

Douglas County
Debris Management Plan
2022 Update

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Douglas County All Hazards Debris Management Plan

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Schedule for Review

The Douglas County Department of Public Works, (PW) will review and revise this plan as needed when areas of improvement are identified following major events or exercises.

Record of Changes

When changes are made to this plan, the following procedures will be followed:

- Changes will be issued by PW and transmitted to agencies, personnel, and other designees specified by PW.

When a specific change is made, an entry will be made on the following log.

Change Number	Date Entered	Pages or Section Changes	Entered by

DOUGLAS COUNTY DEBRIS MANAGEMENT PLAN

I. Authority

This Plan is developed, promulgated, and maintained under the following State and Federal statutes and regulations:

- Public Law 93-288 as amended by Public Law 100-107, the Stafford Disaster Relief and Emergency Assistance Act and in this plan as “the Stafford Act.”
- Public Law 81-920, Federal Civil Defense Act of 1950, as amended.
- CFR, Title 44, Part 200 et seq.
- Douglas County Emergency Operations Plan
- Douglas County Emergency Recovery Plan
- Douglas County Local Hazard Mitigation Plan
- Douglas County Rapid Needs Assessment Annex

II. Overview

A. Background

Douglas County presents opportunities for a number of potential natural and manmade disasters or emergencies. The Douglas County Office of Emergency Management (DCOEM) is responsible for planning and emergency preparedness, response and recovery, and mitigation activities and working in close collaboration with all departments and divisions within Douglas County Government.

Douglas County OEM subscribes to the guidance in the Emergency Operations Plan (EOP) developed through coordinated efforts of all responsible agencies. The EOP establishes responsibilities for each

County government agency and sets forth lines of authority and organizational relationships that are essential for the protection of the public. The EOP also establishes the concepts and policies under which all elements of the County government will operate during disasters and emergencies by providing for the integration of those resources.

While the EOP is a job product of DCOEM, the Recovery Plan and the Debris Management Plan are job products of Facilities, Fleet and Emergency Support Services and Public Works, respectively. These job products are based on guidance provided by Douglas County department heads and procedures outlined in the EOP. This plan focuses on the types of activities that are likely to be required during a disruption or emergency, without regard to the type or cause of that disruption or emergency.

B. Purpose

This Plan has been developed to provide the framework for County government and other entities to clear and remove debris generated during a public emergency within the jurisdictional limits of Douglas County. This plan unifies the efforts of public and private organizations for a comprehensive and effective approach to:

- Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, and disposal of debris caused by a major debris-generating event.
- Establish the most efficient and cost-effective methods to resolve disaster debris removal and disposal issues.
- Initiate and coordinate private sector debris removal and disposal contracts to maximize cleanup efficiencies when deemed appropriate by Douglas County officials.
- Expedite debris removal and disposal efforts that provide visible signs of recovery designed to mitigate the threat to the health, safety, and welfare of citizens.
- Coordinate partnering relationships through communications and pre-planning with local, State, and Federal agencies that have debris management responsibilities.
- Communicate with and guide citizen actions for clearing private properties.

PRIORITY. This plan establishes an overall priority for response, consistent with the County’s EOP. The post-disaster debris priorities will follow the County’s EOP priorities for life safety for people, protection of property (which includes companion, service and large domestic animals), and protection of the environment. In addition, debris management has the following priorities.

- Clear critical roads, facilities, and infrastructure
- Open debris management sites (DMSs) for debris storage
- Address legal, environmental, and health issues
- Document damage and costs
- Normalize operations for routine and long-term removal, recycle, and disposal activities

C. General Approach

Douglas County is vulnerable to numerous natural and manmade hazards, including severe weather and hazardous materials spills as defined in the Douglas County Local Hazard Mitigation Plan. Wildland fire, blizzard, severe weather, and flooding pose the highest natural threats to the County. Critical government and private facilities are potential targets for terrorist attack. The County can manage many disaster situations with internal resources. However, there are potential debris-generating events that may overwhelm the available assets and capabilities.

This plan establishes the framework within which the County will respond and coordinate the removal and disposal of debris generated by potential natural and manmade disasters. This plan will also address the potential role that State and Federal agencies and other groups will take in a debris operation.

This plan defines the roles and responsibilities of local emergency managers with respect to debris planning prior to an event and actions following a major debris-generating event.

D. Planning Basis and Assumptions

Natural disasters such as wildland fire, blizzard, severe weather, and flooding precipitate a variety of debris that includes, but is not limited to, trees and other vegetative organic matter, construction materials, appliances, personal property, mud, and sediment. Man-made disasters such as terrorist attacks may result in a large number of casualties and heavy damage to buildings and basic infrastructure. Crime scene constraints may hinder normal debris management operations, and contaminated debris may require special handling. These factors will necessitate close coordination with local, State and Federal law enforcement, health, and environmental officials.

This plan takes an all-hazards approach to identifying and responding to the following hazards that may pose a threat to Douglas County:

- Natural Hazards – Wildland fires, blizzards, severe weather, flooding, ice storms, tornadoes, hail, or earthquakes
- Human-caused Events and Hazards – Wildland and urban fires, special events, civil disorder, or transportation accidents
- Terrorist Incidents – bomb threats or attacks.
- Incidents including chemical, biological, radiological, nuclear, and/or explosives (CBRNE)

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of removal and disposal methods utilized, the associated costs, and the speed with which the problem can be addressed. Further, the quantity and type of debris generated from any particular disaster will be a result of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

For planning purposes and for pre-positioning response assets, this plan assumes that the magnitude of the event may exceed the capabilities of Douglas County.

The fact that this plan is based on an event that may exceed Douglas County's capabilities in no way diminishes the value of the plan for use in response to other types and categories of events. This plan

establishes a general framework that can, with minor modifications, be used in any debris-generating event.

This plan addresses the clearing, removal, and disposal of debris generated by the above hazards based on the following assumptions:

- A major natural or man-made disaster that requires the removal of debris from public lands and waters could occur at any time.
- The amount of debris resulting from a major natural or man-made disaster will exceed Douglas County's in-house removal and disposal capabilities.
- Douglas County will contract for additional resources to assist in the debris removal, reduction, and disposal processes.
- For the purpose of preparedness, Douglas County has pre-qualified independent contractors who are able to address the removal needs for a large debris generating event. These contractors were selected through the standard Douglas County contracting/procurement procedures and in accordance with the FEMA Debris Removal Applicant's Contracting Checklist (see Appendix E). Please contact the Douglas County Finance Department direct for the pre-qualified contractors list.
- State and possible Federal assistance may be requested to supplement debris removal capabilities in coordination with the Debris Management Team.

E. State/Federal Assistance

If the emergency is of sufficient magnitude and all County resources are expended, the Douglas County EOC will contact the Colorado Division of Homeland Security and Emergency Management (DHSEM) to request additional resources or assistance.

The Board of County Commissioners (BOCC) Chair may declare a disaster, and request assistance through the Governor's office. The Governor can request a Presidential Declaration of a major disaster if conditions so warrant. Such a request will be based on a damage assessment and will indicate the degree of commitment of local and State resources in attempting to cope with the situation.

III. Debris Management Organization and Staff Responsibilities

A. Debris Response and Recovery Organization and Responsibilities

This section of the plan provides a listing of primary debris-related responsibilities for directors and managers, as well as debris-specific assignments for tasks and issues that normally arise during debris operations.

1. Debris Manager

The Director of Public Works or his/her designee will assume the role of the County Debris Manager. His/her responsibilities include, but are not limited to, the following with respect to any and all debris management issues:

- Overall control of the Debris Management Center (DMC). The DMC is organized to provide a central location for the coordination and control of all debris management requirements.
- The Debris Manager will activate the DMC and fully implement the debris plan upon notification by the County OEM. This will likely occur during Type I and Type II incidents.
- Manage any debris-removal operations including any contractors.

