Montgomery County, Maryland

Debris Management Plan

September 2021

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SECTION 1: OVERVIEW

1.1 MONTGOMERY COUNTY OVERVIEW

Montgomery County is located entirely within the Piedmont Plateau region of Maryland and is about 491.25 square miles in land size. The County shares a border with Frederick County; Howard County; Prince Georges County; Washington, D.C.; Fairfax County, VA; and Loudon County, VA.

The County is within the larger Chesapeake Bay watershed. There are two major watersheds within the County: the Potomac River watershed, which covers 88% of the County, and the Patuxent River watershed, which covers the other 12%. Montgomery County has over 1,500 miles of streams.

Montgomery County lies within the northern portion of the humid subtropical climate zone, which is characterized by hot, humid summers and cool winters. Annual precipitation throughout the County is an average of 43 inches. The average annual snowfall within the County ranges from about 22 inches in the northwestern portion of the County to about 17 inches in the Southeastern portion.

The elevation of Montgomery County ranges from 52 feet above sea-level near the District Line and Potomac River to about 850 feet above sea-level in the northern portion of the County near Damascus. As such, the National Weather Service has divided Montgomery County into two separate zones for watches, warnings, or advisories for longer duration weather hazards such as winter weather, floods, and wind events. These two zones are Northwest Montgomery County and Central and Southeast Montgomery County.

Montgomery County is adjacent to Washington, D.C., and is one of 23 jurisdictions referred to as the National Capital Region (NCR) as defined by the Metropolitan Washington Council of Governments (MWCOG). The NCR is not an operational entity but provides a regional basis for collaboration, coordination, training, and exercises among the independent jurisdictions.

Permanent Population of (2020)	**1,062,061**
City of Gaithersburg	**69,657**
City of Rockville	**67,117**
City of Takoma Park	**17,629**
Land Area (square miles)	**507**
Montgomery County is the 12th largest county in the State of Maryland.	
Number of Households (2019)	**370,950**
Median Household Income (2019)	**$110,389**

1.2 DEBRIS MANAGEMENT PLAN OVERVIEW

Montgomery County is vulnerable to numerous natural and technological hazards, including severe weather and hazardous materials spills. Tropical storms, hurricanes, tornadoes, severe lightning, windstorms, ice storms, hail, and floods pose the highest natural threats to the County. Critical government and private facilities are potential targets for terrorist attacks. The County can manage many disaster situations with internal resources. However, some potential debris-generating events may overwhelm the County's assets and capabilities.

This plan establishes the framework within which the County will respond and coordinate the management of debris generated by potential man-made and natural disasters. This plan will also address the potential role that state and federal agencies and other groups may assume during a debris management operation.

Disruptions caused by disaster generated debris are a result of the following:

- Obstructed roads
- Obstructed right-of-way and pedestrian walkways
- Environmental offenses resulting from hazardous material spills or releases, the resulting contaminations of soils, ground and surface waterways, and potential sources for air pollution

Disasters will result in large expenditures of labor, equipment, materials, and supplies at substantial cost to the County. It is imperative the County be prepared to provide all necessary disaster recovery services and have the means to recover eligible costs from state and federal agencies.

It is mandatory that an early, safe, and quick response and recovery process is implemented to restore environmentally safe and economically viable conditions to the disaster-affected areas. To meet this objective, the County developed its Debris Management Plan (DMP).

The purpose of the County DMP is to outline the components critical to the success of a debris removal operation in the County. The DMP provides key information that will help the County coordinate and effectively manage a turnkey debris removal effort if the County were to be impacted by a major debris-generating event. Central to the success of debris removal operations is the County's understanding of the following elements prior to a debris-generating event:

- Parties involved and their roles and responsibilities regarding disaster response and recovery
- Rules, regulations, and guidelines enacted by the Federal Emergency Management Agency (FEMA) and other agencies governing debris removal
- Process of collecting debris
- Disposal of debris, including where the debris will be staged for reduction and/or hauled for final disposal

As with all of the County's emergency plans, this is an all-hazards plans, with operational priorities of (1) life, safety, and health; (2) property protection; (3) environmental protection; (4) restoration of essential utilities; (5) restoration of essential program functions; and (6) coordination among appropriate stakeholders.

1.3 PLAN DEVELOPMENT

To initiate the planning process, the County identified a planning team to make critical decisions and provide information for the development of the plan. The planning team included representatives from divisions within the County's Department of Environmental Protection, Department of Transportation, the Office of Emergency Management and Homeland Security, and the Recycling and Resource Management Division. The Resource Conversion Section of the RRMD within the Department of Environmental Protection is responsible for the debris management planning for the County.

The planning team also conducted an information and plan review meeting with incorporated municipalities. During the meeting, interested municipalities were informed of the services that were available to them through the signing of a Memorandum of Understanding (MOU). Municipalities were encouraged to identify land within their communities that could serve as temporary debris management sites (DMS).

The planning team conducted a review of existing plans, policies, and procedures to design a plan that is compliant with national best practices for debris management. This includes the National Incident Management System (NIMS), Incident Command System (ICS), FEMA Public Assistance Program and Policy Guide (PAPPG), Public Assistance (PA) Alternative Procedures Pilot Program Guide for Debris Removal, and, where applicable, Maryland Department of the Environment (MDE), Maryland Emergency

Management Agency (MEMA), and U.S. Environmental Protection Agency (EPA) best practices for debris management.

The planning team conducted multiple meetings to review major components of the plan, including the following:

- Roles and responsibilities
- Logistics
- Staffing
- Budget
- Force account labor
- Documentation
- Intergovernmental coordination
- Planning assumptions and historical events
- Debris collection and removal strategy
- DMSs and final disposal facilities
- Debris removal on private property
- Use of force account labor and contracted debris services
- Debris monitoring operations
- Health and safety requirements
- Environmental and regulatory requirements
- Public information
- Debris removal services request for proposals

1.4 AUTHORITIES AND REFERENCES

The County DMP is developed, promulgated, and maintained under the following county, state, and federal authorities and references.

1.4.1 Authorities

- Article 16A of the Annotated Code of Maryland.
- Chapter 2 of the Montgomery County Code, 1994, as amended.
- Code of Federal Regulations (CFR), Title 44 - Emergency Management and Assistance, Part 200, et seq.
- Disaster Recovery Reform Act of 2018.
- Public Law 81-920, Federal Civil Defense Act of 1950, as amended.
- Public Law 93-288 as amended by Public Law 100-107, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, and in this plan " (the Stafford Act)."
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288.
- Sandy Recovery Improvement Act (SRIA) included as Division B of the Disaster Relief Appropriations Act, PL 113-2, signed into law January 29, 2013.
- Section 2-17 of the County Code.

- The Maryland Emergency Management Agency (MEMA) Act, Article 16A, Annotated Code, as amended.
- U.S. Code, Title 23 Highways, Part 125 Emergency Relief Section 1107 Public Law 112-141 Moving Ahead for Progress in the 21st Century Act (MAP-21).
- U.S. Code, Title 42, Chapter 103, Comprehensive Environmental Response, Compensation, and Liability (CERCLA) and Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA).

1.4.2 References

- Emergency Management Accreditation Program (EMAP) Standard, May 2019.
- FEMA Public Assistance Debris Monitoring Guide, March 2021
- FEMA Comprehensive Preparedness Guide (CPG) 101, Version 2, November 2010.
- FEMA Public Assistance Program and Policy Guide (PAPPG), Version 4, June 2020.
- Homeland Security Presidential Directive 8, National Preparedness, December 17, 2003.
- Metropolitan Washington Council of Governments Regional Emergency Coordination Plan (RECP), September 30, 2011.
- Montgomery County Emergency Operations Plan, 2017.
- National Disaster Recovery Framework, Department of Homeland Security, 2nd Edition, June 2016.
- National Incident Management System (NIMS), Department of Homeland Security, 3rd Edition, October 2017.
- National Response Framework, Department of Homeland Security, 4th Edition, October 2019.
- NIMS Guide for City Officials, National Association of Counties, October 2006.
- The State of Maryland Consequence Management Operations Plan, Version 2.0, January 2019.
- The State of Maryland Snow Emergency Plan.
- Title II of the Americans with Disabilities Act of 1990.
- Unified Regional Snow Emergency Plan for the Metropolitan Washington Area, November 2010.

SECTION 2: EVENTS AND ASSUMPTIONS

2.1 EVENT DESCRIPTION

Montgomery County is susceptible to a number of natural and human-caused hazards. Table 2-1 lists some of the potential hazards and the types of debris that might be caused by each.

Table 2-1: Types of Debris by Disaster Type

Hazard Type	Characteristics	Types of Debris
Straight-Line Windstorm	Widespread, long-lived windstorm moving in a straight path associated with a band of rapidly moving showers or thunderstorms Wind gusts of at least 58 mph reaching as high as 130 mph	• Destroyed structures • Trees and other vegetation • Construction materials • Personal property • Damaged utilities
Tornadoes	High velocity rotating winds, narrow path up to 2 miles wide, from 100 yards to several miles long	• Destroyed structures • Trees and other vegetation • Construction materials • Personal property • Damaged utilities
Floods & Tsunamis	High/low velocity flows, inundation	• Sediment deposition • Private property • Damaged structures • Removal of sand and sandbags used in flood fighting • Construction materials • Household furniture • Animal carcasses
Hurricanes	High velocity winds, storm surge, wave action, freshwater flooding, tornadoes	• Construction and demolition (C&D) materials • Damaged/destroyed structures • Damaged/destroyed marine property (boats and marinas) • Sediment/sand • Trees, stumps, and other vegetation • White goods • Household hazardous wastes • Electronic waste
Fires	Extensive burn areas	• Damaged/destroyed structures • Burnt metals • Ash • Charred wood waste
Weapons of Mass Destruction	Rapid fire spread, high heat, chemical exposure, shrapnel, shock and blast effects	• Damaged or unstable structures • Personal property • Damaged utilities • Hanging debris

For the purposes of the DMP, we examine a potential straight-line windstorm, ice storm, and flooding from a catastrophic dam failure. The completion of models for various scenarios assists the County in planning and preparing for any event that might occur.

The models used to generate the debris estimates within this plan are based on a collaboration of industry standards, United States Army Corps of Engineers (USACE) modeling, HAZUS modeling, and historical data from other disaster events.

2.2 SCENARIO 1 – STRAIGHT-LINE WINDSTORM DEBRIS ESTIMATE

The most likely disaster event to strike the County is a straight-line windstorm, also known as a derecho. A derecho is a widespread, long-lived windstorm. Derechos are associated with bands of rapidly moving showers or thunderstorms variously known as bow echoes, squall lines, or quasi-linear convective systems. Although a derecho can produce destruction similar to that of a tornado, the damage typically occurs in one direction along a relatively straight path. As a result, the term "straight-line wind damage" sometimes is used to describe derecho damage. By definition, if the swath of wind damage extends for more than 250 miles (about 400 kilometers), includes wind gusts of at least 58 mph (93 km/h) along most of its length, and also includes several, well-separated 75 mph (121 km/h) or greater gusts, then the event may be classified as a derecho. The damaging forces of derechos and other wind-related storms include high velocity winds, rain, and storm surge, which can have devastating effects on buildings, residences, vegetation, and public infrastructure. As winds increase, the damage and quantity of debris generated also increase.

Utilizing the USACE model for estimating debris in wind events and assuming a storm with winds between 58 and 75 mph, it can be determined that a derecho impacting Montgomery County could result in up to 820,000 cubic yards of debris county-wide.

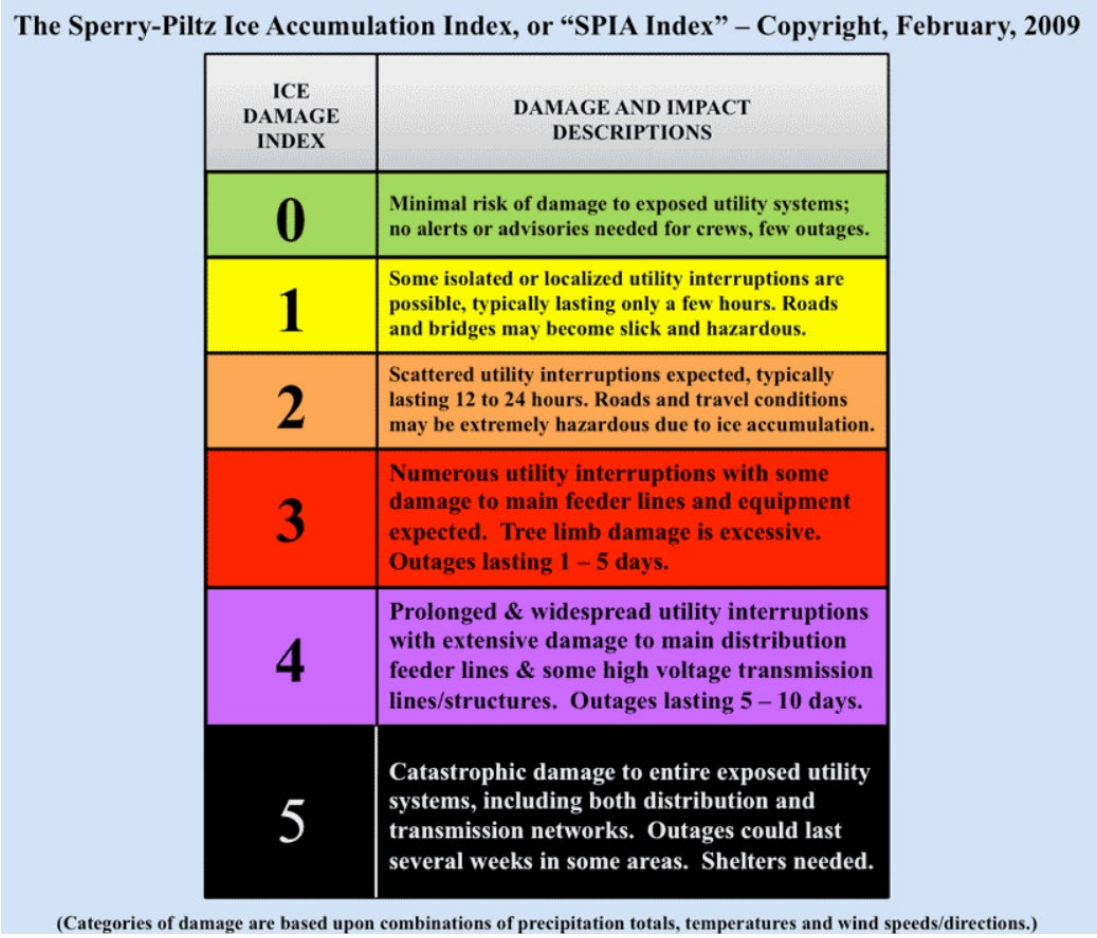
2.3 SCENARIO 2 – ICE STORM DEBRIS ESTIMATE

Winter storms are to be expected in Maryland. One winter storm in late 2009 and two severe storms in early February 2010 resulted in widespread power outages, closed roads, and created a significant need for emergency snow removal. The two disasters were declared to provide the State and counties reimbursement funds primarily for snow removal, under FEMA PA, Category B (Emergency Protective Measures).

Winter storms typically result in large snow accumulations, which can hinder traffic, cause accidents, and result in safety concerns. Many winter weather systems also give rise to exceptionally heavy rain and widespread flooding. Conditions worsen as the temperature drops, rain turns to ice, and accumulation of ice begins to occur. Winter storms are known to spawn other natural hazards, such as inland flooding and erosion, severe thunderstorms, tornadoes, high winds, and severe ice. Ice storms can produce significant ice accumulations, which can result in broken branches, downed trees, and downed power lines. An ice storm has a moderate to high probability of occurring in Maryland and can result in low to medium debris quantities.

To develop a debris forecast for an ice storm in Maryland, the planning team analyzed historical debris collection volumes from ice storms around the region. Using historical volumes, the planning team was able to develop an estimated volume in cubic yards generated per household. In addition to households, other factors such as vegetative characteristics of the location as well as the Sperry-Piltz Ice Accumulation Index (SPIA Index), were also taken into consideration. The SPIA Index is a tool used for emergency management and winter weather preparedness to predict the resulting ice accumulation and ice damage from an ice storm. The SPIA Index (see Figure 2-1) is comparable to the Enhanced Fujita (EF) Scale for tornadoes and the Saffir-Simpson Scale for hurricanes.

Figure 2-1: Sperry-Piltz Ice Accumulation (SPIA) Index



Based on historical data, the planning team estimates that 4.14 CYs of debris will be generated per household following a significant ice storm event. Additional factors that would affect a debris estimate are the SPIA Index of the ice storm, vegetative characteristics of an area, and the urban density. Using the aforementioned factors, the planning team developed five ice storm debris forecasts for the County based on the SPIA Index of an ice storm (see Table 2-2). Using this model, a severe ice storm (SPIA Index 3) could generate approximately 404,300 CYs of debris in the County.

Table 2-2: Scenario 2 – Ice Storm Debris Forecast Analysis

Estimated Number of Households[1]	SPIA Index	SPIA Index Multiplier	Vegetative Characteristics	Historical Average CYs per Household	Debris Estimate (Cubic Yards)
370,950	1	0.025	Medium	4.14	**38,393**
370,950	2	0.05	Medium	4.14	**76,786**
370,950	3	0.25	Medium	4.14	**383,933**
370,950	4	0.5	Medium	4.14	**767,866**
370,950	5	0.75	Medium	4.14	**1,151,799**

[1] 2019 Census households estimate

2.4 SCENARIO 3 – CATASTROPHIC DAM FAILURE

The Montgomery County Threat and Hazard Identification and Risk Assessment (THIRA) 2017 identifies hazards that impact the County by evaluating the risk of a hazard. While dam failure is one of the lower risk areas identified, the County has taken proactive steps to develop and maintain Dam Emergency Action Plans (EAP) for high and significant hazard dams managed by the Department of Environmental Protection (DEP), as required by the MDE and conduct annual updates of the Dam EAPs for County managed facilities, and provide periodic exercises of these plans, as required.

Dams are considered to be localized hazards are most likely to affect inundation areas downstream and immediate areas around a particular dam or levee in Montgomery County. The dams represent the greatest risk to the people who live below the dam in the area designated as the "inundation zone" for overflow or catastrophic failure. Seven dams within the County have the potential to impact residents. According to the geographical information system (GIS) analysis, a catastrophic failure of any of these dams could cause major flooding in areas with population and have a significant impact on Montgomery County. The County's Hazard Mitigation Plan identifies the potential population at risk as a result of a potential failure of one of these dams.

Table 2-3: High-Hazard Dam Inundation Zone

Potential Population at Risk Due to Dam Failures	
High-Hazard Dam Inundation Zone	**Population At-Risk**
Little Seneca	6,811
Railroad Branch SWM	2,609
Inspiration Lake	2,101
Lake Whetstone	8,479
Summit Hall Park	3,219
Brighton	6,453
Needwood and Frank Dams	18,987

Since a catastrophic failure of the Needwood and Frank Dams would impact the greatest number of residents, the planning team used that scenario for the debris estimates. After the number of potentially impacted households were identified, the planning team applied the FEMA Debris Estimating Field Guide (FEMA 329) estimate for cubic yards (CY) generated per home. FEMA 329 estimates that 45–50 CY of personal property debris will be generated from a home with a basement following a flooding event. As a result, an estimated 284,805 CY of debris could be generated in the County from a catastrophic failure of the Needwood and Frank Dams.

Table 2-3: Scenario 3 – Estimated Debris Volumes from a Catastrophic Dam Failure

Estimated Number of Residential Parcels Impacted	Cubic Yards Generated per Residential Parcel	Debris Estimate
6,329	**45**	**284,805**

SECTION 3: ROLES AND RESPONSIBILITIES

3.1 NATIONAL INCIDENT MANAGEMENT SYSTEM COMPLIANCE

NIMS provides a systematic, proactive approach to guide departments and agencies at all government levels, in nongovernmental organizations, and in the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents. This approach works regardless of cause, size, location, or complexity of the emergency and reduces the loss of life and property and harm to the environment. The FEMA requires debris and emergency management personnel to possess a basic understanding of NIMS concepts and principles.

3.2 ADMINISTRATION AND LOGISTICS

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

All Departments of Environmental Protection and Transportation Divisions supporting response and recovery operations should ensure 12-hour staffing capability during implementation of this plan if the emergency or disaster requires or as directed by the County Public Works Director.

The County DEP, in conjunction with Emergency Management and Homeland Security, will be responsible for the annual review of this plan in coordination with the annual amendments and/or revisions to the County Emergency Operations Plan (EOP). It will be the responsibility of each tasked department and agency to update its respective portion of the plan, ensure any limitations and shortfalls are identified and documented, and develop work-around procedures 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-positioned contracts
- Changes in priorities

3.3 DEBRIS MANAGEMENT STAFF RESPONSIBILITIES

To prevent the duplication of effort following a disaster, the roles and responsibilities of County departments as related to operations and management must be clearly defined prior to a disaster. The purpose of this section is to outline the roles and responsibilities of various County Departments and Divisions will undertake prior to, during, and following a disaster event. Table 3-1 below identifies the roles and responsibilities of the County's core disaster recovery Departments and Divisions.

Table 3-1: Departmental Debris Management Roles and Responsibilities

Department/Division/Agency	Primary Roles/Responsibilities
Department of Environmental Protection (DEP)	**Preparedness** • Develop and maintain ESF #3 of the EOP. • Develop and maintain supporting plans and procedures in coordination with ESF support agencies and cooperating organizations. • Coordinate resolution of ESF #3 after-action issues.

Department/Division/Agency	Primary Roles/Responsibilities
	• Develop and maintain inventory of DEP assets. • Develop and maintain Montgomery County DMP. • Assign a representative who will work directly with Department of Transportation (DOT) and act as a point of contact. • Provide technical assistance to OEMHS in reviewing Dam EAPs. • Develop and maintain Dam EAPs for high and significant hazard dams managed by the DEP, as required by the MDE. • Conduct annual updates of the Dam EAPs for County managed facilities, and provide periodic exercises of these plans, as required. • Assist OEMHS with maintaining the Dams Program Standard Operating Guide for County-owned and DEP-operated dams. **Response** • Co-manage emergency debris removal on County roads with the DOT. • Station DEP representative in DOT center of operation or in the Emergency Operations Center (EOC) if the EOC is activated. • Implement DMP and coordinate debris removal operations, including ensuring debris removed from routes, parking, curbs, and architectural elements critical to individuals with disabilities. • Coordinate with designated utility providers, local jurisdictions, and contractor services to facilitate continuous wastewater service and refuse collection. • Coordinate damage assessment and mitigation on County maintained drainage and impoundment systems. (Public Storm Drain systems are maintained by MCDOT, MSHA, MCPS, MNCPPC.) • Monitor County-owned and operated dams during storm events or other dam emergencies and provide info to ESF #5. • Perform emergency mitigation on County-owned and DEP- managed dams as appropriate. • Coordinate the emergency response with MDE. • Based upon conditions, perform detailed inspections of at-risk dams and make assessment judgments on structural integrity. • Recommend evacuations if warranted by conditions/assessment of structural integrity for County-owned dams. **Recovery** • Implement (or continue) DMP and coordinate debris removal operations. • Provide substantial damage assessment, reports, and certifications as required and in accordance with FEMA protocols for dam incidents on County-owned facilities.

Department/Division/Agency	Primary Roles/Responsibilities
	• Assess DEP managed dams to determine when it may be safe for evacuees to return. • Provide technical advice to the Disaster Manager in evaluating conditions at other dams to determine if conditions allow for return of evacuees. • Conduct an ESF #3 after-action review. **Mitigation** • Make recommendations for mitigating codes or ordinances where applicable.
Department of Transportation (DOT)	**Preparedness** • Develop and maintain supporting plans and procedures in coordination with ESF primary and support agencies and cooperating organizations. • Manage open solicitation contracts with local vendors who will assist in disaster debris cleanup and recovery. • Assign a representative who will work directly with DEP and act as a point of contact. • Assist in resolving ESF #3 after-action issues. **Response** • Conduct rapid assessments for incidents when DOT is the primary agency. • Station DOT representative in EOC to coordinate with DEP if the EOC is activated. • Notify various utilities organizations such as the Potomac Power Company (PEPCO) and the Washington Suburban Sanitary Commission (WSSC) when their assistance will be required. • Activate vendors who hold open solicitation contracts with the County. • Collect, analyze and distribute information on the impact and status of the County's transportation systems and infrastructure and share with ESF #3. • Co-manage emergency debris removal on County roads with DEP. • Coordinate and fill requests for available equipment, trucks, and operators. **Recovery** • Monitor and provide information on the status and restoration of the transportation infrastructure. • Co-manage debris removal on County roads with DEP. • Participate in the ESF #3 after-action review.
Office of Emergency Management and Homeland Security (OEMHS)	**Preparedness** • Develop and maintain supporting plans and procedures in coordination with ESF primary and support agencies and cooperating organizations. • Assist in resolving ESF #3 after-action issues. **Response** • Provide assistance to the DEP in collecting, analyzing, and distributing information related to

Department/Division/Agency	Primary Roles/Responsibilities
	water, wastewater, stormwater, and solid waste services and infrastructure. • As needed, request support from the MEMA for ESF #3 operations. • Coordinate the activation of debris removal and monitoring contracts following a disaster declaration. **Recovery** • Provide administrative support as necessary to the DEP. • Participate in the ESF #3 after-action review. **Mitigation** • As appropriate, identify opportunities to mitigate the impact of future incidents.
Department of General Services (DGS)	**Preparedness** • Develop and maintain supporting plans and procedures in coordination with ESF primary and support agencies and cooperating organizations. • Assist in resolving ESF #3 after-action issues. • Develop and maintain internal operational procedures and checklists for conducting debris removal functions. • Develop and maintain inventory of assets. • Identify permanent DMS(s) for emergency debris storage and processing before disposal. **Response** • Assess damage to County buildings and facilities managed by the department. • Provide support for debris removal through existing landscape contractors. DGS/DFM maintains a list of County properties and has the responsibility for debris removal and monitoring of utility restoration at these locations. • Coordinate with contractors to demolish condemned DGS maintained public property, where appropriate. **Recovery** • Monitor status of the repair and restoration of County facilities managed by the department. • Participate in the ESF #3 after-action review. **Mitigation** • As appropriate, identify potential opportunities for mitigating the impacts of future incidents.
Department of Health and Human Services (DHHS)	**Preparedness** • Develop and maintain supporting plans and procedures in coordination with ESF primary and support agencies and cooperating organizations. • Assist in resolving ESF #3 after-action issues. **Response**

Department/Division/Agency	Primary Roles/Responsibilities
	• Review information related to the health and safety of drinking and/or public use water. • Assist with notification of boil water alerts to residents and businesses. **Recovery** • Participate in the ESF #3 after-action review. **Mitigation** • As appropriate, identify opportunities to mitigate the impact of future incidents.
County Attorney's Office	**Preparedness** • Develop and maintain supporting plans and procedures in coordination with ESF primary and support agencies and cooperating organizations. • Assist in resolving ESF #3 after-action issues. **Response** • Prepare waivers and legal clearances for debris removal. • Review contracts and agreements. **Recovery** • Prepare waivers and legal clearances for debris removal. • Review contracts and agreements. • Participate in the ESF #3 after-action review. **Mitigation** • As appropriate, identify opportunities to mitigate the impact of future incidents.
Department of Permitting Services	**Preparedness** • Participate in planning, training and exercises related to ESF #3. • Assist with the resolution of ESF #3 after-action issues. **Response** • Provide assistance as requested by the primary agency for response operations. • Ensure that well and septic systems are functioning. **Recovery** • Provide technical engineering assistance as requested by DEP for recovery operations. • Participate in ESF #3 after-action review. **Mitigation** • As appropriate, identify opportunities to mitigate the impact of future incidents.

Specific debris management roles and responsibilities can be found in **Appendix N: Critical Disaster Debris Management Staff Responsibilities.**

3.4 LOCAL MUNICIPALITY ROLES AND RESPONSIBILITIES

Local incorporated municipalities have the opportunity to use the County's debris removal and monitoring contracts through the signing of an MOU. Municipalities will act as their own applicants and will be responsible for:

- Managing their contractors
- Paying their contractors
- Submitting their own paperwork to FEMA for reimbursement

The debris removal and monitoring contractors can assist with these responsibilities. Additional information on this matter can be found in **Appendix R: Municipality Information**.

3.5 STATE AND FEDERAL RESPONSIBILITIES

If it is determined that responding to and recovering from a major debris-generating incident is beyond the operational capabilities and resources of the County and its contracted entities, the Debris Manager and Emergency Manager may elect to seek assistance from the state or federal agencies through the County EOC.

3.5.1 State Assistance

If the County's debris removal resources have been exceeded and the County cannot supply the additional resources needed, the County's EOC will forward a request to the MEMA, State Emergency Operation Center for further disposition and action.

Operation of temporary debris staging sites and final disposal will require close cooperation with the MDE.

Maryland's State Highway Administration (SHA) is responsible for the clearance of debris from designated state roads within the County and may be called upon to render additional debris removal assistance, if required. SHA is also responsible for bridge inspections.

3.5.2 Federal Assistance

The County EOC staff may request federal assistance when advised by the County Debris Manager that the debris-generating incident exceeds both the County's and the private contractor's debris clearing, removal, and disposal capabilities. The EOC staff will forward the request for a mission assignment through the State Emergency Operation Center to FEMA Region III.

Federal agencies participating in technical or direct debris removal assistance:

- **Federal Emergency Management Agency (FEMA)** – May assist in providing technical assistance for debris operations, assists in the environmental and historical preservation review process, manages the PA grant program reimbursement process, and provides procurement assistance.
- **United States Army Corps of Engineers (USACE)** – May assist in review and removal of debris from publicly maintained commercial harbors and from any water areas immediately adjacent to them. The USACE may also participate in the removal of sunken vessels or other obstructions from navigable waterways under emergency conditions.
- **Natural Resources Conservation Services (Unites States Department of Agriculture)** – May assist with the removal of debris from waterways and channels, particularly man-made and maintained channels vital to the drainage of storm waters.
- **United States Coast Guard (USCG)** – Coordinates with the U.S. EPA to conduct emergency removal of oil and other hazardous materials from coastal zones, harbors, and channels, and will coordinate the removal of navigational hazards. The Coast Guard may also provide technical assistance on contaminated water-borne debris in coastal zones.
- **Office of Inspector General –** Conducts audits to ensure disaster relief funds are spent appropriately.

3.6 CONTRACTED DISASTER RECOVERY SERVICES

Private businesses have a very large role in management of mass debris operations. In the event the County does not have enough internal resources to conduct debris operations during a widespread incident, the County will be augmented by contracted service providers. Roles and responsibilities of private sector businesses and the commercial sector during debris operations are described below. Contact information for contracted disaster recovery service providers can be found in **Appendix A: Contractor and Vendor Contact Information**.

