

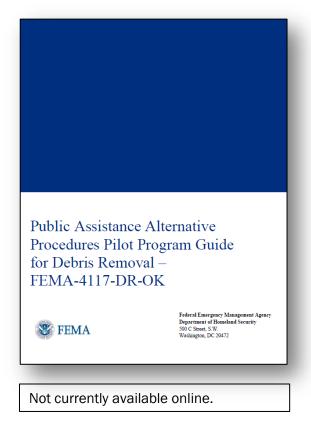
http://www.fema.gov/public-assistance-local-statetribal-and-non-profit/debris-management-guide

- Debris Management Plans
 - One-time incentive of a 2 percent increased cost share.
 - Applied to debris removal completed within 90 days from the start of the incident period.
 - Must have a debris management plan in place before the date of declaration of the major disaster.
 - Must be provided to FEMA for review within 10 days from the date of declaration.
 - Feature can be used with any other feature or on its own.

Debris Management Plans Should Include:

- Debris management overview
- Events and assumptions
- Debris collection and removal plan
- Debris disposal locations and Debris Management Sites
- Debris removal on private property
- Use and procurement of contracted services
- Use of force account labor
- Monitoring of debris operations
- Health and safety requirements
- Environmental considerations and other regulatory requirements
- Public information

Differences in Programs





Public Assistance Pilot Program **Program Guidance** Guidance for FEMA, State and Local Officials June 2007

http://www.fema.gov/pdf/about/region s/regioniii/papilot.pdf

Differences in Programs Estimated Project Underrun Uses

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
Does not allow for estimated projects	Hazard mitigation projects
	Offset overruns on other eligible projects
	Public Assistance related training
	Internal project management/ administrative costs that exceed sliding scale

Differences in Programs Sliding Scale Reimbursement Options

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
85% federal cost share for first 30 days 80% federal cost share for days 31 – 60	Does not allow for sliding scale reimbursement option
75% federal cost share for days 61 – 90	
No reimbursement beyond 180 days	

Differences in Programs Recycling Revenue Uses

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
Cost sharing requirements for debris removal	
Disaster preparedness plan, program and capability developments	Not specified
Activities that reduce future risk	
Activities to improve future debris removal operations	

Differences in Programs Recycling Revenue Uses

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
Cost sharing requirements for debris removal	
Disaster preparedness plan, program and capability developments	Not specified
Activities that reduce future risk	
Activities to improve future debris removal operations	

Differences in Programs Straight Time Force Account Labor

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
Reimbursement for base and overtime wages Reimbursement for permanent employees and extra hires	Reimbursement for permanent employees only

Differences in Programs Debris Management Plans

FEMA-4117-DR-OK Public Assistance Alternative Procedures Guide 2013	Public Assistance Pilot Program 2007
 Additional 2% federal cost share (not to exceed 100%). Plan in place prior to declaration and provided to FEMA within 10 days of declaration. Must have one pre-qualified contractor (as defined in Sand Recovery Improvement Act) prior to declaration 	Additional 5% federal cost share (not to exceed 100%) Must have an approved plan and two pre- qualified contractors