Type IV Incident

Involves an event likely to be within the capabilities of local government. Typical daily activities continue while the event is monitored. Notification is limited to those agencies that have normal day-to-day emergency responsibilities or regulatory requirements. EOC personnel may monitor the incident and respond to resource requirements, as needed.

Event Type	Localized
Total Expected CYs	Less than 5,000 CYs
Number of DMS	0
Requested Resources	Internal, County Owned Resources
Number of Hauling Equipment	5 ea., 10-24 CY Trucks
Estimated Project Timeline	20 Days

Type III Incident

Involves an event that has the potential to develop into a major emergency or disaster and will likely require the assistance of numerous County agencies as well as state resources. A limited staff may be in place in the EOC with County EM personnel and those agencies essential to the response. Twenty-four-hour staffing may be required. Daily activities are altered to accommodate the situation. All applicable State agencies are alerted.

Event Type	County-wide
Total Expected CYs	5,000-15,000 CYs
Number of DMS	1, Possibly
Requested Resources	Internal, County Owned Resources
Number of Hauling Equipment	10-15 ea., 10-24 CY Trucks
Estimated Project Timeline	20 Days

Type II Incident

Involves an event which has become, or is becoming, a major emergency or disaster and requires significant County and State response (local government capabilities clearly exceeded). The direction and control, primary resources, mass care, and environmental and natural resources groups are at least partially staffed on a 24-hour basis in the EOC. Support agencies are alerted, and most County EM personnel are assigned to emergency/disaster functions.

Event Type	County-wide, significant
Total Expected CYs	15,000-30,000 CYs
Number of DMS	1, Possibly
Requested Resources	Local Contractors
Number of Hauling Equipment	20 ea., 10-24 CY Trucks
Estimated Project Timeline	20-30 Days

Type I Incident

Involves a declared disaster, which requires an extensive County and State response where the State and local governments are clearly overwhelmed. The Douglas County EOC is fully staffed for 24-hour operations by all of the primary agencies. The State requests implementation of the Federal Response Plan and the presence of the FEMA Region 8 State Liaison and a FEMA Disaster

Response Team (DRT).

Event Type	County-wide, catastrophic
Total Expected CYs	Greater than 30,000 CYs
Number of DMS	1 – 3, depending on quantity and dispersion
Requested Resources	Any Available
Number of Hauling Equipment	10-20, 10-30 CY trucks
Estimated Project Timeline	20-30 Days

Responsibilities of the DMC in a Type I incident may include:

- Receive regular updates from the County Debris Coordinators regarding cleanup progress and any problems encountered or expected.
- Identify agency staff members for debris management monitoring duties (Roving, Load Site, and Disposal Site Monitors).
- Communicate timely information to the County Manager, BOCC, and the County EOC staff regarding the status of the debris clearing, removal, and disposal operations.
- Assure that the County is represented at all meetings with other government and private agencies involved with the debris cleanup operation.
- Coordinate with appropriate local, State, and Federal agencies, including FEMA, US Army Corps of Engineers (USACE), and others as appropriate.
- Notify appropriate staff as to where and when they will report for duty. This will be incumbent upon each County department to activate and implement their emergency notification system.

2. Debris Coordinators

The Debris Manager will be supported by debris coordinators made up of personnel from Douglas County Public Works, Special Districts, the County Parks and Trails Division (“Parks”), and the County Division of Open Space and Natural Resources (“Open Space”). These coordinators will constitute the daily operating element of the DMC.

- The Debris Coordinators are responsible for daily operational control of the DMC staff. They will receive current information on the severity of the disaster from the EOC. All requests for debris removal or disposal from the emergency response staff will go through the EOC to the Debris Coordinators. Requests for debris removal from public facilities and roadways will be reviewed and approved by the Debris Manager before being carried out.
- The Debris Coordinators will appraise the extent of damage and resulting debris and issue directives to execute the tasking as defined by their department's Standard Operating Procedures.
- The Debris Coordinators will keep the Debris Manager and DMC staff informed on all ongoing debris management operations through, at a minimum, daily meetings and/or reports.
- The Debris Coordinators will maintain a daily journal/Form 214 and file on all debris-related documents and issues.
- The Debris Coordinators will obtain all necessary regulatory permits for collection, reduction, temporary storage, and final disposal of debris.

3. Debris Management Center Staff

The DMC is organized to provide a central location for the coordination and control of all debris management requirements.

Specific DMC staff actions will include the following:

- Making recommendations for Douglas County force account and contractor work assignments and priorities based on the County's Debris Control Zones, which are also the Douglas County Snow Removal Zones (Appendix F).
- Reporting on debris removal and disposal progress and preparing status briefings.
- Providing input to the EOC PIO on debris removal and disposal activities.

- Coordinating with the State on debris issues affecting adjacent counties.
- Coordinating County debris removal and disposal operations with environmental regulators from the County and State.
- Coordinating with State and Federal agencies as required in the event of a major natural or manmade debris generating disaster that exceeds the County's capabilities.

4. County Public Information Officer (PIO)

The role of public information after an incident is crucial. If residents and businesses lack reliable information during this time, it can lead to frustration. It is imperative that the County go beyond minimal efforts to keep the public aware and informed. It will therefore include provision of timely, reliable, and regular information via multiple media channels (including print, broadcast, news/social media, community organizations and networks, direct outreach, etc.). All efforts will be made to keep residents and businesses informed of what they can expect and where/how they can access resources and information relating to their debris disposal (See Appendix C).

The County Public Information Officer (PIO) located in the County Public Affairs Department serves as the official spokesperson for County efforts surrounding debris management and disposal. The County PIO is responsible for responding to all media and general public inquiries. This includes the identification of alternate methods and alternate formats for communication in the event traditional methods are insufficient because of utility outages or the communicated needs of people with functional needs and/or disabilities.

The County PIO is responsible for the development of a public communications and messaging plan in the early stages of the debris management effort.

The County PIO coordinates his/her activities with the DCSO PIO Team and external PIOs. For large incidents that require coordination with city, state and federal agencies, the PIO will establish a Joint Information Center (JIC) and will lead its operations.

Public information channels must be quickly established to receive incoming questions, referrals, etc. via news/social media, hotlines, or in-person visits. Communication with residents and

businesses that may have been displaced within or outside the county will also be addressed.

The County PIO should have pre-established relationships with media and community organizations. Additional support staff may be assigned from the County or affected cities as appropriate.

B. Debris Response and Recovery Primary and Support Agencies

One of the primary functions of this plan is to clearly delineate a basic organization and assign specific responsibilities. During debris operations, many issues will arise that are not specifically mentioned in this plan. However, responsibilities are sufficiently defined so that unexpected issues can be assigned and resolved efficiently.

Specific responsibilities of the various primary and supporting agencies are shown in the sections that follow:

1. County Public Works

Douglas County Public Works responsibilities include, but are not limited to, the following with respect to any and all debris management issues:

- Designate a Debris Manager to oversee debris clearance and removal operations in the County.
- Provide a Debris Coordinator or coordinators to the Debris Management Center (DMC) to coordinate all County debris assignments.
- Provide personnel and equipment to assist in clearing County roadways and waterways.
- Provide personnel and equipment to operate and staff the Debris Contractor Oversight Team (DCOT) element of the DMC, including communications equipment, transportation, etc.
- Provide personnel and equipment to remove and dispose of debris.
- Ensure the DMC is provided all needed administrative staff and equipment support, including

administrative support personnel, computers, desks, chairs, etc.