3.6.1 Debris Clearance and Removal Contractor

If the scope of debris collection operations is beyond the capabilities of local resources, state, and mutual aid resources, it may be necessary to contract for labor and equipment. A contracting checklist to assist the County in contracting any additional disaster recovery services has been compiled and is in **Appendix G: Disaster Debris Contractor Checklist** to this plan. Responsibilities of the debris clearance and removal contractor include the following:

- Immediately following a declared disaster, clear and remove debris from jurisdiction roadways and waterways to render them passable.
- Conduct debris removal from the right-of-way (ROW).
- Decommission, demolish, and dispose of eligible non-regulated asbestos-containing material (non-RACM) structures on private property.
- Manage and operate DMS locations.
- Conduct debris reduction.
- Haul-out reduced materials to recycling/end-use facilities.
- Remove hazardous leaning trees and hanging limbs.
- Remove hazardous stumps.
- Remove white goods debris from the ROW.
- Coordinate removal of household hazardous waste (HHW) from the ROW.
- Coordinate derelict vehicle removal and abandoned vehicle removal.
- Remove animal carcasses from areas designated by the jurisdictions.
- Build relationships with community emergency managers and other officials so as to have an active voice in debris operations.
- Develop, test, and implement debris operations plans. Consider worker safety and health and potential employee unavailability or attrition due to a disaster.
- Educate and train employees to implement debris operations plans.
- Ensure contracts comply with state and/or federal procurement requirements.
- Communicate status of operations and supply chains, as well as challenges and timelines, to local officials.
- Know, understand, and comply with federal regulations for disaster assistance programs.

3.6.2 Debris Monitoring Firm

The County will establish an agreement with a debris monitoring firm for provision of debris monitoring services following a debris-generating incident.

- Conduct truck certifications.

- Conduct disposal monitoring to document the disposal of disaster debris at approved DMSs and at final disposal or end-use locations.
- Conduct ROW collection monitoring.
- Conduct monitoring and documentation of hazardous tree removal and specialized debris removal programs such as waterways debris removal and private property debris removal.
- Audit debris hauler invoices and certify they are ready for payment by the County.

3.7 NONPROFIT SECTOR

The County may choose to partner with nonprofit and volunteer organizations to help individuals with disabilities and/or access and functional needs. These nonprofit and volunteer organizations should coordinate with the County to ensure that their efforts are consistent with operational objectives and to ensure that response efforts proceed in a safe manner to minimize risk of injuries, in keeping with the Health and Safety Policy (see **Appendix E: Health and Safety Strategy**). These entities will not be asked to conduct tasks beyond their members' training or capabilities. Roles and responsibilities of nonprofit organizations in debris operations are as follows:

- Identify vulnerable populations and incorporate strategies to assist these populations.
- Help individuals with disabilities and access and functional needs bring debris to the public ROW.
- Provide public information regarding debris operations to populations with communication barriers.

  Provide debris services to vulnerable and underserved groups, individuals, and communities, as necessary.

SECTION 4: ACTION PLAN

This section provides the guidance required for all phases of a debris-generating event. For the purposes of this DMP, four phases are discussed: normal operations, pre-event preparation, post-event response, and post-event recovery.

A flowchart of this action plan can be located at the end of this section.

4.1 NORMAL OPERATIONS

Normal operations refer to the period when the County is not in any serious threat of a disaster. Severe weather can occur at any time, leaving the County constantly susceptible to debris-generating events. Therefore, it is imperative to maintain a constant state of preparedness throughout normal operations by reviewing and updating the plan and conduct response staff training annually.

The normal operations phase is the ideal time for the County to establish or review pre-positioned contracts with its monitoring firm and debris removal contractor(s), identify and secure pre-approval from the MDE for locations to serve as debris management site (DMS) locations, and review current local ordinances and their historical impact on debris removal operations. The normal operations phase is also the ideal time for the DEP, DOT, Office of Emergency Management and Homeland Security (EMHS), the County executive leadership, and other lead and supporting departments and agencies to re-evaluate the roles and responsibilities of each entity involved. The purpose of this evaluation is to ensure all impacted departments, municipalities, and external agencies maintain the capacity to fulfill their obligations in a timely and effective manner should a disaster strike the County. Once roles and responsibilities have been re-evaluated, a review and update of the plan should be conducted annually. Meetings should also be held annually with the County and its pre-positioned monitoring firm and debris removal contractors, either in person or via conference call, to ensure appropriate preparedness levels and operational consistency. The normal operations checklist is also provided below.

4.2 NORMAL OPERATIONS CHECKLIST

- All departments update contact lists.
- DEP, DOT, and Emergency Management reviews state-issued road lists and road maps.
- Establish and maintain pre-positioned contracts.
- Review debris disposal options.
- Review FEMA guidance.
- Conduct annual debris management training.
- DOT continue tree trimming along ROW.

4.2.1 Update Contact Lists

The contact lists in **Appendix A: Contractor and Vendor Contact Information** and **Appendix N: Critical Disaster Debris Management Staff Responsibilities** should be updated annually to reflect changes in personnel or contact information.

4.2.2 Review Road List and Road Maps

Changes or updates relating to road segments and applicable maintenance responsibility among local, state, and federal agencies are critical for reimbursement through the FEMA PA Grant Program and the Federal Highway Administration (FHWA) Emergency Relief (ER) Program. It is critical that the County review and update road lists and maps in **Appendix Q: Debris Zones, Priority Roads, and Equipment** annually. This annual process will be coordinated by DEP with DOT, OEMHS, and Finance. Updated and

accurate road lists and maps will assist in documenting debris removal operations and thereby assist the County during the reimbursement process.

4.2.3 Establish and Maintain Pre-Positioned Contracts

During times of normalcy, the County should establish and maintain pre-positioned contracts for debris monitoring and debris removal services. The procurement of such services should be compliant with County procurement practices and the procurement competition requirements specified in the Code of Federal Regulations – Title 44 Emergency Management and Assistance (44 CFR), Part 13.36.

The County currently has pre-positioned contracts for both debris removal and monitoring. **Appendix A: Contractor and Vendor Contact Information** includes the appropriate contact information of the selected vendors.

4.2.4 Review FEMA Guidance

Rules and regulations dictating operational procedures change periodically; the information in the DMP should be updated annually to reflect such changes by the County's disaster recovery contractors.

4.2.5 Conduct Annual Debris Training

The County will conduct debris training on an annual basis. A representative (preferably those involved in debris operations) from each individual County department should attend the training.

4.2.6 Tree Trimming

The County DOT will perform tree trimming throughout the year to alleviate storm damage.

4.3 PRE-EVENT PREPARATION

The County should begin pre-event preparations when disastrous weather, such as a derecho, is headed for the County. In some cases, because of the relatively short notice of certain events that could affect the County, the opportunity to make pre-event preparations may be limited. If it is feasible to employ pre-event preparations, key County personnel and representatives of involved outside agencies (**Appendix A: Contractor and Vendor Contact Information**) as well as their staff, should be put on alert and be aware they may be required to work extended hours in adverse conditions. All relevant parties will be briefed on their specific roles and responsibilities, as outlined in Table 3-1. The County Debris Co-Managers should place the pre-positioned monitoring firm and debris removal contractors on stand-by.

4.4 PRE-EVENT CHECKLIST

A pre-event checklist has been developed for the County to use prior to or in anticipation of an upcoming event/incident. The checklist performed during pre-event preparation is critical to assembling a coordinated response. The checklist is a valuable tool to ensure that proper steps are taken in a time of extreme duress.

- Download most recent road list and relevant documents to a portable storage device.
- Alert key personnel and place monitoring firm and debris removal contractors on stand-by.
- DEP and DOT will establish a departmental liaison.
- Review plan with key personnel.
- Issue pre-event media press releases.
- The Procurement Department and the County's legal counsel review contracts for accuracy.
- County Debris Manager issues the Notice to Proceed.
- County Debris Manager reviews pre-identified DMS locations for capacity and permits.
- County Debris Manager facilitates a pre-event coordination meeting with contractors.

- County Debris Manager stages debris monitoring and removal contractors.

4.4.1 Archive Most Recent Road List and Relevant Documents to a Portable Storage Device

Following each update to this plan, DEP, DOT, and EMHS will archive the plan, the most recent street list, and maps of the County to a portable storage device such as CD, USB drive, and/or external hard drive. Many of the computers and servers that store this information may be unavailable immediately following an event. Having this information on-hand ensures that debris collection commences in a timely manner and proceeds properly. It would be critical at this point for the County to provide updates of the road list to its monitoring firm as they become available.

4.4.2 Alert Key Personnel and Place Monitoring Firm and Debris Removal Contractors on Stand-By

Prior to a debris-generating event, County debris management staff should be put on alert. Additionally, the County Debris Manager should contact key stakeholders via verbal and electronic communication, informing them of information needed to begin the response and recovery process. Key stakeholders include the following:

- County Manager's Office
- Department of Environmental Protection
- Department of Transportation
- Office of Emergency Management and Homeland Security
- Police Department
- Fire and Rescue Service
- Parks Department
- Department of Permitting Services
- Office of Human Resources
- Office of Procurement
- Office of Public Information
- Department of Housing and Community Affairs – Code Enforcement
- Department of Technology Services
- Department of Finance – Division of Risk Management
- Office of the County Attorney

The County's monitoring firm and debris removal contractors should be put on alert by the County that their contracts may be activated. Discussions with the monitoring firm and debris removal contractors should address the following key issues:

- Availability and amount of assets that will be dedicated to debris removal operations
- Estimated time of mobilization
- Exchange of mobile contact information
- Identification of staging area(s) for truck certification – with assistance from Debris Contractors

4.4.3 DEP and DOT Will Establish a Departmental Liaison

Before the disaster strikes, DEP and DOT should each establish who will act as a liaison, stationed in the other department's center of operations. The liaisons will ensure an efficient flow of communication and prevent overlapping labor and resources.

4.4.4 Review Plan with Key Personnel

Once an initial meeting is scheduled with all of the County's key contacts, the County Debris Co-Managers, monitoring firm and debris removal contractors should review the DMP. Once roles are reviewed and agreed upon, the initial meeting should focus on key activities that need to occur immediately following the debris-generating event, including damage assessments and emergency road-clearing activities. During the initial meeting, the County Safety Plan and the Health and Safety Strategy in **Appendix E: Health and Safety Strategy**, should be reviewed by the County and modified/appended as necessary.

4.4.5 Pre-Event Media Press Release

Office of Emergency Management and Homeland Security and the Public Information Officer (PIO) will provide the County Debris Co-Managers with a pre-event media press release to inform residents of the potential debris removal operations. The press release should assure the public that the County is prepared and has a plan in place to immediately respond to an event. The press release should also include information on County office closure times and dates (this should include information regarding garbage collection and County facilities). In addition, the County should provide information on proper debris set-out procedures and estimates on when the cleanup process will begin. A draft press release for this scenario is included in **Appendix C: Sample Press Releases**.

4.4.6 The Procurement Department and the County's Legal Counsel Review Contracts

The Procurement Department and the County's Legal Counsel will review any contracts that might be activated to ensure they are accurate and in accordance with State and Federal requirements and guidelines.

4.4.7 County Debris Manager Issues the Notice to Proceed

If a determination is made that it will be necessary to activate contractors to assist with debris management operations, the Debris Manager designation by the County will issue a notice to proceed to contractors that will be needed in preparation for the incident.

4.4.8 County Debris Manager Reviews Pre-Identified DMS Locations for Capacity and Permits.

Based on the anticipated impacts from the event, the County Debris Manager will review the list of pre-identified DMS for readiness including their current debris capacity and permit status.

4.4.9 County Debris Manager Facilitates a Pre-Event Coordination Meeting with Contractors

The County Debris Manager will meet with contractors activated in preparation for the event to discuss responsibilities, how efforts will be coordinated with the County, and the resources they can bring to bear to assist in managing debris anticipated from the incident.

4.4.10 County Debris Manager Stages Debris Monitoring and Removal Contractors

The County Debris Manager will coordinate with the debris monitoring and removal contractors stage equipment and staff so they will be ready to respond quickly and safely immediately following a debris generating incident.

4.5 POST-EVENT RESPONSE (EMERGENCY PUSH)

The emergency push encompasses the time that roadways are cleared of scattered debris, leaning trees, and other obstructions for emergency response vehicles. This operation is reimbursable by FEMA on a time and materials basis. It is critical that all types of equipment and the amount of time the equipment is used are documented with detail and accuracy. Please note the reimbursement criteria and duration for time and materials work is subject to change following a disaster.

During this phase, the DOT should initiate emergency roadway clearing operations. The County will begin initial push operations using departmental resources and DOT's force account labor contracts and vendors. If necessary, the County may request additional resources for emergency road clearance operations from its debris removal contractor. Road clearance priorities are pre-established to allow access to critical public facilities such as fire stations, police stations, hospitals, shelters, and emergency supply centers. Concurrent to emergency push operations, the County's debris removal contractor should perform necessary preparation work to open DMS locations.

4.5.1 Emergency Road Clearance Priorities

Emergency road clearance priorities will generally depend on factors such as type of disaster, concentration of debris, and available resources. Following a disaster event, County Public Works will review and determine road clearance priorities based on the disaster event. Typically, the County will prioritize debris removal from major thoroughfares and access roads for critical infrastructure. Priorities for road clearance can be found in **Appendix Q: Debris Zones, Priority Roads, and Equipment.** DEP will be responsible for the annual update of **Appendix Q: Debris Zones, Priority Roads, and Equipment**. DOT will provide the requested data for debris zones, priority roads, and equipment.

4.6 POST-EVENT RESPONSE CHECKLIST

The response checklist is critical in assembling a coordinated response. The checklist is a valuable tool to ensure that proper steps are taken in a time of extreme stress. Actions are as follows:

- Station DEP and DOT representatives in operation centers.
- Conduct damage assessment.
- Assess Hazardous Materials Debris
- Activate monitoring firm and debris removal contractors.
- Confirm emergency priority roads.
- Begin emergency roadway debris clearance.
- Begin truck certification.
- Activate DMS locations.
- Prepare DMS based on concentration of debris.
- Conduct meetings/briefings with key personnel and contractors.
- Review debris volume and collection cost assessment.
- Request contact information and meeting with FEMA Program Delivery Manager (PDMG).
- Issue media press release.

4.6.1 Station DEP and DOT Representatives in Operation Centers

If the EOC is not activated, DEP will station a representative in DOT's Operation Center. If the EOC is activated, both DOT and DEP will station representatives in the EOC.

4.6.2 Conduct Damage Assessment

Damage assessments are necessary to determine the extent and the location of the debris. Windshield surveys of the County should be taken and used to communicate critically damaged areas and assist in prioritizing road clearance efforts. If possible, additional surveys may be conducted by drone or helicopter to obtain an aerial view of damaged areas within the County. The damage assessment teams are made up of representatives from the OEMHS, DEP, and DOT. Damage assessment teams should coordinate with each other and the EOC to quickly and accurately disperse information.

4.6.3 Assess Hazardous Materials Debris

Debris Co-Managers will coordinate with the Fire and Rescue Department to assess if any hazardous materials debris exists and what measures and resources will be needed to remove the hazardous debris safely.

4.6.4 Confirm Emergency Priority Roads

DOT will review the list of emergency priority roads and verify those roads that should receive priority in debris clearance.

4.6.5 Begin Emergency Roadway Debris Clearance

The County's DOT should then commence road clearance or "cut and toss" activities. These operations should focus first on major arterials leading to emergency shelters, hospitals, fire stations, police stations, supply points, and other critical locations throughout the County. Open solicitation vendors and contractors should be activated by DOT if necessary.

4.6.6 Activate Monitoring Firm and Debris Removal Contractors

The County will use the damage assessments to determine whether to activate the debris monitoring firm and debris removal contractors. The County Debris Co-Managers should immediately meet with County officials to make this determination. Once the monitoring firm and debris removal contractors are activated, each contractor should review the updated street list, debris collection zones, and County Health and Safety Strategy (**Appendix E: Health and Safety Strategy**). The monitoring firm and debris removal contractors should begin logistical coordination and equipment ramp-up immediately upon receiving a Notice to Proceed.

4.6.6.1 Monitoring Function

Upon activation, the monitoring firm will deploy staff to support truck certification, collection, and disposal monitoring functions. The monitoring firm will orient employees with operational procedures and familiarize staff with the field-training program on current debris removal eligibility, FEMA requirements, County debris removal contract requirements, and safety procedures. Collection Monitors must carefully document debris collection information to demonstrate eligibility and ensure proper debris removal contractor payments and FEMA reimbursement. It is the intent of the County for monitoring to be completed using an automated debris management system (ADMS). The documentation should include:

- Applicant name
- Location of debris, including full address and zone
- Time and date of collection
- Name of debris removal contractor
- Name and unique monitor employee number
- Truck certification number
- Truck capacity (Disposal Site Monitor will fill out load call [percentage] information)

- Debris classification
- Disaster declaration number

4.6.7 Debris Removal Contractor Function

Upon activation, the debris removal contractor will mobilize staff and equipment to the event location. Equipment will be certified as required by the monitoring firm. Regarding DMS locations, site preparation, including logistical setup and tower construction, will begin. The contractor will brief subcontractors with operational procedures and familiarize staff with current debris removal eligibility, FEMA requirements, County debris removal contract requirements, and safety procedures.

4.6.8 Begin Truck Certification

Truck certification is the most important function in initiating a debris removal operation. Accuracy and documentation of all measurements are critical. All debris removal trucks hauling debris under a volumetric contract with the County must have their vehicle capacity and dimensions measured, sketched, photographed, and documented on a truck certification form. Each debris removal truck will be assigned a unique number for debris tracking and invoice reconciliation purposes. Truck certifications should contain:

- Unique truck number
- Driver name
- Driver phone number
- License number, state-issued, and expiration date
- Tag number, state-issued, and expiration date
- Vehicle measurements and capacity
- Sketch of the vehicle

4.6.9 Activate Debris Management Site Locations

The Solid Waste Division of the DEP in coordination with key departments and staff will authorize the activation of DMS locations throughout the County. A sample DMS MOU can be found in **Appendix H: Sample DMS Memorandum of Agreement**. A list and map of DMS locations can be found in **Appendix B: Debris Management Site Synopsis and Sample Form.**

4.6.10 Prepare Debris Management Sites Based on Concentration of Debris

The following qualification criteria should be taken into consideration when opening and operating a DMS:

- Current availability
- Duration of availability
- Ingress/egress
- Concentration of debris relative to each site
- Geographic location within the County

4.6.11 Reduction Method

Chipping and Grinding – Using this method, vegetative debris is chipped or ground and typically results in a reduction ratio of up to 4:1. Factors such as debris composition, weather, site conditions, and other factors may impact the reduction ratio. The leftover mulch is either hauled to a final disposal facility or recycled.

Incineration – The burning of vegetative debris typically results in a reduction ratio of up to 20:1. Factors such as debris composition, weather, site conditions, and other factors may impact the reduction ratio. The leftover ash may be hauled to a final disposal facility or be incorporated in a land application.

Crushing – The crushing of vegetative debris is the least effective reduction method and results in a reduction ratio of up to 2:1. Crushing is an appropriate reduction method for C&D debris that cannot be recycled. However, if crushing is used to reduce C&D debris, the residual debris must show a reduction in volume.

4.6.12 Recycling of Debris

Common recyclable materials that are a result of a debris-generating event include wood waste, metals, and concrete. The following are potential uses for each of these materials:

Wood Waste – Vegetative debris that is reduced through chipping or grinding results in leftover mulch. The remaining mulch can be used for agricultural purposes or fuel for industrial heating. For the mulch to be viable in agricultural purposes, the end user typically has a size requirement and requests that the mulch be as clean as possible of plastics and dirt.

Metals – Metal debris such as white goods, aluminum screened porches, etc., that may result from a debris-generating event can be recycled. Certain metals, such as aluminum and copper, are highly valuable to scrap metal dealers.

Concrete – Concrete, asphalt, and other masonry products that may become debris as a result of a debris-generating event can be crushed and potentially used for road construction projects or as trench backfill.

4.6.13 DMS Preparation

After a review of the availability and suitability of DMS, the debris removal contractor can begin site preparation. As part of the preparation, baseline data should be gathered from the site to document the state of the land before the debris is deposited. The following action items are recommended to compile baseline information:

- **Photograph the site** – Digital photos should be taken to capture the condition of the site before debris reduction activities begin. Photos should be updated periodically throughout the project to document the progression of the site.
- **Record physical features** – Records should be kept detailing the physical layout and features of the site. Items such as existing structures, fences, landscaping, etc., should be documented in detail.
- **Historical evaluation** – The past use of the site area should be researched and documented. Issues relating to historical or archeological significance of the site should be cleared with the state historical preservation agency.
- **Sample soil and groundwater** – If possible and deemed necessary, soil and groundwater samples will be taken before debris generation activities commence. Samples will help ensure the site is returned to its original state. Typically, soil and groundwater samples should be analyzed for total Resource Conservation and Recovery Act (RCRA) metals, volatile organic compounds, and semi-volatile organic compounds using approved U.S. EPA methods. To determine if samples are required, the County Debris Manager should contact the State's Department of the Environment and the EPA's Emergency Response division.

The County Debris Co-Managers and the monitoring firm will oversee the debris removal contractors' activities to ensure they comply with contractual obligations and environmental standards and act in the best interest of the County and its residents.

4.6.14 Disposal Monitoring

The primary function of the monitoring firm with regard to disposal monitoring is to document the disposal of disaster debris at approved DMS and final disposal locations. Monitors perform quality assurance/quality control (QA/QC) checks on all load tickets and haul-out tickets to ensure that information captured by Collection Monitors is complete. This QA/QC includes but is not limited to the following:

- Inspection of truck placards for authenticity and signs of tampering
- Verification that placard information is documented properly
- Verification that all required fields on the load ticket have been completed

Afterward, the Disposal Monitor will document the amount of debris collected by making a judgment call on vehicle fullness (typically on a percentage basis). The percentage documented for each debris removal vehicle is later applied to the calculated CY capacity of the vehicle to determine the amount of debris collected. The Disposal Monitor's responsibilities include but are not limited to the following:

- Completing and physically controlling load tickets
- Ensuring debris removal trucks are accurately credited for their loads
- Ensuring trucks are not artificially loaded
- Ensuring hazardous waste is not mixed in with loads
- Ensuring all debris is removed from the debris removal trucks before exiting the DMS or final disposal site
- Ensuring only debris specified within the County's scope of work is collected
- In addition to the responsibilities listed above, final Disposal Site Monitors are also tasked with the following:
    - Ensuring all debris is disposed at a properly permitted landfill
    - Matching landfill receipts and/or scale house records to haul-out tickets

4.6.15 Determine Force Account Requirements and Staffing Needs

The County Debris Manager and Emergency Management will coordinate with Finance and individual County departments to determine the force account requirements and staffing needed to support debris management operations based on the scope of the incident.

4.6.16 Conduct Meetings/Briefings with Key Personnel and Contractors

Coordination meetings and briefings with key personnel should be conducted to update the status of the road clearance efforts, DMS openings, contractor asset ramp-up, and pertinent public information for press releases.

Daily meetings should be held each morning at a location determined by the County and should include key personnel from the County, the potential monitoring firm, and debris removal contractors. The purpose of the daily meeting is to focus on daily objectives and discuss operational progress and best practices moving forward. During the meeting, the County will also review real-time statistics and completion maps that reflect operations through the end of the previous day.

4.6.17 Review Debris Volume and Collection Cost Assessment

The County Debris Co-Managers, the monitoring firm, and debris removal contractors will meet to review the debris volume and collection cost assessment. The topics of discussion in this meeting may include, but are not limited to the following:

- Amount of debris generated (total CY)
- Type of debris generated (vegetative, C&D, or other miscellaneous debris)

- Number and estimated date of arrival for assets (trucks, loaders, monitoring personnel)
- Estimated number of DMS locations necessary
- Preliminary scope of debris removal efforts
- Estimated cost of the debris removal efforts
- Following this meeting, the County will begin to collect required documentation for the development of FEMA Project Worksheets (PW)

4.6.18 Request Contact Information and Meeting with FEMA PDMG

This request should be made through MEMA.

The County Debris Co-Managers should immediately request the contact information of the designated FEMA Program Delivery Manager (PDMG) for the disaster. A representative from the County must be the one to request a meeting with the PDMG through FEMA. The County's Debris Monitoring firm can provide guidance before, during, and after the meeting. Upon receiving the information, the County should arrange to hold a meeting with the FEMA PDMG. During this meeting, the County will complete the following actions:

- Summarize the County's debris removal operations to date.
- Review debris and cost estimates for the County.
- Review any Disaster-Specific Guidance (DSG) documents issued by FEMA.
- Examine the County's debris removal plan.
- Provide contact information for all County potential monitoring firm and debris removal contractor's key personnel.
- Determine if the County will utilize the FEMA PA Alternative Procedures.

Determine additional information the PDMG will need to generate PWs for the County. For FEMA to generate a Category A debris removal and debris monitoring PW, it will require the following information:

- Copy of the debris removal contractor contract(s)
- Copy of the debris monitoring firm contract(s)
- Information on the procurement process of the debris removal and monitoring contracts
- Address (if available) and GPS coordinates for all DMS
- Debris volume and costs estimates (using damage assessment reports)
- Monitoring cost estimate (based on budgeted labor hours)
- Brief debris removal plan overview

4.6.19 Issue Media Press Release

A press release developed by the County Debris Manager and the PIO that has been approved by County officials should be issued to various media sources or be broadcast over the radio within the first three days following the debris-generating event. The purpose of the press release will be to reassure and comfort the public that the County is responding to the event and has activated its monitoring firm and debris removal contractors to begin debris removal activities. Sample press releases are in **Appendix C: Sample Press Releases**.

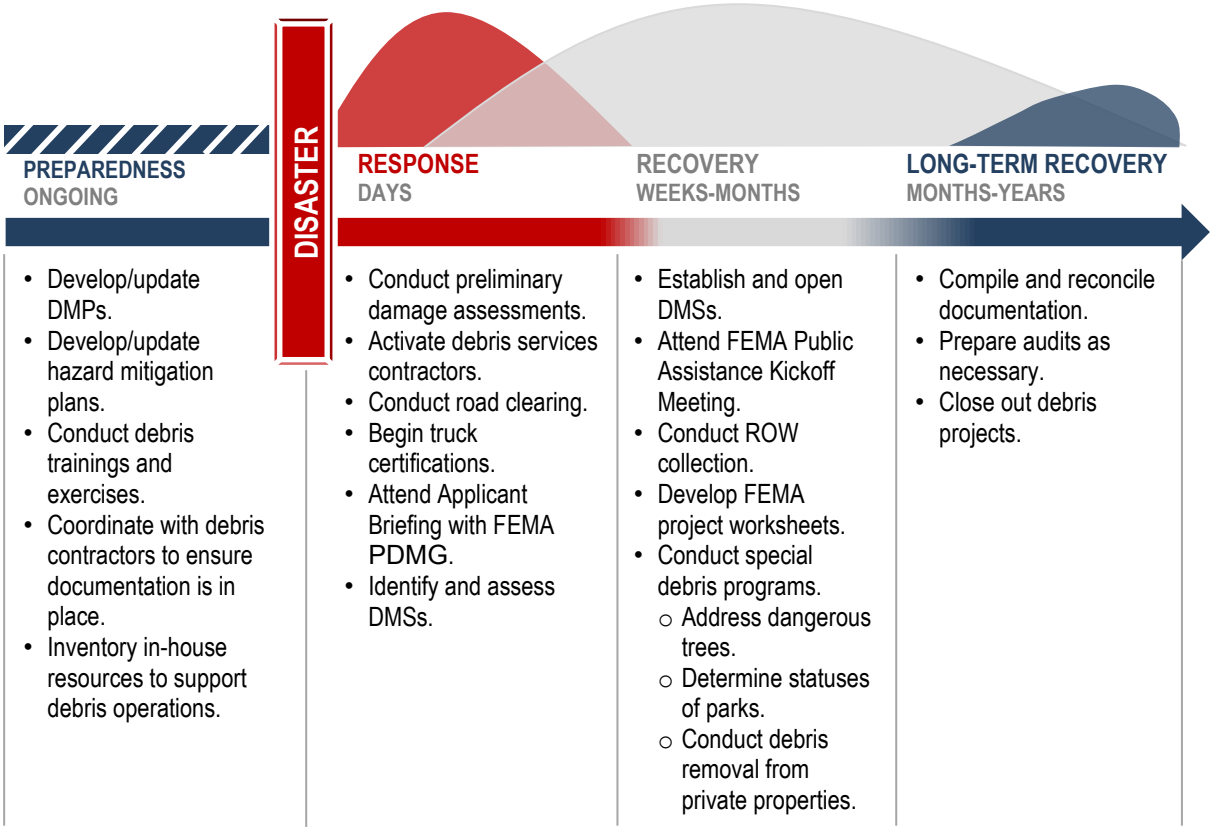


Figure 4-1: Disaster Recovery Timeline

4.7 POST-EVENT RECOVERY

For debris management, the post-event recovery phase is marked by the debris removal contractor collecting and reducing debris from the public ROW.

Concurrent to the commencement of ROW debris removal operations, the County should evaluate the need for contract debris removal on private property, parks, and waterways. As noted in **Figure 4-1**, these specialized debris removal operations typically do not begin until roughly 30 to 60 days following a debris-generating event. Specialized debris removal operations are often governed by DSGs and require some level of FEMA pre-validation. However, if the County determines there is an immediate and imminent threat to public health and safety, these programs can be expedited.

The following recovery checklists are critical in expediting and ensuring proper steps are taken during the debris removal process. The post-event recovery checklists are subdivided into the following time periods:

- 2 Days – 2 Weeks
- 2 Weeks – 1 Month
- 1 Month – 3 Months
- 3 Months – Project Completion

4.8 POST-EVENT RECOVERY CHECKLIST: 2 DAYS – 2 WEEKS

- Open DMS.
- Review environmental considerations.
- Prioritize roads/areas.

- Prioritize restoring power lines.
- Issue press release regarding segregation of debris.
- Determine which types of debris will be eligible for collection from the ROW (i.e., HHW).
- Begin ROW debris removal.
- Begin environmental monitoring program of DMS.
- Coordinate with external agencies.
- Initiate discussions with FEMA.
- Obtain FEMA guidance for gated community and private property debris removal.

4.8.1 Open Debris Management Sites

The DMS(s) will be opened, beginning with sites closest to the most heavily impacted areas of the County. Monitoring towers will be located at the ingress and egress of the DMS. Monitoring towers will be high enough so Disposal Monitors can verify the contents inside the debris removal trucks. See **Appendix B: Debris Management Site Synopsis and Sample Form** for DMS locations.

4.8.2 Review Environmental Considerations

Post-event recovery operations may have environmental considerations that affect operations. Environmental considerations typically correlate to the type of disaster debris and activity needed to address the debris. Table 4-1 below provides a summary of debris-related activities and the regulatory agency such activities will fall under for guidance and regulation.

Table 4-1: Environmental Considerations

Debris-Related Activity	Regulatory Agency
DMS	• MDE – Notify in opening and closing of DMS. Monitor air quality at DMS when reducing debris through burning. • Maryland Department of Natural Resources (MDNR) – Contact for an open burning and/or air curtain incineration permit. • Maryland Historical Trust (MHT) – Contact if items of historic significance are found at a DMS.
Widespread Hazardous Materials Contamination	• EPA – Determines the specific activities that may be funded under the PA Program versus those that are under the authority of the EPA.
Debris Removal Activities That Impact Endangered Species	• Contact the U.S. Fish and Wildlife Service.
Waterways Debris Removal and Protection of Coastal Barrier Resource Systems	• USACE – Responsible for debris removal from federally maintained navigable channels and waterways. • EPA – Responsible for the emergency removal of oil, pollutants, hazardous materials, and their containers from inland zones. • United States Coast Guard (USCG) – Responsible for the removal of oil discharges and hazardous substances releases that occur in the coastal zone.
Demolition	• MHT – Contact for state historic review of the property. • MDE – Coordinate with for an environmental review of the property.
Environmental Justice	• FEMA and EPA – Evaluate actions for disproportionately high and adverse effects on minority or low-income populations and to find ways to avoid or minimize these impacts where possible.

