DEBRIS OPERATIONS

A FIELD PERSPECTIVE

Presented by the FEMA Florida Long Term Recovery Office - Debris Operations
May 2006 v1.0.4
Overview of Debris Operations

- Costs
- Trends
- Force Account
- Contract
- Operational Methods
- Other Information
Overview of Debris Operations

Costs

- Most likely the highest cost of a disaster!
- For every man, woman, child and an occasional alligator in the entire State of Florida, FEMA, The State of Florida and YOU will spend approximately $45.00 per person, removing Wilma debris
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- **Trends**
  - Disasters will continue to happen
  - Unit costs have continued to go up
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Force Account Work

- **FA Labor**
  - Overtime and Fringe Benefits Only

- **FA Equipment**
  - Cost Codes and Equipment Rates
    - Local Cost Codes
  - Total Hours in Use
    - Idle time typically is not eligible
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Contracts

- Contracts - Types
  - Lump Sum
  - Unit Price
  - Cost plus fixed fee
  - Time and Materials (T&M)
    - Limited to 70 hours immediately after the disaster
Contracts

- **Lump Sum**
  - *Scope of work needs to be defined accurately and very specific*

- **Unit Price**
  - Work done on an item by item basis with cost by
    - Cubic yards (CY)
    - Tons

- **Cost plus fixed fee:**
  - *May be Eligible*
Time and Materials
- Limited to 70 hours of T&M
- Contract needs to have a not to exceed provision.

Other?
- Must comply with 44CFR 13.36

Not Eligible:
- Cost plus a percentage of cost contracts and contingency contracts are not eligible
Competitive Bid Process

- Applicants must follow Local, State and Federal Procurement Guidelines.
- Applicant must document the Procurement Process
- References
  - Code of Federal Regulations 44 paragraph 13.36
  - Do NOT Use Qualifications-Based Procurement Procedures – Reserved for A/E Services Only
  - Procurement, and OMB Circular A-87.
  - Applicant’s Purchasing Manual
Piggyback Contracts

- FEMA has no specific prohibition with regard to “piggyback” contracts. There are, however, several pitfalls that an applicant must consider as they evaluate their need to piggyback on the contract of another entity.
Piggyback Contracts

You must have written permission from the original contracting entity to “piggyback” on their contract,
You must have written approval from the contractor that they agree to honor the terms of that contract to you,
Piggyback Contracts

- You need to understand that when you “piggyback” on a contract that was let by another entity, you in effect assume the “sins of your predecessors”. If there are procedural errors in compliance of that contract with Federal requirements, FEMA will hold you responsible for those errors just as if you had been the original bidding and contracting agency.
Piggyback Contracts

Generally, FEMA encourages applicants to avoid “piggyback” contracts. Even though they may be legal, the use of such contracts may jeopardize FEMA funding. If FEMA determines that the use of such contracts has negatively impacted any Federal procurement requirement, most specifically the requirement to compete, your funding could be at risk.
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Truck Certifications

- **Measurements**
  - Measurements on inside of bed, usable space.
  - Deduct for open spaces, voids etc
- **Use standardized form, with dimensions, volume and truck identifying information**
- **Measurements converted to decimal points. 8’ 5” is not 8.5 feet (8.42)**
- **Tailgates**
Loading Trucks

- **Machine Loads**
  - Loaders should have height capability to “compact” load into truck/trailer.
  - Mechanical loaders
    - Include Front-end loaders such as Bobcats and Knuckle-Boom type loaders
      - Handcarts and grippers are not eligible

- **Hand Loads**
  - Limited to a maximum 50% of certified capacity.
  - More often than not, are no longer used
    - *Punch list Work*
Monitoring

- 44 CFR 13.20(2) Accounting Records
  - Identify Source and Application of Funds Provided for Financially-Assisted Activities
- 44 CFR 13.40 Monitoring and Reporting Program Performance
- Requirement to Adequately Monitor Debris Operations
  - Force Account Monitors
  - Contracted Monitors
Monitoring (Cont)

- FA or Contracted Monitors
  - Proper Training
    - Applicant-Developed Program
    - FEMA Assistance
  - Adequate Oversight
    - Eligible Debris, Accurate Quantifications
    - Applicant is Accountable, Not Contractors
    - Protection of Funding
Monitoring (Cont)

- **Roles of your Monitors**
  - Your representative
  - Your eyes and ears
  - Make or break a debris operation
  - Every time a monitor signs a load ticket, they are writing a check

- **Roles of FEMA Monitors**
  - Protect the Applicant’s funding
  - Protect Government funds from waste
Monitoring Schemas

**Field**

- **Choke Point**
  - Monitor located at a central point and contractors come from many areas to get load tickets.
    - Does not work very well. No control or true knowledge of where debris originated.