2. County Parks and Trails Division

The Douglas County Parks and Trails Division responsibilities include, but are not limited to, the following with respect to any and all debris management activities:

- Provide County Parks and Trails Division Debris Coordinators to the DMC staff to coordinate all park and open space debris assignments.
- Provide personnel and equipment to assist in clearing major evacuation routes and access to critical facilities (Phase I).
- Provide personnel and equipment to assist in the removal and disposal of debris (Phase II) as directed by the Debris Manager through the County Parks and Trails Division Debris Coordinators.
- Provide specialized equipment and trained operators to assist in the clearing and removal of woody vegetation from along critical rights-of-way.
- Ensure that debris removal from parks and recreational facilities is coordinated through and approved by the Debris Manager through the County Parks and Trails Division Debris Coordinators.
- Ensure that the County Parks and Trails Debris Coordinators are provided all needed logistical support, including cell phones, transportation, etc.
- Ensure that the County Parks and Trails Division Debris Coordinators keep the Debris Manager informed of cleanup progress and any problems encountered or expected.
- Assist in debris management site investigations.
- Coordinate with the Debris Manager for the removal, storage, burning, and disposal of debris at debris collection/management sites.

3. County Department of Open Space & Natural Resources

The Douglas County Department of Open Space & Natural Resources responsibilities include, but are not limited to, the following with respect to any and all debris management activities:

- Provide County Department of Open Space & Natural Resources Debris Coordinators to the DMC staff to coordinate all open space debris assignments.
- Ensure that debris removal from open space is coordinated through and approved by the Debris Manager through the County Department of Open Space & Natural Resources Debris Coordinators.
- Ensure that the County Department of Open Space & Natural Resources Debris Coordinators are provided all needed logistical support, including cell phones, transportation, etc.
- Ensure that the County Department of Open Space & Natural Resources Debris Coordinators keep the Debris Manager informed of cleanup progress and any problems encountered or expected.
- Assist in debris management site investigations.

4. County GIS

- Provide digital map files of all identified parks or open space properties greater than 10 acres.

5. Fire and Emergency Medical Services (Coordinated with other local agencies as needed)

- Respond to fire and other emergencies at debris management sites.
- Respond to requests to investigate and handle hazardous materials incidents.
- Approve debris management burn sites in accordance with appropriate local requirements to ensure safe burning.

- Issue bans on open burning based upon assessment of local conditions and ensure dissemination of information to the public.
- Supervise burn sites in accordance with all appropriate local requirements to ensure safe burning; subject to amendments by the health department and/or fire marshal.
- Participate, as necessary, with Rapid Needs Assessments and Windshield Surveys.

6. Sheriff's Office

- Provide security at sites and traffic control as needed during debris management and removal emergencies and incidents.
- Assist in monitoring debris management sites to ensure compliance with local traffic regulations.
- Assist in investigating illegal dumping activities by general public.
- Participate, as necessary, with Rapid Needs Assessments and Windshield Surveys.

7. ~~Tri-County~~ Douglas County Health Department

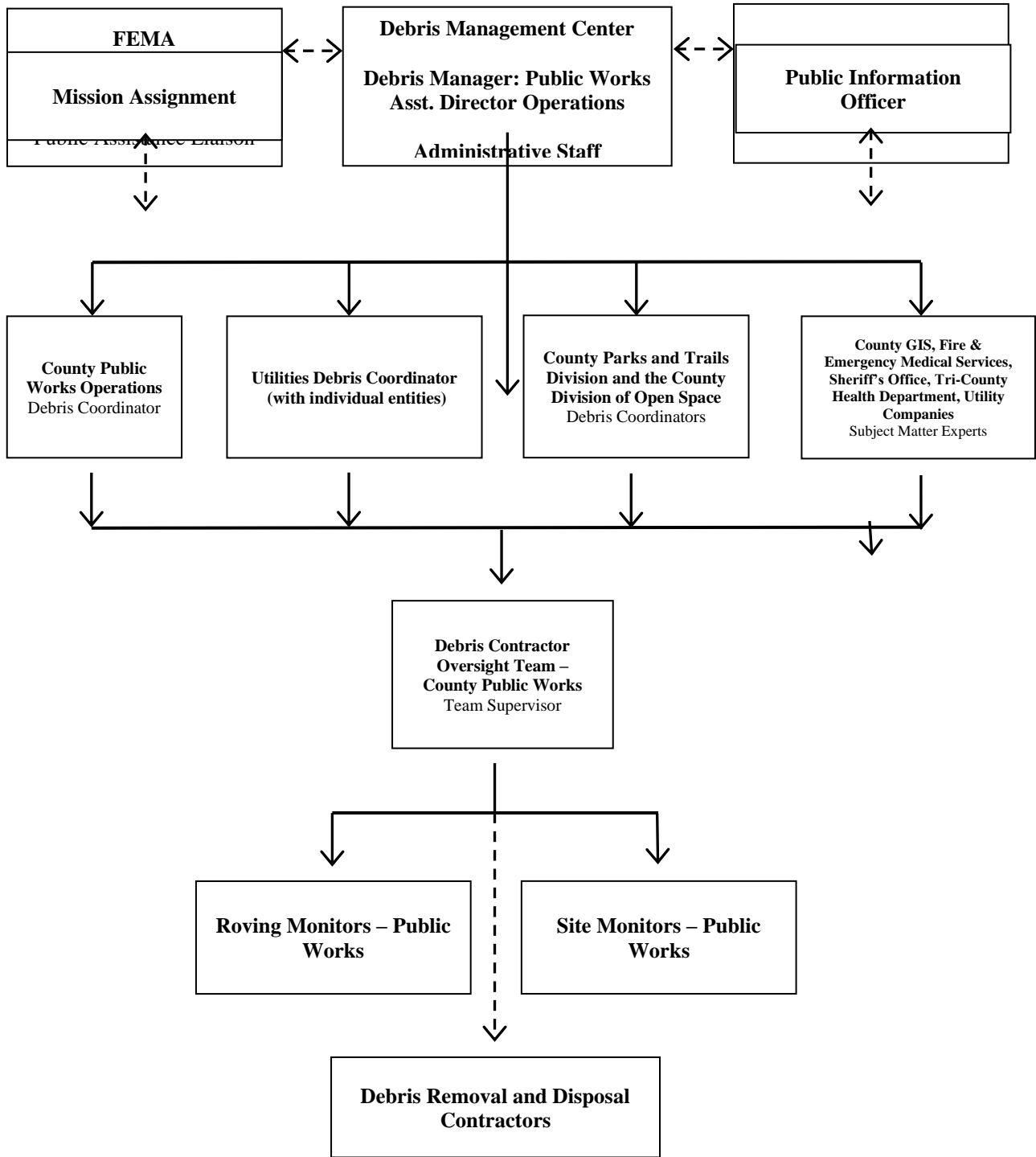
- Ensure appropriate health and medical considerations are addressed.
- Provide Emergency Management the appropriate public health messaging regarding safety and precautions based on the debris removal needs created by the incident.
- Serve as the liaison between Douglas County and CDPHE in addressing public health and environment issues, which can include providing guidance for emergency disposal of different types of waste (i.e. asbestos, fire-damaged debris, etc.).
- Coordinate guidance for health and medical partners regarding the disposal of incident related medical waste.

- Utilize Public Health Authority to provide a Declaration of Immediate Public Health Threat, if appropriate, to support the response and recovery efforts of an incident.

8. Utility Companies (Coordinated with individual entities as needed)

- Provide a Utilities Debris Coordinator to the DMC.
- Coordinate with the Debris Manager with regard to debris removal along utility service easements and rights-of-way.
- Provide regulatory advice and assistance regarding Debris Management Sites and concerns.
- Coordinate with the Debris Manager to clear and remove debris affecting public utilities.
- Provide information, maps, sites, and other pertinent data, as needed.

Figure 1 – Debris Management Center Organizational Chart



IV. Debris Management Response and Recovery Operations

The Debris Manager will be the point of contact to coordinate and control all personnel and equipment responding to a major debris-generating event. This plan provides guidance for the efficient and effective control and coordination of initial debris assessments through debris clearance, removal, and disposal operations.