4.8.3 Prioritize Roads/Areas

After reviewing damage assessments and the concentration of debris within the County, areas that sustained more extensive damage may need to be prioritized, subdivided into smaller work zones, and recorded on the County's GIS data.

4.8.4 Prioritize Restoring Power Lines

DOT, in coordination with PEPCO, should prioritize clearing of debris to the extent necessary to allow PEPCO crews to access and perform power restoration. Primary clearing of debris will be completed after power is restored.

4.8.5 Issue Press Release Regarding Segregation of Debris

The County should issue a second press release regarding segregation of vegetative, C&D, and HHW.

4.8.6 Begin ROW Debris Removal

The County should allow the debris removal contractors to proceed with curbside collection. Curbside collection entails residents placing their disaster-related debris along the ROW. It is critical residents segregate their debris in categories such as vegetative, C&D, HHW, and white goods. This will help prevent the contamination of debris loads and expedite the cleanup process. To assist the County in an "all-hazards approach" to debris removal efforts, the processes for HHW and white goods debris removal are outlined below.

4.8.6.1 HHW Debris Removal

HHW includes gasoline cans, aerosol spray cans, paint, lawn chemicals, batteries, fire extinguishers, fluorescent lamps, household electronics, etc.

HHW removal is eligible for FEMA reimbursement if the debris is a result of the debris-generating event and removed from publicly maintained property and roadways whose maintenance is the responsibility of the County. HHW should be collected separately and disposed of or recycled at a properly permitted facility. Collection of HHW can be conducted internally, contracted out on a unit rate basis, or tasked to the existing County debris removal contractor. The following action items are recommended to the County regarding HHW removal:

- Communicate to County residents the eligibility of HHW following an event. It is important residents separate HHW from other debris, such as vegetative, C&D, etc., to ensure HHW does not enter the debris stream at DMS locations.
- Decide whether to contract with an established HHW collection firm to augment or replace HHW drop-off sites. This helps ensure that HHW is properly disposed. Measures should still be taken by the debris removal contractor and the monitoring firm to identify, segregate, and dispose of intermingled HHW at DMS locations.
- Interface with the MDE. Describe the HHW collection program and permitted facilities to be used for disposal or recycling.

4.8.6.2 White Goods Debris Removal

White goods include refrigerators, freezers, air conditioners, heat pumps, ovens, ranges, washing machines, clothes dryers, etc.

White goods debris removal is eligible for FEMA reimbursement if the debris is a result of the debris-generating event and removed from publicly maintained property and roadways whose maintenance is the responsibility of the County. White goods debris that contains ozone-depleting refrigerants, mercury, or compressor oils need to have such materials removed by a certified technician before recycling. All state and federal laws should be followed regarding the final disposal of removed refrigerants, mercury, or compressor oils. Collection of white goods can be conducted internally, contracted out on a unit rate basis,

or tasked to the existing County debris removal contractor. The following action items are recommended to the County regarding white goods removal:

- Communicate the eligibility of white goods to County residents following an event. It is important residents separate white goods from other debris to ensure white goods are not mixed with C&D or vegetative debris during collection.
- Interface with MDE. Describe the white goods collection program and permitted facilities to be used for disposal of recovered refrigerants, mercury, or compressor oils.

4.8.6.3 Load Tickets

For the debris categories outlined above, pre-printed load tickets or an ADMS-generated ticket will be used as reimbursement documentation for the County. An example of a load ticket is in **Appendix D: Field Documents**.

The top portion of the ticket will be filled out by the Collection Monitor at the beginning of each load. The address field will be completed when the debris removal contractor has completed work. The Collection Monitor will also ensure the debris removal contractor is working within the scope of the contract with the County. The load ticket will then be given to the debris removal vehicle driver to turn in to the Disposal Monitor upon arrival at the DMS or final disposal site. The Disposal Monitor will complete the remaining portion of the load ticket. The Disposal Monitor documents the amount of debris collected by making a judgment call reflecting the vehicle's fullness (typically on a percentage basis).

The percentage documented for each debris removal vehicle is later applied to the calculated CY capacity of the vehicle to determine the amount of debris collected.

4.8.7 Begin Environmental Monitoring Program at DMS

Throughout the duration of the project, data should be collected for use in the remediation and closeout of the DMS. Collected data should be compared to previous data to establish any remediation actions necessary to return the site to its original state. The following items should be included in an environmental monitoring program:

- **Sketches of Site Operations** – During the project, operations at the DMS may expand, condense, or shift. Changes to the site should be documented along with the locations of debris reduction activity. The sketches and documentation will assist in determining areas of concern that may need additional sampling and testing during site closure.
- **Documentation of Issues at the Site** – Meticulous records should be kept documenting issues such as petroleum spills, hydraulic spills, or the discovery of HHW within debris at the site. This documentation will assist in the remediation of the site.
- **Historical Findings** – If during operations, prehistoric or historic artifacts, vessel remnants, or any other physical remains of historical value are encountered, work activity at the DMS must cease. The owner or operator will contact the Maryland Historical Trust, Administrative Support at 410-697-9592 for further guidance. Other issues relating to the historical or archeological significance of the site should be cleared with the state historical preservation agency.

4.8.8 Coordinate with External Agencies

The County should coordinate with the Maryland Department of Transportation (MDOT) and other relevant agencies to ensure debris is being collected and documented appropriately. Coordination with MDOT is imperative regarding state-maintained roads.

4.8.9 Initiate Discussions with FEMA

It will be critical for the County Debris Co-Managers and the monitoring firm to clearly communicate debris removal plans and operations with FEMA. Clear communication fosters a coordinated effort that enhances the transparency of the operation for auditors and ensures maximum FEMA reimbursement.

4.8.10 Obtain FEMA Guidance for Gated Community and Private Property Debris Removal

Eligibility of gated community and private property debris removal (PPDR) will be determined by FEMA on a case-by-case basis following an event. Typically, the debris and devastation must be so widespread that debris removal from private property is a "public interest." Under the current FEMA PA Program and Policy Guidelines, debris removal from private property is defined as a public interest when operations:

- Remove threats to the health and safety of the community at large.
- Prevent significant damage to public or private property.
- Assist in the economic recovery and thereby benefit the community at large.

For PPDR to be eligible for reimbursement, the County must submit a written request to the FEMA Federal Coordinating Officer (FCO) before PPDR operations begin. The request does not need to be approved for PPDR operations to begin but a denied request will result in the withholding of reimbursement funds for that project. The request will include the following information:

- **Immediate Threat Determination** – The County must provide documentation from the State's Department of Health that debris on private property is a threat to public health and safety.
- **Documentation of Legal Responsibility** – The County must demonstrate it has the legal authority to enter private property and gated communities and accepts the responsibility to abate all hazards, regardless of whether a federal disaster declaration is made. Public health nuisance abatement will be addressed by the Department of Health if issues arise.

If PPDR is authorized and considered for the County, the following documentation will be required by FEMA:

- **Right of Entry (ROE) and Hold Harmless Agreements (HHA)** – The County should execute signed ROE and HHA documents with private property owners holding the federal government harmless from any damages caused to private property. The County may execute ROE and HHA forms prior to a disaster under the condition that the ROE and HHA form do not reference a particular event or disaster number. A sample ROE agreement can be found in **Appendix I: Sample Right of Entry Agreement.**
- **Photos** – It is in the County's best interest to photograph conditions of private property before and after debris removal is completed. The photos will assist in the verification of address and scope of work on the property.
- **Private Property Debris Removal Assessment** – The assessment will be a property-specific form to establish the scope of eligible work on the property. The assessment can be in the form of a map or work order if the scope of work can be clearly identified.
- **Documentation of Environmental and Historic Review** – Debris removal efforts on private property must comply with all review requirements under 44 CFR (specifically Part 9 [Floodplain Management and Protection of Wetlands] and Part 10 [Environmental Considerations]).

4.9 POST-EVENT RECOVERY CHECKLIST: 2 WEEKS – 1 MONTH

- Maintain and evaluate ROW cleanup.
- Begin ROW stump removal, as necessary.
- Open additional DMS, as necessary.
- Continue meetings with FEMA.
- Begin debris removal from private property and gated communities.
- Communicate recovery updates to residents via press release.

4.9.1 Maintain and Evaluate ROW Cleanup

The monitoring firm will document and provide information on debris collection (vegetative, C&D, white goods, HHW, etc.) and completion progress to the County on a daily basis. To ensure proper record keeping and reimbursement from all appropriate agencies, it will be important for the County to announce the completion of the first pass.

4.9.2 Begin ROW Stump Removal as Necessary

Following initial ROW debris removal efforts, the County and the monitoring firm may determine if a significant threat remains to the public in the form of hazardous stumps along the ROW. Before ROW stump removal operations commence, all applicable DSG criteria or FEMA Publication FP 104-009-2 should be reviewed for eligibility guidelines. FEMA's Recovery Policy for Hazardous Stump Extraction and Removal Eligibility is available at http://www.fema.gov. In addition, as of the publication of this plan FEMA Publication FP 104-009-2 defines a stump as hazardous if **all** the following criteria are met:

- The stump has 50 percent or more of the root ball exposed.
- The stump is 2 feet or larger in diameter when measured 2 feet from the ground.
- The stump is located on a public ROW.
- The stump poses an immediate threat to public health and safety.

4.9.3 Open Additional Debris Management Sites as Necessary

If the initial DMS are approaching maximum capacity, additional DMS may need to be prepared. The same procedures taken to open and monitor the initial DMS should be applied to any additional DMS the County may utilize.

4.9.4 Continue Meetings with FEMA

Maintaining a strong line of communication with the County's assigned FEMA representative is critical. The meetings will help to ensure maximum coordination and expedite resolving any operational problems that may occur.

4.9.5 Begin Debris Removal from Private Property and Gated Communities

If approved, debris removal from private property and gated communities should begin.

4.9.6 Communicate Recovery Updates to Residents via Press Release

Recovery update press releases should focus on clarifying any ineligible debris confusion and communicating a debris set-out deadline to minimize illegal dumping. Protocol for leaners/hangers and private property/gated community debris removal programs, if applicable, should be communicated at this time. Depending on the severity of the debris-generating event, project closeout may be further away.

4.10 POST-EVENT RECOVERY CHECKLIST: 1 MONTH – 3 MONTHS

- Maintain and evaluate ROW cleanup (vegetative and C&D).
- Review ROW for ineligible debris.
- Begin ROW dangerous trees program.
- Identify final disposal locations/Initiate haul-out.
- Progress to weekly meetings with the FEMA.
- Maintain accurate documentation to obtain maximum reimbursement and grant allocations.

4.10.1 Maintain and Evaluate ROW Cleanup – Vegetative and Construction & Demolition

Information on debris collection and completion progress will be documented by the potential monitoring firm and provided to the County daily. During this period, the County should announce the completion of the second pass and establish a deadline for residents to set out debris on the ROW as well as a deadline for the County's debris removal contractor to complete the third pass. In a smaller debris-generating event, the second pass could be announced earlier.

4.10.2 Review ROW for Ineligible Debris

In addition to disaster debris, ineligible debris may also be placed curbside for collection by County residents. Ineligible debris may include non-disaster-related debris, debris generated by land clearing, or debris types that are not eligible for collection. Once ineligible debris on the ROW is identified, the County may proceed in one of several ways:

- Hold individual homeowners responsible for the disposal of ineligible debris.
- Handle the removal of ineligible debris internally with County resources.
- Task the County debris removal contractor with the removal of ineligible debris and incur the associated cost since the ineligible debris will not be reimbursable by FEMA. This debris shall be hauled directly to a final disposal landfill or transfer station to reduce associated handling costs.

4.10.3 Begin ROW Leaners/Hangers Program

A ROW leaners/hangers program should be initiated if it is determined a significant threat remains to the County public in the form of leaning trees and hanging limbs along the ROW. To ensure maximum reimbursement, all threats must be identified and verified against DSG criteria for eligibility prior to the commencement of cutwork. It is important to note the County's debris removal contractor may require lead-time to transport specialty vehicles, equipment, and labor force to commence leaner/hanger work. Currently, FEMA Publication FP 104-009-2 provides the following guidance on eligibility requirements for leaners and hangers.

Leaner – A tree is considered hazardous and defined as a "leaner" when the tree's present state is caused by a disaster, the tree poses a significant threat to the public, and the tree is at least six inches in diameter measured at 4.5 feet above the ground. In addition, **one or more** of the following FEMA Publication FP 104-009-2 criteria must be met:

- The tree has more than 50 percent of the crown damaged or destroyed.
- The tree has a split trunk or broken branches that expose the heartwood.
- The tree has fallen or been uprooted within a public use area.
- The tree is leaning at an angle greater than 30 degrees.

Hanger – A hanger is a hazardous limb that poses a significant threat to the public. The current eligibility requirements for hangers per FEMA Publication FP 104-009-2 are as follows:

- The limb must be 2 inches or greater in diameter when measured at the break.
- The limb is still hanging in a tree and threatening a public use area.
- The limb is located on improved public property.

4.10.3.1 Unit Rate Tickets

Unit rate tickets or an ADMS ticket will be used as reimbursement documentation for the County's leaners/hangers program. An example of a unit rate ticket is in **Appendix D: Field Documents**. To ensure maximum reimbursement, Debris Monitors will use GPS devices to document the GPS coordinates of tree or hanger removals and take digital photos of the work done.

4.10.4 Identify Final Disposal Locations/Initiate Haul-Out

At this point in the post-event recovery process, reduced debris from DMS will be hauled to a final disposal site or recycled. Generally, for final disposal purposes, the most environmentally responsible and cost-effective method will be for the County to recycle reduced debris. Any remaining reduced debris that cannot be recycled should be disposed of at permitted landfills with consideration to the cost structure of associated tipping fees.

The County will work with the debris removal contractor to determine potential final disposal locations. It will be important that the County and monitoring firm ensure the debris removal contractor obtains proper disposal tipping fee information.

4.10.5 Progress to Weekly Meetings with the FEMA

Although strong communication with the County's assigned FEMA representatives remains important, at this point in the debris removal operation, meetings can move to a weekly timeframe. The weekly meetings will help ensure maximum coordination.

4.10.6 Maintain Accurate Documentation to Obtain Maximum Financial Reimbursement and Grant Allocations

The County's Finance Department or OEMHS will assist in making sure documentation from force account labor and contracted services are in compliance with County, state, and federal regulations to ensure that the County receives maximum financial reimbursement, eases the grant application process, and receives appropriate grant allocations.

4.11 RECOVERY CHECKLIST: 3 MONTHS – PROJECT COMPLETION

- Complete all debris recovery activities.
- Continue to review ROW for ineligible debris.
- Complete the disposal of reduced debris.
- Close out and remediate DMS.
- Conduct project closeout meetings with FEMA and external agencies.
- Perform contractor reconciliation.

4.11.1 Complete all Debris Recovery Activities

The County's debris removal contractor will identify and remove all remaining eligible debris piles.

4.11.2 Continue to Review ROW for Ineligible Debris

Continue to review the County ROW for ineligible debris placed curbside for collection by residents. Ineligible debris should be clearly marked to prevent collection by the debris contractor.

4.11.3 Complete the Disposal of Reduced Debris

Before project closure, remaining reduced debris at the DMS should be recycled through one of the end users or hauled to a local landfill for final disposal landfill.

4.11.4 Closeout and Remediate DMS Locations

MDE must be contacted before final closure of the DMS to ensure all required actions are taken. Generally, DMS locations must be returned to their original environmental state. Restoration of the DMS includes removing all remnants of operations and the remediation of any contamination that may have occurred during operations. A final sample of environmental data should be collected to ensure the site is returned

to its original state. Final closure of the DMS will require written notice to MDE. The results of any required environmental samples should be included with the written notice.

4.11.5 Conduct Project Closeout Meetings with FEMA and External Agencies

Prior to the project closeout meeting, the County will receive detailed data from the potential monitoring firm regarding the debris removal operations within the County. The County, in conjunction with their contracted monitoring firm, should compile all contractor invoices, contracts, and other documentation supporting debris removal operations in preparation of the project closeout meeting.

4.11.6 Perform Contractor Reconciliation

The County's Department of Finance and Office of the County Attorney will assist in making sure all contracts are reconciled completely during the project closeout process.

SECTION 5: OVERVIEW OF RULES AND REGULATIONS

5.1 FEDERAL REGULATIONS AND GUIDANCE

5.1.1 National Environmental Policy Act (NEPA)

NEPA regulations can be found in 40 CFR, Parts 1500–1508. The Act requires that the FEMA consider the environmental impacts of proposed actions and reasonable alternatives to those actions. The U.S. Department of Homeland Security publishes NEPA requirements and provides a decision-making process that FEMA must follow to fund a project.

5.1.2 Resource Conservation and Recovery Act (RCRA)

RCRA governs the disposal of solid waste and hazardous waste. The Act also provides planners with greater awareness of environmental considerations and regulations for dealing with disaster debris. Additional information about RCRA is at http://www.epa.gov/rcra.

5.1.3 National Historic Preservation Act (NHPA)

In conducting debris operations, jurisdictions must consider how such operations will affect historic properties. Historic properties include buildings or groups of buildings, structures, objects, landscapes, archeological sites, as well as properties listed in or eligible for inclusion in the National Register of Historic Places. Section 106 of the NHPA requires FEMA to consider how a project might affect such properties.

5.1.4 Endangered Species Act (ESA)

Projects must be examined to ensure they will not jeopardize the continued existence of any threatened or endangered species (listed species) and critical habitats. FEMA must consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries to ensure the conservation of listed species.

5.1.5 Clean Water Act (CWA)

The CWA provides regulations for the discharges of pollutants in the waters of the United States. According to the CWA it is unlawful to discharge any pollutant from a specific source into navigable waters without the appropriate CWA permits from the U.S. Army Corps of Engineers or State Regulatory Agency.

5.1.6 Clean Air Act (CAA)

The CAA seeks to protect air quality through the reduction of smog and atmospheric pollution. Air compliance measures in debris management operations may include air monitoring and dust abatement.

5.1.7 National Emission Standard for Hazardous Air Pollutants (NESHAP)

NESHAP provides standards for demolition of structures containing asbestos as well as the disposal and reporting of asbestos.

5.1.8 Executive Order 11990, Protection of Wetlands

Executive Order 11990, Protection of Wetlands, requires federal agencies to minimize or avoid activity that adversely affects wetlands and encourage the preservation and enhancement of the beneficial functions of wetlands.

5.1.9 Executive Order 12898, Environmental Justice

Executive Order 12898 requires federal agencies to identify and address any disproportionately high and adverse human health or environmental effects on minority and low-income populations as a result of their actions.

5.2 STATE OF MARYLAND REGULATIONS

5.2.1 Guidance for Establishment, Operation, and Closure of Disaster Debris Management Sites

The County is allowed to use County-owned land for temporary debris staging within County regulations. Permits or MOUs may be required to use privately owned land as a DMS.

5.2.2 Open Burning Permits

A permit is required for open burning. Chapter 3 of the Montgomery County Code and Maryland regulations (COMAR 26.11.07) place restrictions on open burning. Most open burning without a permit is prohibited in Montgomery County and fines of $500 per day may be imposed for open burning. Burn Pits are monitored during use by the Fire Marshall and State Forester. If burning within 100 feet of a wooded area is proposed, a Maryland Department of Natural Resources Forest Service Open Air Burning Permit is required (Phone: 301-880-2745; Fax: 301-475-8527). The direction and speed of the prevailing winds will be considered prior to the active use of the burn sites to help minimize any impacts to adjacent development(s).

5.2.3 Hazardous Waste Handling Standards

State standards for hazardous waste management are handled by the MDE. Hazardous waste generators must arrange for shipment of their hazardous waste to a facility permitted to accept it or, with the appropriate permits, treat it themselves. A person who ships hazardous waste off-site must use a hauler certified by MDE and the waste must be accompanied by a document that tracks it from generation to disposal (the hazardous waste manifest). A person must comply with regulations on the storage of the waste and must follow specified procedures to prevent the occurrence of circumstances which would threaten human health or the environment. These requirements are spelled out in Title 26, Subtitle 13 of the Code of Maryland Regulations (COMAR 26.13). More information can be found on the MDE website: https://mde.maryland.gov/programs/Land/HazardousWaste/Pages/index.aspx

5.3 FUNDING SOURCES FOR DISASTER DEBRIS OPERATIONS

The federal government provides several assistance programs through various agencies to support debris operations. However, these programs have extensive documentation requirements that must be adhered to. Additionally, the policy guidance for these assistance programs changes and adapts with lessons learned from each disaster across the United States. It will be important for the County to maintain awareness of current federal assistance program guidance and regulations related to disaster debris federal funding programs.

5.3.1 FEMA Public Assistance Program

The mission of the FEMA PA Grant Program is to provide assistance to state and local governments and certain private nonprofit (PNP) organizations to quickly respond to and recover from disasters or emergencies declared by the President. FEMA provides supplemental federal disaster grant assistance for debris removal, emergency protective measures and repair, replacement, or restoration of disaster-damaged facilities through the PA Program. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process.

The FEMA PA Program is a cost-sharing program. Cost share refers to the portion of disaster-related costs the federal government is responsible for funding. Per the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), the federal cost share of assistance is not less than 75 percent of the eligible cost for emergency measures and permanent restoration. The remaining 25 percent is the responsibility of the state and local governments. The State of Maryland serves as the grant administrator or the grantee. The grantee determines how the non-federal share is funded.

5.3.2 Recent Changes to the PA Program

The Stafford Act constitutes the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and FEMA programs.

On Oct. 5, 2018, The President signed the Disaster Recovery Reform Act (DRRA) of 2018 into law as part of the Federal Aviation Administration Reauthorization Act of 2018. These reforms acknowledge the shared responsibility of disaster response and recovery, aim to reduce the complexity of FEMA and build the nation's capacity for the next catastrophic event.

The DRRA contains more than 50 provisions that require FEMA policy or regulation changes for full implementation, as they amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

The Stafford Act was also amended by the SRIA of 2013. The President signed the SRIA into law in January 2013 to improve and streamline disaster assistance for Hurricane Sandy and for future disasters. As a result of this Act, the Stafford Act was amended, including alternative procedures for the FEMA PA Program.

The purpose of the SRIA is to:

- Reduce the cost of federal government assistance.
- Increase the administrative flexibility of the FEMA PA Program.
- Expedite the process of providing and using the assistance.
- Create incentives for applicants to complete projects in a timely and cost-effective manner.

The law authorizes changes to the way FEMA may deliver federal disaster assistance to survivors. Key provisions of the Act are as follows:

- Provides substantially greater flexibility in use of federal funds and less administration burden if applicants accept grants based on fixed capped estimates, which may be provided by applicants' licensed engineer and validated by independent expert panel.
- Offers a package of cost-share adjustments, reimbursement for force account, and retention of program from recycling to speed debris removal and encourage pre-disaster debris planning.
- Allows PA applicants for all disasters declared on or after October 30, 2012, an option to request binding arbitration for certain projects with an amount in dispute of over $1 million after first appeal instead of pursuing a second appeal under FEMA's PA Program.

In addition to the SRIA, the Stafford Act was also amended by the DRRA of 2018. The law contains more than 50 provisions that require FEMA policy or regulation changes for full implementation. Goals of the DRRA include:

- Increase mitigation spending.
- Push more responsibility for post-disaster management to state and local governments.
- Clarify policy.

Some of the provisions of the DRRA include the following:

- Increases the amount of pre-disaster mitigation spending to 6% of the cost of disasters.
- Establishes management cost allowances for FEMA PA and the FEMA Hazard Mitigation Grant Program (HMGP).

- Authorizes FEMA to provide assistance under the HMGP and Pre-Disaster Mitigation Program (PDMP) for wildfire and windstorm disaster mitigation.
- Provides assistance to state and local governments for building code and floodplain management ordinance administration and enforcement.
- Requires development of guidance and training in the prioritization of power restoration for hospitals and nursing homes and the need to coordinate plans before outages occur.
- Authorizes FEMA to develop “incentives and penalties” to state, local, tribal, and territorial governments to ensure timely closeout of disaster grants.
- Adds long-term recovery groups, center-based childcare facilities, and domestic hunger relief organizations to the list of groups with which FEMA will coordinate.
- Prohibits FEMA from recovering funds from a local government that received PA if the Office of Inspector General (OIG) finds the local government relied on inaccurate information by a FEMA Technical Assistance Contractor.
- Grants a right of arbitration to any applicant disputing a FEMA decision regarding eligibility for or repayment of assistance where the amount is more than $500K or more than $100K for applicants in rural areas.

It is the responsibility of the applicant to understand the eligibility requirements and provisions of the Stafford Act, the SRIA, and the DRRA. FEMA will make every effort to provide reliable information through field personnel following a disaster. However, it is ultimately the responsibility of the Applicant to understand what is allowed under the law.

It is critical that local officials and local managers implementing federal programs fully understand applicable local, state, and federal laws related to disaster assistance.

The consequence of non-compliance with these provisions is fraud and can result in the following:

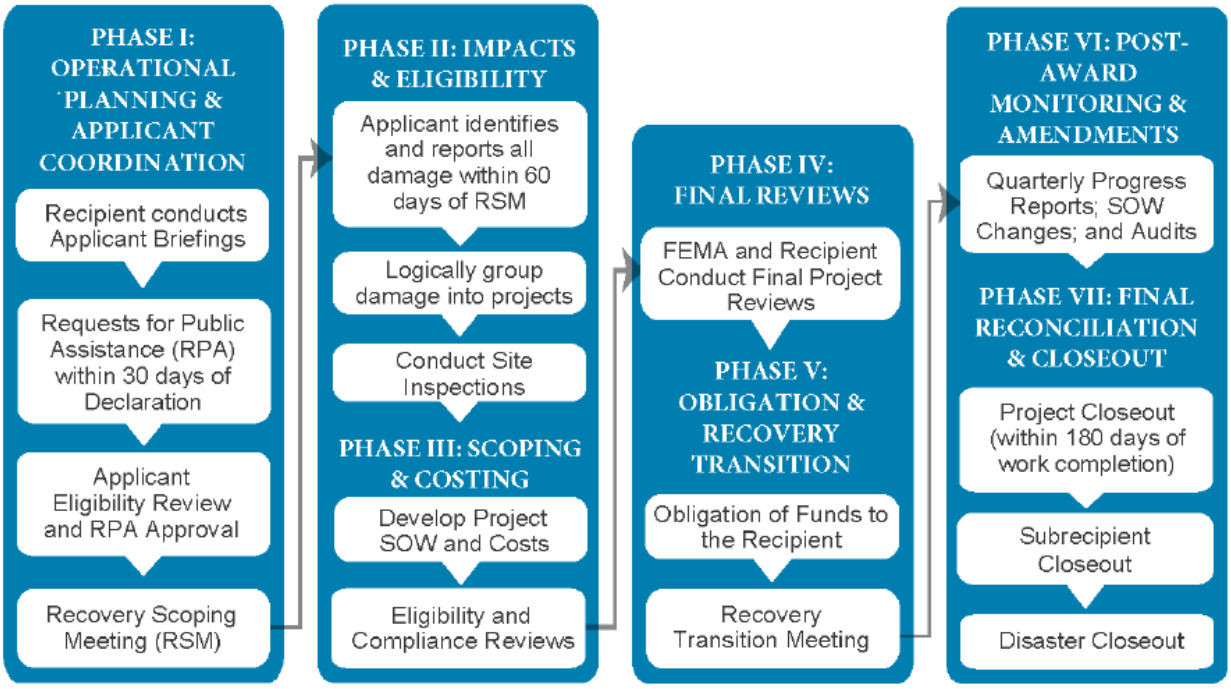
- Temporarily withhold payment or take more severe enforcement action.
- Disallow all or part of the cost of the activity or action not in compliance.
- Wholly or partly suspend or terminate the Applicant’s current award.
- Withhold future awards.
- Take other remedies that may be legally available.

Debris Managers will need to understand how these policies impact debris operations. The following is an overview of the FEMA PA Grant Program process with a flow chart at the end of the section.

5.4 FEMA PA GRANT PROGRAM PROCESS OVERVIEW[2]

Figure 5-1 flow diagram provides a graphical representation of the FEMA PA Grant Program.

Figure 5-1: PA Grant Program Process Flow



5.5 FEMA HAZARD MITIGATION GRANT PROGRAM

The latest addition to FEMA's Hazard Mitigation Assistance Grants is called Building Resilient Infrastructure and Communities (BRIC). The purpose of BRIC is to help communities implement hazard mitigation measures following a Presidential Major Disaster Declaration in the areas of the state, tribe, or territory requested by the Governor or Tribal Executive. The DRRA, Section 1234, amended Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) and authorizes BRIC. The BRIC priorities are to:

- Incentivize public infrastructure projects;
- Incentivize projects that mitigate risk to one or more lifelines;
- Incentivize projects that incorporate nature-based solutions; and,
- Incentivize adoption and enforcement of modern building codes.

FEMA offers a variety of disaster assistance programs with different eligibility requirements. BRIC provides funds to states, tribes, and local communities after a disaster declaration to protect public or private property through various mitigation measures. Hazard mitigation includes long-term efforts to reduce the impact of future events. BRIC recipients (states, federally recognized tribes, or territories) have the primary responsibility for prioritizing, selecting, and administering state and local hazard mitigation projects. Although individuals may not apply directly to the state for assistance, local governments may sponsor an application on their behalf.

[2] FEMA Public Assistance Program and Policy Guide, FP 104-009-2, June 2020

5.6 DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT: COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

HUD provides flexible grants to help cities, counties, and states recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. In response to Presidentially declared disasters, Congress may appropriate additional funding for the Community Development Block Grant (CDBG) Program as Disaster Recovery grants to rebuild the affected areas and provide crucial seed money to start the recovery process. Since CDBG Disaster Recovery (CDBG-DR) assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources. HUD can also fund disaster mitigation projects through the CDBG-Mitigation (MIT) grant.

5.7 OTHER FUNDING OPTIONS

Public entities may be eligible for other federal assistance programs for disaster debris management, including:

- Federal Highway Administration Emergency Relief Program
- Natural Resources Conservation Commission Emergency Watershed Protection Program
- U.S. Department of Agriculture Farm Services Agency Emergency Programs

Each disaster assistance program has different documentation requirements. For additional information on cost tracking and documentation requirements, refer to the Federal Policies and Guidance for Debris Operations through www.fema.gov.

5.8 DOCUMENTATION

Accurate and complete cost tracking is critical to obtain assistance for disaster-related costs. Emergency protective measures can be eligible for reimbursement. If the incident allows for warning, public entities should begin tracking costs once the threat has been identified. If there is no warning, public entities should begin tracking costs as soon as possible. Accounting best practices for tracking costs include the following:

- Identify a person who will be responsible for compiling disaster-related costs for the jurisdiction.
- Establish a cost code for disaster-related costs.
- Establish a file structure for each site where recovery work has been or will be performed.
- Maintain accurate disbursement and accounting records to document the work performed and the cost incurred.
- Obtain and review applicable local, state, and federal policies and regulations.
- Document administrative costs.
- Begin compiling recovery project documentation, including:
    - Executed contracts, bids, periods of performance, and locations worked
    - Property insurance
    - Donated resources (labor, equipment, and materials)
    - Mutual aid
    - Force account labor
    - Force account equipment
    - Equipment rental agreements
    - Fuel logs
    - Materials including meals and gas purchases
    - Description of damage
    - Scope of work to be completed

    - Photos of damage
    - Copies of estimates
    - Maintenance records
    - Site inspection records
    - Special considerations
- Coordinate with state and federal agencies to obtain disaster-specific cost tracking spreadsheets and templates.

