

Title: Navigating the Aftermath: Best Practices for Wildfire Debris Cleanup and Recovery

Introduction

Wildfires present unique challenges for disaster debris removal and recovery efforts. The destruction caused by wildfires not only impacts the environment but also places significant stress on citizens, city, and county government officials. Learning from past events, such as the 2015 and 2017 California Wildfires, the 2018 Camp Fire in Paradise, CA, and the 2021 Oregon Wildfires, can provide valuable insights into best practices for effective debris management.

Complexity of Wildfire Debris Removal

- **Nature of Debris:** Wildfire debris consists of various materials, including:
 - Burned Structures
 - Burned Vehicles
 - Vegetation
 - Metals
 - Concrete
 - Asbestos
 - Ash
 - Contaminated soils and other hazardous substances
- **Recyclability:** A significant portion of structural wildfire debris, such as metals and concrete, is recyclable, which adds a layer of complexity to the cleanup process
- **Soil Contamination:** Determining the extent of soil excavation required to remove contamination is a critical and challenging aspect of the cleanup.
 - How much soil to excavate?

Recyclability of Wildfire Debris

- **Metal:** Metals such as steel, aluminum, and copper from buildings and vehicles can be recycled. They can be melted down and used to produce new metal products, including construction materials, automobile parts, and appliances.
- **Concrete:** Concrete debris can be crushed and used as aggregate for new construction projects, such as road base, landscaping, and new concrete mixes.
- **Brick:** Similar to concrete, bricks can be cleaned and reused in construction projects or crushed to be used as aggregate.
- **Vegetation:** Burned trees and other vegetation can be chipped or mulched and used for landscaping, erosion control, or as biomass fuel for energy production.

- **Vehicles:** Burned vehicles may be taken to a metals recycler.

Tree Hazard Assessment

- Determining which fire damaged trees truly pose a risk to public safety and infrastructure is crucial.
 - Deciding which trees should remain is essential for environmental recovery & erosion control
 - Assessing hazard trees can also help in managing forest health. By identifying and removing severely damaged trees, foresters can reduce the risk of pest infestations and diseases, which can spread to healthy trees.
 - Not all burned trees need to be removed; some can provide habitat for wildlife or contribute to the ecosystem's recovery if they don't pose a safety risk.

Community Preparedness Recommendations

- The significance of having pre-positioned debris contracts in place for swift response. What is a pre-positioned contract? (Jeff)
 - What are the benefits of a pre-positioned contract disaster debris management contract? (Jeff)
 - Are there costs involved? (Jeff)
 - Do I need to have a pre-positioned contract with a debris monitoring firm? (Jeff)
 - Give examples of local governments using a debris monitoring contract. (Jeff, Rob)
 - What preparedness actions are associated with a pre-positioned contract? (Jeff)
- Contract Line Items that are important to have in place (Show screenshot of ODOT contract line items)
 - Examples
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MOBILIZATION TO OPERATIONAL BRANCH DEBRIS REMOVAL
COMMUNITY DUST CONTROL
COMMUNITY STREET SWEEPING
COMMUNITY TRAFFIC CONTROL CREW
TRAFFIC CONTROL PILOT CAR & OPERATOR
TRAFFIC CONTROL ADDITIONAL FLAGGER
PORTABLE CHANGEABLE MESSAGE SIGN
MISCELLANEOUS METALS
BURNED DEBRIS & ASH
CONCRETE
CONTAMINATED SOIL & RESIDUAL ASH
CONTAMINATED SOIL - LOT RE-SCRAPE

EROSION CONTROL, RESIDENTIAL STICK BUILT STRUCTURE
EROSION CONTROL, RESIDENTIAL MOBILE HOME STRUCTURE
VEHICLE (BURNED HULKS) ABATEMENT
DEBRIS REMOVAL CREW COST
MISC METALS TRANSPORTATION, ASSUME 32 MILES
BURNED DEBRIS & ASH TRANSPORTION, ASSUME 32 MILES
CONCRETE TRANSPORTATION, ASSUME 32 MILES
CONTAM SOIL & RESIDUAL ASH TRANS, ASSUME 32 MILES
MOBILIZATION BETWEEN LOTS, GREATER THAN 3 MILES
PROPERTY OWNER ASSISTANCE
AGGREGATE BASE ROCK APPLICATION
CHIMNEY/WALL DEMOLITION CREW
SAFETY FENCING INSTALLATION
SEPTIC TANK ABANDONMENT - FENCE PANELS
SEPTIC TANK ABANDONMENT - PUMPING & DISPOSAL
SEPTIC TANK ABANDONMENT - EXC, REM & BKFL
HEATING OIL & UST ABANDONMENT - FENCE PANELS
HEATING OIL & UST ABANDONMENT - PUMPING & DISPOSAL
HEATING OIL & UST ABANDONMENT - EXC, REM & BKFL
MOBILE DEDICATED HEAVY DUTY CONCRETE BREAKER EQUIP

Operational Phases and FEMA Public Assistance

- Overview of key operational phases in disaster debris removal.
 - Typically working on Private Property
 - HHW gets removed first
 - Apply perimeter of property erosion control, typically waddles
 - Soil Testing/Structure Testing takes place to determine contamination levels, if asbestos is present

- If asbestos is present then a specialized licensed asbestos removal subcontractor must be utilized for the debris removal
 - Setting up a containment area (Hot Zone) where only the crew working on the property is allowed to enter.
 - Creating an area just outside of the Hot Zone where the crew members put on/take off their Tyvek suits, respirators, gloves/boots so that cross contamination does not occur
 - Wetting down of burned materials and soils on continuous basis to keep dust down
 - Air Monitoring to ensure the dust is remaining at safe levels
 - Segregating and sorting of the various materials (metal, concrete/brick, burned debris & ash)
 - Septic Tank Abandonment (Pumping & Disposal) or removal and backfill
 - Burned Vehicle collection and recycling
 - Load/Haul all recyclable materials individually.
 - Remove non-recyclable burned debris and ash with the initial scrape of the property.
 - Load/Haul usually approximately 6 inches of the contaminated soil to make the property ready for secondary soil testing.
 - Tests come back positive, remove an additional 3-6 inches in the areas that tested “hot”
 - Tests come back negative, apply erosion control over all disturbed soils and turn the property back over to the client.
- Explanation of the FEMA Public Assistance reimbursement process and its relevance to city and county government officials. (Jeff)
 - Make clear that debris removal on public property following a declared disaster is generally eligible for public assistance funds. Debris removal on private property following a declared disaster may or may not be eligible for public assistance funds. It's up to FEMA. Debris removal on commercial property following a declared disaster is generally not eligible for public assistance funds and requires pre-approval by FEMA. FEMA grants under the Stafford Act are a minimum of 75% cost share and may be higher. Local governments that perform debris removal shortly after the incident may receive an even higher cost share (up to 100%). (Jeff)

Conclusion

- Recap of the key points discussed.
- Encouragement for audience members to incorporate the presented best practices into their community's disaster preparedness plans.
- Open floor for questions and further discussion.