RECENT CHANGES TO FEDERAL DISASTER ASSISTANCE PROGRAMS

🧭 FEMA	What are you looking for?	
Archived Policies	9522 General Work Eligibility	
PA Publications Archive	9523 Emergency Work	
 Process to Request Arbitration 	• 9523.1 Snow Assistance Policy (11/02/09), (PDF 2MB, TXT 17KB)	
 Community Disaster Loan Program Fact Sheet 	Clarification Memo: Snow Assistance Policy (1/6/11), (PDF 313K, TXT 2K)	
 Frequently Asked Questions Section 403 Sheltering 	 9523.2 <u>Eligibility of Building Safety Inspections Supporting Emergency Work</u> (1/28/08), (PDF 845KB) 9523.3 <u>Provision of Temporary Relocation Facilities</u> (12/14/10), (PDF 493KB) 	
Frequently Asked Questions Section 403 Sheltering	Memo: Safe Rooms for Temporary School Facilities (6/13/11), (PDF 552KB)	
Supplement 1	 9523.4 <u>Demolition of Private Structures</u> (7/18/07), (PDF 1.76MB) 	
Emergency Declarations For	 9523.5 Debris Removal from Waterways (10/30/12) (PDF 527KB, TXT 18KB) 	
Sheltering Evacuees Resources and Tools 	 9523.6 Mutual Aid Agreements for Public Assistance and Fire Management Assistance (11/10/12), (PDF 381KB) 	
Eine Management Applications	 9523.8 Mission Assignments for ESF #10 (6/4/01) 	
 Fire Management Assistance Grants 	 9523.9 <u>100% Funding for Direct Federal Assistance and Grant Assistance</u> (6/9/06), (PDF 1.5MB) 	
Rethinking the Public	 9523.10 Eligibility of Vector Control (Mosquito Abatement) (9/12/06), (PDF 325KB) 	
Assistance Program	 9523.11 <u>Hazardous Stump Extraction and Removal Eligibility</u> (5/15/07), (PDE 722KB) 	
Public Assistance Frequently	 9523.12 <u>Debris Operations – Hand-Loaded Trucks and Trailers</u> (8/17/10) 	
Asked Questions	 9523.13 Debris Removal from Private Property (7/18/07), (PDF 4.4MB) 	
Public Assistance Appeals	 9523.15 Eligible Costs Related to Evacuations and Sheltering (4/6/07), (PDF 374KB) 	
Database	 9523.18 Host-State Evacuation and Sheltering Reimbursement (7/23/10), (PDF 969KB, TXT 7KB) 	
Alternative Procedures	Host State Policy Clarification Memorandum (8/30/08), (PDF 131KB)	
Louisiana Recovery	 9523.19 Eligible Costs Related to Pet Evacuations and Sheltering (10/24/07), (PDF 1.49MB) 	
Mississippi Recovery Office	9523.20 Purchase and Distribution of Ice (8/26/09), (PDF 519KB)	
Environmental Planning and	9524 Restoration of Damaged Facilities	
Historic Preservation Program	 9524.1 Welded Steel Moment Frame Inspections (11/05/07), (PDF 1.61MB) 	

FEMA 9500 Recovery Policies

- Public Assistance policies formatted for printing
- Frequent updates to policies
- Numbering not sequential with date
- Monitor site for changes

The FEMA 9500 Series Policy Publications can be found at the following link: <u>http://www.fema.gov/9500-series-policypublications</u>

- Recent updates to the FEMA 9500 Series Policy Publications
 - Recovery Policy 9523.5 Debris Removal from Waterways
 - Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - Recovery Fact Sheet 9580.214 Debris Removal on Federal-Aid Highways
 - Recovery Fact Sheet 9580.215 Debris Removal Force Account Labor Costs

- Recovery Policy 9523.5 Debris Removal from Waterways
 - Guidance for debris removal from the following:
 - Navigable waterways
 - Coastal and inland zones
 - Wetlands



- Recovery Policy 9523.5 Debris Removal from Waterways
 - Defines roles and responsibilities for:
 - US Army Corps of Engineers (USACE)
 - US Coast Guard (USCG)
 - Environmental Protection Agency (EPA)
 - Natural Resources Conservation Commission (NRCS)

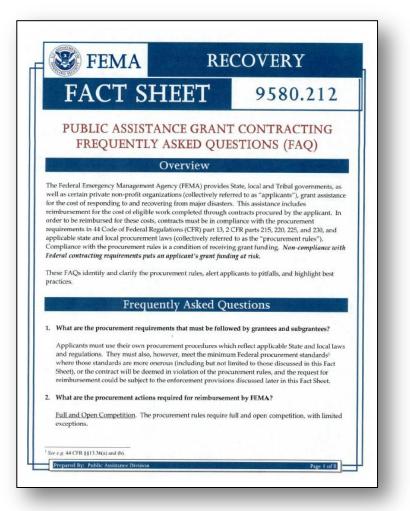


- Recovery Policy 9523.5 Debris Removal from Waterways
 - Approval for FEMA Assistance:
 - Direct result of a presidentially declared disaster
 - Removal is in the public interest
 - Another federal agency does not have specific authority to perform or fund the work
 - Applicant must provide:
 - Public interest determination
 - Legal responsibility
 - Debris types and quantities
 - Debris removal locations

 Recovery Policy 9523.5 Debris Removal from Waterways

"Pursuant to Section 312 of the Stafford Act, FEMA is prohibited from providing funds for work that is covered by another source of funding. Therefore, applicants should take steps to verify whether insurance coverage or any other source of funding exists for the debris removal work."

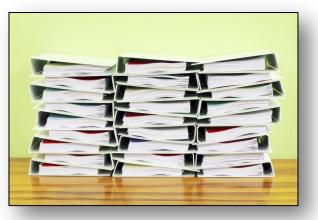
- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - Provides information on frequently asked questions regarding:
 - Procurement policies
 - Contracts
 - Compliance for receiving grant funding



- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - Applicants must:
 - Use their own procurement procedures.
 - Comply with local, state and federal applicable laws.
 - Applicant may be subject to enforcement actions for non-compliance.

- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - Procurement action requirements:
 - Full and open competition
 - Cost or price analysis
 - Contractor ownership preferences
 - System for managing procurement
 - Required provisions in procurement actions (Davis-Bacon Act)
 - Guarantees and bonds

- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - FEMA recommended best practices:
 - Use sealed bids
 - Keep detailed records
 - Team up intergovernmental agreements
 - Lease versus purchase
 - Use value engineering
 - Pre-qualify debris contractors



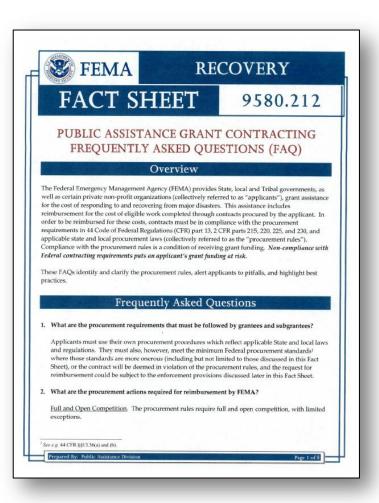
- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - FEMA discouraged practices:
 - Time and materials contracts except for 70 hour push
 - Piggyback contracts

FEMA preferences pre-qualified contractors rather than pre-positioned contracts to ensure pricing is determined at the time of the disaster.

- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - FEMA prohibited practices:
 - Noncompetitive contracts
 - Cost plus percentage contracts
 - Debarred or suspended contractors
 - Conflicts of interest
 - Duplicating costs
 - Contingency clauses
 - Excessive costs
 - Grantee or subgrantee profit

- Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting
 - Consequences for non-compliance:
 - Temporarily withhold payment or take more severe enforcement action
 - Disallow all or part of the cost of the activity or action not in compliance
 - Wholly or partly suspend or terminate the applicant's current award
 - Withhold future awards
 - Take other remedies that may be legally available

- Recovery Fact Sheet 9580.214 Debris Removal on Federal-Aid Highways
 - Provides information on debris removal from federal-aid highways under the FEMA Public Assistance program.
 - Explains recent changes to federal funding programs



CHANGES TO FEDERAL DISASTER AID PROGRAMS

- Until recently, the Federal Highway Administration (FHWA) had the primary authority to remove debris on federal-aid highways under its Emergency Relief (ER) Program
 - FHWA would only address first pass
 - FEMA would reimburse for subsequent passes
- Moving Ahead for Progress in the 21st Century Act ("MAP-21") signed 7/6/12 changed this process



FHWA ER – Conditions for Eligibility

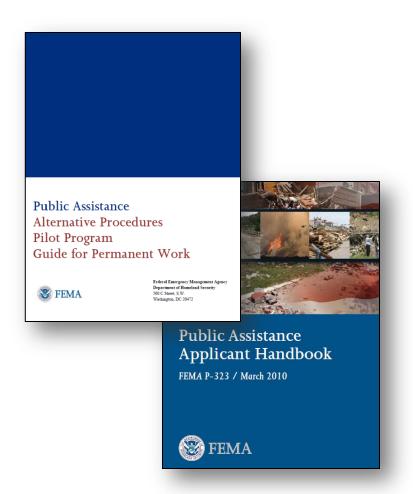
- Governor declares emergency but does not receive a Presidential declaration.
- The event receives a Presidential emergency declaration, but FEMA has determined that debris removal is not eligible for its assistance.
- A Governor's emergency declaration includes more counties than the Presidential declaration. FHWA can participate in debris removal costs for the counties not included in the Presidential declaration.

For additional information on changes as a result of MAP-21: <u>http://www.fhwa.dot.gov/map21/qandas/qaer.cfm</u> For additional information on the FHWA ER Program: <u>http://www.fhwa.dot.gov/reports/erm/</u>

In-Depth Discussion on Debris Reimbursement Options



- Advantages and disadvantages to using both program procedures based on the following:
 - Type of disaster
 - Type and quantity of debris
 - Special programs
 - Environmental considerations
 - Timeline



- Project Comparison:
 - Sioux Falls, South Dakota Ice Storm
 - Short-term debris removal project
 - Vegetative debris
 - Quick project completion
 - Bastrop, Texas Wildfires
 - Long-term debris removal program
 - Environmental concerns
 - Special programs



- Sioux Falls, South Dakota Ice Storm
 - Occurred in April 2013
 - Combination of ice and wind caused trees to crack and fall
 - Hazardous hanging and leaning limbs