SECTION 6: ABBREVIATIONS AND GLOSSARY OF TERMS

ADMS	Automated Debris Management System
BRIC	Building Resilient Infrastructure and Communities
C&D	Construction and Demolition
CAA	Clean Air Act
CDBG-DR	Community Development Block Grant – Disaster Recovery
CEMP	Comprehensive Emergency Management Plan
CERCLA	Comprehensive Environmental Response, Compensation & Liability
CFR	Code of Federal Regulations
County	Montgomery County
CPG	Comprehensive Preparedness Guidance
CWA	Clean Water Act
CY	Cubic Yard
DEP	Department of Environmental Protection
DGS	Department of General Services
DHHS	Department of Health and Human Services
DMP	Debris Management Plan
DMS	Debris Management Site
DOT	Department of Transportation
DRRA	Disaster Recovery Reform Act
DSG	Disaster-Specific Guidance
EAP	Emergency Action Plan
EF	Enhanced Fujita
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ER	Emergency Relief
ESF	Emergency Support Function
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographical Information System
HHA	Hold Harmless Agreements
HHW	Household Hazardous Waste
HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program

HUD	Housing and Urban Development
ICS	Incident Command System
MDE	Maryland Department of the Environment
MDOT	Maryland Department of Transportation
MEMA	Maryland Emergency Management Agency
MHT	Maryland Historical Trust
MOU	Memorandum of Understanding
MWCOG	Metropolitan Washington Council of Governments
NCR	National Capital Region
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NIMS	National Incident Management System
NRCS	Natural Resources Conservation Service
OEMHS	Office of Emergency Management and Homeland Security
OIG	Office of Inspector General
PA	Public Assistance
PAPPG	Public Assistance Program and Policy Guide
PDMG	Program Delivery Manager
PDMP	Pre-Disaster Mitigation Program
PEPCO	Potomac Power Company
PIO	Public Information Officer
PNP	Private Nonprofit
PPDR	Private Property Debris Removal
PW	Project Worksheets
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RECP	Regional Emergency Coordination Plan
ROE	Right-of-Entry
ROW	Right-of-Way
RRMD	Recycling and Resource Management Division
SARA	Superfund Amendments and Reauthorization Act
SHA	State Highway Administration
SPIA	Sperry-Piltz Ice Accumulation
SRIA	Sandy Recovery Improvement Act
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WSSC	Washington Suburban Sanitary Commission

APPENDIX A: CONTRACTOR AND VENDOR CONTACT INFORMATION

Table A-1: Primary Debris Monitoring Firm, Tetra Tech, Contact Information[1]

Contact Name	Contact Title	Phone	Email	Address
Ralph Natale	Director, Post Disaster Programs	407-580-8184	Ralph.natale@tetratech.com	2301 Lucien Way, Suite 120 Maitland, FL 32751
Simon Carlyle	Senior Project Manager	404-803-2525	Simon.carlyle@tetratech.com	2301 Lucien Way, Suite 120 Maitland, FL 32751
Betty Kamara	Contracts Administrator	407-803-2551	Betty.kamara@tetratech.com	2301 Lucien Way, Suite 120 Maitland, FL 32751

[1] Term of Debris Monitoring Contract is from 2019 – 2022 with the option of two 1-year extensions.

Table A-2: Pre-Positioned Disaster Debris Management Contractor(s)[2]

Contractor	Primary	Secondary	Secondary
	AshBritt, Inc. **Contract No.: 1052746**	**Ceres Environmental Services, Inc** **Contract No.: 1052747**	**CrowderGulf, LLC** **Contract No.: 1052748**
Mailing Address	565 East Hillsboro Blvd Deerfield, FL 33441 **office telephone:** 954-725-6992 **office fax:** 828-479-3010	6968 Professional Parkway East Sarasota, FL 34240 **office telephone:** 800-218-4424 **office fax:** 941-358-6363	5435 Business Parkway Theodore, AL 36582 **office telephone:** 800-992-6207 **office fax:** 251-459-7433
Contact Person	Dow Knight, Senior Vice President **mobile**: 954-818-4416 **email**: dknight@ashbritt.com	Tia Laurie, Director of Administration **mobile:**813-333-8254 **email:** tia.laurie@ceresenv.com	Ashley Ramsay-Naile, Chief Operating Officer/Senior VP **mobile:** 646-872-1548 **email:** aramsay@crowdergulf.com
Contact Person	Rob Ray, Senior Vice President **mobile**: 954-868-9502 **email**: rray@ashbritt.com	Karl Dix, Director of Client Services **mobile:** 813-508-5839 **email:** karl.dix@ceresenv.com	John Campbell, Regional Director **mobile:** 859-963-8672 **email:** jcampbell@crowdergulf.com
Contact Person	Dilia Camacho, Regional Manager **mobile:** 954-725-6992 **email:** dcamacho@ashbritt.com	Kerry Kennedy, PE, Project/Operations Manager **mobile:** 757-675-1367 **email:** kerry.kennedy@ceresenv.com	Barrett Holmes, Regional Manager **mobile:** 985-863-2845 **email:** bholmes@crowdergulf.com

[2] Term of Pre-Positioned Disaster Debris Management contracts is from 2019 – 2022 with the option of two 1-year extensions.

Table A-3: Tree Maintenance and Removal Services Contractor

Company Name	Company Contact	Phone	Email	Address
Asplundh Tree Expert Co.	Steven Miller	410-519-990	Miller@asplundh.com	1900Betson Court, Odenton MD 21113

Table A-4: Franchise Waste Haulers

Company Name	Service Areas	Company Contact	Phone	Email	Address
Ecology Services, Inc.	6, 8, 9, 10, 11, 12, 13	Margaret P. Gibbs	301-362-6700	mgibbsesi@gmail.com	9135 Guilford Rd., Suite 200 Columbia, MD 21046
BFI Waste Services, LLC	3, 7	Lori Barker	301-631-3512	lbarker@republicservices.com	8145 Reichs Ford Rd. Frederick, MD 21704
Unity Disposal & Recycling, LLC	1,2,4,5	Bruce Bates	301-490-8604	bbates@batestrucking.com	14862 Old Gunpowder Rd. Laurel, MD 20707

Table A-5: Potential Final Disposal Locations

Site Name	Market	Operator	Contact	Address
Shady Grove Processing Facility and Transfer Station	Household Hazardous Waste	Clean Harbors, Inc.	Kevin Malone	Laurel, MD

Table A-6: Recycling Resources

Debris to Be Recycled	Market	Operator	Contact	Address
Wood Chips	Vegetative Waste	Grant County Mulch, Inc.	Maryland Environmental Service	5402 Van Dusen Rd, Laurel, MD 20707

APPENDIX B: DEBRIS MANAGEMENT SITE SYNOPSIS AND SAMPLE FORM

PURPOSE

The purpose of this report is to identify locations the County to be used as debris management sites (DMS) following a debris-generating incident. The identification and analysis of DMS locations for the County is part of a larger project that has included the development of a debris management plan to improve response and speed recovery from an incident that generates a large quantity of debris. The purpose of a DMS is to provide a place to temporarily store debris and conduct some form of reduction, before the debris is transported to a final disposal facility or recycled. The objective is to reduce the debris to minimize impacts on area landfills or to divert the debris from landfills altogether. In the event the site is not deemed suitable to serve as a DMS, it might be recommended to serve as a Residential Drop-Off Site (RDO). Tetra Tech, Inc. was retained to conduct site evaluations of locations intended for future use by the County following a disaster.

DEBRIS MANAGEMENT SITE ANALYSIS PROCESS

A three-step process is used to identify DMS locations. First, a set of initial screening criteria was developed to assist the County to evaluate potential sites. The criteria used in screening the sites are described in further detail in below. The second step consists of site visits to each property to further investigate the appropriateness of each site. During the site visits, Tetra Tech will meet with jurisdiction staff familiar with the properties to collect information needed for the assessments including property ownership, environmental and historic issues, zoning considerations, proposed future uses of the properties and information regarding utilities. The last step consists of the recommendation of a list of sites for use as a DMS or RDO.

The Site Analysis section below will list the sites visited and provide recommendations to the jurisdiction regarding the use of the properties as a DMS or an RDO.

CRITERIA FOR ELIGIBILITY

Below is a list of recommended criteria to consider when identifying parcels of land for potential use as a Debris Management Site (DMS). While some criterion will be weighted more heavily during the site evaluation process (Ex. Environmental Concerns), all criteria should be considered.

Access to Major Roads

Sites should be in relatively close proximity to major thoroughfares to avoid unnecessary travel time.

Proximity to Residential Areas, Schools, and Churches

When possible, avoid parcels from areas residentially dense areas or parcels next to schools and churches.

Greater than 10 acres in size

While not a qualifying criterion, the size of the parcel will be considered. Sites 10 acres in size or larger should be identified first. Small sites can also be considered for use as a residential drop-off location.

Flood Plain Considerations
Sites should not be in a designated flood plain area. Tetra Tech will assess the site's location relative to FEMA flood plain designated sites during report development.

Wetlands, navigable water, potable water sources
Similar to flood plains, parcels that are in a wetland, near navigable waters or potable water sources should not be considered.

Current Land Use
Vacant property should be considered first.

Land Preparation
Sites that would require minimal preparation should be considered first.

Land Topography
Flat land and land with minimal undulations should be considered first. Land that will need minimal site preparation, i.e., does not have dense tree coverage.

Disbursement Throughout the County
Ideally, sites should be located in multiple areas throughout the County to avoid unnecessary travel time and decrease potential queueing problems.

Site Ownership
County-owned sites should be considered first.

SITE ANALYSIS

Based on the evaluation criteria, the properties below are recommended for use as DMS locations or RDOs following a disaster.

Debris Management Sites

Name	Address	Lat/Long	Debris Type
Oaks Landfill	6001 Olney Laytonsville Road, Gaithersburg, MD 208822	39° 11' 45.7" 77° 07' 18.7"	Vegetative, Construction and Demolition, White Goods

DMS AND RDO WORKSHEETS AND DIAGRAMS

Oaks Landfill

DATE OF SITE INVESTIGATION: 1/30/2020

OWNERSHIP OF PROPERTY (CHECK ONE):

Municipal Property _____

County Property _XX_____

Private Property _____

Other Ownership (describe)

_____

PROPERTY NAME: Oaks Landfill

PROPERTY ADDRESS: 6001 Olney Laytonsville Road, Gaithersburg, MD 20882

PROPERTY OWNER'S NAME: Montgomery County

PROPERTY POINT OF CONTACT: Jamie Foster

PROPERTY POINT OF CONTACT PHONE NUMBER: 240-832-0414

PROPERTY POINT OF CONTACT E-MAIL ADDRESS: Jamie.Foster@montgomerycountymd.gov

ESTIMATED PROPERTY SIZE: 4.22 Acres

CHARACTERIZATION OF NEIGHBORING PROPERTIES	
EVALUATION FACTOR	**COMMENTS**
Property current land use	None
Any proposed future land uses	No
Environmental considerations	Near trees that are protected by the Forest Conservation Act
Historical considerations	No
Located in a flood plain	No
Zoning considerations	Close to residential
Proximity to schools, churches, and community centers	Not next to any churches or schools.
Property topography	Flat
Open water sources	No
Ground water wells	Possible
Access to electricity, sewer, and water	No
Soil integrity	Unknown
Water Sampling	Yes

Surface water drainage	Yes
Prevailing wind direction	Unknown
Ingress/egress	Yes
Lighted area	No
Site security	Yes
Buffer distance for noise control	Yes
Property development	Property is ready to be used as a DMS
Property adjacent to airport/airfield	No
Site able to handle large volume of trucks	No

SITE PREPARATION: High_____ Medium__ ___ Low _XX_ Site preparation may include the temporary removal of recreational equipment, shrubbery, and some trees.

SUITABILITY TO WET WEATHER: High ___ Medium__XX___ Low_____

ABILITY TO SERVE A SPATIAL AREA: High __ Medium_____ Low__XX___

SITE ACCEPTABILITY FOR WHAT TYPE OF REDUCTION METHOD (CHECK APPLICABLE METHOD(S)):

Open Burning:

Air Curtain Incineration:

Grinding: X

WILL THIS SITE BE RECOMMENDED FOR:

_____ C&D

__X_Vegetative

_____Both C&D and Vegetative

_____White Goods

_____ Other (Describe: Potentially other Debris)

Photos of site begin on next page

SAMPLE DMS AND RDO WORKSHEETS AND DIAGRAMS

[Name of Site]

DATE OF SITE INVESTIGATION: _____

OWNERSHIP OF PROPERTY (CHECK ONE):

Municipal Property ☐

County Property ☐

Private Property ☐

Other Ownership (describe) ☐

_____

PROPERTY NAME:

PROPERTY ADDRESS:

PROPERTY OWNER'S NAME:

PROPERTY POINT OF CONTACT:

PROPERTY POINT OF CONTACT PHONE NUMBER:

PROPERTY POINT OF CONTACT E-MAIL ADDRESS:

ESTIMATED PROPERTY SIZE:

CHARACTERIZATION OF NEIGHBORING PROPERTIES	
EVALUATION FACTOR	COMMENTS
Property current land use	
Any proposed future land uses	
Environmental considerations	
Historical considerations	
Located in a flood plain	
Zoning considerations	
Proximity to schools, churches, and community centers	
Property topography	
Open water sources	
Ground water wells	
Access to electricity, sewer, and water	
Soil integrity	
Water Sampling	

Surface water drainage	
Prevailing wind direction	
Ingress/egress	
Lighted area	
Site security	
Buffer distance for noise control	
Property development	
Property adjacent to airport/airfield	
Site able to handle large volume of trucks	

SITE PREPARATION: High_____ Medium_____ Low_____ Site preparation may include the temporary removal of recreational equipment, shrubbery, and some trees.

SUITABILITY TO WET WEATHER: High_____ Medium_____ Low_____

ABILITY TO SERVE A SPATIAL AREA: High_____ Medium_____ Low_____

SITE ACCEPTABILITY FOR WHAT TYPE OF REDUCTION METHOD (CHECK APPLICABLE METHOD(S)):

Open Burning:

Air Curtain Incineration:

Grinding:

WILL THIS SITE BE RECOMMENDED FOR:

__ ____ C&D

__ ____Vegetative

__ ____Both C&D and Vegetative

__ ____White Goods

_____ Other (Describe_____)

OVERHEAD VIEW OF SITE AND POTENTIAL LAYOUT:

[Include Pictures]

APPENDIX C: SAMPLE PRESS RELEASES

For Immediate Release (Approximately 48–72 Hours Prior to Event)

County of Montgomery, Maryland – The potential for dangerous **INSERT STORM** conditions is eminent for the County and its residents. In anticipation of a likely large debris-generating storm, residents are asked to secure or store all yard items that may become damaging projectiles. The County is prepared and has a plan in place to immediately respond following the event. Once dangerous conditions subside and roads have been cleared of obstructions, residents should bring any debris to the public right-of-way for removal.

The public right-of-way is the area of residential property that extends from the street to the sidewalk, ditch, utility pole, or easement. Residents should separate clean, vegetative debris (woody burnable debris such as limbs and shrubbery) from construction and demolition debris. **Bagged debris should not be placed on the public right-of-way; only loose debris will be collected.** Do not mix hazardous material, such as paint cans, aerosol sprays, batteries, or appliances, with construction and demolition debris. Household trash, tires, or roof shingles cannot be combined with any storm debris.

Do not place debris near water meter vault, fire hydrant or any other aboveground utility. Only debris placed on the public right-of-way will be eligible for collection until further notice.

If all debris is not picked up during the initial pass, residents should continue to push remaining debris to the public right-of-way for collection on subsequent passes. Residential debris drop-off locations may be available within the County. Check the County website **INSERT WEBSITE** for the location of these sites and the hours of operation or call **INSERT NUMBER**. The County website will also provide County office closure times/date (including trash collection and County facilities). All reconstruction debris (debris resulting from rebuilding) is the responsibility of the homeowner. Those items must be dropped off at the **INSERT LOCATION**.

County residents are encouraged to stay indoors until dangerous conditions have passed. Please tune in to local news channels for updated weather information.

For Immediate Release (Approximately 0–72 Hours Following Event)

County of Montgomery, Maryland – The County is beginning its recovery process in the wake of **INSERT EVENT**. County residents are asked to place any storm-generated debris on the public right-of-way.

The public right-of-way is the area of residential property that extends from the street to the sidewalk, ditch, utility pole, or easement. Keep vegetative debris (woody burnable debris such as limbs and shrubbery) separated from construction and demolition debris, as they will be collected separately. **Bagged debris should not be placed on the public right-of-way; only loose debris will be collected**. Any household hazardous waste, roof shingles or tires resulting from **INSERT EVENT**, may be eligible for removal and should be separated at the curb.

Do not place debris near water meter vault, fire hydrant or any other aboveground utility. Only debris placed on the public right-of-way will be eligible for collection until further notice.

If all debris is not picked up during the initial pass, please continue to push remaining debris to the right-of-way for collection **and please note bagged debris should not be placed on the public right-of-way; only loose debris will be collected**. Household trash collection will resume to its normal schedule on **INSERT DATE AND TIME**. Please check the County website **INSERT WEBSITE** for additional information and updates on the debris removal process.

For more information, please call the County's debris hotline at **INSERT NUMBER**.

For Immediate Release (72 Hours Prior to Final Pass of Debris Removal)

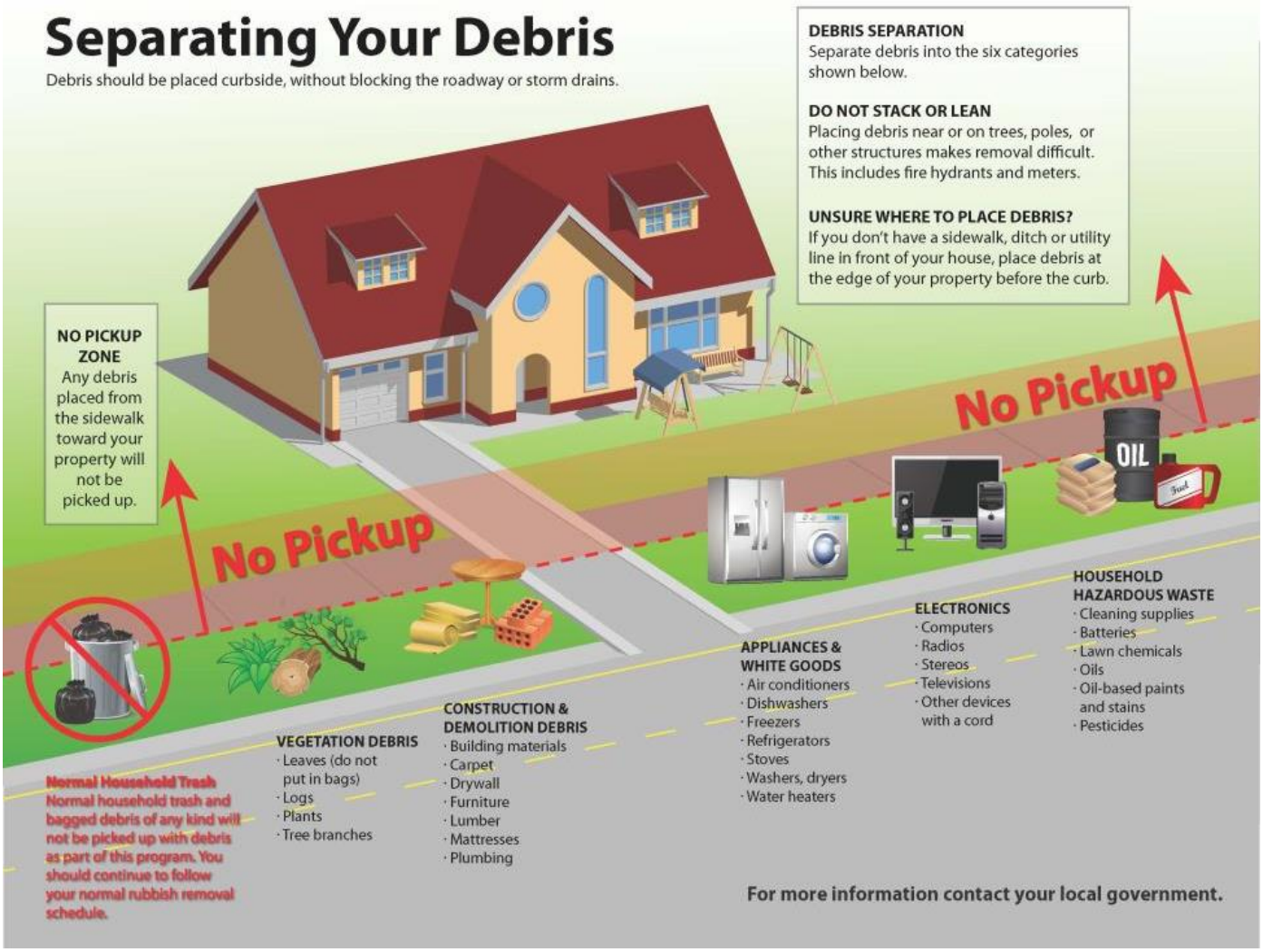
County of Montgomery, Maryland – Final preparations are being made for the third and potentially final pass for debris removal in the wake of **INSERT EVENT.**

County residents should have all storm-generated debris in front of their homes on the public right-of-way (the area of residential property that extends from the street to the sidewalk, ditch, utility pole, or easement) no later than **INSERT DATE** to be eligible for pick-up.

Bagged debris should not be placed on the public right-of-way; only loose debris will be collected. The County will not be able to guarantee that debris placed on the public right-of-way after the specified deadline will be removed.

Residents should continue to separate vegetative debris (woody debris such as limbs and shrubbery) and construction and demolition debris. Do not place debris near water meter vault, fire hydrant or any other aboveground utility. Hazardous household chemicals such as paint cans and batteries may be deposited at the **INSERT LOCATION.**

You can follow the debris removal efforts in your neighborhood and the rest of the County by going to the County website **INSERT WEBSITE**, or by calling **INSERT NUMBER**.



Separando Sus Escombros
Los escombros deberían ser puestos al final de la acera, sin bloquear la carretera o alcantarilla.
ZONA QUE NO SERA RECOGIDA
Cualquier escombro colocado desde la acera hacia su propiedad no serán recogida.
SEPARACIÓN DE ESCOMBROS
Separe los escombros en las 6 categorías mencionadas abajo.
NO APILE O RECUESTE
Colocación de escombros cerca de o en árboles, postes, u otras estructuras dificulta el removerlos. Esto incluye hidrantes y metros.
¿INSEGURO DE DONDE PONER LOS ESCOMBROS?
Si no tienes una acera, zanja o línea de servicio público frente a su casa, coloque los escombros en el borde de su propiedad antes de la acera.
NEWS
OIL
FUEL
Basura Doméstica Normal
Basura doméstica y bolsas de basura de cualquier tipo no serán recogidas como parte de este programa. Debe seguir su programa normal de retiro de basura.
ESCOMBROS VEGETATIVOS
• Hojas (no las ponga en bolsas)
• Troncos
• Plantas
• Ramas de arboles
ESCOMBROS DE CONSTRUCCIÓN Y DEMOLICIÓN
• Materiales de construcción
• Alfombra
• Panelas de Yeso
• Muebles
• Madera
• Colchones
• Artículos de plomería
ENSERES Y ELECTRODOMÉSTICOS
• Aire acondicionados
• Lavadoras de platos
• Congeladores
• Refrigeradores
• Fogón/Estufa
• Lavadora, secadora
• Calentador de agua
ELECTRÓNICA
• Computadoras
• Radios
• Equipos de sonido
• Televisores
• Otros artículos con cordones eléctricos
DESPERDICIOS PELIGROSOS DEL HOGAR
• Materiales de limpieza
• Baterías
• Químicas del patio
• Aceites
• Pinturas de aceite
• Pesticidas
Para más información comuníquese con su gobierno local.

APPENDIX D: FIELD DOCUMENTS

This appendix contains several field documents that are typically used during debris management operations. A short description of the purpose and use of each document is provided below. Appropriate field documentation will be completed by County Disaster Debris Monitoring Firm as tasked by the County Debris Manager.

Force Account Labor Summary Record: This form is used to document force account or community personnel expenses for eligible projects. Keep the following points in mind when compiling force account labor information:

- Record regular and overtime hours separately.
- Record the benefits separately for regular and overtime hours. Most overtime hours include fewer benefits than regular hours.
- Attach an Applicant's Benefit Calculation Worksheet giving a breakdown of what is included in your benefits, by percentages, e.g., social security - 15.2%, worker's compensation - 4.3%, insurance - 18.5%, etc. You can use an average rate if you have different benefit rates for different employees.

Materials Summary Record: This form is used to document the work performed and cost associated with the work.

Rented Equipment Summary Record: This form is used to document the expenses associated with renting equipment.

Contract Work Summary Record: This form is used to document work performed by contractors on behalf of the County.

Load Ticket: Load tickets are used to track the debris from the original collection point to the debris management site (DMS) or landfill. The assigned monitor will complete this form at the point of origin, enabling the impacted community to document each individual load from collection through final disposal.

Haul-out Ticket: This form is used to document the transportation of reduced debris from the DMS to its final disposal location.

Unit Rate Ticket: This form documents specialized debris programs that require a per unit collection and disposal rate, such as parks debris removal, right-of-entry programs, and leaning trees and hanging limbs.

Collection Monitor Log: This form is used by the collection monitor to document ticket numbers, driver information, address, and the debris class, from the debris collection point.

Disposal Log: This form is used by the disposal monitor to document the location where debris is disposed as well as the ticket number, truck number, truck capacity, and debris quantity.

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

FORCE ACCOUNT LABOR SUMMARY

PAGE ____ OF ____

O.M.B. Control Number: 1660-0017
Expires: June 30, 2020

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APPLICANT	PA ID #	PROJECT #	DISASTER

LOCATION/SITE	CATEGORY	PERIOD COVERING

DESCRIPTION OF WORK PERFORMED

NAME / JOB TITLE	DATES AND HOURS WORKED EACH WEEK								COSTS				
	DATE								TOTAL HOURS	HOURLY RATE	BENEFIT RATE/HR	TOTAL HOURLY RATE	TOTAL COSTS
NAME / JOB TITLE	REG.												
	O.T.												
NAME / JOB TITLE	REG.												
	O.T.												
NAME / JOB TITLE	REG.												
	O.T.												
NAME / JOB TITLE	REG.												
	O.T.												
												TOTAL COSTS FOR FORCE ACCOUNT LABOR REGULAR TIME	$
												TOTAL COST FOR FORCE ACCOUNT LABOR OVERTIME	$

I CERTIFY THAT THE INFORMATION ABOVE WAS OBTAINED FROM PAYROLL RECORDS, INVOICES, OR OTHER DOCUMENTS THAT ARE AVAILABLE FOR AUDIT.

CERTIFIED	TITLE	DATE

FEMA Form 009-0-123 **PREVIOUS EDITION OBSOLETE**

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

PAGE ____ OF ____

O.M.B. Control Number: 1660-0017

Expires: June 30, 2020

MATERIALS SUMMARY RECORD

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APPLICANT	PA ID #.	PROJECT #.	DISASTER

LOCATION/SITE	CATEGORY	PERIOD COVERING

DESCRIPTION OF WORK PERFORMED

VENDOR	DESCRIPTION	QUAN.	UNIT PRICE	TOTAL PRICE	DATE PURCHASED	DATE USED	INFO FROM (CHECK ONE)	
							INVOICE	STOCK
GRAND TOTAL _____								

CERTIFIED	TITLE	DATE

FEMA Form 009-0-124 **PREVIOUS EDITION OBSOLETE**

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

PAGE ____ OF ____

RENTED EQUIPMENT SUMMARY RECORD

O.M.B. Control Number: 1660-0017
Expires: June 30, 2020

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APPLICANT	PA ID #.	PROJECT #.	DISASTER
LOCATION/SITE		**CATEGORY**	**PERIOD COVERING**

DESCRIPTION OF WORK PERFORMED

TYPE OF EQUIPMENT Indicate size, Capacity, Horsepower Make and Model as Appropriate	DATES AND HOURS USED	RATE PER HOUR		TOTAL COST	VENDOR	INVOICE NO.	DATE AND AMOUNT PAID	CHECK NO.
		W/OPR	W/OUT OPR					
GRAND TOTAL								

I CERTIFY THAT THE ABOVE INFORMATION WAS OBTAINED FROM PAYROLL RECORDS, INVOICES, OR OTHER DOCUMENTS THAT ARE AVAILABLE FOR AUDIT.

CERTIFIED	TITLE	DATE

FEMA Form 009-0-125 **PREVIOUS EDITION OBSOLETE**

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

CONTRACT WORK SUMMARY RECORD

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O.M.B. Control Number: 1660-0017

Expires: June 30, 2020

PAPERWORK BURDEN DISCLOSURE NOTICE

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DATE	PA ID #	PROJECT #	DISASTER

LOCATION/SITE	CATEGORY	PERIOD COVERING

DESCRIPTION OF WORK PERFORMED

DATES WORKED	CONTRACTOR	BILLING/INVOICE NUMBER	AMOUNT	COMMENTS- SCOPE
	GRAND TOTAL			

I CERTIFY THAT THE INFORMATION WAS OBTAINED FROM PAYROLL, INVOICES, OR OTHER DOCUMENT THAT ARE AVAILABLE FOR AUDIT.