**Localized**

- Monitor controls small group of contractors within a small area
- Most Workable Method
Monitoring Schemas

- Tower
  - Entrance
    - Suggested - One monitor in tower and one spotter on the ground to quantify amount of debris, Cubic Yard, CY
  - Exit
    - Used to prevent contractor from “recycling” debris
Monitoring

Overall

- Debris Contract work must be monitored
  - Either FA or Contract Monitors
- Origination location of debris
  - Use a standardized Load Ticket
  - Important Point – Know where your debris originated
Monitoring

Tower Monitoring Example
Single/Double/Triple Hauls

- **Single Haul** – From origin to TDSRS or Final Disposal
- **Double Haul** – Second haul of *unreduced* debris
  - Typically is not eligible unless the least cost alternative
- **Triple Haul** – Hauling of debris in a unreduced state for a third time
  - Typically is not eligible unless the least cost alternative
Temporary Debris Storage & Reduction Sites (TDSRS)

- Suggestion - Chosen before disaster
- Suggestion - Pre/Post Environmental Studies
- Permits – Environmental, Forestry etc
- TDSRS Site Management
- TDSRS Site Restoration
  - A good method is to include site restoration into the contract as a part of the Site Management cost
Debris Reduction

- Chipping/Grinding
  - Typically Tub Grinders
  - 4:1 reduction (75% reduction)

- Burning
  - Air curtain pit incineration
  - 20:1 reduction (95% reduction)
  - Open burning
    - Uncontrolled
    - Controlled
Debris Disposal

- Landfill
  - Permits

- Beneficial Use Disposal
  - Permits

- Due Diligence
  - Know where your debris is and ensure your contractors are operating in your area of legal responsibility!
  - Ultimately, you are responsible for your debris.
Stumps

- **Validation**
  - Pre Validation
    - Lists with GPS locations to provide to FEMA monitors.
  - Post Validation
    - Lists, Pictures, Descriptions, etc

- **Eligibility**
  - Uprooted 50% or more, and poses an immediate threat to life, public health and safety; on a public ROW, improved public property or improved property of a PNP
    - 24 inches and above, removed on a per stump cost
    - 24 inches and below, removed at a unit cost rate of veg debris
Stumps

- Uprooted 50% or less, and poses an immediate threat to life, public health and safety; on a public ROW, improved public property or improved property of a PNP
  - Flush cut. Cut portion as a unit cost rate of veg debris

- Covered under 9523.11 Stump Policy

- Grinding of stumps meeting eligibility criteria
  - Typically is not eligible. Must be validated by FEMA monitors on a case by case basis and must be the most cost effective method.
Contracts

- Unit Cost per stump
- Unit Cost as Debris

Based on experience in dealing with storms over the past few years, cradle to grave contracts including disposal, are less confusing and more efficient.
Leaners

- **Validation/Eligibility**
  - Pre Validation
    - Lists with GPS locations to provide to FEMA monitors.
  - Post Validation
    - Lists, Pictures, Descriptions, etc

- **Contracts**
  - Unit Cost per Tree
  - Unit Cost as Debris
  - Based on experience in dealing with storms over the past few years cradle to grave contracts including disposal, are less confusing and more efficient.
Hangers

- **Validation/Eligibility**
  - Pre Validation
    - Lists with GPS locations to provide to FEMA monitors.
  - Post Validation
    - Lists, Pictures, Descriptions, etc
  - Eligibility
    - 2” or greater at the break

- **Contracts**
  - Unit Cost per hanger or “hanger tree”
    - Preferred contract by “Hanger Tree”, with single or split scope
  - Based on experience in dealing with storms over the past few years, cradle to grave contracts including disposal, are less confusing and more efficient.
Derelict Vessels

- **Due Diligence**
  - Federal Statutes – Stafford Act, Policies, DSGs
  - State Statues
    - 376.15 Derelict Vessels; removal from public waters.
    - 823.11 Abandoned and derelict vessels; removal; penalty
  - Local Statues
  - Duplication of Benefits
    - Insurance – Policy Digest 321, pg 71
    - Other Federal Agencies - USCG, USACE – Policy Digest 321, pg 85
Derelict Vessels

- Validation/Eligibility
  - Pose a Health and Safety Hazard
    - Navigational Hazard
  - Environmental Hazard

- Pitfalls
  - Seizure of Private Property on Public Property
  - Seizure of Private Property on Private Property
  - No Due Diligence
Private Roads/Gated Communities

- **Wilma** *(Disaster Specific – May not be for future events)*
  - Debris Removal may be eligible under strict guidelines
    - Must be pre-approved by FCO through the State.
    - Immediate threat to life, public health and safety
    - Applicant must resolve and present its legal responsibility to remove debris
    - Subject to normal public services such as school bus and postal routes. Emergency vehicles not considered
    - Removal from private property is and remains the responsibility of the property owner