A. Damage Assessment Response Teams

The Debris Manager is responsible for coordinating debris impact assessment for all County public structures, equipment, and debris clearance immediately following a large-scale disaster. Impact Assessments are performed by Damage Assessment Response Teams and used to prioritize impacted areas and resource needs. The teams will be composed of personnel from Douglas County Public Works, Douglas County Building Division, Douglas County Health Department, Douglas County Parks, local law enforcement, and fire departments/districts. Further detail regarding the composition, activation and deployment of Rapid Assessment Teams can be found in the *Douglas County Rapid Needs Assessment Annex* and Damage Assessment Teams in the *Douglas County Damage Assessment Annex*.

The DMC Debris Coordinator(s) will have the primary mission of coordinating the efforts of department personnel to identify debris impacts on critical roads and make initial estimates of debris quantities. Based on this prioritization, the Debris Manager will issue urgent assignments to clear debris from at least one lane on all evacuation routes and identified primary and secondary roads to expedite the movement of emergency service vehicles such as fire, police, and medical responders.

Based on first responder initial size-up and windshield surveys, Rapid Needs Assessment Teams will conduct initial zone-by-zone Rapid Needs Assessments to identify the type of debris and to estimate amounts of debris on the roadways and on private and public property. The results of the Rapid Needs Assessments will be provided to the Debris Manager and to the DMC Liaison Officer located at the EOC. Further detail and checklists are provided in the County's Damage Assessment Plan.

The Debris Manager will establish initial priority for debris clearance based upon the following ranking as provided by the Damage Assessment Response Teams:

- Life-safety and extrication of people.

- Ingress/egress for Emergency Services and Emergency Operations Center.
- Ingress to hospitals and special care units.
- Major traffic routes.
- Major flood drainage ways.
- Access for utility restoration.
- Supply distribution points and mutual aid assembly areas.
- Government facilities.
- Public Safety communications towers.
- American Red Cross shelters.
- Secondary roads to neighborhood collection points.
- Neighborhood streets.
- Private property adversely affecting public welfare.

During the debris clearance and removal process, the DMC staff will be responsible for coordinating with the Debris Coordinator and Utility Coordinator as appropriate to ensure that power lines do not pose a hazard to emergency work crews.

B. Phase I – Initial Response

For ease of control and coordination, debris management operations are divided into two phases.

Phase I will be implemented immediately after a debris-generating event to open emergency evacuation

routes and roadways to critical facilities and affected neighborhoods. The major emphasis during this phase is to simply push debris from the traveled way to the right-of-way or curb. This activity is commonly referred to as Debris Clearance. Little or no effort is made to remove debris from the right-of-way.

The Debris Manager and Douglas County Public Works will be responsible for implementing all Phase I activities with support as required from the EOC.

Phase I activities include:

- Implementation of the Debris Management Plan.
- Determination of incident-specific debris management responsibilities.
- Establishment of priorities based on evacuation needs and prediction models.
- Activation of pre-authorized contracts, if necessary, to support Phase I clearance operations and debris management.
- Activation of pre-established temporary debris reduction/storage sites as needed.
- Implementation of Public Information Plan.
- Coordination and tracking of resources.
- Formal documentation of costs.

C. Phase II - Recovery

Phase II may be implemented as early as possible following the Phase I response of a major debris generating event and will encompass the processes of debris removal and disposal. Some delay is normal and allows time for affected citizens to return to their homes and begin the cleanup process.

Generally, debris removal from private property following a disaster is the responsibility of the property

owner. However, large-scale disasters may deposit enormous quantities of debris on private property over a large area resulting in widespread immediate threats to the public-at-large. In these cases, local government may choose to assist property owners in removing debris to:

- eliminate immediate threats to life,
- eliminate immediate threats to public health and safety;
- eliminate immediate threats of significant damage to improved property; and/or
- ensure economic recovery of the affected community to the benefit of the community-at-large.

Debris must be brought to the rights-of-way or curb for removal. Only disaster-generated debris is eligible. For further details reference the FEMA document 9523.13 Debris Removal from Private Property on the FEMA.gov website. Every attempt will be made to communicate with citizens on how to separate debris at the curb via the PIO and the public information plan (Appendix C).

The Debris Manager will be responsible for implementing all Phase II activities with assistance as required from all supporting agencies. All debris removal and disposal operations will be coordinated by the Debris Manager located at the DMC. Phase II may be quite lengthy as disaster recovery continues until pre-disaster conditions are restored.

Phase II activities include:

- Activation of pre-approved contracts to support Phase II operations.
- Notification to citizens of debris removal procedures.
- Identification, procurement, and activation of additional debris management sites.
- Removal of debris from rights-of-way and critical public facilities.
- Removal of sediment from debris basins and channels.

- Movement of debris from debris management sites to permanent landfills.
- Final documentation of costs for reimbursement, as applicable.

D. Phase II Debris Removal and Disposal Overview

The general concept of debris removal operations includes multiple, scheduled passes by each critical site, location, or right-of-way. This manner of scheduling debris removal allows residents to return to their properties and bring debris to the edge of the right-of-way as property restoration proceeds.

The County has been divided into Debris Control Zones, also referred to as the Douglas County Snow Removal Zones, to control and expedite debris removal and disposal operations (Appendix F).

E. Phase II Debris Removal and Disposal Operations

The Debris Manager and DMC staff will coordinate debris removal and disposal operations for all portions of Douglas County. Phase II operations involve the removal and disposal of curbside debris by County personnel and/or contractor crews.

Under this plan, mixed debris will be collected and hauled from assigned Debris Control Zones to County-designated debris management sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative debris management site for eventual burning or grinding. A listing of possible temporary debris reduction/storage sites can be found in (Appendix H).

The primary tracking mechanism for all debris loaded, hauled, and disposed of under this plan will be the Load Ticket, which is shown in (Appendices B and D). Load tickets will be initiated at pick-up sites and closed-out upon drop-off of each load at a debris management site or permanent landfill and are to be used to document both County force account and contracted haulers. Load tickets will serve as supporting documentation for contractor payment as well as for requests for reimbursement from federal grant programs (FEMA) and mutual aid recipients.

1. Debris Contractor Oversight Team (DCOT)

The DCOT is responsible for the coordination, oversight, and monitoring of all debris removal and disposal operations performed by private contractors. The DCOT will be trained and knowledgeable on debris types, County removal operations, disposal facilities, environmental constraints, and contract performance parameters to ensure adequate Quality Assurance of debris operations.

The DCOT supervisor and team members may be detailed from Douglas County Public Works as well as from other County departments as required. The DCOT team may also be supplemented with, or stand-alone, contracted inspectors as needed. The County Finance Department will maintain and manage all outside contracts.

The DCOT team supervisor will be located at the DMC and will provide for roving monitors, load site monitors, and disposal site monitors described below. Specific responsibilities include the following:

- Planning and conducting debris management site inspections, quality control, and other contractor oversight functions.
- Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).
- Making recommendations to the Debris Manager regarding distribution of force account and contractor work assignments and priorities.
- Reporting on progress and preparation of status briefings.
- Providing input to the DMC PIO on debris cleanup activities and pick-up schedules.

The DCOT Supervisor will oversee the activities of the following three types of monitors. The functions and responsibilities of the field monitors are described below.

a. Roving Monitors

Two-person teams of Roving Monitors will be assigned to specific Debris Control Zones or to a specific contractor depending upon the distribution of work assignments. The Roving Monitors' mission is to act as the "eyes and ears" for the Debris Manager and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Staff to fulfill the Roving Monitor positions will be provided by Douglas County Public Works or oversight contractors. Roving Monitors will have the authority to monitor contractor operations and to report any problems back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct contractor operations or to modify the contract scope of work.

Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned debris management zone(s). In addition, Roving Monitors shall do the following:

- Assist in the measuring of all contractor trucks and trailers with the contractor's representative and take photographs of all trucks and trailers.
- Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.
- Observe all phases of debris management operation, to include loading sites, debris management sites, and final landfill sites.
- Prepare a daily written report of all contractor activities observed to include photographs.
- Periodically monitor each debris management site to ensure that operations are being followed as specified in the applicable debris removal and disposal contract with respect to local and Federal regulations and the Debris Clearing, Removal and Disposal Guidelines (Appendix I).

Roving Monitors will also submit daily written reports to the DCOT supervisor outlining

their observations with respect to the following:

- Ensure the contractor is using the site properly with respect to layout and environmental considerations.
- Ensure the contractor established lined temporary storage areas for ash, household hazardous wastes, and other materials that can contaminate soil and groundwater.
- Ensure the contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids.
- Ensure plastic liners are in place under stationary equipment such as generators and mobile lighting plants.
- Verify the contractor established appropriate rodent control measures.
- Ensure burn sites are constructed and operating in accordance with the plans and requirements. Appendix F
- Ensure the contractor established procedures to mitigate smoke, dust, noise, and traffic flow.

Roving Monitors' reports will also include written observations at loading sites, disposal sites, and the locations of any illegal dumping sites. If the monitor sees a problem, they are to notify the DMC immediately and take photographs of the site.

b. Load Site Monitors

Load Site Monitors will be stationed at designated contractor debris loading sites. The Load Site Monitors are responsible for verifying that debris being picked up is eligible under the terms of the contract, completing the debris load ticket, the Daily Loading Site Monitor Log, and the Daily Debris Issue Log. Each of these is described below. Prior to performing duties, Load Site Monitors will be familiar with contract vendor requirements,

as provided by the County Finance Department.

Load Site Monitor positions may be staffed from Douglas County Public Works and other County departments as well as potentially contracted inspectors depending on the magnitude of the debris-generating event. Load Site Monitors will be assigned to each contractor's debris loading site within designated Debris Control Zones and will initiate and sign load tickets as verification that the debris being picked up is eligible.

Sample Debris Load Ticket

The loading site monitor will complete Section 1 of the load ticket (Figure 2 below) for all contractor debris-hauling vehicles. The monitor will keep one copy and give the original and remaining copies to the truck driver. The monitor's copy will be submitted to the debris monitoring contractor's Data Entry Supervisor or designated representative on a daily basis. Load ticket information will be entered into a database by the monitoring contractor's data entry staff.

Load Ticket		Ticket No. 0012345	
Municipality (Applicant)		Prime Contractor	
		Sub-Contractor	
Truck Information			
Truck No		Capacity	
Truck Driver (print legibly)			
Loading Information			
Loading	Time	Date	Inspector/Monitor
Location (Address or Cross Streets)			
When Using GPS Coordinates use Decimal Degrees (N xx.xxxxx)			
N		W	
Unloading Information			
Debris Classification		Estimated %, CYs, or Actual Weight	
<input type="checkbox"/> Vegetation <input type="checkbox"/> C&D <input type="checkbox"/> White Goods <input type="checkbox"/> HHW <input type="checkbox"/> Other* See Below			
Unloading	Time	Date	Inspector/Monitor
DMS Name and Location			
*Other Debris Explanation		Original: Applicant Copy 1: _____ Copy 2: _____ Copy 3: _____	

Figure 2 – Sample Debris Load Ticket

The loading site monitor should be responsible for initiating load tickets where trucks are loaded and verifying the estimated amount of debris hauled at the temporary storage area or landfill. The Applicant monitors must provide a list of the measured trucks capacities in CY and license plate number of all trucks to be used to move debris upon award of the debris removal contract.

Once a truck is loaded with debris at the loading site, the loading site monitor should fill out a load ticket. The load tickets issued by the loading site monitors are the basis for debris contractor payment. Each item in the load ticket must be completed or the load

ticket will not be considered valid.

Sample Daily Debris Loading Site Monitor Log

The Daily Debris Loading Site Monitor Log (Figure 3 below) is used by the County and/or FEMA debris loading site monitor to collect data at the debris pick-up sites. The loading site monitor may monitor the removal and disposal crews at several loading sites. The number of crews monitored will depend on the geographical area and volume of debris. It is important for the debris loading site monitor to document the pick-up site locations (using addresses, mile-markers, or GPS readings) to ensure that the debris being picked up is eligible and contractors are working where they were assigned. When issues arise, they should be documented on the Daily Issues Log (see next section). Each loading site monitor should record any issues noted for that day and provide comments concerning that day’s operation; photographs should also be provided as needed. Photographs should be taken of any safety violations or other unusual events affecting the debris operation. The debris Loading site monitor should document the type of debris being removed.

Time	Ticket Number	Truck Number	Full Truck Rated Capacity (CY)	Pickup Location	Vegetative Debris	C&D Debris	White Goods/ Metals	Other	Issues or Comments/ Pictures Disc

Figure 3 – Debris Loading Site Monitor Log

Sample Daily Issue Log

The Daily Issue Log (Figure 4) is used by the County and/or FEMA debris loading site monitor to collect data at the location where any issue of significance should be recorded. When documenting information on the Daily Issue Log, the location, monitoring personnel, truck identification data, and details of the issue being resolved should be recorded. For

any eligibility or capacity issues, photographs (identified by corresponding numbers on the log sheet) should accompany this log.

Issue No.	Truck No.	Load Ticket	Pick-up Location	Contractor/ Sub-Contractor	County Monitor	Photo/ Disc	Issue/ Resolution

Figure 4 – Daily Issue Log

c. Debris Disposal Tower/Site Monitors

Disposal Tower/Site Monitors will be located at both debris management sites and landfill sites as identified by the DMC throughout the recovery process. It is the responsibility of the Disposal Site Monitor to estimate and record the CY of the debris in appropriate location on the lower portion of the load ticket for *all* incoming debris-hauling vehicles. Prior to performing duties, Disposal Site Monitors will be familiar with contract venter requirements, as provided by the County Finance Department.

The following procedures will be followed:

- At each debris management site and landfill disposal site, the contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The contractor will construct the monitoring station towers with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The contractor will also provide each site with chairs, table, and portable sanitary facilities.
- The disposal site monitor will be stationed in the inspection tower and estimate the quantity of debris contained in the truck or trailer in CY. Each truck or trailer will have the measured hauling capacity in CY recorded on the side of the truck or trailer. The

number should be validated with the quantity stated in appropriate location on the upper portion of the load ticket.

- The disposal site monitor will record the name and the arrival time of the truck and confirm the type of debris in the truck.
- The disposal site monitor will record the estimated volume of debris contained within the bed of the truck or trailer, in CY, under “Unloading Information” on the load ticket. The monitor must print and sign his/her name in the designated block on the load ticket.
- The disposal site Monitor will record the estimated volume of debris contained within the bed of the truck or trailer each truck/trailer entering the contractor’s selected temporary debris management site or landfill disposal site, in CY, and will record the estimated quantity under “Unloading Information” on the pre-numbered debris load tickets. The monitor must print and sign his/her name in the designated block on the load ticket.
- The contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on debris load tickets. This is to be done on all types of debris removal contracts and force account vehicles.
- The disposal site monitors will be stationed at all debris management sites and landfill disposal sites for the purpose of verifying the quantity of material being hauled by the contractor. The Disposal Site Monitor will be responsible for closing out and signing each load ticket and returning a copy to the DCOT Supervisor at the end of each day.

The disposal site monitor may find it useful to use an estimating table such as shown in Figure 5 and should also refer to the job aids presented in Appendix A: FEMA Field Reference Guides – Debris Monitor Guidelines for Estimating Quantities.