CERTIFIED	TITLE	DATE

FEMA Form 009-0-126 **PREVIOUS EDITION OBSOLETE**

		LOAD TICKET #
Applicant:	**Disaster #**	
Program:	**Contractor:**	
Truck # :	**Truck Capacity:**	
House # :	**Street / Load Origin:**	**Zone #:**

Debris Classification:

- ☐ Vegetative/Woody
- ☐ Mixed
- ☐ Construction & Demolition
- ☐ White Goods
- ☐ Household Hazardous Waste
- ☐ Animal Carcasses
- ☐ Hazardous Materials / Toxic
- ☐ Other:_____

Driver's Name:	**Odometer:**
Loading Time:	**Loading Date:**
Monitor Name (print):	**I.D. #**
TDSRS / Disposal Site Location:	**Odometer:**
Load Call (%):	**Weight (tons):**
Disposal Time:	**Disposal Date:**
Monitor Name (print):	**I.D. #**
Contractor Name (print):	**I.D. #**
Notes:	

White - Applicant *Green and Yellow - Contractor* *Pink - Driver* *Gold - Site Copy*

	HAULOUT TICKET #
Applicant:	**Disaster #**
Program:	**Contractor:**
Truck # :	**Truck Capacity:**
Driver's Name:	
TDSR Site:	

Haulout Debris Classification:

☐ Vegetative Mulch	☐ White Goods
☐ Ash	☐ Hazardous Materials / Toxic
☐ C & D Mulch	☐ Household Hazardous Waste
☐ C & D Compacted	☐ Other:_____

Loading Time:	**Loading Date:**
Monitor Signature:	**I.D. #**

Disposal Site Location:	**Scale Ticket #**
Load Call (%):	**Weight (tons / lbs.)**
Disposal Time:	**Disposal Date:**
Monitor Name (print):	**I.D. #**
Contractor Name (print):	**I.D. #**
Notes:	

White - Applicant Green and Yellow - Contractor Pink - Driver Gold - Site Copy

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		UNIT RATE TICKET #
Applicant:	**Disaster #**	
Program: ☐ Parks ☐ Right-of-Entry ☐ Time & Materials ☐ ROW Lean/Hanger ☐ Stumps ☐ _____		
Contractor:	**Crew # :**	
Survey Item # :	**GPS:** **N:** **W:**	
House # :	**Street Name:**	**Zone #:**
Parcel # :	**ROE # :**	
Contract Rate Code: 1 2 3 4 5 6 7 8 9 Other: _____		
Contract Rate Sub-Code A B C D E F G H I Other: _____		
Unit Count:	**Measurement:**	
Start Time: A P	**End Time:** A P	**Date:**
Monitor Name (print):		**I.D. #**
Contractor Name (print):		**I.D. #**
Notes:		
White - Applicant *Green and Yellow - Contractor* *Pink - Crew Chief* *Gold - Site Copy*		
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COLLECTION MONITOR LOG

Contractor Company Name _____ Crew Leader Name _____ Phone # _____

Applicant _____ Project # _____ Date _____ Monitor Name _____ # _____ Zone _____ Mileage In _____ Mileage Out _____

	TIME		TICKET #	VOID	DRIVER NAME	TRUCK #	DEBRIS ADDRESS/GPS(Lat,Lng)	CONFIRM CODE	DEBRIS CLASS	PRE-LOAD / NOTE
		A P								
		A P								
		A P								
		A P								
		A P								
		A P								
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		A P								
		A P								

Page ____ of ____

Monitor Signature _____ $ _____ Check-out Supervisor Signature _____ $ _____ Tomorrow's Meeting Place _____

DISPOSAL MONITOR LOG

Legend
✓ = All Good
Initials = Fixed
X = Problem

Project _____ Site _____ Date _____ QC Monitor _____ #

	ARRIVAL	TICKET #	COLLECTION MONITOR #	Last Name	TRUCK #	CAP	%	Project (App/Div/Prog)	Truck Number	Phone Number	Street / Origin	Correct Zone	Debris/Class	Correct Dates & Times	Disposal Site	Load Call/ Weight	CONFORM CODE	ERROR NOTE
	A P																	
	A P																	
	A P																	
	A P																	
	A P																	
	A P																	
	A P																	
	A P																	
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Disposal Monitor # Check-out Supervisor Signature #

APPENDIX E: HEALTH AND SAFETY STRATEGY

Purpose

The purpose of this Health and Safety Strategy is to supplement existing Collier County safety guidelines with regard to debris removal activities. These are recommended baseline safety provisions. Ultimately, health and safety is the responsibility of the contracted parties involved in debris removal activities. This document will outline some of the general steps necessary to provide a safe work environment for monitoring firm and debris removal contractors' employees. In addition, this document will identify some representative work hazards and the appropriate measures to reduce risk of injury.

1.0 Dissemination of Information

The monitoring firm and debris removal contractors' project managers will be provided with this document and will be expected to disseminate the information and guidelines to their respective personnel. A copy of the document should be available for consultation. In addition, elements of the document will be reviewed periodically during the project to increase worker awareness.

2.0 Compliance

The monitoring firm and debris removal contractors' project managers are responsible for health and safety compliance of their respective personnel and subcontractors. Any crews or individuals that are not compliant shall be suspended from debris removal activities until the situation is remedied. Frequent offenders of safety policies and procedures will be dismissed from the project entirely.

3.0 Job Hazard Assessment

Though debris removal activities are fairly similar among events, assessing the particular hazards of each disaster is an important part of maintaining health and safety for the debris removal workers. At a minimum, the following areas of focus should be considered as part of job hazard assessment:

- **Disaster Debris** – Disasters that result in property damage typically generate large quantities of debris, which must be collected and transported for disposal. The type of debris varies depending on the characteristics of the region (e.g., terrain, climate, dwelling and building types, population, etc.) and the debris-generating event (e.g. type, event strength, duration, etc.). In addition, the disaster debris produces a host of uneven surfaces, which must be negotiated.
- **Debris Removal** – Often the removal of disaster debris involves working with splintered, sharp edges of vegetative or construction material debris. Many disasters involve heavy rains or flooding. Consequently, disaster debris is damp and heavier than usual. As weights increase, so does the risk of injury.
- **Removal Equipment** – In most disasters, debris must be removed from the public right-of-way (ROW) to provide access for emergency vehicles and subsequent recovery efforts. Debris collection and removal requires the use of heavy equipment and power tools to trim, separate and clear disaster debris.
- **Traffic Safety** – The ROW is located primarily on publicly maintained roads. As a result, much of the debris removal process takes place in traffic of varying levels of congestion. In addition, disasters often damage road signs, challenging safety on the road.
- **Wildlife Awareness** – Disasters are traumatic events for people as well as wildlife. Displaced animals, reptiles, and insects pose a hazard to debris removal workers.

- **Debris Disposal** – After disaster debris is collected, it is often transported to a DMS. Upon entry to a DMS, the monitoring firm will assess the volume of disaster debris being transported. The collection vehicle will then dispose of the disaster debris and the debris will be reduced either through a grinding operation or incineration. The DMS is a common area for injury. Response and recovery workers in this environment are more likely to be exposed to falling debris, heavy construction traffic, noise levels, and dust and airborne particles from the reduction process.
- **Climate** – Debris-generating disasters often occur in areas or seasons with extreme weather conditions. The effects of temperature and humidity on physical labor must be monitored, and proper work-rest intervals must be assessed.

4.0 Administrative and Engineering Controls

The use of administrative and engineering controls can greatly reduce the threats to public health and safety in debris removal activities. Some common administrative and engineering controls used in the debris removal process are:

Collection Operations

- Conduct debris removal operations during daylight hours only.
- Limit cleanup operations to one side of the road at a time.
- Limit collection work under overhead lines.
- Inspect piles before using heavy equipment to remove them to ensure that there are no hazardous obstructions.
- Make sure that all collection vehicles have properly functioning lights, horns, and backup alarms.
- Load collection vehicles properly (not overloaded or unbalanced).
- Cover and secure loads, if necessary.
- When monitoring the collection process, stay alert in traffic and use safe driving techniques.

Power Tools

- Inspect all power tools before use.
- Do not use damaged or defective equipment.
- Use power tools for their intended purpose.
- Avoid using power tools in wet areas.

Debris Reducing Machinery (Grinders/Woodchippers)

- Do not wear loose-fitting clothing.
- Follow the manufacturer’s guidelines and safety instructions.
- Guard the feed and discharge ports.
- Do not open access doors while equipment is running.
- Always chock the trailer wheels to restrict rolling.
- Maintain safe distances.
- Never reach into operating equipment.
- Use lock out/tag out protocol when maintaining equipment.

DMS/Disposal Operations

- Use jersey barriers and cones to properly mark traffic patterns.
- Use proper flagging techniques for directing traffic.
- Monitor towers must not exit into traffic and should have hand and guard rails to reduce trips and falls.
- Monitor towers must have properly constructed access stairways with proper treads and risers and proper ascent angle (4:1 height/width ratio).
- Monitor towers must be surrounded by jersey barriers that protect the tower and Monitors from being struck by inbound or outbound collection vehicles.
- Monitor towers should be located upwind from dust- and particulate generating activities.
- A water truck must spray the site at least once daily, but more if needed, to control airborne dust and debris.

5.0 Personal Protective Equipment

Personal protective equipment (PPE) is the last resort to providing a safe working environment for workers. PPE does not eliminate or even reduce hazards as administrative and engineering controls do. PPE works to reduce the risk of injury by creating a protective barrier between the individuals and work place hazards.

Proper use of PPE includes using PPE for its intended purpose. For example, using the wrong type of respirator might expose the worker to carcinogenic particulates. Properly fitting the equipment to the user may require examination by a medical professional. PPE that does not fit well will not provide maximum protection and will decrease the likelihood of the individual continuing to use the equipment. In addition, improper use may result in serious injury or death. The proper use of the equipment is outlined in detail in the manufacturer's instructions.

The following PPE may be applicable in standard ROW, ROE, and vegetative and C&D debris removal activities:

- **Head Protection** – Equipment designed to provide protection for an individual's head against hazards such as falling objects or the possibility of striking one's head against low-hanging objects. PPE used to protect the head must comply with ANSI Z89.1-1986, "American National Standard for Personnel Protection – Protective Headwear for Industrial Workers – Requirements."
- **Foot Protection** – Equipment designed to provide protection for an individual's feet and toes against hazards such as falling or rolling objects, objects that may pierce the sole or upper section of the foot, etc. PPE used to protect the feet and toes must comply with ANSI Z-41-1991, "American National Standard for Personal Protection – Protective Footwear."
- **Hand Protection** – Equipment designed to provide protection for an individual's hands against hazards such as sharp or abrasive surfaces. The proper hand protection necessary depends on the situation and characteristics of the gloves. For instance, specific gloves would be used for protection against electrical hazards while the same gloves may not be appropriate in dealing with sharp or abrasive surfaces or when handling hazardous materials.
- **Vision/Face Protection** – Equipment designed to provide protection for an individual's eyes or face against hazards such as flying objects. PPE used to protect eyes and face must comply with ANSI Z87.1-1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection." Again, the proper eye/face protection necessary depends on the situation and characteristics of the equipment. For instance, eye and face protection used by individuals who are welding may not be appropriate for individuals operating a woodchipper.

- **Hearing Protection** – Equipment designed to provide protection for an individual's hearing against prolonged exposure to high noise levels. According to OSHA, the permissible level of sound is an average of 90 decibels over the course of an eight (8) hour workday. Above the sound exposure level, hearing protection is required. PPE used to protect hearing must comply with ANSI S3.19-1974, "American National Standard Practice for Personal Protection – Hearing Protection."
- **Respiratory Protection** – Equipment designed to provide protection for an individual's respiratory system against breathing air contaminated with hazardous gases, vapors, airborne particles, etc. PPE used to protect the respiratory system must comply with ANSI Z88.2-1992. In addition, the use of respiratory protection requires a qualitative fit test and, in some cases, a pulmonary fit test by a licensed medical professional.

6.0 PPE Debris Removal Activity

PPE requirements are made based upon the results of the job hazards assessment. The following list of PPE is organized by debris removal activity and is meant to be a representative list. Specific PPE requirements vary from location to location. In general, individuals involved in the debris removal process should personally monitor water consumption to avoid dehydration and use appropriate skin protection (breathable clothes, light colors, sunscreen, etc.). Ultimately, the selection of PPE is the responsibility of the monitoring firm and debris removal contractors' project managers.

Debris Collection Monitoring

The hazards of disaster debris collection monitoring include, but are not limited to being struck by vehicles; falls or trips on uneven surfaces; and cuts, abrasions, or punctures from vegetative or C&D sharps. PPE requirements include:

- Reflective vest
- Foot protection (rugged shoes or boots, steel toe and shank if required)
- Long pants

Debris Disposal Monitoring

The hazards of disaster debris disposal monitoring include but are not limited to being struck by or caught in/between vehicles; falls or trips on stairs or uneven surfaces; cuts, abrasions, or punctures from vegetative or C&D sharps, and being struck by falling disaster debris. Monitor towers must be equipped with a first aid kit. PPE requirements include:

- Reflective vest
- Foot protection (rugged shoes or boots, steel toe if required)
- Long pants
- Hard hat

Debris Removal

The hazards of disaster debris removal include but are not limited to being struck by vehicles; falls or trips on uneven surfaces; cuts, abrasions, or punctures from vegetative or C&D sharps and airborne debris. In addition, PPE requirements include:

- Reflective vest
- Vision and hearing protection
- Foot protection (rugged shoes or boots, steel toe and shank if required)

- Long pants

Debris Disposal and Reduction

The hazards of disaster debris disposal and reduction include but are not limited to being struck by or caught in/between vehicles; falls or trips on uneven surfaces; cuts, abrasions, or punctures from vegetative or C&D sharps; being struck by falling disaster debris and airborne particles. PPE requirements include:

- Reflective vest
- Foot protection (rugged shoes or boots, steel toe if required)
- Vision and hearing protection
- Long pants
- Hard hat

Debris Cutting and Trim Work

The hazards of disaster debris cutting, and trimming work include but are not limited to being struck by vehicles; falls or trips on uneven surfaces; cuts, abrasions, or punctures from power tools or vegetative or C&D sharps; being struck by falling disaster debris and airborne particles. PPE requirements include:

- Reflective vest
- Hand and foot protection (rugged shoes or boots, steel toe if required)
- Vision and hearing protection
- Long pants
- Gloves
- Hard hat

For additional information regarding health and safety requirements, please contact the Montgomery County Recycling and Resource Management Division at 311.

APPENDIX F: DISASTER DEBRIS MANAGEMENT CHECKLIST

Task	Task Assigned To	Date/Time Completed
Normal Operations		
All departments update contact lists.		
Building, Zoning and Planning reviews road list and road maps.		
Establish and maintain pre-positioned contracts.		
Review debris disposal options.		
Emergency Management, DOT, and DEP review FEMA guidance.		
DEP will conduct annual debris training.		
Ongoing tree trimming.		
Pre-Event Operations		
County Debris Manager downloads most recent road list and relevant documents to a CD, Thumb drive, network or portable device.		
County Debris Manager alerts key personnel and places monitoring firm and debris removal contractors on stand-by.		
DEP and DOT Establish Department Liaisons		
County Debris Manager reviews debris management plan with key personnel via conference call or at the EOC.		
The PIO issues pre-event media press releases.		
The Procurement Department and the County's legal counsel review contracts for accuracy.		
County Debris Manager issues the Notice to Proceed.		
County Debris Manager reviews pre-identified DMS locations for capacity and permits.		
County Debris Manager facilitates a pre-event coordination meeting with contractors.		

Task	Task Assigned To	Date/Time Completed
County Debris Manager stages debris monitoring and removal contractors.		
Response Operations		
Station DEP and DOT representatives in operation centers.		
DOT confirms emergency priority roads.		
County Debris Manager coordinates with the potential monitoring firm to conduct an impact assessment.		
Debris Co-Managers coordinate with Fire & Rescue Department to assess hazardous materials debris.		
County Debris Manager coordinates with Procurement to activate potential monitoring firm and debris removal contractors by issuing a Purchase Order and a Notice to Proceed.		
DOT, with Emergency Management, notifies debris haulers to begin emergency roadway debris clearance.		
County Debris Manager conducts meetings/briefing with key personnel.		
County Debris Manager reviews debris volume and collection cost assessment.		
County Debris Manager and the debris removal contractors coordinate to prepare DMS based on concentration of debris.		
County Debris Manager and the potential monitoring firm begin collection truck certification.		
The PIO issues media press release regarding the initiation of debris removal operations.		
County Debris Manager conducts daily coordination meeting with contractors.		
Emergency Management determines force account requirements and staffing needs (debris, PA, etc.) with Finance and individual County departments.		
County Debris Co-Managers request contact information and meeting with FEMA PDMG.		
Recovery Operations: 2 Day – 2 Weeks		

Task	Task Assigned To	Date/Time Completed
County Debris Co-Managers coordinates with the debris removal contractors and MDE to open DMS.		
County Debris Co-Managers reviews environmental considerations with the contractors.		
County Debris Co-Managers coordinate with County officials to prioritize roads/areas and disseminate that information to the debris removal and monitoring contractors.		
County Debris Co-Managers requests contact information and meeting with FEMA Program Delivery Manager. Attendees should include: • Emergency Management • DOT • County Officials • PIO • Finance • FEMA Program Delivery Manager Debris monitoring firm		
The PIO issues the second press release regarding segregation of debris.		
County Debris Co-Manager coordinate with the debris removal and monitoring contractors to begin ROW debris removal.		
Determine which types of debris will be eligible for collection from the ROW (i.e., HHW).		
County Debris Co-Manager coordinate with FEMA and MDE to begin environmental monitoring program of DMS locations.		
County Debris Co-Managers coordinate with external agencies.		
County Debris Co-Managers initiates discussions with FEMA.		
Obtain FEMA guidance for gated community and private property debris removal.		
Recovery Operations: 2 Weeks – 1 Month		
County Deputy Debris Manager maintains and evaluates ROW cleanup.		

Task	Task Assigned To	Date/Time Completed
County Deputy Debris Manager coordinates with debris removal contractors to begin ROW stump removal, as necessary.		
County Deputy Debris Manager coordinates with debris removal contractors to open additional DMS as necessary.		
County Deputy Debris Manager continues daily meetings with FEMA.		
County Deputy Debris Manager coordinates with contractors to begin debris removal from private property and gated communities.		
County Deputy Debris Manager coordinates with the PIO to communicate project closeout to residents via press release.		
Recovery Operations: 1 Month – 3 Months		
County Deputy Debris Manager maintains and evaluates ROW cleanup – vegetative and C&D.		
County Deputy Debris Manager reviews ROW for ineligible debris.		
County Deputy Debris Manager coordinates with debris removal contractors to begin ROW leaners/hangers program.		
County Deputy Debris Manager coordinates with debris removal contractors to initiate haul-out.		
County Deputy Debris Manager progresses to weekly meetings with the FEMA.		
County's Finance Department or OEMHS makes sure accurate documentation is maintained to obtain maximum reimbursement and grant allocations.		
Recovery Operations: 3 Months – Project Completion		
County Deputy Debris Manager completes all debris recovery activities.		
County Deputy Debris Manager continues to identify ineligible debris on ROW.		
County Deputy Debris Manager coordinates with debris removal contractors to complete the disposal of reduced debris.		

Task	Task Assigned To	Date/Time Completed
County Deputy Debris Manager coordinates with debris removal contractors to close out and remediate DMS locations.		
County Deputy Debris Manager conducts project closeout meetings with FEMA and external agencies.		
County's Department of Finance and Office of the County Attorney Perform contractor reconciliation.		

APPENDIX G: DISASTER DEBRIS MANAGEMENT CONTRACT CHECKLIST

The Disaster Debris Contract Checklist was designed to guide the County in contracting disaster debris services. The checklist provides a step-by-step process of procuring disaster debris services that comply with current federal standards and best practices. The checklist includes the steps to solicit bids, review proposals, and select an appropriate contractor. The checklist was developed using guidance set forth by the Federal Emergency Management Agency (FEMA) and the provisions of Title 44, Code of Federal Regulations (CFR) Section 13.36 Procurement. The checklist is intended to serve as a guide but should not supersede the County's current procurement policies.

Tab A, attached to this document, provides additional details on procurement policies:

Tab A: Title 44 CFR 13.36

Table 1: Disaster Debris Contract Checklist

Task	Responsibility	Completion Date
Pre-Disaster Tasks		
Solicit a request for proposals for disaster debris services.		
The solicitation for prequalified contractors should include: ■ Adequately defined scope of work ■ All potential debris types ■ Anticipated haul distances ■ Potential size of debris events ■ Hourly labor, equipment and material price schedule ■ Performance bond requirements		
Qualify bidders by requesting documentation of the following: ■ Licenses ■ Financial stability ■ Proof of insurance ■ Bonding capability ■ Description of related experience and capabilities including total verified cubic yards removed and processed ■ References including jurisdiction name, point of contact, email address and phone number ■ Description of health and safety plan including operation plan at debris management site(s).		
Contractors that have been declared debarred by the Office of Federal Contract Compliance Programs (OFCCP) **should not be considered.** A complete list of federally disbarred contractors can be found in the System for Award Management (SAM) dataset at www.sam.gov.		

Task	Responsibility	Completion Date
Check the status of prequalified contractors in the SAM database **at the time of the disaster.** ■ Go to the SAM Database at https://www.sam.gov/portal/public/SAM/. ■ Under the Search Records tab, enter a DUNS number, CAGE code or Business Name to search for the contractor you are interested in pre-qualifying. ■ Note any exclusions listed for the contractor that may prohibit federal assistance for debris services. ■ Print the screen with the results and file in records.		
Ensure compliance with the jurisdiction's procurement procedures.		
Ensure compliance with applicable state and local procurement laws and regulations.		
Ensure compliance with federal procurement laws and standards identified in 2 CFR 200 (see Tab A).		
Ensure competition (see the provisions in Section 200.319 Competition in Tab A for specific requirements regarding competition).		
Provide a clear and definitive scope of work.		
Develop a cost analysis to demonstrate cost reasonableness **for any contract or contract modification where price competition is lacking**.		
Ensure opportunities for minority and women-owned businesses and firms whenever possible. Require prime contractors to utilize minority and women-owned businesses as scope allows per the provisions laid out in 2 CFR 200.		
Document the process and rationale the jurisdiction followed in making procurement decisions.		
The jurisdiction's legal counsel should conduct a review of the procurement process and any potential contracts to be awarded to ensure compliance with all federal, state, and local requirements.		
Establish procedures to address protests and disputes related to contract awards.		
Compile all documentation related to the procurement and file in a secure location that can be accessed for future review.		

Title 44: Emergency Management and Assistance
PART 13—UNIFORM ADMINISTRATIVE REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS TO STATE AND LOCAL GOVERNMENTS
Subpart C—Post-Award Requirements

§13.36 Procurement.

(a) *States.* When procuring property and services under a grant, a State will follow the same policies and procedures it uses for procurements from its non-federal funds. The State will ensure that every purchase order or other contract includes any clauses required by federal statutes and executive orders and their implementing regulations. Other grantees and subgrantees will follow paragraphs (b) through (i) in this section.

(b) *Procurement standards.* (1) Grantees and subgrantees will use their own procurement procedures which reflect applicable State and local laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this section.

(2) Grantees and subgrantees will maintain a contract administration system which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(3) Grantees and subgrantees will maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer, or agent of the grantee or subgrantee shall participate in selection, or in the award or administration of a contract supported by federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

(i) The employee, officer or agent,

(ii) Any member of his immediate family,

(iii) His or her partner, or

(iv) An organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or subgrantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to subagreements. Grantee and subgrantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by state or local law or regulations, such standards or conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and subgrantee's officers, employees, or agents, or by contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

(4) Grantee and subgrantee procedures will provide for a review of proposed procurements to avoid purchase of unnecessary or duplicative items. Consideration should be given to consolidating or breaking

out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(5) To foster greater economy and efficiency, grantees and subgrantees are encouraged to enter into state and local intergovernmental agreements for procurement or use of common goods and services.

(6) Grantees and subgrantees are encouraged to use federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(7) Grantees and subgrantees are encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(8) Grantees and subgrantees will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

(9) Grantees and subgrantees will maintain records sufficient to detail the significant history of a procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(10) Grantees and subgrantees will use time and material type contracts only—

(i) After a determination that no other contract is suitable, and

(ii) If the contract includes a ceiling price that the contractor exceeds at its own risk.

(11) Grantees and subgrantees alone will be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to source evaluation, protests, disputes, and claims. These standards do not relieve the grantee or subgrantee of any contractual responsibilities under its contracts. Federal agencies will not substitute their judgment for that of the grantee or subgrantee unless the matter is primarily a federal concern. Violations of law will be referred to the local, state, or federal authority having proper jurisdiction.

(12) Grantees and subgrantees will have protest procedures to handle and resolve disputes relating to their procurements and shall in all instances disclose information regarding the protest to the awarding agency. A protestor must exhaust all administrative remedies with the grantee and subgrantee before pursuing a protest with the federal agency. Reviews of protests by the federal agency will be limited to:

(i) Violations of federal law or regulations and the standards of this section (violations of state or local law will be under the jurisdiction of state or local authorities) and

(ii) Violations of the grantee's or subgrantee's protest procedures for failure to review a complaint or protest. Protests received by the federal agency other than those specified above will be referred to the grantee or subgrantee.

(c) *Competition.* (1) All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of section 13.36. Some of the situations considered to be restrictive of competition include but are not limited to:

(i) Placing unreasonable requirements on firms in order for them to qualify to do business,

(ii) Requiring unnecessary experience and excessive bonding,

(iii) Noncompetitive pricing practices between firms or between affiliated companies,

(iv) Noncompetitive awards to consultants that are on retainer contracts,

(v) Organizational conflicts of interest,

(vi) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance of other relevant requirements of the procurement, and

(vii) Any arbitrary action in the procurement process.

(2) Grantees and subgrantees will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-state or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(3) Grantees will have written selection procedures for procurement transactions. These procedures will ensure that all solicitations:

(i) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description shall not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured, and when necessary, shall set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equal” description may be used as a means to define the performance or other salient requirements of a procurement. The specific features of the named brand which must be met by offerors shall be clearly stated; and

(ii) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(4) Grantees and subgrantees will ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, grantees and subgrantees will not preclude potential bidders from qualifying during the solicitation period.

(d) *Methods of procurement to be followed*—(1) *Procurement by small purchase procedures.* Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the simplified acquisition threshold fixed at 41 U.S.C. 403(11) (currently set at $100,000). If small purchase procedures are used, price or rate quotations shall be obtained from an adequate number of qualified sources.

(2) Procurement by *sealed bids* (formal advertising). Bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in §13.36(d)(2)(i) apply.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

(A) A complete, adequate, and realistic specification or purchase description is available;

(B) Two or more responsible bidders are willing and able to compete effectively and for the business; and

(C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

(A) The invitation for bids will be publicly advertised and bids shall be solicited from an adequate number of known suppliers, providing them sufficient time prior to the date set for opening the bids;

(B) The invitation for bids, which will include any specifications and pertinent attachments, shall define the items or services in order for the bidder to properly respond;

(C) All bids will be publicly opened at the time and place prescribed in the invitation for bids;

(D) A firm fixed-price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs shall be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(E) Any or all bids may be rejected if there is a sound documented reason.

(3) Procurement by *competitive proposals.* The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(i) Requests for proposals will be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals shall be honored to the maximum extent practical;

(ii) Proposals will be solicited from an adequate number of qualified sources;

(iii) Grantees and subgrantees will have a method for conducting technical evaluations of the proposals received and for selecting awardees;

(iv) Awards will be made to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(v) Grantees and subgrantees may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(4) Procurement by *noncompetitive proposals* is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate.

(i) Procurement by noncompetitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and one of the following circumstances applies:

(A) The item is available only from a single source;

(B) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(C) The awarding agency authorizes noncompetitive proposals; or

(D) After solicitation of a number of sources, competition is determined inadequate.

(ii) Cost analysis, i.e., verifying the proposed cost data, the projections of the data, and the evaluation of the specific elements of costs and profits, is required.

(iii) Grantees and subgrantees may be required to submit the proposed procurement to the awarding agency for pre-award review in accordance with paragraph (g) of this section.

(e) *Contracting with small and minority firms, women's business enterprise and labor surplus area firms.* (1) The grantee and subgrantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

(vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (e)(2) (i) through (v) of this section.

(f) *Contract cost and price.* (1) Grantees and subgrantees must perform a cost or price analysis in connection with every procurement action including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, grantees must make independent estimates before receiving bids or proposals. A cost analysis must be performed when the offeror is required to submit the elements of his estimated cost, e.g., under professional, consulting, and architectural engineering services contracts. A cost analysis will be necessary when adequate price competition is lacking, and for sole source procurements, including contract modifications or change orders, unless price reasonableness can be established on the basis of a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation. A price analysis will be used in all other instances to determine the reasonableness of the proposed contract price.

(2) Grantees and subgrantees will negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration will be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(3) Costs or prices based on estimated costs for contracts under grants will be allowable only to the extent that costs incurred or cost estimates included in negotiated prices are consistent with federal cost principles (see §13.22). Grantees may reference their own cost principles that comply with the applicable federal cost principles.

(4) The cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used.

(g) *Awarding agency review.* (1) Grantees and subgrantees must make available, upon request of the awarding agency, technical specifications on proposed procurements where the awarding agency believes such review is needed to ensure that the item and/or service specified is the one being proposed for purchase. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the grantee or subgrantee desires to have the review accomplished after

a solicitation has been developed, the awarding agency may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(2) Grantees and subgrantees must on request make available for awarding agency pre-award review procurement documents, such as requests for proposals or invitations for bids, independent cost estimates, etc. when:

(i) A grantee's or subgrantee's procurement procedures or operation fails to comply with the procurement standards in this section; or

(ii) The procurement is expected to exceed the simplified acquisition threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation; or

(iii) The procurement, which is expected to exceed the simplified acquisition threshold, specifies a “brand name” product; or

(iv) The proposed award is more than the simplified acquisition threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(v) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the simplified acquisition threshold.

(3) A grantee or subgrantee will be exempt from the pre-award review in paragraph (g)(2) of this section if the awarding agency determines that its procurement systems comply with the standards of this section.

(i) A grantee or subgrantee may request that its procurement system be reviewed by the awarding agency to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews shall occur where there is a continuous high-dollar funding, and third-party contracts are awarded on a regular basis.

(ii) A grantee or subgrantee may self-certify its procurement system. Such self-certification shall not limit the awarding agency's right to survey the system. Under a self-certification procedure, awarding agencies may wish to rely on written assurances from the grantee or subgrantee that it is complying with these standards. A grantee or subgrantee will cite specific procedures, regulations, standards, etc., as being in compliance with these requirements and have its system available for review.

(h) *Bonding requirements.* For construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold, the awarding agency may accept the bonding policy and requirements of the grantee or subgrantee provided the awarding agency has made a determination that the awarding agency's interest is adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

(1) *A bid guarantee from each bidder equivalent to five percent of the bid price.* The “bid guarantee” shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

(2) *A performance bond on the part of the contractor for 100 percent of the contract price.* A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(3) *A payment bond on the part of the contractor for 100 percent of the contract price.* A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

(i) *Contract provisions.* A grantee's and subgrantee's contracts must contain provisions in paragraph (i) of this section. Federal agencies are permitted to require changes, remedies, changed conditions, access and records retention, suspension of work, and other clauses approved by the Office of Federal Procurement Policy.

(1) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. (Contracts more than the simplified acquisition threshold)

(2) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of $10,000)

(3) Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). (All construction contracts awarded in excess of $10,000 by grantees and their contractors or subgrantees)

(4) Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). (All contracts and subgrants for construction or repair)

(5) Compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR part 5). (Construction contracts in excess of $2000 awarded by grantees and subgrantees when required by federal grant program legislation)

(6) Compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by grantees and subgrantees in excess of $2000, and in excess of $2500 for other contracts which involve the employment of mechanics or laborers)

(7) Notice of awarding agency requirements and regulations pertaining to reporting.

(8) Notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.

(9) Awarding agency requirements and regulations pertaining to copyrights and rights in data.

(10) Access by the grantee, the subgrantee, the federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

(11) Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

(12) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of $100,000)

(13) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

APPENDIX H: SAMPLE DMS MEMORANDUM OF AGREEMENT

This Memorandum of Agreement, made and entered into this _____ day of _____ _____, by and between (hereinafter "OWNER"), and the **JURISDICTION** (hereinafter **"(CITY/TOWN/COUNTY")** (collectively referred to hereinafter as "the Parties").

WHEREAS, the **JURISDICTION** has a debris management plan for the removal, reduction, and disposal of large volumes of debris from public property following large scale disasters; and

WHEREAS, pursuant to the **JURISDICTION** debris management plan, the **JURISDICTION** may or may not enter into an agreement with one or more contractor(s) to manage and operate the removal, reduction, and disposal of disaster generated debris depending on the severity of the incident; and

WHEREAS, OWNER is the owner of a tract of land in **JURISDICTION OF TRACT OF LAND** (hereinafter "the Property"), more particularly described in Exhibit A attached hereto; and

WHEREAS, the **JURISDICTION** has identified the Property owned by OWNER as a suitable location for a Debris Management Site ("DMS"), to be used by the **JURISDICTION** in the event of a disaster necessitating debris removal, reduction, and disposal; and

WHEREAS, the **JURISDICTION** and the OWNER have agreed to cooperate toward establishment of a DMS to be used by the **JURISDICTION**, or its designees, in the event of emergency assistance efforts requiring debris removal, reduction, and disposal in Maryland.