- **New Guidance Coming!**
FHwA-ER Roads

- FHwA will limit eligibility of debris removal under the ER program to one pass only.
- Subsequent passes are eligible for FEMA reimbursement.
- Costs for associated FHwA-ER debris removal are not eligible for FEMA reimbursement to applicant.
- Refer to your local FDOT office for program requirements.
NRCS to deploy with FEMA to facilitate canal eligibility decisions
FEMA considers emergency work only judged against a 5 year flood event
FEMA eligibility guidelines require that canals be maintained
New guidance coming!
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Volume VS Weight

- CY is a very subjective call at best
  - Even experienced monitors call loads at higher than actual volume
- Weight is the best method
  - Cost will be more accurate
  - Cleanup will be faster
    - Contractor will pick up EVERYTHING. Still need to monitor closely
  - Easier to monitor
  - FEMA WILL reimburse for the use of portable scales
FEMA Standard Conversions

- **Debris - CY to Tons Ratio**
  - Based on Field Studies – 8 CY = 1 Ton

- **Mulch – Reduction Ratio**
  - Based on USACE Study – 8 CY Debris = 2 CY of Mulch, 4 to 1 Ratio

- **Mulch – CY to Tons Ratio**
  - Calculated: 2 CY Mulch = 1 Ton
Debris Types

- Vegetative
- Construction & Demolition – C&D
- Mixed
- Hazardous
Debris Eligibility

- General Criteria
  - Threat to public health & safety
  - Direct result of declared event
  - Within maintained Public Property
    - Public ROW
  - Applicant’s legal jurisdiction and responsibility at time of disaster
Debris Eligibility

Who makes the eligibility call?
- FEMA
The PW Formulation Process

- **Estimated PWs**
  - Preferred Method
    - General – Efforts should focus on preparing estimated PW’s as early in the debris removal process as possible. There are several elements that generally need to be included in the PW. These can be placed on a single PW or broken out into several as necessary.
      - Contract Costs for debris removal, site management, and disposal
      - Contract Costs for monitoring
      - Force Account costs for debris removal and/or monitoring
      - Special debris issues such as stumps, trees, hangers, white goods, sand etc.
  - Funding available early in the project!
The PW Formulation Process

- **Actual Cost PWs**
  - Based on actual invoice costs
  - Delay in funding until PW is formulated
The PW Formulation Process

- **72 Hour, 100% Funding Period**
  - *If included in Presidential declaration*
  - *Not to be confused with the 70 Hour Time and Material Contract Limitations*
  - *Applicant should chose this period based on costs per day of the “window”*
  - *Must be 72 “continuous” hours*
Applicant Documentation Responsibilities

- It is your responsibility to document all cost associated with your projects. Failure to properly document any project may result in loss of funding for any claimed work.
  - Ref: Applicant Handbook FEMA 323 pg. 68
- The information required for documentation describes the “who, what, when, where, why and how much” for each item of disaster recovery work.
  - Ref: Public Assistance Guide
Applicant shall create and maintain documentation of work performed and costs incurred on each project identified in a Project Worksheet sufficient to permit a formal audit...
Written Resources

- FEMA Publication 321 – Policy Digest
- FEMA Publication 322 – Public Assistance Guide
- FEMA Publication 325 – Debris Management Guide
- 9500 Series Policies
  - Debris Specific Citation
    - 9523.11 Stumps
    - 9523.12 Hand loaded Trucks
    - 9580.1 Job Aid
    - 9580.4 Fact Sheet: Debris Operations – Clarifications
Written Resources

- 2006 Florida Playbook
  - Located on Florida PA Website>Information
    - Has latest DSGs
    - Latest Fact Sheets
    - Specific Policies
FEMA's Role

- Protect the Applicant’s reimbursement funding
- Protect Government funds from waste
- Determines eligibility
- Advise Applicants in Debris Management Issues
State’s Role

- Protect the Applicant’s Funding
- Act as Advocate for Applicant in PA Process
- Process Appeals
- Advise Applicants in Debris Management Issues
Applicant’s Role

Before the storm
- Provide your Debris Contact Person information. Send to FLTRODEBRIS@DHS.GOV
- Provide copies of your prepositioned contracts, Debris Removal, Monitoring, etc

After the storm
- Find your FEMA Debris Specialist!
  - *If they haven’t found you!
Important Contact Information

- **FLORIDA Debris Hotline 407-858-4951**
  - Roger Jones – Acting Deputy Director, Infrastructure Branch, FEMA, LTRO, Orlando, FL
    - Desk 407-858-6396
    - Cell 407-312-6247
    - Email roger.jones@dhs.gov
  - Andy Compton – Lead Debris Program Specialist, Infrastructure Branch, LTRO, Orlando FL
    - Desk 407-854-6302
    - Cell 832-851-3583
    - Email james.compton@associates.dhs.gov
  - Billy Morgan – Miami Dade Debris Specialist
    - Cell 703-463-8446
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To get the latest copy of today’s seminar, please contact either the debris hotline at 407-858-4951 or via email at fltrodebris@dhs.gov