Truck/Trailer Size - CY	100% CY	90% CY	85% CY	80% CY	75% CY
<i>Note: Truck/trailer without a tailgate is rated at 85 percent of capacity to start.</i>					

Figure 5 – Estimating Truck/Trailer Capacity

- The disposal site monitor will retain the original of the load ticket and give the remaining copies to the truck driver. The original load ticket will be submitted to the monitoring contractor’s Data Entry Supervisor or designated representative daily basis. Load ticket information will be entered into a database by the monitoring contractor’s data entry staff. Load tickets are controlled forms and cannot be lost since they will be used to verify the amount of money paid to the debris reduction site contractor and to the debris hauling contractor.

Sample Daily Disposal Site/Tower Monitoring Log

The Daily Disposal Site/Tower Monitoring Log (Figure 6 below) can be used by the County and/or FEMA disposal site/tower monitor to record the truck data, document estimates of the load volumes, and describe what types of debris are being brought into the DMS or landfill. Documenting the tower and pick-up site locations is important so that debris can be correlated and tracked. Each tower/site monitor should provide his or her name and company name on the form. The tower/site monitor should record any issues noted for that day and provide comments concerning that day’s operation; photographs should also be provided as needed. Photographs should be taken of any safety violations or other unusual things affecting the debris operation.

Time	Ticket Number	Truck Number	Full Truck Rated Capacity (CY)	Applicant QA Eligible Capacity (% CY/Weight (Wt))	FEMA Eligible Capacity (% CY/Wt)	Vegetative Debris	C&D Debris	White Goods / Metals	Other	Issues or Comments / Pictures / Disc

Figure 6 – Daily Disposal Site/Tower Monitoring Log

d. Truck Certification Form

The County should ensure that every truck and trailer to be used in debris removal operations is measured and documented on a Truck Certification Form (Figure 7). Knowing the hauling capacity of each truck is necessary because debris, specifically vegetative debris, is often hauled and billed by volume. Accurately capturing all the truck capacity information and driver profile information is important; having a FEMA PA representative present when certifying debris trucks is recommended.

Truck documentation should include all trucks to be used, including contractor and county trucks and trailers. A Truck Certification Form allows the debris monitor to identify the truck itself and its hauling capacity in a standardized manner. The following information should be documented:

- Capacity of hauling bed (CY)
- License plate number
- Truck identification number assigned by the owner
- Brief physical description of the truck
- Photographs

Determining an accurate capacity for each truck is important. Refer to Truck Certification

form Calculation Instructions below, for additional information.

The information on the Truck Certification Form should be entered into a database by the data entry staff. Copies of the Truck Certification Form should be on file with the Applicant and kept in the truck throughout the operational period.

Debris monitors may need to be trained to measure truck capacities for certification purposes. Recertification of the hauling trucks on a random and periodic basis should be implemented for contract compliance and reimbursement considerations.

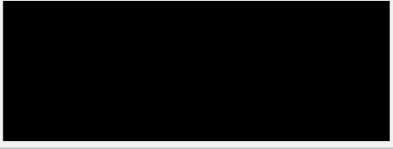
Truck Information			
Make: _____	Year: _____	Color: _____	License: _____
Truck Measurements			
Performed By: _____	Date: _____		
Volume Calculated By: _____	Date: _____		
Both Checked By: _____	Date: _____		
Driver Information			
Name: _____			
Address: _____		Phone Number: _____	
Owner Information			
Name: _____			
Address: _____		Phone Number: _____	
Truck Identification: _____		Truck Capacity: _____	
			
Photo			

Figure 7 – Truck Certification Form

Truck Certification Form Calculation Instructions

Instructions to take the necessary dimensions of corner wedge (refer to Figure 8):

“a”: Along the side of the bed, measure the distance from the point where the rounded part of the bed starts, to the front corner of the bed.

“b”: Equal to “a.”

“c” and “d”: Along the side of the bed, mark the point where the rounded part of the bed starts, and along the front of the bed, also mark the point where the rounded part of the bed ends. Run a string between the two points and measure the distance between them; half of that distance is “c” and half of the distance is “d” (“c” and “d” are equal).

“e”: Measure the distance from the mid-point of the string that was stretched from the side to the front of the bed in the previous step to the rounded part of the bed.

Extra trailer: The volume calculations for the extra trailer would be simply length x width x height if the extra trailer has a rectangular bed. However, if the extra trailer also has round corners at the front, the volume calculation would be the same as explained above.

Instructions to take the necessary dimensions of round bottom truck (refer to Figure 8):

“a”: The width of the bed.

“b”: The depth of the vertical portion (the side) of the bed.

“c” and “d”: Both are equal to half the width of the bed

“e”: Run a string between the lower ends of the vertical portions of the bed (the sides) and measure the distance from the mid-point of the string to the bottom of the bed.

Note: All dimension used in the above formulas must be in feet, with inches converted to fractions of feet, using the following conversions (for example, 8 feet, 5 inches should be written as 8.42 feet):

1 inch = .08 foot	7 inches = 58 foot
1 inches = .17 foot	8 inches = .67 foot
3 inches = .25 foot	9 inches = .75 foot

4 inches = .33 foot	10 inches = .83 foot
5 inches = .42 foot	11 inches = .92 foot
6 inches = .50 foot	

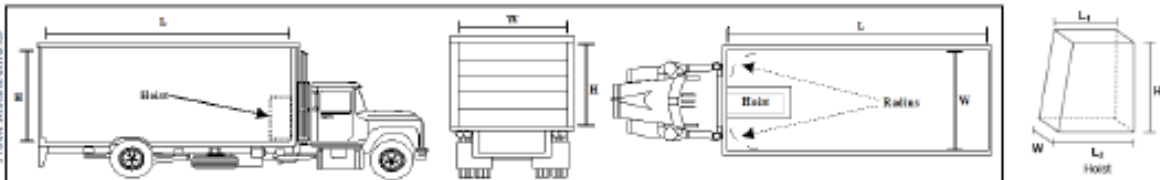

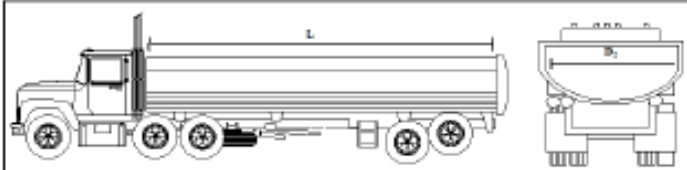
DUMP TRUCK			
Measurements			
Truck Measurements	Length (L) = <input style="width: 80px;" type="text"/>	Width (W) ft = <input style="width: 80px;" type="text"/>	Height (H) ft = <input style="width: 80px;" type="text"/>
Hoist Measurement	Length ₁ (L ₁) ft = <input style="width: 80px;" type="text"/>	Width _H (W _H) ft = <input style="width: 80px;" type="text"/>	Height _H (H _H) ft = <input style="width: 80px;" type="text"/>
	Length ₂ (L ₂) ft = <input style="width: 80px;" type="text"/>		
Radius	Radius ft = <input style="width: 80px;" type="text"/>	Height (H) = <input style="width: 80px;" type="text"/>	
Calculations			
Bed Volume (Basic)	$(L \times W \times H) / 27 =$	<input style="width: 40px;" type="text"/>	+ <input style="width: 40px;" type="text"/> cyd
Hoist Volume	$((L_1 + L_2) / 2 \times W_H \times H_H) / 27 =$	<input style="width: 40px;" type="text"/>	- <input style="width: 40px;" type="text"/> cyd
Radius Volume	$(3.14 \times R^2 \times H) / 27 =$	<input style="width: 40px;" type="text"/>	- <input style="width: 40px;" type="text"/> cyd
	Total =	<input style="width: 80px;" type="text"/>	cyd
Cubic Yards			
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">Truck Measurements</div>  </div>			
EXTRA TRAILER			
Measurements			
Truck Measurements (Basic)	Length (L) = <input style="width: 80px;" type="text"/>	Width (W) ft = <input style="width: 80px;" type="text"/>	Height (H) ft = <input style="width: 80px;" type="text"/>
Hoist Measurement	Length ₁ (L ₁) ft = <input style="width: 80px;" type="text"/>	Width _H (W _H) ft = <input style="width: 80px;" type="text"/>	Height _H (H _H) ft = <input style="width: 80px;" type="text"/>
	Length ₂ (L ₂) ft = <input style="width: 80px;" type="text"/>		
Radius	Radius ft = <input style="width: 80px;" type="text"/>	Height (H) = <input style="width: 80px;" type="text"/>	
Calculations			
Bed Volume (Basic)	$(L \times W \times H) / 27 =$	<input style="width: 40px;" type="text"/>	+ <input style="width: 40px;" type="text"/> cyd
Hoist Volume	$((L_1 + L_2) / 2 \times W_H \times H_H) / 27 =$	<input style="width: 40px;" type="text"/>	- <input style="width: 40px;" type="text"/> cyd
Radius Volume	$(3.14 \times R^2 \times H) / 27 =$	<input style="width: 40px;" type="text"/>	- <input style="width: 40px;" type="text"/> cyd
	Total =	<input style="width: 80px;" type="text"/>	cyd
Cubic Yards			
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">Trailer/Truck Combination</div>  </div>			
ROUND BOTTOM TRUCK			
Measurements			
Truck Measurements	Length (L) ft = <input style="width: 80px;" type="text"/>	Diameter (D) ft = <input style="width: 80px;" type="text"/>	
Calculations			
Approx. Volume	$(3.14 \times (D/2)^2 \times L) / 27 =$ <input style="width: 80px;" type="text"/> cyd (round bottom portion only)		
Cubic Yards			
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">Round Bottom Truck</div>  </div>			