Now therefore, the Parties agree as follows:

I. PROPERTY

The Property, as shown and identified as DMS on Exhibit A, constitutes approximately ____ acres available for DMS operations. The physical location of the site is: _____ and is a portion of property owned by OWNER identified as: _____ Real Estate ID#: _____.

II. TERM

Subject to early termination as permitted by Section V herein below, this Agreement shall be for a term of _____ from the date of the Agreement without regard to the Commencement Date (as hereinafter defined).

III. AGREEMENT

OWNER, subject to the terms and conditions set forth herein, hereby agrees to the use of the Property by the **JURISDICTION** for purposes of staging, storing, reducing, and properly disposing of disaster generated debris following a natural or man-made event.

IV. JURISDICTION OBLIGATIONS

a. Obtain, or cause to be obtained, all required local, state, and federal permits for the operation of a DMS;

b. Install, or caused to be installed, if necessary, a temporary access road (of gravel, graded dirt, or other temporary material) for access of debris hauling vehicles to the Property;

c. Manage, or cause to be managed, the DMS during the entire period of **JURISDICTION** use;

d. Remove, or cause to be removed, all debris, vehicles, equipment, and temporary structures located on the property which were placed thereon by the **JURISDICTION**, its employees, agents, contractors, subcontractors, and representatives;

e. Restore, or cause to be restored, the property to the property's pre-use condition prior to the return of use of property to the OWNER;

f. Perform, or cause to be performed, soil testing and abatement of any hazards created on the property as a direct result of **JURISDICTION** use as required under local, state, and federal law prior to the closing of the debris site and return of use of the property to the OWNER;

g. Repair, or cause to be repaired, any damage to the property, including buildings and structures located on the property, caused as a direct result of **JURISDICTION** use of the property; in lieu of making or causing to make repair, the **JURISDICTION** may compensate OWNER for the cost of said repair upon agreement of both parties.

V. OWNER OBLIGATIONS

a. Take no action that renders the Property unusable as a temporary disaster debris disposal site as determined by the **JURISDICTION;**

b. Upon notification (either verbal or in writing) by the **JURISDICTION** of the **JURISDICTION'S** intent to make use of some or all of the Property as a DMS under the terms and conditions of this Agreement, to make as much of the Property as deemed necessary by the **JURISDICTION** immediately available to the **JURISDICTION**, and to immediately remove all personal property (including, but not limited to vehicles and equipment) from those portions of the Property identified by the **JURISDICTION** for use;

c. Not interfere in any manner with **JURISDICTION**-controlled debris management operations during the period of the **JURISDICTION'S** use of the Property under the terms and conditions of this Agreement.

VI. COMMENCEMENT DATE

The **JURISDICTION** will initiate DMS operations immediately preceding an event anticipated to generate debris within the **JURISDICTION**, or immediately following an event that generated debris within the **JURISDICTION**. The **JURISDICTION** will activate this Agreement through verbal notification to the OWNER, followed by written notification transmitted by United States mail as certified or registered mail, return receipt requested, postage paid, and addressed to OWNER. The "Commencement Date" shall be the date upon which notification is verbally provided by the **JURISDICTION** to OWNER.

VII. ASSIGNMENT

OWNER shall not sell or in any way assign, transfer, or encumber his control of the Property without prior written notification to the **JURISDICTION**.

VIII. COMPENSATION

The parties agree that no compensation will be rendered for the use of the Property by the **JURISDICTION**. The **JURISDICTION**, or its designee(s), shall be responsible for restoring the Property to its original state.

IX. DMS OPERATIONS

The **JURISDICTION**, or its designee(s), will establish, operate, and monitor Debris Management Site ("DMS") operations from the time of activation of this agreement through site restoration.

X. WORKING HOURS

Working hours for the DMS are only during daylight hours, seven days a week. Working hours may need to be adjusted to accommodate 24-hour operations depending on the severity of the incident.

XI. DEBRIS DISPOSAL

The **JURISDICTION**, or its designee(s), will properly, promptly and lawfully dispose of all waste, ash, and debris brought to or generated on the DMS.

XII. DEBRIS SOURCES

The debris stream entering the DMS may include debris generated in the unincorporated areas of _____ the **JURISDICTION**, areas within neighboring municipalities, and from road right-of-ways maintained by the Maryland Department of Transportation (MDOT). The **JURISDICTION** will coordinate with the FDOT, and neighboring municipalities with regard to debris disposal at the **JURISDICTION**-operated DMS. The intention of this Agreement is to create an arrangement where MDOT, and municipalities can deliver their debris to the DMS upon approval by the **JURISDICTION** and does not necessitate individual agreements between the OWNER and each entity.

XIII. NOTICES

Any notice or demand which by any provision of this agreement is required or allowed to be given by either party to the other shall be deemed to have been sufficiently given for all purposes when made in writing and sent in the United States mail as certified or registered mail, return receipt requested, postage paid, and addressed to the following respective addresses:

XIV. INDEMNIFICATION

The **JURISDICTION** agrees to indemnify and hold harmless OWNER from any claims, causes of action, administrative proceedings, and any and all other legal claims directly arising out of or relating to any damage, injury, loss, or other actions or omissions taken by **JURISDICTION**, its employees, agents, contractors, subcontractors, and representatives as a direct result of the **JURISDICTION's** use of the Property under the terms and conditions of the Agreement. The **JURISDICTION**

shall not be liable for any damage, injury, loss, or other actions or omissions not taken by **JURISDICTION**, its employees, agents, contractors, subcontractors and representatives, including acts of third parties not operating at the direction of or under the control of **JURISDICTION**. Further, **JURISDICTION** shall not be liable for any injury, damage, or loss sustained by OWNER as a result of OWNER'S breach of the terms and conditions of this Agreement.

XV. TERMINATION

This Agreement shall be in effect from the last date written below until _____. This Agreement may be terminated by either party upon submission of a thirty-day advance written notice of termination. It is the intention of the Parties to discuss the renewal of this Agreement on an annual basis. Such renewals, if mutually agreed upon, shall be evidenced by an executed Supplemental Memorandum of Agreement. The Parties may choose to negotiate new or changed terms at the time of renewal.

OWNER: _____

_____

_____

JURISDICTION: _____

_____

_____

XVI. ENTIRE AGREEMENT

The OWNER and the **JURISDICTION** agree that this document constitutes the entire agreement between the two parties and may only be modified by a written mutual agreement signed by the parties. Modifications may be evidenced by facsimile signatures. Unless and until further modified, this agreement shall consist of this document and the following attachments or addenda: Exhibit A

XVII. GOVERNING LAW

Both parties agree that this Agreement shall be governed by the laws of the State of Maryland.

This Agreement shall be effective on the date of the last signature below. Jurisdiction in witness whereof, the Parties have each executed this Agreement, this the ___ day of _____, **ENTER YEAR**.

OWNER

BY: _____
(Signature)

_____
(Print Name)

_____
(Title)

DATE: _____

JURISDICTION

BY: _____
(Signature)

_____
(Print Name)

_____
(Title)

DATE: _____

WITNESS

BY: _____
(Signature)

_____
(Print Name)

_____
(Title)

DATE: _____

APPENDIX I: SAMPLE RIGHT OF ENTRY AGREEMENT

RIGHT OF ENTRY AGREEMENT

THIS *Right of Entry Agreement* ("AGREEMENT") entered into this ____ day of _____, 20___, by and between _____ _____("GRANTOR"), owner(s) of _____ _____,Montgomery County, Maryland, (the "Property") and MONTGOMERY COUNTY, MARYLAND, a body politic and corporate (the "COUNTY"). GRANTOR and COUNTY are collectively referred to as the "PARTIES."

WHEREAS, the County has a Debris Management Plan, approved by the Federal Emergency Management Agency (FEMA) which is part of the County's approved Emergency Operations Plan; and

WHEREAS, the COUNTY is currently updating the Debris Management Plan and plans to have the project completed in; and

WHEREAS, the updated Debris Management Plan will include provisions for the clearing, collection, removal, and processing of debris resulting from a significant hazard or disaster occurring in the County.

NOW, THEREFORE, in consideration of the mutual promises herein stated and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the PARTIES agree as follows:

1. Effective upon the date of the GRANTOR'S signature (the "Effective Date"), the COUNTY is granted a right of ingress, egress, and entry in, to, upon and over the Property, without coercion, for the purpose of removing and clearing any and all storm-generated debris of whatever nature from the Property.

2. The PARTIES acknowledge that the COUNTY'S right of entry under this Agreement is not an obligation to perform debris clearance om the Property. The GRANTOR will mark any storm damaged sewer lines, water lines, and other utility lines located on the Property.

3. The GRANTOR agrees and warrants to hold harmless the County, its agencies, contractors, and subcontractors, for damage of any type whatsoever either to the Property or persons situated thereon and hereby release, discharge, and waive any action, either legal or equitable, that might arise out of any activities on the Property.

4. The GRANTOR ( ) has, ( ) has not ( ) will, ( ) will not receive any compensation for debris removal from any other source, including the Small Business Association (SBA), Agricultural Stabilization and Conservation Service (ASCS), private insurance, individual and family grant program or any other public assistance program. GRANTOR will report for this Property any insurance settlements to GRANTOR or GRANTOR'S family for debris removal that has been performed at government expense.

5. This Agreement may not be amended, altered or modified except in writing, executed by the PARTIES.

6. Nothing in this Agreement shall be construed to create any relationship of partnership, joint venture, association or other form of entity between the PARTIES, and the PARTIES hereby disclaim the existence of any such relationship.

7. This Agreement shall be governed by the laws of the State of Maryland.

8.. Any notice or communication under this Agreement by or between the COUNTY and GRANTOR shall be sufficiently given and delivered if dispatched by either (a) certified mail, postage prepaid, return receipt requested, (b) nationally recognized overnight delivery service, (c) hand-delivery (if receipt is evidenced by a signature of the addressee or authorized agent, or (d) telecopy or facsimile transmission (provided that such notice is also sent via nationally recognized overnight delivery service for guaranteed next business day delivery, and addressed:

(i) in the case of a notice or communication to the GRANTOR, to _____ _____or

(ii) in the case of a notice or communication to the COUNTY, to _____ _____ with a copy to:

Montgomery County, Maryland
Office of the County Attorney
101 Monroe Street, 3rd Floor
Rockville, MD 20850
Attn: Terrilyn Brooks, Associate County Attorney

Any party may change its address for the service of notice by giving written notice of such change to the other party, in any matter above specified.

MONTGOMERY COUNTY, MARYLAND **GRANTOR**

By: _____ By: _____

Assistant Chief Administrative Officer

Date: _____ Date: _____

APPROVED FOR FORM AND LEGALITY

By: _____ Date: _____
Terrilyn Brooks, Associate County Attorney

APPENDIX J: DISASTER DEBRIS HAULER REQUIREMENTS

1.0 **Emergency Road Clearance**

1.1 Work shall consist of all labor, equipment, fuel, and miscellaneous costs necessary to clear and remove debris from COUNTY roadways and waterways to make them passable immediately following a declared disaster. All roadways designated by the COUNTY shall be clear and passable within a reasonable amount of time as overseen by the COUNTY. What constitutes a reasonable period for emergency push operations will be defined by the COUNTY at the time of a notice to proceed. This may include roadways in municipalities within the COUNTY. Roadways will be cleared as directed by the COUNTY. The Debris Hauler Contractor shall assist the COUNTY and its representatives in ensuring proper documentation of emergency road clearance activities by documenting the type of equipment and/or labor utilized (that is, certification), starting and ending times, and zones/areas cleared.

2.0 **ROW Vegetative Debris Removal**

2.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to pick up and transport eligible disaster-related vegetative debris from the COUNTY ROW to a COUNTY -approved DMS or approved final disposal site in accordance with all federal, state, and local regulations.

2.2 Vegetative debris in the COUNTY ROW is defined as debris resulting from a hurricane or other natural or human-caused disaster, which has been or will be placed along public ROWs, easements, COUNTY parks, alleys, COUNTY debris staging areas, and other areas as designated by the COUNTY.

2.3 Eligible vegetative debris that is piled in immediate proximity to the actual legal street ROW and that is accessible from the ROW line with loading equipment (that is, not behind a fence or other physical obstacle) will be deemed to be on the ROW and is to be removed.

2.4 Debris Hauler Contractor will remove vegetative debris as directed by the COUNTY.

2.5 All Eligible debris will be removed from each location before proceeding to the next location, unless otherwise directed by COUNTY or its authorized representative.

2.6 Debris Hauler Contractor must provide traffic control as conditions require or as directed by the COUNTY.

2.7 Entry onto private property for the removal of Eligible vegetative debris will only be permitted when directed by the COUNTY or its authorized representative. COUNTY will provide specific ROE legal and operational procedures.

3.0 **ROW C&D Debris Removal**

3.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to pick up and transport eligible C&D debris from the COUNTY ROW to a COUNTY -approved DMS or final disposal site in accordance with all federal, state, and local regulations.

3.2 C&D debris in the COUNTY ROW is defined as disaster-generated debris that has been or will be placed along public ROW, easements, COUNTY parks, alleys, and COUNTY debris staging areas.

3.3 For the purposes of this contract, Eligible C&D debris that is piled in immediate proximity

to the ROW and that is accessible from the ROW line with loading equipment (that is, not behind a fence or other physical obstacle) will be deemed to be on the ROW and is to be removed.

3.4 Debris Hauler Contractor will remove C&D debris from the ROW as directed by the COUNTY.

3.5 Once the debris removal vehicle has been issued a load ticket from the COUNTY's authorized representative, the debris removal vehicle will proceed immediately to a COUNTY-approved DMS or final disposal site as specified by the COUNTY. The debris removal vehicle will not collect additional debris once a load ticket has been issued.

3.6 All Eligible debris will be removed from each location before proceeding to the next location, unless otherwise directed by the COUNTY or its authorized representative.

3.7 Debris Hauler Contractor must provide traffic control as conditions require or as directed by the COUNTY.

3.8 Entry onto private property for the removal of Eligible C&D debris will only be permitted when directed by the COUNTY or its authorized representative. COUNTY will provide specific ROE legal and operational procedures.

3.9 C&D debris must be monitored for the collection, complete haul, and delivery at the approved DMS or final disposal sites. COUNTY or authorized representative will obtain the original copy of the disposal or scale ticket showing the inbound and outbound collection vehicle weights.

4.0 **Demolition, Removal, Transport, and Disposal of Non-RACM Structures**

4.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to decommission, demolish, and dispose of eligible non-regulated asbestos-containing material ("non-RACM") structures on private property within the jurisdictional limits of the COUNTY. Under this service, work will include asbestos-containing material ("ACM") testing, decommissioning, structural demolition, debris removal, and site remediation. Further, eligible debris generated from the demolition of non-RACM structures, as well as scattered C&D debris on private property, will be transported to a COUNTY -approved final disposal site in accordance with all federal, state, and local regulations.

4.2 Removal and transportation of demolished structures and scattered C&D debris on private property will be performed as identified by the COUNTY.

4.3 Entry onto private property will only be permitted when directed by the COUNTY. COUNTY will provide specific ROE legal and operational procedures.

4.4 Debris Hauler Contractor is required to strictly adhere to all local, state, and federal regulations (such as obtaining demolition permits) for the demolition, handling, and transportation of non-RACM structures.

4.5 Decommissioning consists of the removal and disposal of all HHW, used electronics, white goods, and scrap tires from a non-RACM structure at a properly sanctioned facility in accordance with all applicable federal, state, and local regulations.

4.6 Any structurally unsound and unsafe structures will be identified and presented to the

COUNTY for direction regarding decommissioning.

4.7 Removal and transportation of eligible non-RACM demolished structures and eligible scattered C&D debris on private property will be performed as directed in writing by the COUNTY's authorized representative.

4.8 Once the debris removal vehicle has been issued a load ticket from the COUNTY's authorized representative, the debris removal vehicle will proceed immediately to a COUNTY -approved final disposal site. The debris removal vehicle will not collect additional debris once a load ticket has been issued.

4.9 Entry onto private property for the removal of eligible C&D debris will only be permitted when directed in writing by the COUNTY or its authorized representative. COUNTY will provide specific ROE legal and operational procedures for private property debris removal programs if requested.

5.0 **Demolition, Removal, Transport, and Disposal of RACM Structures**

5.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to decommission, demolish, and dispose of eligible RACM structures on private property within the jurisdictional limits of the COUNTY. Under this service, work will include ACM testing, decommissioning, structural demolition, debris removal, and site remediation. Further, eligible debris generated from the demolition of structures, as well as eligible scattered C&D debris on private property, will be transported to a COUNTY -approved final disposal site in accordance with all federal, state, and local regulations.

5.2 Debris Hauler Contractor is required to strictly adhere to all local, state, and federal regulatory requirements (such as obtaining demolition permits, burrito wrapping of debris, etc.) for the demolition, handling, and transportation of RACM structures.

5.3 Decommissioning consists of the removal and disposal of all HHW, e-waste, white goods, and scrap tires from an RACM structure at a properly sanctioned facility in accordance with all applicable local, state, and federal regulations.

5.4 Any structurally unsound and unsafe structures will be identified and presented to the COUNTY for direction regarding decommissioning.

5.5 Removal and transportation of eligible RACM demolished structures and eligible scattered C&D debris on private property will be performed as directed in writing by the COUNTY's authorized representative.

5.6 Once the debris removal vehicle has been issued a load ticket from the COUNTY's authorized representative, the debris removal vehicle will proceed immediately to a COUNTY -approved final disposal site that accepts RACM debris. The debris removal vehicle will not collect additional debris once a load ticket has been issued.

5.7 Entry onto private property for the removal of eligible C&D debris will only be permitted when directed in writing by the COUNTY or its authorized representative. COUNTY will provide specific ROE legal and operational procedures for private property debris removal programs if requested.

6.0 **DMS Management and Operations**

6.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to manage and operate DMS(s) for the acceptance, management, segregation, staging, and reduction of disaster debris. Reduction methods must be approved by the COUNTY prior to commencement of reduction activities. DMS layouts and ingress and egress plans must be approved by the COUNTY. COUNTY may provide Debris Hauler Contractor with potential DMS(s). Debris Hauler Contractor will be responsible for documenting the condition of the sites prior to their use as DMS(s), and for returning the DMS(s) to their original condition, abiding by all state and federal environmental regulatory requirements, and the following:

a. If COUNTY DMS locations are identified, the Debris Hauler Contractor will be provided with the address, Global Positioning System ("GPS") coordinates, and estimated acreage of each DMS.
b. Based on the severity of the disaster, COUNTY may require Debris Hauler Contractor to locate additional sites to be used as DMS(s). If private sites are identified to be leased, the Debris Hauler Contractor may be tasked with executing the lease and could bill these costs to the COUNTY as a pass-through cost.
c. The Debris Hauler Contractor will be responsible for conducting pre-condition baseline underground water and soil sampling and testing of DMS as well as comparable closeout sampling and testing.
d. DMS(s) operations and remediation must comply with all local, state, and federal safety and environmental standards. Debris Hauler Contractor reduction, handling, disposal, and remediation operations must be approved in writing by the COUNTY.

6.2 COUNTY reserves the right to inspect the DMS(s), verify quantities, and review operations at any time.

6.3 Managing DMS location includes helping to obtain necessary local, state, and federal permits or approval and operating in accordance with all rules and regulations of local, state, and federal regulatory agencies, which may include but are not limited to the U.S. Environmental Protection Agency ("EPA"), Maryland Department of the Environment (MDE), or other State and County agencies. Debris Hauler Contractor shall also be responsible for all costs associated with third-party groundwater and soil testing.

6.4 Debris at the DMS(s) will be clearly segregated and managed independently by debris type (C&D, vegetative, white goods, and other scope of service items), program (ROW collection, private property debris removal, etc.), as outlined in Section 2.10 Description of Designated Area.

6.5 Debris Hauler Contractor is responsible for maintaining the DMS(s) approach and interior road(s) for all weather conditions for the entire period of debris hauling, including provision of crushed concrete for any roads that require stabilization for ingress and egress.

6.6 Debris Hauler Contractor is responsible for all associated costs necessary to provide DMS(s) traffic control (for example, traffic cones and staff with traffic flags).

6.7 Debris Hauler Contractor is responsible for all associated costs necessary to provide DMS(s) dust control and erosion control (for example, an operational water truck, silt

fencing, and other best management practices).

6.8 Debris Hauler Contractor is responsible for providing twenty-four (24)-hour security at DMS(s).

6.9 Debris Hauler Contractor will only permit Debris Hauler Contractor vehicles and others specifically authorized by the COUNTY or its authorized representative on DMS locations.

6.10 Debris Hauler Contractor is responsible for all associated costs necessary to provide DMS(s) utilities (for example, water, lighting, and portable toilets).

6.11 Debris Hauler Contractor is responsible for all associated costs necessary to provide DMS(s) fire protection (for example, an operational water truck [sufficient and equipped for fire protection], fire breaks, and a site foreman).

6.12 Debris Hauler Contractor is responsible for all associated costs necessary to provide qualified personnel, as well as lined containers or containment areas, for the segregation of visible HHW/contaminants that may be mixed with disaster debris. The cost associated with qualified personnel and lined containers/containment areas for HHW/contaminant segregation is reflected in this scope of work. The COUNTY will be responsible for disposing of HHW/contaminant material segregated and stored in lined containers at the DMS(s)

6.13 Debris Hauler Contractor shall provide tower(s) from which the COUNTY or its authorized representative can make volumetric load calls. The tower provided by the Debris Hauler Contractor will meet required minimum specifications, detailed in Section 3.20 Debris Site Tower Specifications.

6.14 Debris Hauler Contractor is responsible for operating the DMS(s) in accordance with OSHA, EPA, and MDE guidelines.

6.15 Upon completion of haul-out activities, the Debris Hauler Contractor shall restore the site to its original condition prior to site use at their own expense, abide by all local, state, and federal environmental regulatory requirements, and obtain a written release from the COUNTY or its authorized representative. Site remediation will include (but is not limited to) ensuring all debris, mulch, and other residual material is adequately removed, returning the original site grade and other physical features including sodding if necessary. Site remediation will also include returning all utilized sites to their original condition as verified through soil and groundwater samples. Site remediation will abide by all state and federal environmental regulatory requirements and is subject to final approval by the COUNTY. Site remediation does not include restoring fencing, concession stands, lighting, and other permanent structures that may have been demolished at the COUNTY's direction for DMS(s) operations.

7.0 **DMS Management and Reduction by Grinding**

7.1 Under this contract, work shall consist of all labor, equipment, fuel, and miscellaneous costs necessary to reduce disaster debris by grinding. Reduction methods are at the discretion of the COUNTY. Grinding must be approved by the COUNTY prior to commencement of reduction activities.

7.2 All unreduced disaster debris must be staged separately from reduced debris at the DMS(s).

7.3 Grinding activities must begin within seven days of the opening of the DMS with adequate equipment available to process the type of debris entering the site and prevent stockpiling of excess debris at the DMS.

7.4 Debris Hauler Contractor must obtain COUNTY's approval to reduce C&D debris. If approved for reduction by the COUNTY, C&D debris must be reduced via grinding in order for the COUNTY to compensate the Debris Hauler Contractor for reduction. Incineration, mauling or driving over of C&D are not acceptable methods of C&D reduction.

8.0 DMS Management and Reduction by Incineration

8.1 Under this contract, work shall consist of all labor, equipment, fuel, and miscellaneous costs necessary to reduce disaster debris by incineration. Reduction methods (controlled open-air incineration and air curtain burning) are at the discretion of the COUNTY. Incineration must be approved by the COUNTY prior to commencement of reduction activities.

8.2 All unreduced disaster debris must be staged separately from reduced debris at the DMS(s).

9.0 Haul-Out of Reduced Debris from DMS to Final Disposal Site

9.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, and associated costs necessary to load and transport reduced eligible material (such as ash, compacted C&D, or mulch) from a COUNTY-approved DMS(s) to a COUNTY-approved final disposal site in accordance with all local, state, and federal regulations.

9.2 All unreduced disaster debris must be transported to a final disposal site separately from reduced debris.

9.3 Debris Hauler Contractor shall provide the name and address of each disposal site to be used along with the name and the telephone number of a responsible party for each site, prior to commencing the work.

9.4 Debris Hauler Contractor shall not use any disposal site without the written consent of the COUNTY. All costs and fees associated with the disposal of debris shall be reviewed for reasonableness by the COUNTY prior to issuing any such authorization.

9.5 Debris Hauler Contractor shall initiate and manage the execution of a written three-party agreement between the disposal site owner/operator, Debris Hauler Contractor, and COUNTY for permission to post a COUNTY inspector at the site for verification of each load disposed.

9.6 Debris Hauler Contractor shall provide a sufficient number of debris site towers and/or certified scales meeting COUNTY specifications to provide for the efficient delivery of waste streams without excessive wait times. The COUNTY shall decide what constitutes an excessive wait time. To the extent that the COUNTY determines that additional towers and/or scales are required, additional towers must be operational within forty-eight (48) hours of the COUNTY's request and certified scales must be operational within five (5) business days of the COUNTY's request.

9.7 At the completion of disposal operations, each disposal site will issue a written summary of the quantity, type, and origin of waste delivered.

9.8 Debris Hauler Contractor shall not receive any payment from the COUNTY for haul-out or load tickets related to reduced or unreduced debris transported and disposed of at a final disposal site that was not approved by COUNTY.

10.0 **Removal of Hazardous Leaning Trees and Hanging Limbs**

10.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to remove all eligible hazardous leaning trees six (6) inches or greater in diameter, measured four and a half (4.5) feet from the base of the tree, and eligible hazardous hanging limbs two (2) inches or greater in diameter at the point of the break and in the COUNTY ROW. Further, debris generated from the removal of eligible hazardous leaning trees and eligible hazardous hanging limbs two (2) inches or greater in diameter at the point of the break and in the COUNTY ROW will be placed in the safest possible location on the City ROW and subsequently removed in accordance with Section 3.2 of this RFP. Eligible hazardous leaning trees less than six (6) inches in diameter, measured four and a half (4.5) feet from the base of the tree, will be flush cut, loaded, and removed in accordance with Section 3.2 of this RFP. The COUNTY will not compensate the Debris Hauler Contractor for cutting leaning trees less than six (6) inches in diameter on a unit rate basis. The collection of all eligible hazardous leaning trees and eligible hazardous hanging limbs must be performed on the same day as the cut work. If there is insufficient room for safe placement along the COUNTY ROW, then the Debris Hauler Contractor must load the resulting debris as eligible hazardous leaning trees or eligible hazardous hanging limbs as they are removed.

10.2 Eligible hazardous leaning trees will be identified by the COUNTY or its authorized representative for removal. Removal and transportation of hazardous leaning trees six (6) inches or greater in diameter on the COUNTY ROW or private property will be performed as identified by the COUNTY or authorized representative. All disaster-specific eligibility guidelines regarding size and diameter of hazardous leaning trees will be communicated to the Debris Hauler Contractor in writing by the COUNTY or authorized representative. For hazardous leaning trees to be removed and eligible for reimbursement, the tree must satisfy a minimum of one (1) of the following requirements:

a. The tree has a broken canopy.

b. The tree has a split trunk.

c. The tree has fallen or been uprooted within a public use area.

d. The tree is leaning at an angle greater than thirty (30) degrees.

10.3 Eligible hazardous hanging limbs will be identified by the COUNTY or its authorized representative for removal. Removal and placement of eligible hazardous hanging limbs two (2) inches or greater in diameter at the point of the break and on the COUNTY ROW or private property will be performed as identified by the COUNTY's authorized representative. All disaster-specific eligibility guidelines regarding size and diameter of limbs will be communicated to the Debris Hauler Contractor in writing by the COUNTY's authorized representative. For hazardous hanging limbs to be removed and eligible for payment, the limb must satisfy all of the following requirements:

a. The limb is two (2) inches or greater in diameter at the point of the break.

b. The limb is still hanging in a tree and threatening a public use area.

c. The limb is located on improved public property.

11.0 **Removal of Hazardous Stumps**

11.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary to remove all hazardous uprooted stumps two (2) feet or greater in diameter, measured 2 feet from the base of the tree, in the COUNTY ROW. Any voids not backfilled immediately following hazardous stump removal must have measures taken in order to protect public health and safety. Further, debris generated from the removal of eligible hazardous uprooted stumps in the COUNTY ROW will be placed in the safest possible location on the ROW and subsequently removed in accordance with Section 3.2 of this RFP. Stumps measured two (2) feet from the base of the tree and less than two (2) feet in diameter will be considered normal vegetative debris and will be removed in accordance with Section 3.2 of this RFP. COUNTY will not compensate Debris Hauler Contractor for removing hazardous stumps less than two (2) feet in diameter on a unit rate basis and instead will be considered normal vegetative debris. The diameter of stumps less than two (2) feet will be converted into a cubic yardage volume based on the published FEMA Stump Conversion Table (see Attachment 1, FEMA Stump Conversion Table) and will be removed under the terms and conditions of Section 3.2 of this RFP.

11.2 Eligible hazardous stumps will be identified by the COUNTY for removal. Removal and transportation of hazardous uprooted stumps in the COUNTY ROW and private property will be performed as identified by the COUNTY. All disaster-specific eligibility guidelines regarding size and diameter of hazardous stumps will be communicated to Debris Hauler Contractor in writing by the COUNTY. For hazardous stumps to be removed and eligible for reimbursement, the stump must satisfy the following requirements:

a. Over fifty (50) percent of the tree crown is damaged or broken and heartwood is exposed.

b. Fifty (50) percent or more of the root ball is exposed.

c. The stump is on **COUNTY** ROW and poses an immediate threat to public health, safety, or welfare.

11.3 Stumps that are not attached to the ground will be considered normal vegetative debris and will be subject to removal under the terms and conditions of Section 3.2. Stumps with less than fifty (50) percent of the root ball exposed shall be flush cut to the ground. The stump portion of the tree will not be removed but the residual debris (that is, tree trunk) will be removed under the terms and conditions of Section 3.2. The cubic yard volume of the unattached stump will be based on the diameter conversion using the published FEMA Stump Conversion Table (see Attachment 1, FEMA Stump Conversion Table).

11.4 The COUNTY or its representative will measure and certify all stumps before removal.

11.5 Stumps shall only be collected after the COUNTY and the Debris Hauler Contractor document and perform the following:

a. Location – Determine that the uprooted stump is located on improved public property or a public ROW. Record and document the location using

photography, map depiction, and specific descriptive notations.

b. Size – Measure and record the diameter of the stump to be removed at the appropriate location.

c. Marking – Eligible stumps will be marked and uniquely numbered with green paint. Ineligible stumps will be marked with red paint.

d. Stump Worksheet – Hazardous Stump Worksheet provided by the monitoring firm(s) will be completed in full for each stump to capture the following information: (1) names and signatures of parties present; (2) physical location (street address, road cross streets, etc.); (3) stump number; (4) size of the stump; and (5) date of stump removal.

11.6 The unit stump price shall include (but not be limited to) stump extraction, stump cavity filling with compacted soils and installation of seed and/or sod, stump hauling, and stump reduction.

12.0 **ROW White Goods Debris Removal**

12.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, toll costs and other associated costs necessary for the collection of white goods from the ROW, removal of refrigerants, transportation to a COUNTY-approved DMS, decontamination, and transportation to the COUNTY's approved final disposal site.

12.2 White goods containing refrigerants must first have such refrigerants removed by the Debris Hauler Contractor's qualified technicians prior to mechanical loading. White goods can be collected without first having refrigerants removed if the white goods are manually placed into a hauling vehicle with lifting equipment so that the elements containing refrigerants are not damaged.