Sioux Falls, South Dakota Ice Storm Sliding Scale Option

Timeline	Eligible Work	Federal Share	Local Share
Day 1 to 30 Cost Share: 85%/15%	\$863,487.88	\$733,964.70	\$129,523.18
Day 31 to 90 Cost Share: 80%/20%	\$125,653.55	\$106,805.52	\$18,848.03
Day 91 to 180 Cost Share: 75%/25%	\$0.00	\$0.00	\$0.00
Day 180+ Cost Share: 0%/100%	\$0.00	\$0.00	\$0.00
TOTAL	\$989,141.44	\$840,770.22	\$148,371.22

Sioux Falls, South Dakota Ice Storm Standard Debris Option

Eligible Work	Federal Share	Local Share		
\$989,141.44	\$741,856.08	\$247,285.36		
Comparison				
Program	Federal Share	Local Share		
Sliding Scale Option	\$840,770.22	\$148,371.22		
Standard Debris Option	\$741,856.08	\$247,285.36		

Difference of **\$98,914.14** federal cost share

Bastrop, Texas Wildfires

- Fire started September 4, 2011
- Tropical Storm Lee caused 30 mph winds
- Most destructive wildfire in Texas history
- 34,000 acres burned
- 1,667 homes destroyed
- 38 non-residential structures destroyed
- 5,000 people displaced
- 2 fatalities
- 1.5 million trees killed



Bastrop, Texas Wildfires Sliding Scale Option

Timeline	Eligible Work	Federal Share	Local Share
Day 1 to 30 Cost Share: 85%/15%	\$1,502,881.87	\$1,277,449.59	\$225,432.28
Day 31 to 90 Cost Share: 80%/20%	\$3,230,326.73	\$2,584,261.38	\$646,065.35
Day 91 to 180 Cost Share: 75%/25%	\$3,217,615.04	\$2,574,092.03	\$643,523.01
Day 180+ Cost Share: 0%/100%	\$9,732,477.24	\$0.00	\$9,732,477.24
TOTAL	\$17,683,300.88	\$6,435,803.00	\$11,247,497.88

Bastrop, Texas Wildfires Standard Debris Option

Eligible Work	Federal Share	Local Share		
\$17,683,300.88	\$13,262,475.66	\$4,420,825.22		
Comparison				
Program	Federal Share	Local Share		
Sliding Scale Option	\$6,435,803.00	\$11,247,497.88		
Standard Debris Option	\$13,262,475.66	\$4,420,825.22		

Difference of \$6,826,672.66 local cost share

Sliding Scale Option:

- Pros:
 - Possible lower cost share
- Cons:
 - Cleanup cut off date
 - Must identify when debris actually reaches final disposal
 - Ensuring contractor urgency with final disposal

- Recycling Revenue Option:
 - Pros:
 - Possible increased funding for disaster programs with Recycling revenue
 - Innovative recycling methods that are more expensive are eligible

Cons:

- Current contracts might not account for recycling revenues
- Contractors consider revenues in unit pricing
- Contracts may utilize cradle to grave pricing
- Local may have given up ownership of debris





Impacts of Recent Disasters



Hurricane Isaac

- Landfall on August 28, 2012 near New Orleans, Louisiana
- Large size and storm surge
- Slow moving storm with heavy rain
- \$500,000,000 in utility damage
- \$612 million in damage in Louisiana
- Approximately 181,000 cubic yards of debris collected





- Hurricane Isaac Success Stories
 - Prepositioned contracts
 - Pre-identified and permitted debris management sites
 - Required 50% beneficial use of vegetative debris

- Hurricane Isaac Challenges
 - Past experience with previous storms
 - New levees untested
 - Flooding in areas outside new federal levees
 - Public perception of debris start times
 - Mobilization schedule requirements
 - Subcontractor payments lower than with Gustav and Katrina
 - Not USACE managed projects
 - Industry pricing has eroded with small margins



- Recommendations from Hurricane Isaac: Project Kickoff
 - Every disaster is different and requires a different response
 - Define the roles and responsibilities of all project stakeholders
 - Maintain a robust public information campaign to help manage citizen expectations

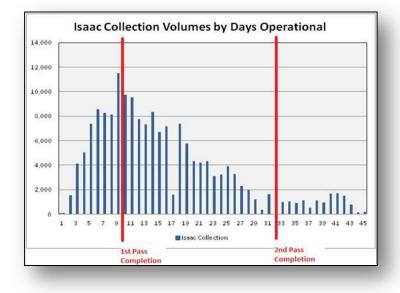
- Recommendations from Hurricane Isaac: Managing Debris Operations
 - Strict mobilization schedules and low bid contracts with low debris quantities will not facilitate an immediate response
 - Define priority areas with associated distinctive identifiers
 - Require specialty crews for unique challenges