Figure 8 – Truck Calculations

e. Sample Debris Collection Summary Spreadsheet

The Debris Collection Summary Spreadsheet (Figure 9) is used to capture the total amount and types of debris removed and disposed of, as well as the cost for each. This information may also be helpful to FEMA to validate any debris prediction models that are run, as well as establishing reasonable costs for debris removal.

CY	Unit Price \$	CY	Unit Price \$	CY	Unit Price \$	CY	Unit Price \$	Average Haul Distance	Primary Disposal Method	CY to Landfill
Vegetative		C&D		HHW		White Goods				

Figure 9 – Debris Data Collection Summary Spreadsheet

2. Garbage Contractors

Garbage contractors will continue to pick up refuse in accordance with current procedures, routes, and removal schedules. They will not haul disaster debris unless expressly authorized by the Debris Manager.

3. Household Hazardous Waste and White Goods

The Debris Manager will identify one or more Household Hazardous Waste (HHW) drop-off locations within the County. Contractors will be encouraged to separate HHW at the curb and not haul it to a Debris Management Site. Residents will be encouraged to separate and transport HHW to pre-identified drop-off points. The Debris Manager will coordinate with Tri-County Health Department for the collection of eligible industrial or commercial hazardous waste resulting from the disaster.

White goods are defined as discarded household appliances including, refrigerators, freezers, air

conditioners, heat pumps, ovens, ranges, washing machines, clothes dryers, water heaters, etc. Refrigerants and other machine fluids are regulated and will only be reclaimed by certified technicians and disposed of at a permitted facility. To avoid the releases of refrigerants or oils, the collection of white goods will be accomplished carefully by manually placing the appliance on trucks or by using lifting equipment that will not damage the elements that contain refrigerants or regulated oils. Residents will be required to segregate these materials from other types of debris.

4. Equipment Assets

A list of equipment that Douglas County currently has in inventory which may be used to assist with debris removal is on file through the Department of Public Works.

5. Contractor Debris Removal and Disposal Operations

Douglas County recognizes that disasters may generate debris of types and quantities that exceed the County's capabilities. Thus, Douglas County will implement a pre-positioned contracting process to have contractors on stand-by to respond within a pre-determined period to assist in requested aspects of the debris operation.

The Debris Manager or authorized County personnel will contact the firm(s) holding pre-positioned debris removal and disposal contract(s) and advise them of impending conditions. The scope of the pre-positioned contract provides for the removal and lawful disposal of all natural and man-made disaster-generated debris, excepting household, industrial, or commercial hazardous waste. Debris removal will be limited to County-maintained streets, roads, and other public rights-of-way based on the extent of the disaster. Debris removal will be limited to disaster related material placed at or immediately adjacent to the edge of the rights-of-way by residents within designated Debris Control Zones.

Each contractor, upon receipt of notice to proceed, will mobilize such personnel and equipment as necessary to conduct the debris removal and disposal operations detailed in the contractor's general operations plan (required by the debris removal and disposal contract). All contractor operations will be subject to review by the Debris Manager.

The contractor will make multiple, scheduled passes of each site, location, or area impacted by the

disaster according to assigned Debris Control Zones and as directed by the Debris Manager. Schedules will be provided to the DMC PIO for publication and notification by the news media.

The load ticket, coupled with inspections by Roving, Load Site, and Disposal Site Monitors, will be the primary mechanism for monitoring contractor performance and tracking quantities for pay purposes.

Federal support will be requested if the incident is beyond the County and State's capabilities and contractors. The US Army Corps of Engineers (USACE) may be tasked by FEMA through the mission assignment process to provide the necessary support to the County.

If tasked by FEMA, USACE will respond by providing trained and experienced Debris Planning Response Teams that are responsible for managing the debris mission from removal to final disposal. These tasks are accomplished utilizing pre-awarded contracts to private industry contractors experienced in debris removal operations. The USACE also has Debris Subject Matter Experts available to provide advice and support to the contractor and the DMC staff.

6. Temporary Debris Management and Landfill Sites

The County recognizes the economic benefits of debris volume reduction and will realize this benefit through the use of local debris management sites for processing of clean woody debris. Douglas County has identified pre-designated vegetative debris management sites for the sole purpose of temporarily storing and reducing clean woody debris through either burning or grinding. A listing of temporary debris staging, and reduction sites is located in Appendix D.

Contractors will operate the debris management sites made available by the County. Each contractor will be responsible for all site setup, site operations, rodent control, closeout and remediation costs at each of its sites. The contractor is also responsible for the lawful disposal of all by-products of debris reduction that may be generated.

The contractor will restore the debris management sites as close to the original condition as is practical so that it does not impair future land uses. All sites are to be restored to the satisfaction of the Debris Manager with the intent of maintaining the utility of each site.

Contractors are also expected to haul and manage construction and demolition (C&D) waste. C&D

materials will be hauled to debris management sites for temporary sorting and storage and reduction until final disposal arrangements are made.

It is important to note that all material deposited at debris management sites will eventually be taken to a properly permitted landfill or recycling site for final disposal. Under certain circumstances, the Debris Manager may direct contractors to bypass C&D debris management sites and approve the hauling of mixed C&D debris directly to a properly permitted landfill for disposal.

While residents will be encouraged to segregate HHW at curbside, small amounts of HHW may be mixed in with material deposited at the debris management sites. Therefore, the contractor must be prepared to place any HHW in a separate enclosed and lined area for temporary storage and must report any accumulation of HHW at the debris management sites to the DCOT staff. The DCOT staff will notify the Debris Coordinators, who will coordinate for removal and disposal.

7. Load Ticket Disposition

The Load Ticket will be a 5-part pre-printed form or equivalent (see Appendices B and D).

At initiation of each load, the Load Site Monitor will fill out all items in Section 1 of the Load Ticket and will retain Part 1 (White Copy). The remaining copies will be given to the driver and carried with the load to the disposal site.