12.3 The removal, transportation, and disposal of white goods includes obtaining all necessary local, state, and federal handling permits, and operating in accordance with all local, state, and federal regulatory agencies.

12.4 There are no disposal fees for residential white goods.

13.0 **Used Electronics**

13.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary for the removal, transportation, and proper disposal of eligible used electronics from the ROW to the COUNTY-approved final disposal site. Eligible used electronics includes (but is not limited to) disaster-damaged televisions, computers, computer monitors, and microwaves in areas identified and approved by the COUNTY. Debris Hauler Contractor shall recycle or dispose of all eligible used electronics in accordance with all local, state, and federal regulations.

14.0 **Household Hazardous Waste Removal, Transport, and Disposal**

14.1 Under this contract, work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary for the removal, transportation, and disposal of HHW.

14.2 The removal, transportation, and disposal of HHW includes obtaining all necessary local,

state, and federal handling permits and operating in accordance with all local, state, and federal regulations.

14.3 The collection methods shall include collection vehicles supplied by the Debris Hauler Contractor, which shall be capable of transporting HHW materials from the curb to the approved final disposal sites. All hazardous waste collection personnel shall wear Level D PPE and carry a means of communication (for example, cell phone or radio) for safety and operational purpose. Debris Hauler Contractor personnel shall observe all applicable safety requirements for the handling of HHW in accordance with applicable regulations. All HHW shall be examined prior to collection to ensure it is free of other more serious contaminants, including polychlorinated biphenyls ("PCB"). Such serious and non-qualifying non-HHW waste shall be noted and scheduled for separate recovery by the COUNTY or Debris Hauler Contractor as directed by the COUNTY. Debris identified as HHW shall be collected and placed in poly bags for temporary storage during transport to the approved final disposal site.

14.4 Removal of HHW from DMS to approved final disposal site.

15.0 **Abandoned Vessel and Vehicle Removal**

15.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary for the removal and haul-out of eligible vessels and vehicles in areas identified and approved by the COUNTY. The removed eligible vehicles will be hauled to a COUNTY-approved staging area and subsequently disposed of by the appropriate regulatory agency.

15.2 The removal, transportation, and disposal required for abandoned vessel and vehicle removal includes obtaining all necessary local, state, and federal handling permits and operating in accordance with all local, state, and federal regulations.

16.0 **Animal Carcass Removal and Disposal**

16.1 Work shall consist of all labor, equipment, fuel, traffic control costs, toll costs, and other associated costs necessary for the removal, transportation, and lawful disposal of dead animal carcasses in areas identified and approved by the COUNTY to an approved final disposal site. The carcasses will be hauled to a COUNTY-approved staging area and subsequently disposed of by the appropriate regulatory agency.

16.2 The Debris Hauler Contractor will coordinate activities with the appropriate local animal control agency.

16.3 The removal, transportation, and disposal of animal carcasses includes obtaining all necessary local, state, and federal handling permits and operating in accordance with all local, state, and federal regulations.

17.0 **Other Debris Removal Work**

17.1 Neither the Debris Hauler Contractor nor any Sub-Contractor shall solicit work from private citizens or others to be performed in the designated work areas during the term of this Agreement. COUNTY reserves the right to require Debris Hauler Contractor to dismiss or remove from the project any workers as the COUNTY sees necessary. Any debris removal vehicles dismissed from the project must have their issued placard removed and destroyed.

18.0 **Use of Local Resources**

18.1 Debris Hauler Contractor will be able to use their own Sub-Contractor resources to meet the obligations of the contract. FEMA encourages using local resources. The COUNTY will establish the extent to which Debris Hauler Contractor must use local resources. It is expected that the awarded Debris Hauler Contractor will encourage at least thirty (30) percent of Sub-Contractors are resources located within the disaster area, including but not limited to procuring supplies and equipment, awarding subcontracts, and employing workmen at the COUNTY's discretion. Debris Hauler Contractor will provide a list of Sub-Contractors with proposal submission.

19.0 **Working Hours**

19.1 Working hours of this contract shall only be during daylight hours, Monday through Sunday, or as otherwise directed by the COUNTY. No work outside these hours shall be allowed unless approved in advance by the COUNTY.

19.2 Debris Hauler Contractor shall conduct debris removal operations that generate noise levels above that normally associated with routine traffic flow during daylight hours only. Work may be performed seven (7) days per week. Adjustments to work hours, as local conditions may dictate, shall be coordinated between the COUNTY and the Debris Hauler Contractor. Unless otherwise directed, the Debris Hauler Contractor must be capable of conducting volumetric reduction operations at DMS locations on a twenty-four-(24)-hour, seven-(7)-day-a-week basis.

20.0 **Debris Site Tower Specifications**

20.1 Debris Hauler Contractor shall provide as many towers as designated by the COUNTY at each disposal site for the use of COUNTY representatives during their inspection of dumping operations.

20.2 If ingress and egress of the DMS(s) is of significant distance that the COUNTY or its authorized representative are unable to verify the entering and exiting trucks, Debris Hauler Contractor may be required to provide a second tower.

20.3 The inspection platform of the tower shall be constructed at a minimum height of ten (10) feet from surrounding grade to finish floor level, have a minimum eight (8) feet by eight (8) feet of usable floor area, be covered by a roof with two (2) feet overhangs on all sides, and be provided with appropriate railings and a stairway. The platform shall be enclosed, starting from platform floor level and extending up four (4) feet on all four (4) sides.

20.4 Debris Hauler Contractor shall provide a minimum of one (1) portable toilet at each dump site for the use of COUNTY authorized representatives during their inspection of dumping operations. The toilet shall be provided prior to start of any dumping operations and will be kept in a sanitary condition by the Debris Hauler Contractor throughout dumping operations.

20.5 Care shall be taken to place tower at a sufficient distance away from any reduction/dumping operations. If necessary, dumping operations may be temporarily suspended by the COUNTY due to unsuitable conditions at the tower.

21.0 **Equipment**

21.1 All trucks and other equipment must comply with all applicable local, state, and federal regulations. Any truck used to haul debris must be capable of rapidly unloading without the assistance of other equipment and must be equipped with a tailgate that will effectively contain the debris during transport and permit the truck to be filled to capacity.

21.2 Sideboards or other extensions to the bed are allowable provided they meet all applicable regulations, cover the front and both sides, and are constructed to withstand severe operating conditions. The sideboards are to be constructed of two (2)-inch by six (6)-inch boards or greater and not to extend more than two (2) feet above the metal bedsides. Trucks or equipment certified with sideboards must maintain such sideboards and keep them in good repair. To ensure compliance, equipment will be inspected by the COUNTY or authorized representative prior to its use by Debris Hauler Contractor.

21.3 Trucks or equipment designated for use under this contract shall not be used for any other work during the working hours of this contract. Debris Hauler Contractor shall not solicit work from private citizens or others to be performed in the designated area during the period of this contract. Under no circumstances will Debris Hauler Contractor mix debris hauled for others with debris hauled under this contract.

21.4 Debris shall be reasonably compacted into the hauling vehicle. Any debris extending above the top of the bed shall be secured in place to prevent it from falling off. Measures must be taken to prevent debris from blowing out of the hauling vehicle during transport to an approved DMS or an approved final disposal site.

21.5 Equipment used under this contract shall be rubber tired and sized properly to fit loading conditions. Excessively large equipment (100 cubic yards and up) and non-rubber-tired equipment must be approved for use on the road by the COUNTY.

21.6 Hand-loaded vehicles are prohibited unless pre-authorized in writing by the COUNTY following the event. All hand-loaded vehicles will receive an automatic fifty (50) percent deduction for lack of compaction.

21.7 Debris Hauler Contractor shall supply a list of all equipment owned by the Debris Hauler Contractor with their proposal submittal.

22.0 **Traffic Control**

22.1 Debris Hauler Contractor shall mitigate the effects of their operations on local traffic to the fullest extent practical. The Debris Hauler Contractor is responsible for establishing and maintaining appropriate traffic controls in all work areas, including DMS(s) and debris collection sites.

22.2 Debris Hauler Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices at all Debris Hauler Contractor work areas to ensure the safety of vehicular and pedestrian traffic.

22.3 Debris Hauler Contractor shall provide qualified flag personnel where necessary to direct the traffic and shall take all necessary precautions to protect the designated area and the safety of the public.

22.4 All work shall comply with all applicable local, state, and federal regulations governing personnel, equipment, and workplace safety. Any notification of a deficiency in traffic

control or other safety items shall be immediately corrected by Debris Hauler Contractor. No further work shall take place until the deficiency is corrected. Neither the COUNTY nor the COUNTY's authorized representative shall sign any additional load or unit rate tickets until the safety item is corrected.

22.5 Highways, streets, or parts of the designated area closed to through traffic shall be protected by effective barricades, and obstructions shall be illuminated during the hours from sunset to sunrise. Suitable warning signs shall be provided by the Debris Hauler Contractor to properly control and direct traffic.

22.6 All barricades, warning signs, lights, temporary signals, other protective devices, flag persons, and signaling devices shall meet the minimum requirements established in the Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI, prepared by the National Joint Committee on Uniform Traffic Control Devices and current at the time bids are received. Traffic control will conform to the State's most current roadway and traffic design standards and the Federal Highway Administration's ("FHWA") Manual on Uniform Traffic Control Devices ("MUTCD") for Streets and Highways. The foregoing requirements are to be considered as minimum and the Debris Hauler Contractor's compliance shall in no way relieve the Debris Hauler Contractor of final responsibility for providing adequate traffic control devices for the protection of the public and Debris Hauler Contractor's employees throughout the designated area.

23.0 **Damage to Public or Private Property**

23.1 All items damaged as a result of Debris Hauler Contractor or Sub-Contractor operations (for example, sidewalks, seating, curbs, pipes, drains, water mains, pavement, mailboxes, and turf) shall be repaired or replaced by the Debris Hauler Contractor, at their expense, in a manner prescribed by and at the sole satisfaction of the COUNTY. Debris Hauler Contractor will be responsible for any invoices submitted to the COUNTY (such as by utility companies or landowners) that are determined to be the result of damage done by the Debris Hauler Contractor. The COUNTY reserves the right to pay any such invoices and deduct the cost from the Debris Hauler Contractor's invoice. Repairs or receipt of repairs shall be completed and submitted to the COUNTY prior to submission of the Debris Hauler Contractor's invoice for work accomplished. If the Debris Hauler Contractor fails to repair any damaged property, the COUNTY may have the work performed and charge the Debris Hauler Contractor.

23.2 The Debris Hauler Contractor shall restore all disturbed areas to their original condition, including re-grading, use of rye grass and permanent grass, and any other means necessary.

23.3 Debris Hauler Contractor's failure to restore damage to public or private property to the satisfaction of the COUNTY will result in the COUNTY withholding retainage money in an amount sufficient to make necessary repairs.

24.0 **Existing Utilities**

24.1 Some trees and debris that are to be removed under this Agreement may be blocked or entangled with overhead power, telephone, and television cables. In this case, it shall be Debris Hauler Contractor's responsibility to coordinate directly with the utility owners to arrange for the removal of the debris without damage to the overhead and underground utility lines. The Debris Hauler Contractor shall pay all such costs to the utility company

for any adjustments.

24.2 The Debris Hauler Contractor shall make the necessary repairs or pay all costs incurred to repair damaged utilities, as determined by the affected utility company. Repairs to all municipal and privately-owned water and sewer facilities shall be made by the Debris Hauler Contractor.

25.0 Environmental Protection

25.1 All chemicals of whatever nature used during project construction or furnished for project operations must be state and federally certified. Their use and disposal of all residues shall strictly comply with instructions.

25.2 Debris Hauler Contractor shall, at their own expense, ensure that noise and dust pollution is minimized to comply with all local, state, and federal regulations and the approval of the COUNTY. Debris Hauler Contractor shall comply in a timely manner with all directions of the COUNTY regarding the use of a water truck or other approved dust abatement measures.

25.3 Debris Hauler Contractor shall comply with all laws, rules, regulations, and ordinances regarding environmental protection.

26.0 Documentation and Measurement

26.1 Prior to beginning any work, the COUNTY or its authorized representative shall clearly number each truck or piece of equipment hauling or loading debris with a placard. All vehicles must be certified by the COUNTY or its authorized representative prior to debris collection. If a vehicle is working under multiple contracts or for multiple communities, it must be re-certified by a COUNTY authorized representative each time it returns to work from other contracts or communities.

26.2 Debris Hauler Contractor is responsible for ensuring that all Sub-Contractors maintain valid driver's licenses and equipment legally fit for travel on the road.

26.3 Debris Hauler Contractor shall designate one project manager. The project manager shall provide the COUNTY with a telephone number at which the project manager can be reached throughout the project.

26.4 It is the COUNTY's preference to use an electronic system for load tickets. An Automated Debris Management System ("ADMS") or paper load tickets will be provided by the COUNTY or its authorized representative for recording volumes of debris removal. If an ADMS is used a copy of the electronic ticket will be printed for the vehicle operator at the dump site. If paper tickets are to be used each load ticket shall consist of one (1) original and four (4) carbon-copy duplicates and will be distributed as follows:

a. Load tickets will be issued by a COUNTY -authorized representative at the loading site. COUNTY will keep one (1) copy of the ticket and give four (4) copies to the vehicle operator. Upon arrival at the dump site, the vehicle operator will give the four (4) copies to the COUNTY-authorized representative at the dump site. Trucks with less than full capacities will be adjusted down by visual inspection; the COUNTY-authorized representative present at the dump site will make this determination. The COUNTY-authorized representative will validate, enter the estimated debris quantity,

and sign the load tickets. COUNTY will keep the original copy and the three (3) remaining duplicate copies will be returned to the vehicle operator for the Debris Hauler Contractor's records.

26.5 Debris Hauler Contractor shall give written notice of the location for work scheduled twenty-four (24) hours in advance to the COUNTY.

27.0 **Ownership of Debris**

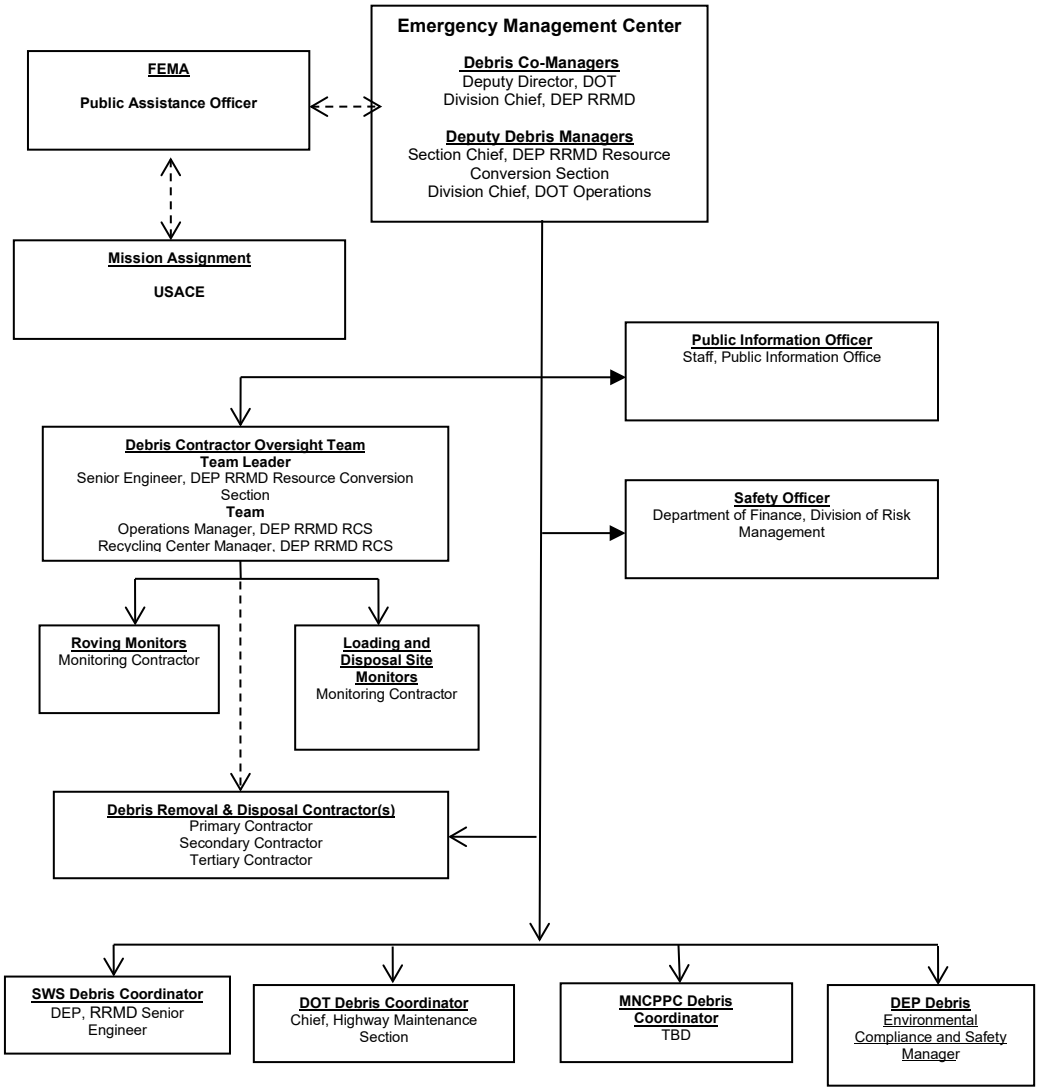
27.1 All debris residing in the COUNTY ROW and COUNTY-provided DMS(s) as a result of the disaster shall be the property of the COUNTY until final disposal at a properly permitted disposal site. Debris Hauler Contractor shall be responsible removing debris up to the point where debris can only be described as light litter and additional collection can be facilitated only by sweeping and raking. In addition to debris stored on the ROW as the result of road clearing, COUNTY will direct residents to place debris in segregated piles along the ROW, separated according to the waste category. There may be a need to perform some curbside separation of the different waste materials. Different waste materials will be collected in separate vehicles and may require disposal at different locations, which will be approved by the COUNTY. Any items requiring disposal at special sites shall be required to be monitored for the collection, complete haul, and delivery at the approved special site with the monitor obtaining an original copy of the disposal ticket showing inbound and outbound collection vehicle weights.

27.2 All bagged and bundled waste and debris smaller than two (2) inches in diameter and shorter than two (2) feet in length are outside the scope of this contract unless specifically directed by the COUNTY. Collection of municipal solid waste ("MSW") is outside the scope of this contract. All debris outside the scope of the contract handled by the Debris Hauler Contractor shall become the property of the Debris Hauler Contractor upon collection.

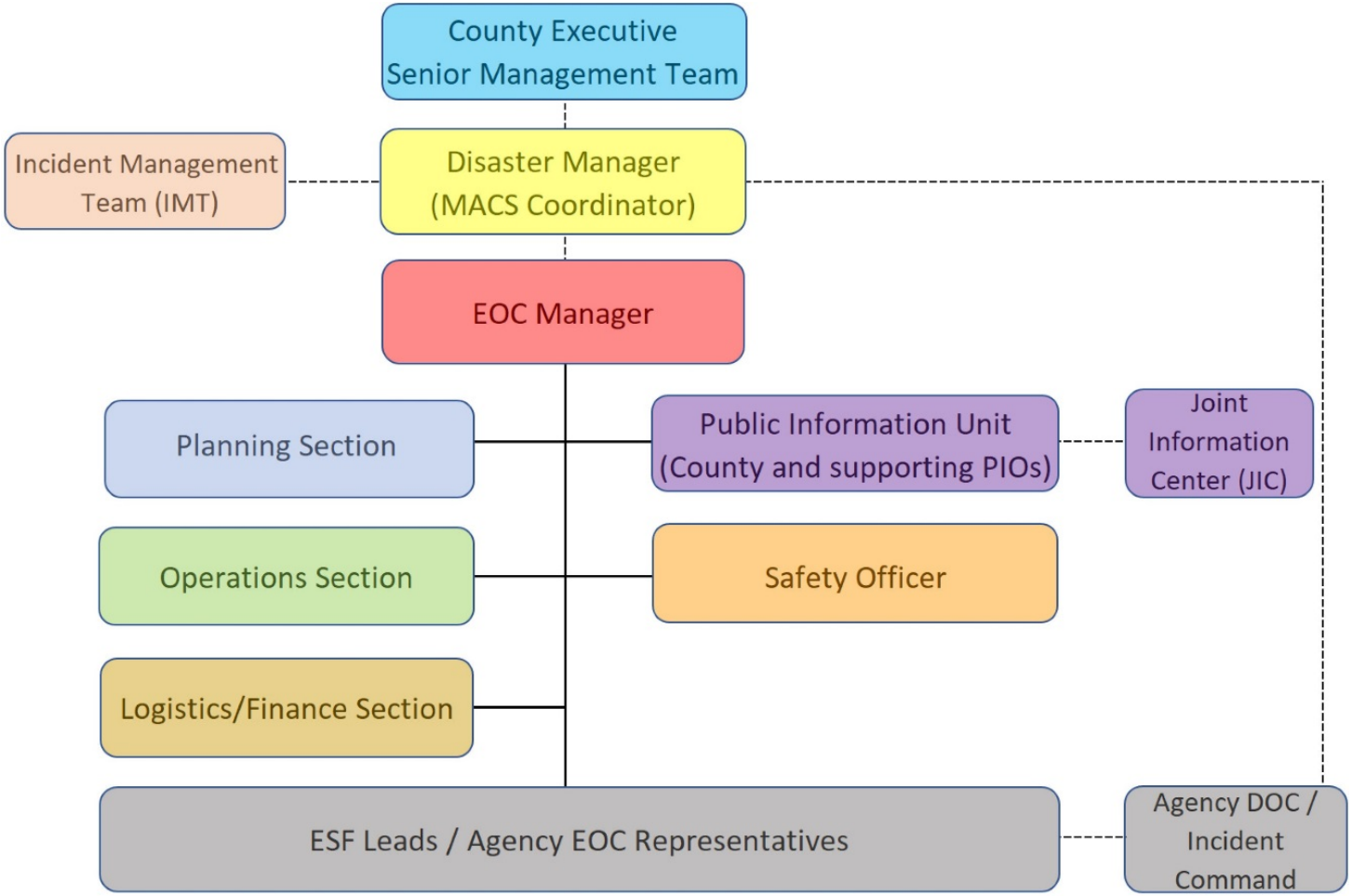
27.3 It is recognized that C&D debris might contain small amounts of asbestos, lead-based paints, treated wood, or similar materials. MDE may issue orders for the classification and disposition of all disaster debris. Based on the mandates of MDE and other applicable state and federal reimbursement agencies, the character and disposal of waste streams will be determined. The Debris Hauler Contractor and COUNTY will establish a final disposal plan based on these mandates.

APPENDIX K: ORGANIZATIONAL CHARTS

Disaster Debris Management Organizational Chart

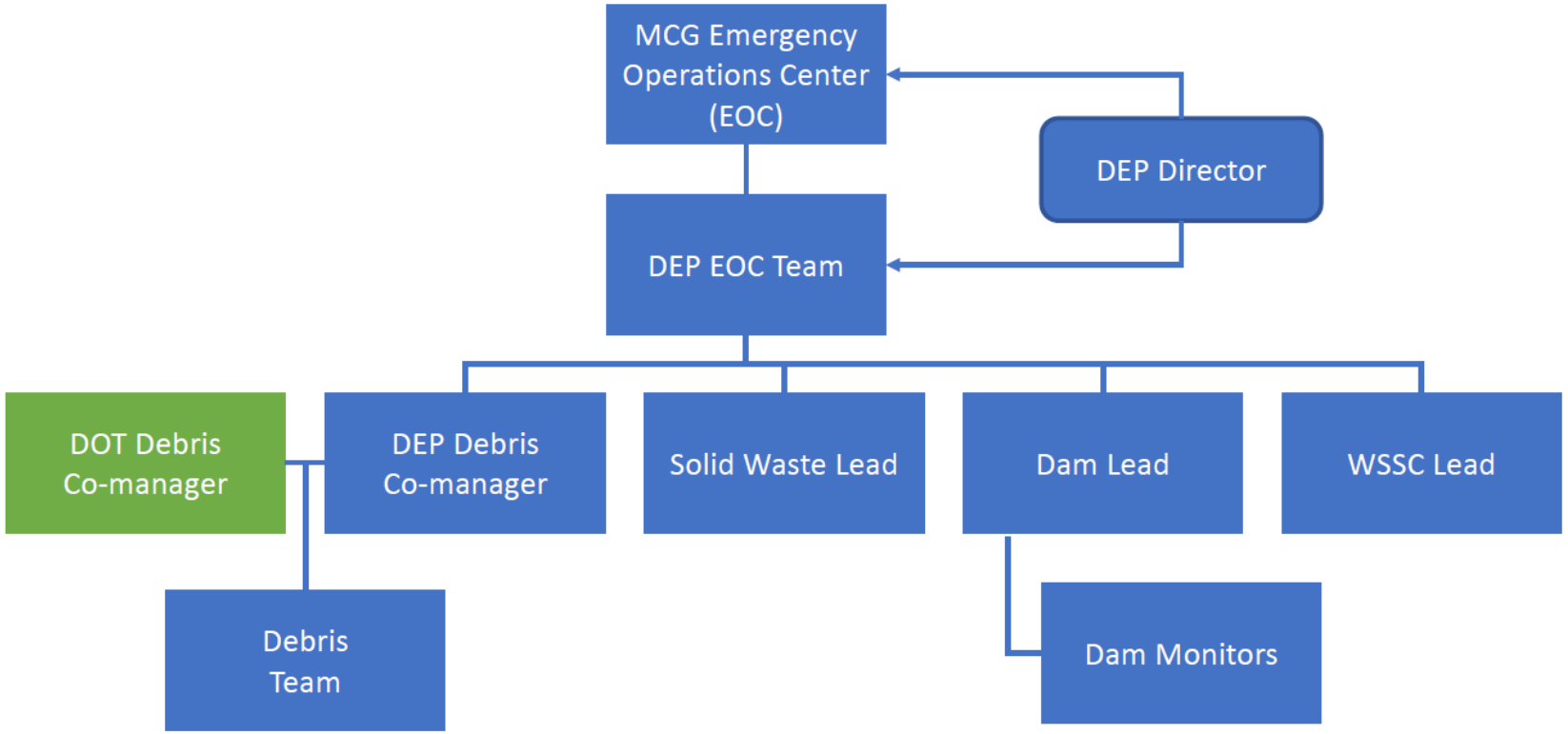


Emergency Operations Center/Emergency Management Group Organization Structure



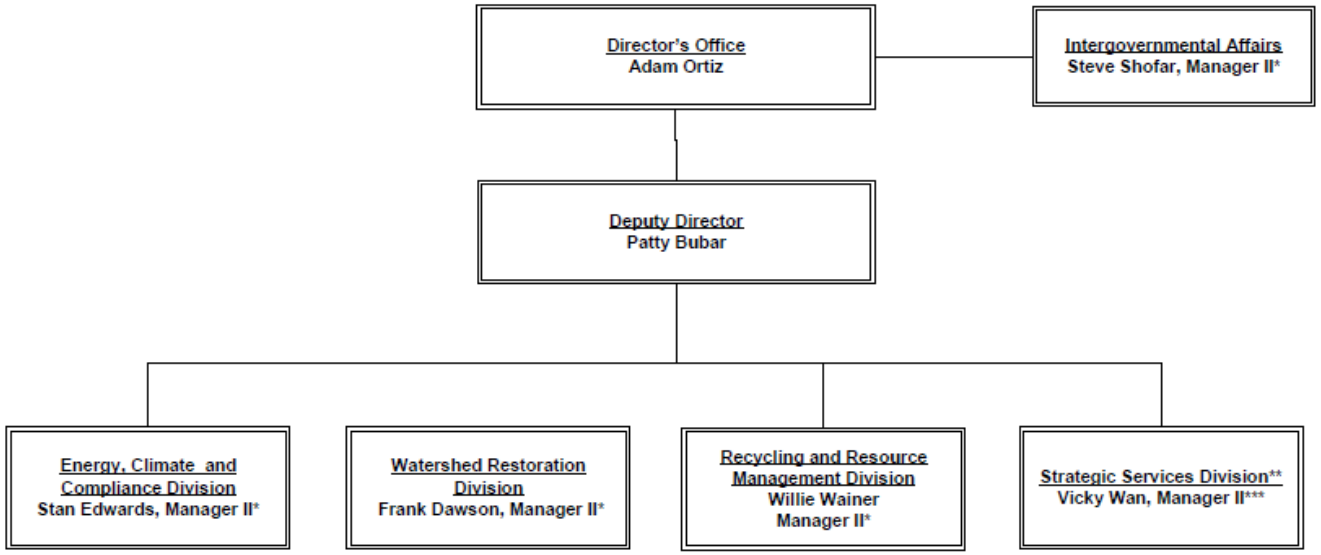
From 2017 Montgomery County Emergency Operations Plan

DEP Emergency Operations Communication/Hierarchy Chart



Updated 9/6/18

DEP Organizational Chart, 2019



* Indicates supervisory/manager position
** Indicates new position
*** Indicates acting
Blue font indicates position approved in FY20 budget

APPENDIX L: TIME TRACKING LOG: FORCE ACCOUNT LABOR

[Sample Tracking Log for Force Account Labor can be found on the next page]

All hours worked during the course of the day, whether project/grant related or not, must be documented on this log.
Leave columns A & B blank for hours unrelated to the hurricane.

Pay Period: Employee #: Dept #

Name: Job Title:

			Regular Hours				Overtime Hours		
Date	A. Equipment Used - CV#, Last 6 of VIN#, Operator/Passenger	B. Explanation - Project (#), Location, Duties, Work Order #	IN	OUT	Total Reg Hours		IN	OUT	Total OT Hours
		TOTAL REGULAR HOURS:					TOTAL OVERTIME HOURS:		

I certify to the accuracy of the hours worked as recorded above.

Submitted By: _____ Signature: _____

I certify that I have used suitable means of verifying work performed by this individual and hours recorded for this work.

Approved By: _____ Signature: _____

*Please attach this log to your timesheet.