- Recommendations from Hurricane Isaac: Zone Management/Pass Completion
 - Define requirements for zone completion
 - Provide aggressive public information campaign
 - 1st pass one time
 - 2nd pass multiple with notice
 - 3rd pass last opportunity
 - Identify pick up way points
 - Use automated debris management system (ADMS)

- Recommendations from Hurricane Isaac: Monitor and Contract Reporting
 - Predetermine critical areas of reporting:
 - Debris collected
 - Areas worked (zone or collection point)
 - Number of trucks
 - Cumulative amount vs. capacity of debris management site
 - Incident reports



- Recommendations from Hurricane Isaac: Contract Management
 - Prepare and plan for contractor failure
 - Include contract clauses for underperformance
 - Maintain backup contractors
 - Ensure back up contractors are on standby



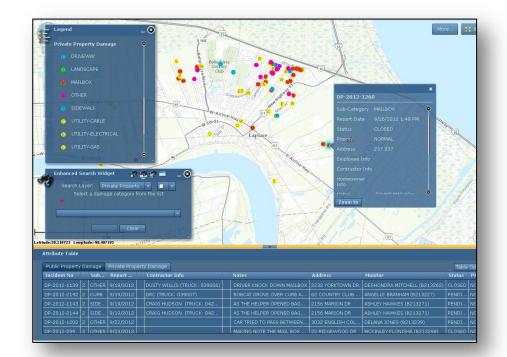
- Recommendations from Hurricane Isaac: Debris Management Sites
 - Location –Strategically locate for mileage price schedule
 - Capacity vs. haul-out operations
 - Recycling opportunities -Stafford Act changes



- Recommendations from Hurricane Isaac: Set Out Procedures/Bagged Debris
 - Task and appeal
 - Use force account or solid waste
 - Provide public Information: don't use bags



- Recommendations from Hurricane Isaac: Citizen Complaints and Questions
 - Establish a debris command center
 - Consider using a GIS based management tool



Hurricane Sandy

- Late season storm making landfall on October 29, 2012 in New Jersey
- Massive storm surge flooded streets, tunnels and subways
- Approximately \$50 billion in damage
- 15 states and the District of Columbia impacted
- 6 million without power



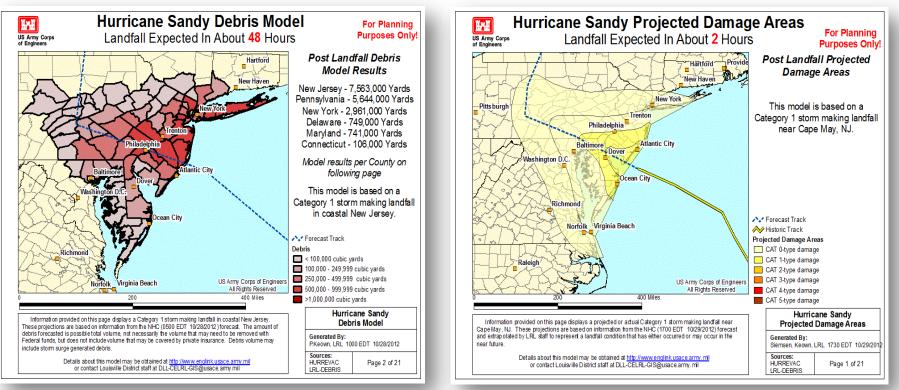
- Hurricane Sandy Success Stories
 - ADMS was widely used throughout the impacted area with success.



- Hurricane Sandy Challenges
 - General lack of preparedness
 - Very few pre-positioned contracts or preidentified vendors
 - Statewide contract
 - 75% federal cost share in New Jersey, 90% in New York
 - Underestimated available resources
 - Lack of planning and consideration for local landfill capabilities

Hurricane Sandy Challenges

 Locals relied on debris estimation models that were significantly off target



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- Recommendations from Hurricane Sandy
 - Think: It can happen to you.
 - Prepare even if you are on the periphery of the projected path.
 - Do not rely solely on debris estimation models, prepare for the worst.
 - Pre-identify debris contractors.
 - Develop a debris management plan.

"He who fails to plan is planning to fail."

Next Steps/Adjourn



QUESTIONS?





Workshop 3: Disaster Debris Management Documentation

- August 21, 2013

ADJOURN

Thank you!

John Buri Director of Post-Event Programs, SAIC (713) 737-5763

Donald Kunish Client Services Manager, SAIC (407) 790-9288

Caryn Messer Emergency Management Planner, SAIC (407) 271-0744