Upon arrival at the disposal site, the driver will give all four copies to the Disposal Site Monitor. The Disposal Site Monitor will complete Section 2 of the Load Ticket and retain Part 2 (Green). Parts 3, 4, and 5 will be given either to the contractor's on-site representative or to the truck driver for subsequent distribution.

All trucks will be measured by the contractor and Roving or Load Site Monitors before the operation begins and periodically rechecked throughout the operation.

The contractor will be paid based on the number of cubic yards of eligible debris hauled per truckload. Payment for hauling debris will only be approved upon presentation of Part 4 (Canary and Blue) of the Load Ticket with the contractor's invoice.

Load tickets will also be completed and retained for County force account vehicles as a primary mechanism for tracking debris quantities deposited at debris management sites.

8. Temporary Debris Management Site Setup and Closeout Procedures

The contractor will be responsible for preparing and closing out a temporary debris management site in accordance with the specifications in the debris removal and disposal contract and guidance provided by the selected contractor.

9. Private Property Debris Disposal

Dangerous structures are the responsibility of the owner to demolish in order to protect the health and safety of adjacent residents. However, experience has shown that unsafe structures will often remain in place due to lack of insurance or absentee landlords. Care must be exercised to ensure that the County properly identifies structures listed for demolition.

The Debris Manager will coordinate with local jurisdictions, State and FEMA Public Assistance Officers regarding:

- Demolition of private structures.
- Removing debris from private property.
- Local law and/or code enforcement requirements.
- Historic and archaeological sites restrictions.
- Qualified environmental contractors to remove hazardous materials such as asbestos and lead-based paint.
- Execution of right-of-entry/hold harmless agreements with landowners; a sample right-of-entry/hold harmless agreement can be found in Appendix D.

10. Recycling Storm Debris

The intent is to recycle as much of the storm generated debris as feasible:

- **Vegetative Debris** – volume reduced, processed yard trash/vegetative storm debris will be transported to agricultural fields for use as a soil amendment in accordance with policies for use of such materials and/or to cogeneration power plants for use as boiler fuel.
- **Non-Vegetative, Non-Hazardous Debris** – These materials commonly referred to as C/D (construction demolition debris) will attempt to be recycled or reduced if financially feasible and if volumes do not exceed the handling capacity of the County Debris Management System or Temporary Debris Staging and Reduction (TDSR) sites.

11. Permitting

All environmental and land-use variance permits necessary to establish temporary debris management sites shall be obtained by the Debris Manager or his/her designee. Debris operations will comply with all Federal, State, and local regulations. Several agencies may be involved in issuing permits.

The following is a list of potential permits that may be required in debris operations:

- Waste processing and recycling operations permit.
- Temporary land-use variances or permits.
- Traffic or entrance permits.
- Air quality permits (Colorado Department of Health and Environment).
- Water quality permits.
- Household Hazardous Waste permits.

- Fire department permits.
- Freon removal from white goods.
- Drainage, erosion and sediment control.

12. Environmental Requirements

Following a disaster event, compliance with environmental protection laws and regulations is required. Federal, State, and local agencies such as the U.S. Environmental Protection Agency, the Colorado Department of Public Health and Environment, the U.S. Army Corps of Engineers, and the Douglas County Health Department, among other agencies, should be consulted for applicable regulatory requirements. The Department of Public Works Engineering reviews all stormwater and drainage projects.

All debris-related activities shall be coordinated with Federal, State, and local agencies to ensure compliance with environmental and historic preservation laws/regulations/policies and determining environmental monitoring and reporting requirements for TDSR's. Refer to Appendix I for Debris Clearing, Removal, and Disposal Guidelines.

13. Health and Safety

The contractor will be required to provide Douglas County with a comprehensive Health and Safety Plan.

The Health and Safety Plan enables the agency and their contractors to avoid accidents during debris recovery operations and to protect workers from exposure to hazardous materials. The health and safety strategy establishes minimum safety standards for the agency and contractor personnel to follow.

The agency and contractor will disseminate safety information and how the agency will monitor compliance with the minimum safety standards to all contracted workers. The plan also includes specific corrective actions to be taken if workers do not comply with the minimum safety standards.

Debris operations involve the use of heavy equipment to move and process various types of debris. Many of these actions can pose safety hazards to emergency response personnel, recovery personnel, and the public. In addition to those safety hazards, exposure to certain types of debris, such as building materials that contain asbestos and mixed debris that contains hazardous materials, can pose potential health risks to all workers.

The Health and Safety Plan provides contracted workers with information on how to identify hazardous conditions and specific guidelines on the appropriate and proper use of personal protective equipment.

14. Utility Company Property

In coordination with the Debris Manager and contractors, utilities will remove and dispose of all utility-related debris such as power transformers, utility poles, cable, and other utility company material.

V. Weapons of Mass Destruction/Terrorism Event

The handling and disposal of debris generated from a Weapons of Mass Destruction (WMD) or terrorism event will exceed the capabilities of the County and will require immediate Federal assistance.

Normally, a WMD or terrorism event will, by its very nature, require all available assets and involve many more Federal and adjacent State and County departments and agencies. The nature of the waste stream as well as whether or not the debris is contaminated will dictate the necessary cleanup and disposal actions.

Debris handling considerations that are unique to this type of event include:

- Much of the affected area will likely be a crime scene. Therefore, debris may be directed to a controlled debris management site by State and/or Federal law enforcement officials for further analysis.
- The debris may be contaminated by chemical, biological, or radiological contaminants. If the debris is contaminated, it will have to be stabilized, neutralized, containerized, etc., prior to disposal. In such an occurrence, the operations may be under the supervision and direction of a Federal agency and one or

more specialty contractors retained by that agency. The presence of contamination will influence the need for pretreatment (decontamination), packaging, and transportation.

- The type of contaminant will dictate the required capabilities of the personnel working with the debris. Certain contaminants may preclude deployment of resources that are not properly trained or equipped.
- The Debris Manager will continue to be the single point of contact for all debris removal and disposal issues within the County. Coordination will be exercised through the USACE ESF #3 Branch located at the designated FEMA Disaster Field Office.

VI. Administration, Finance and Logistics

The Emergency and Disaster Finance Policy was approved September 2011 and revised in August 2015 to ensure the proper and efficient process of specific governmental functions relating to emergency procurement. This policy addresses the delegation of procurement, contracts, purchasing cards limits, employee's overtime or other wage compensation and allocation of funds requirements during emergency/disaster incidents. The full Emergency and Disaster Finance Policy can be found in Appendix J.

All County departments and agencies will maintain records of personnel, equipment, load tickets, and material resources used to comply with this plan. Such documentation will then be used to support reimbursement from any Federal assistance that may be requested or required.

Per County job descriptions, all County personnel supporting debris operations "...will be expected to make every effort to be available to assist the County Manager, Elected/Appointed Officials and Department Directors to ensure the continued operation of any and all necessary County functions. This may mean being available to perform additional duties and hours beyond what is normally required. In the event that an exempt employee does work more than 40 hours a week in support of County operations during an emergency, such employee may receive overtime or other appropriate wage compensation in accordance with existing County policies or at the discretion of the County."

All County departments are responsible for the review of this plan in conjunction with updates to the County EOP and the County Recovery Plan. It will be the responsibility of each tasked department and agency to update its respective portion of the plan and ensure any limitations and shortfalls are identified

and documented, and work-around procedures developed, if necessary.

The review will consider such items as:

- Changes in mission.
- Changes in concept of operations.
- Changes in organization.
- Changes in responsibility.
- Changes in desired contracts.
- Changes in pre-approved contracts.
- Changes in priorities.

This Plan also may be updated as necessary to ensure a coordinated response as other plans are developed. Surrounding cities may also develop Debris Management Plans that should be coordinated with the County's Plan and other plans. This coordination is especially important with respect to allocation of resources such as temporary staging areas and disposal facilities.