APPENDIX M: CRITICAL FACILITIES

-Police Headquarters and District Stations

-Hospitals

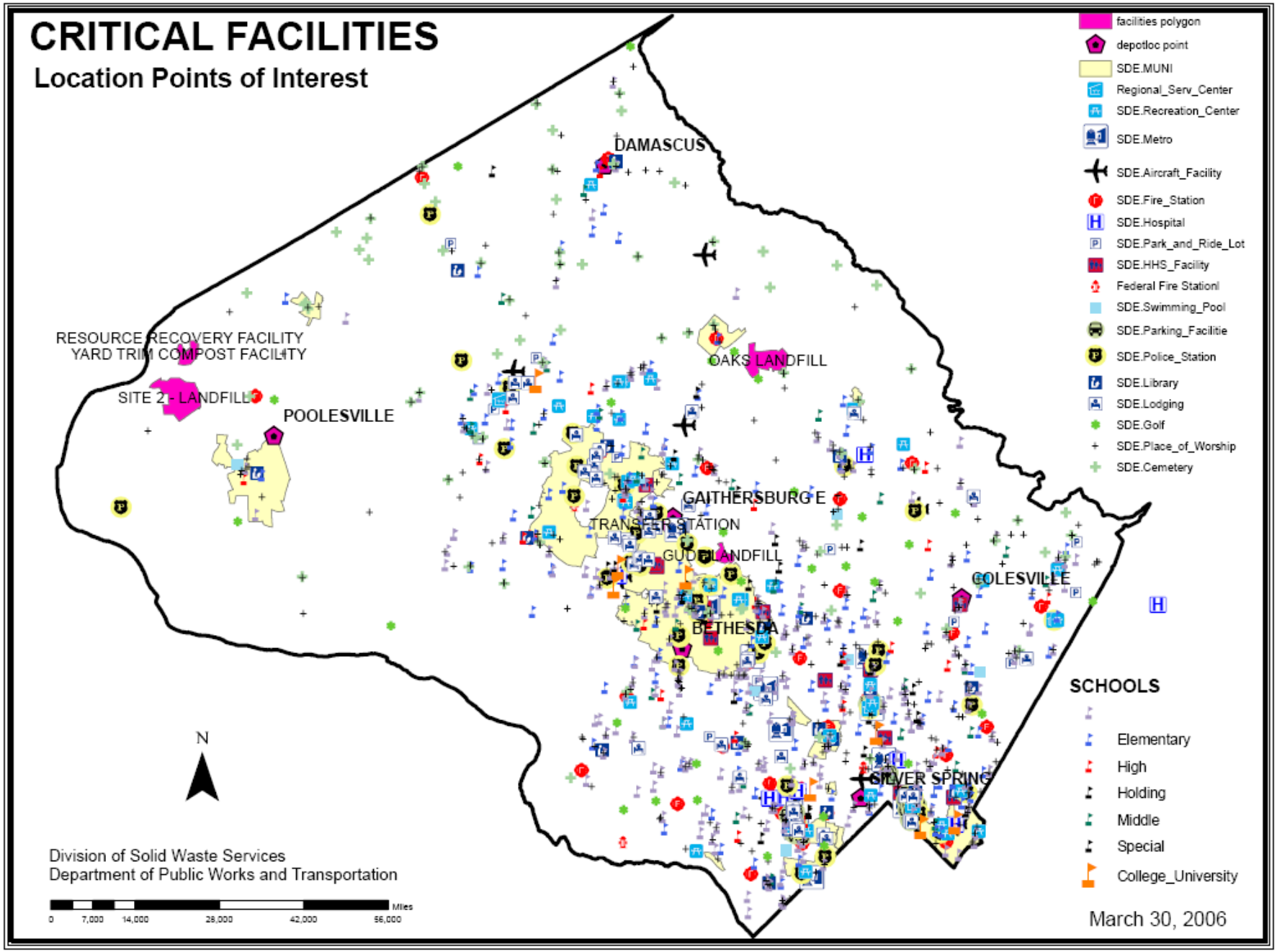
-Fire and Rescue Stations

-Schools

-DOT Depots

-County Buildings and Offices

-Montgomery College Campuses


CRITICAL FACILITIES
Location Points of Interest
DAMASCUS
RESOURCE RECOVERY FACILITY
YARD TRIM COMPOST FACILITY
SITE 2 - LANDFILL
POOLESVILLE
OAKS LANDFILL
GAITHERSBURG E
TRANSFER STATION
GUDE LANDFILL
COLESVILLE
BETHESDA
SILVER SPRING
N
Division of Solid Waste Services
Department of Public Works and Transportation
Miles
0
7,000
14,000
28,000
42,000
56,000
facilities polygon
depotloc point
SDE.MUNI
Regional_Serv_Center
SDE.Recreation_Center
SDE.Metro
SDE.Aircraft_Facility
SDE.Fire_Station
SDE.Hospital
SDE.Park_and_Ride_Lot
SDE.HHS_Facility
Federal Fire Station
SDE.Swimming_Pool
SDE.Parking_Facilitie
SDE.Police_Station
SDE.Library
SDE.Lodging
SDE.Golf
SDE.Place_of_Worship
SDE.Cemetery
SCHOOLS
Elementary
High
Holding
Middle
Special
College_University
March 30, 2006

Critical Facilities—Hospitals

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
H	ADVENTIST REHABILITATION HOSPITAL OF MARYLAND	9909	MEDICAL CENTER DRIVE	ROCKVILLE	DORIS B. REINHART	2408646000
G	FMC OF BETHESDA	6420	ROCKLEDGE DRIVE, SUITE 1100	BETHESDA	YOLETTE COX	3016522554
H	GAMBRO HEALTHCARE - SILVER SPRING	8412	GEORGIA AVENUE	SILVER SPRING	HEIDI HAYES	3017175130
H	HOLY CROSS HOSPITAL	1500	FOREST GLEN ROAD	SILVER SPRING	JEFF JOYNER	3017547259
L	KAISER PERMENENTE	1396	PICCARD DRIVE	ROCKVILLE	JANE HUSTEAD	3018166852
G	KAISER PERMANENTE	6111	EXECUTIVE BOULEVARD	ROCKVILLE	JANE HUSTEAD	3018166852
L	KAISER PERMANENTE GERMANTOWN MEDICAL CENTER	20407	SENECA MEADOWS PARKWAY	GERMANTOWN	JANE HUSTEAD	3018166852
H	KESSLER\ADVENTIST REHABILITATION HOSPITAL	9909	MEDICAL CENTER DRIVE	ROCKVILLE	DORIS B. REINHART	(240) 864-6000
G	MONTGOMERY GENERAL HOSPITAL	18101	PRINCE PHILIP DRIVE	OLNEY	HAROLD PICKETT	(301) 774-8770
SE	NATIONAL NAVAL MEDICAL CENTER	8901	WISCONSIN AVENUE	BETHESDA	LAURA J. BROUSSARD	3012952528
L	RIVER ROAD SURGERY CENTER	5110	RIDGEFIELD ROAD, SUITE 106	BETHESDA	BEVERLY LIGHTY	(301) 652-7130
S	SHADY GROVE ADVENTIST HOSPITAL	9901	MEDICAL CENTER DRIVE	ROCKVILLE	MIKE CLARK	3012796201
G	SUBURBAN HOSPITAL, INC.	8600	OLD GEORGETOWN ROAD	BETHESDA	BRIAN GRAGNOLHTI	(301) 896-2574

H	SURGERY CENTER OF MARYLAND LLC	3801	INTERNATIONAL DRIVE #300	SILVER SPRING	SARAH L. CUNEO	(301) 598-5100
H	UNIVERSITY OPHTHALMIC CONSULTANTS OF WASHINGTON, PC/VISION CENTER	2	WISCONSIN CIRCLE	CHEVY CHASE	THOMAS E. CLINCH	(301) 215-7100
S	WASHINGTON ADVENTIST HOSPITAL	7600	CARROLL AVENUE	TAKOMA PARK	JERE STOCKS	(301) 891-5651

Critical Facilities—Fire Stations

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
HE	BETHESDA FIRE DEPARTMENT - STATION 6	6600	WISCONSIN AVENUE	BETHESDA	DENNIS D. URBAN	(301) 652-5602
HE	BETHESDA FIRE DEPARTMENT - STATION 26	6700	DEMOCRACY BOULEVARD	BETHESDA	DENNIS D. URBAN	(301) 652-5602
HE	BETHESDA FIRE DEPARTMENT - STATION 20	9041	OLD GEORGETOWN ROAD	BETHESDA	DENNIS D. URBAN	(301) 652-5602
HE	BLACK HILL REGIONAL PARK	20941	LAKE RIDGE DRIVE	BOYDS	TRUDYE MORGAN JOHNSON	(301) 454-1740
HE	BURTONSVILLE VOL. FIRE DEPT. - STATION 15	13900	OLD COLUMBIA PIKE	SILVER SPRING	CRAIG S. BAKER	(301) 384-4320
HE	CABIN JOHN PARK VOL. FIRE DEPT. - STATION 10	8001	RIVER ROAD	WEST BETHESDA	MICHAEL D. HARTING	3017625734
HE	CABIN JOHN PARK VOL. FIRE DEPT. - STATION 30	9404	FALLS ROAD	POTOMAC	MICHAEL D. HARTING	(301) 365-2255
HE	CHEVY CHASE FIRE DEPARTMENT STATION 7	8001	CONNECTICUT AVENUE	CHEVY CHASE	GREGORY L. SOCKS	(301) 652-0707

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	DAMASCUS VOL. FIRE DEPT.- ACTIVITIES BLDG	10211	LEWIS DRIVE	DAMASCUS	THOMAS GARTNER, SR.	(301) 253-3988
HE	DAMASCUS VOL. FIRE DEPARTMENT - STATION 13	26334	RIDGE ROAD	DAMASCUS	MIKE BURCH	(301) 253-3913
SE	FEDERAL EMERGENCY MANAGEMENT AGENCY	5321	RIGGS ROAD	LAYTONSVILLE	MICHAEL BUCKLEY	3019265375
SE	GAITHERSBURG VOL. FIRE DEPT. - STATION 8	801	RUSSELL AVENUE	GAITHERSBURG	FRANK JACOB	(301) 948-0660
HE	GAITHERSBURG VOL. FIRE DEPT. - STATION 28	7272	MUNCASTER MILL ROAD	DERWOOD	FRANK JACOB	(301) 948-0660
HE	GERMANTOWN VOL. FIRE DEPT. - STATION 29	20001	CRYSTAL ROCK DRIVE	GERMANTOWN	JOSEPH S. CHORNOCK	(301) 972-3155
HE	GLEN ECHO FIRE DEPARTMENT - STATION 11	5920	MASSACHUSETTS AVENUE	BETHESDA	JEFF HEARLE	(301) 229-3200
HE	HILLANDALE VOL. FIRE DEPARTMENT - STATION 12	10617	NEW HAMPSHIRE AVENUE	SILVER SPRING	RUSSELL S. HARTUNG	(301) 434-2400
HE	HILLANDALE VOL. FIRE DEPARTMENT - STATION 24	13216	NEW HAMPSHIRE AVENUE	SILVER SPRING	RUSSELL S. HARTUNG	(301) 434-2400
HE	HYATTSTOWN VOL. FIRE DEPARTMENT - STATION 9	25801	FREDERICK ROAD	CLARKSBURG	DOUGLAS W. EDWARDS	(301) 972-3398
GE	KENSINGTON VOL. FIRE DEPARTMENT - STATION 5	10620	CONNECTICUT AVENUE	KENSINGTON	ANDREW B. WHITE	(301) 929-8000
HE	KENSINGTON VOL. FIRE DEPARTMENT - STATION 18	12251	GEORGIA AVENUE	WHEATON	ANDREW B. WHITE	(301) 929-8000
GE	KENSINGTON VOL. FIRE DEPARTMENT - STATION 21	12500	VEIRS MILL ROAD	ROCKVILLE	ANDREW B. WHITE	(301) 929-8000

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
SE	KENSINGTON VOL. FIRE DEPARTMENT - STATION 25	14401	CONNECTICUT AVENUE	SILVER SPRING	ANDREW B. WHITE	3019298025
SE	LAYTONSVILLE VOL. FIRE DEPT. - STATION 17	21400	LAYTONSVILLE ROAD	LAYTONSVILLE	CLARK P. BEALL	2408765983
HE	PUBLIC SAFETY TRAINING ACADEMY - STATION 27	9710	GREAT SENECA HIGHWAY	ROCKVILLE	ROBERT CLEMENS	3012791314
CL	PUBLIC SERVICE TRAINING ACADEMY - STATION 27	10025	DARNESTOWN ROAD	ROCKVILLE	ROBERT CLEMENS	(301) 279-1314
SE	ROCKVILLE VOL. FIRE DEPARTMENT - STATION 23	121	ROLLINS AVENUE	ROCKVILLE	ERIC BERNARD	(301) 424-2311
SE	ROCKVILLE VOL. FIRE DEPARTMENT - STATION 3	380	HUNGERFORD DRIVE	ROCKVILLE	ERIC BERNARD	(301) 424-0310
SE	ROCKVILLE VOL FIRE DEPARTMENT - STATION 33	11430	FALLS ROAD	POTOMAC	MIKE OGREN	(301) 299-7833
SE	ROCKVILLE VOL. FIRE DEPARTMENT - STATION 31	12100	DARNESTOWN ROAD	GAITHERSBURG	ERIC BERNARD	(301) 424-2311
CL	SANDY SPRING VOL. FIRE DEPT. - STATION 4	816	OLNEY SANDY SPRING ROAD	SANDY SPRING	THOMAS C. RHODES, SR.	(301) 774 7400
SE	SANDY SPRING VOL. FIRE DEPT. - STATION 40	16911	GEORGIA AVENUE	OLNEY	MICHAEL J. WEINER	(301) 774-7400
HE	SANDY SPRING VOL. FIRE DEPT. - STATION 4	17921	BROOKE ROAD	SANDY SPRING	MICHAEL J. WEINER	(301) 774-7400
SE	SILVER SPRING VOL. FIRE DEPT. - STATION 16	111	UNIVERSITY BOULEVARD EAST	SILVER SPRING	ROGER A. MCGARY	(301) 587-3400
GE	SILVER SPRING VOL. FIRE DEPT. - STATION 19	1945	SEMINARY ROAD	SILVER SPRING	ROGER A.MCGARY	(301) 587-3400

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
GE	SILVER SPRING VOL. FIRE DEPT. - STATION 1	8131	GEORGIA AVENUE	SILVER SPRING	ROGER A. MCGARY	(301) 587-3400
HE	TAKOMA PARK VOL. FIRE DEPT. - STATION 2	7201	CARROLL AVENUE	TAKOMA PARK	ELMER E. HAMM	(301) 270-8209
HE	UPPER MONTGOMERY COUNTY VFD - STATION 14	19801	BEALLSVILLE ROAD	BEALLSVILLE	EARL L. MOORE	(301) 972-8888
SE	WILLIAM F. BOLGER CENTER FOR LEADERSHIP DEVELOPMENT, U.S. POSTAL SVC.	9600	NEWBRIDGE DRIVE	POTOMAC	SHERYL D. TURNER	(301) 983-7003

Critical Facilities—Schools

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
L	ACORN HILL WALDORF KINDERGARTEN & NURSERY	9504	BRUNETT AVENUE	SILVER SPRING	JANET MARIE JOHNSON	(301) 565-2282
GE	ALBERT EINSTEIN HIGH SCHOOL #789	11135	NEWPORT MILL ROAD	KENSINGTON	PAMELA K. MONTGOMERY	(301) 279-3425
GE	A. MARIO LOIEDERMAN MIDDLE SCHOOL #787	12701	GOODHILL ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ARGYLE MIDDLE SCHOOL	2400	BEL PRE ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ASHBURTON ELMENTARY SCHOOL #425	6315	LONE OAK DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BANNOCKBURN ELEMENTARY SCHOOL	6520	DALROY LANE	BETHESDA	PAMELA K. MONTGOMERY	3012793425
G	THE BARNESVILLE SCHOOL	21830	PEACHTREE ROAD	BARNESVILLE	JARALYN HOUGH	3019720341

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	BEALL ELEMENTARY SCHOOL #207	451	BEALL AVENUE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BELLS MILL ELEMENTARY SCHOOL #607	8225	BELLS MILL ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BEL PRE ELEMENTARY SCHOOL #780	13801	RIPPLING BROOK DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	BELMONT ELEMENTARY SCHOOL #513	19528	OLNEY MILL ROAD	OLNEY	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BENJAMIN BANNEKER MIDDLE SCHOOL #333	14800	PERRYWOOD DRIVE	BURTONSVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	BETHESDA-CHEVY CHASE HIGH SCHOOL	4301	EAST WEST HIGHWAY	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BETHESDA ELEMENTARY SCHOOL #401	5011	MOORLAND LANE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BEVERLY FARMS ELEMENTARY SCHOOL #226	8501	POST OAK ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
GE	BRADLEY HILLS ELEMENTARY SCHOOL #410	8701	HARTSDALE AVENUE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BRIGGS CHANEY MIDDLE SCHOOL #335	1901	RAINBOW DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BROAD ACRES ELEMENTARY SCHOOL #304	710	BEACON ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	BROWN STATION ELEMENTARY SCHOOL #559	851	QUINCE ORCHARD BOULEVARD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BROOKE GROVE ELEMENTARY SCHOOL #518	2700	SPARTAN ROAD	OLNEY	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	BROOKHAVEN ELEMENTARY SCHOOL #807	4610	RENN STREET	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
H	BULLIS SCHOOL	10601	FALLS ROAD	POTOMAC	TODD S. MCCREIGHT	3019835711
LE	BURNING TREE ELEMENTARY SCHOOL #419	7900	BEECH TREE ROAD	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BURNT MILLS ELEMENTARY SCHOOL #309	11211	CHILDS STREET	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	BURTONSVILLE ELEMENTARY SCHOOL #302	15516	OLD COLUMBIA PIKE	BURTONSVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CABIN JOHN MIDDLE SCHOOL #606	10701	GAINSBOROUGH ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CANNON ROAD ELEMENTARY SCHOOL #310	901	CANNON ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CANDLEWOOD ELEMENTARY SCHOOL #508	7210	OSPREY DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CAPT. JAMES E. DALY ELEMENTARY SCHOOL	20301	BRANDERMILL DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CARL SANDBURG CENTER #215	451	MEADOWHALL DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CARVER EDUCATIONAL SERVICES CENTER	850	HUNGERFORD DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CARDEROCK SPRINGS ELEMENTARY SCHOOL #604	7401	PERSIMMON TREE ROAD	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CASHELL ELEMENTARY SCHOOL #511	17101	CASHELL ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CEDAR GROVE ELEMENTARY SCHOOL #703	24001	RIDGE ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	CHEVY CHASE ELEMENTARY SCHOOL #403	4015	ROSEMARY STREET	CHEVY CHASE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CLARKSBURG ELEMENTARY SCHOOL	13530	REDGRAVE PLACE	CLARKSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CLEARSPRING ELEMENTARY SCHOOL #706	9930	MOYER ROAD	DAMASCUS	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CLOVERLY ELEMENTARY SCHOOL #308	800	BRIGGS CHANEY ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CLOPPER MILL ELEMENTARY SCHOOL #100	18501	CINNAMON DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	COLLEGE GARDENS ELEMENTARY SCHOOL #229	1700	YALE PLACE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
HE	COL. ZADOK MAGRUDER HIGH SCHOOL #510	5939	MUNCASTER MILL ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	COLD SPRING ELEMENTARY SCHOOL #238	9201	FALLS CHAPEL WAY	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
LE	COL. E. BROOKE LEE MIDDLE SCHOOL #818	11800	MONTICELLO AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CONNECTICUT PARK CENTER	12518	GREENLY DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	CRESTHAVEN ELEMENTARY SCHOOL	1234	CRESTHAVEN DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	DAMASCUS ELEMENTARY SCHOOL	10201	BETHESDA CHURCH ROAD	DAMASCUS	PAMELA K. MONTGOMERY	(301) 279-3425
HE	DAMASCUS HIGH SCHOOL #701	25921	RIDGE ROAD	DAMASCUS	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	DARNESTOWN ELEMENTARY SCHOOL #351	15030	TURKEY FOOT ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	DEPARTMENT OF MATERIALS MANAGEMENT	580	STONESTREET AVENUE NORTH	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3842
LE	DIAMOND ELEMENTARY SCHOOL	4	MARQUIS DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	DR. CHARLES R. DREW ELEMENTARY SCHOOL	1200	SWINGINGDALE DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	DR. SALLY K. RIDE ELEMENTARY SCHOOL	21301	SENECA CROSSING DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	DUFIEF ELEMENTARY SCHOOL #241	15001	DUFIEF DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
HE	EARLE B. WOOD MIDDLE SCHOOL #820	14615	BAUER DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	EASTERN MIDDLE SCHOOL #775	300	UNIVERSITY BOULEVARD EAST	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	EAST SILVER SPRING ELEMENTARY SCHOOL#756	631	SILVER SPRING AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	EDISON CAREER CENTER #748	12501	DALEWOOD DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	EDWARD U. TAYLOR LEARNING CENTER	19501	WHITE GROUNDS ROAD	BOYDS	PAMELA K. MONTGOMERY	(301) 279-3425
LE	EMORY GROVE CENTER	18100	WASHINGTON GROVE LANE	GAITHERSBURG	MANIYA JULES DESROCHES	3018407179
LE	FAIRLAND ELEMENTARY SCHOOL #303	14315	FAIRDALE ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	FALLSMEAD ELEMENTARY SCHOOL	1800	GREENPLACE TERRACE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FARMLAND ELEMENTARY SCHOOL #219	7000	OLD GATE ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FIELDS ROAD ELEMENTARY SCHOOL #566	1	SCHOOL DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FLOWER VALLEY ELEMENTARY SCHOOL #506	4615	SUNFLOWER DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FLOWER HILL ELEMENTARY SCHOOL #549	18425	FLOWER HILL WAY	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
HE	FOREST OAK MIDDLE SCHOOL #248	651	SAYBROOKE OAKS BOULEVARD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FOREST OAK MIDDLE SCHOOL	8100	MIDCOUNTY HIGHWAY	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3842
LE	FOREST KNOLLS ELEMENTARY SCHOOL	10830	EASTWOOD AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	FOX CHAPEL ELEMENTARY SCHOOL #106	19315	ARCHDALE ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
GE	FRANCIS SCOTT KEY MIDDLE SCHOOL #311	910	SCHLINDER DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	GAITHERSBURG MIDDLE SCHOOL	2	TEACHER'S WAY	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GAITHERSBURG ELEMENTARY SCHOOL #553	35	SUMMIT AVENUE NORTH	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	GAITHERSBURG HIGH SCHOOL #551	314	FREDERICK AVENUE SOUTH	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	GALWAY ELEMENTARY SCHOOL #313	12612	GALWAY DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GARRETT PARK ELEMENTARY SCHOOL #204	4810	OXFORD STREET	GARRETT PARK	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GEORGIAN FOREST ELEMENTARY SCHOOL	3100	REGINA DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
S	GEORGETOWN PREPARATORY SCHOOL	10900	ROCKVILLE PIKE	N. BETHESDA	J. MARTIN FRANKIEWICZ	(301) 493-5000
LE	GERMANTOWN ELEMENTARY SCHOOL	19110	LIBERTY MILL ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
GE	GLEN HAVEN ELEMENTARY SCHOOL #767	10900	INWOOD AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GLENALLAN ELEMENTARY SCHOOL #817	12520	HEURICH ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GOSHEN ELEMENTARY SCHOOL #546	8701	WARFIELD ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	GREENWOOD ELEMENTARY SCHOOL #512	3336	GOLD MINE ROAD	BROOKEVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	GREENCASTLE ELEMENTARY SCHOOL #334	13611	ROBEY ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	HARMONY HILLS ELEMENTARY SCHOOL #797	13407	LYDIA STREET	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	HERBERT HOOVER MIDDLE SCHOOL #228	8810	POST OAK ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
GE	HIGHLAND ELEMENTARY SCHOOL #774	3100	MEDWAY STREET	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	HIGHLAND VIEW ELEMENTARY SCHOOL #748	9010	PROVIDENCE AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	JACKSON ROAD ELEMENTARY SCHOOL #305	900	JACKSON ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	JAMES HUBERT BLAKE HIGH SCHOOL	300	NORWOOD ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	JOHN F. KENNEDY HIGH SCHOOL #815	1901	RANDOLPH ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	JOHN POOLE MIDDLE SCHOOL	17014	TOM FOX AVENUE	POOLESVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	JOHN T. BAKER MIDDLE SCHOOL #705	25400	OAK DRIVE	DAMASCUS	PAMELA K. MONTGOMERY	(301) 279-3425
LE	JONES LANE ELEMENTARY SCHOOL #360	15110	JONES LANE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	JOURNEY #748	18100	WASHINGTON GROVE LANE	POOLESVILLE	PAMELA K. MONTGOMERY	(301) 279-3842
LE	JUDITH A. RESNIK ELEMENTARY SCHOOL #514	7301	HADLEY FARMS DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	JULIUS WEST MIDDLE SCHOOL	651	GREAT FALLS ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	KARMA ACADEMY #748	175	WATTS BRANCH PARKWAY	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3842
LE	KEMP MILL ELEMENTARY SCHOOL #805	411	SISSON STREET	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	KENSINGTON PARKWOOD ELEMENTARY SCHOOL	4710	SAUL ROAD	KENSINGTON	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	KINGSVIEW MIDDLE SCHOOL	18909	KINGSVIEW ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	KINGSLEY WILDERNESS #748	22870	WHELAN LANE	CLARKSBURG	PAMELA K. MONTGOMERY	(301) 279-3842
GE	LAKELANDS PARK MIDDLE SCHOOL #522	1200	MAIN STREET	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	LAKEWOOD ELEMENTARY SCHOOL #209	2534	LINDLEY TERRACE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LAKE SENECA ELEMENTARY SCHOOL #108	13600	WANEGARDEN DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LATHROP E. SMITH ENVIRONMENTAL ED. CTR.	5110	MEADOWSIDE LANE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LAYTONSVILLE ELEMENTARY SCHOOL #051	21401	LAYTONSVILLE ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LOIS P. ROCKWELL ELEMENTARY SCHOOL #156	24555	CUTSAIL DRIVE	DAMASCUS	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LONGVIEW SCHOOL	13900	BROMFIELD ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LUCY V. BARNSLEY ELEMENTARY SCHOOL #505	14516	NADINE DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	LUXMANOR ELEMENTARY SCHOOL #220	6201	TILDEN LANE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MARYVALE ELEMENTARY SCHOOL #210	1000	FIRST STREET	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	MARTIN LUTHER KING, JR. MIDDLE SCHOOL	13737	WISTERIA DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	MCKENNEY HILLS CENTER #770	2600	HAYDEN DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MEADOW HALL ELEMENTARY SCHOOL #212	951	TWINBROOK PARKWAY	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MILL CREEK TOWNE ELEMENTARY SCHOOL #556	17700	PARK MILL DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	MONTGOMERY BLAIR HIGH SCHOOL #757	51	UNIVERSITY BOULEVARD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MONTGOMERY KNOLLS ELEMENTARY SCHOOL	807	DALEVIEW DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MONOCACY ELEMENTARY SCHOOL #652	18801	BARNESVILLE ROAD	DICKERSON	PAMELA K. MONTGOMERY	(301) 279-3425
LE	MONTGOMERY VILLAGE MIDDLE SCHOOL #557	19300	WATKINS MILL ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	NEELSVILLE MIDDLE SCHOOL	11700	NEELSVILLE CHURCH ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	NEW HAMPSHIRE ESTATES ELEMENTARY SCHOOL	8720	CARROLL AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	NEWPORT MILL MIDDLE SCHOOL	11311	NEWPORT MILL ROAD	KENSINGTON	PAMELA K. MONTGOMERY	(301) 279-3425
GE	NORTHWOOD HIGH SCHOOL #796	919	UNIVERSITY BOULEVARD WEST	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	NORTH CHEVY CHASE ELEMENTARY SCHOOL #415	3700	JONES BRIDGE ROAD	CHEVY CHASE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	NORTH BETHESDA MIDDLE SCHOOL	8935	BRADMOOR DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	NORTHWEST HIGH SCHOOL	13501	RICHTER FARM ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	OAKVIEW ELEMENTARY SCHOOL #766	400	WAYNE AVENUE EAST	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	OAKLAND TERRACE ELEMENTARY SCHOOL #769	2720	PLYERS MILL ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	OLNEY ELEMENTARY SCHOOL #502	3401	QUEEN MARY DRIVE	OLNEY	PAMELA K. MONTGOMERY	(301) 279-3425
HE	PAINT BRANCH HIGH SCHOOL #315	14121	OLD COLUMBIA PIKE	BURTONSVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	PARKLAND MIDDLE SCHOOL #812	4610	FRANKFORT DRIVE WEST	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	PHOENIX 1 #770	11721	KEMP MILL ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3842
LE	PHOENIX 2 #770	18100	WASHINGTON GROVE LANE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3842
LE	PINE CREST ELEMENTARY SCHOOL #761	201	WOODMOOR DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	POOLESVILLE HIGH SCHOOL	17501	WILLARD ROAD	POOLESVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	POOLESVILLE ELEMENTARY SCHOOL #153	19565	FISHER AVENUE	POOLESVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	POTOMAC ELEMENTARY SCHOOL	10311	RIVER ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
GE	QUINCE ORCHARD HIGH SCHOOL #125	15800	QUINCE ORCHARD ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	RACHEL CARSON ELEMENTARY SCHOOL #159	100	TSCHIFFELY SQUARE ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	REDLAND MIDDLE SCHOOL #562	6505	MUNCASTER MILL ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	RICHARD MONTGOMERY HIGH SCHOOL #201	250	RICHARD MONTGOMERY DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	RIDGEVIEW MIDDLE SCHOOL #105	16600	RAVEN ROCK DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	RITCHIE PARK ELEMENTARY SCHOOL #227	1514	DUNSTER ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROBERT FROST MIDDLE SCHOOL #237	9201	SCOTT DRIVE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	ROBERTO CLEMENTE MIDDLE SCHOOL	18808	WARING STATION ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROCK TERRACE SCHOOL #916	390	MARTINS LANE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
HE	ROCKVILLE HIGH SCHOOL #230	2100	BALTIMORE ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	ROCK VIEW ELEMENTARY SCHOOL #795	3901	DENFELD AVENUE	KENSINGTON	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROCKING HORSE ROAD CENTER	4910	MACON ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3842
LE	ROCK CREEK VALLEY ELEMENTARY SCHOOL #819	5121	RUSSETT ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROCK CREEK FOREST ELEMENTARY SCHOOL #773	8330	GRUBB ROAD	CHEVY CHASE	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	ROCKY HILL MIDDLE SCHOOL	22401	BRICK HAVEN WAY	CLARKSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROCKY HILL MIDDLE SCHOOL	22500	WIMS ROAD	CLARKSBURG	PAMELA K. MONTGOMERY	(301) 279-3842
LE	ROLLING TERRACE ELEMENTARY SCHOOL #771	705	BAYFIELD STREET	TAKOMA PARK	PAMELA K. MONTGOMERY	(301) 279-3425
GE	RONALD McNAIR ELEMENTARY SCHOOL #158	13881	HOPKINS ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROSEMARY HILLS ELEMENTARY SCHOOL #794	2111	PORTER ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROSEMONT ELEMENTARY SCHOOL #794	16400	ALDEN AVENUE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	ROSA M. PARKS MIDDLE SCHOOL #155	19200	OLNEY MILL ROAD	OLNEY	PAMELA K. MONTGOMERY	(301) 279-3425
H	SANDY SPRING FRIENDS SCHOOL	16923	NORWOOD ROAD	SANDY SPRING	ROBERT TRUE	3017747455
LE	S. CHRISTA McAULLIFE ELEM. SCHOOL #110	12500	WISTERIA DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SENECA VALLEY HIGH SCHOOL #104	12700	MIDDLEBROOK ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SEQUOYAH ELEMENTARY SCHOOL #565	17301	BOWIE MILL ROAD	DERWOOD	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SEVEN LOCKS ELEMENTARY SCHOOL #603	9500	SEVEN LOCKS ROAD	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SHADY GROVE MIDDLE SCHOOL	8100	MIDCOUNTY HIGHWAY	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
GE	SHERWOOD HIGH SCHOOL #503	300	OLNEY SANDY SPRING ROAD	SANDY SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	SHERWOOD ELEMENTARY SCHOOL # 501	1401	OLNEY SANDY SPRING ROAD	SANDY SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SILVER SPRING INTERNATIONAL SCHOOL	313	WAYNE AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SLIGO CREEK ELEMENTARY SCHOOL	500	SCHUYLER ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SLIGO MIDDLE SCHOOL #778	1401	DENNIS AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SOMERSET ELEMENTARY SCHOOL #405	5811	WARWICK PLACE	CHEVY CHASE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SOUTH LAKE ELEMENTARY SCHOOL #564	18201	CONTOUR ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SPARK MATSUNAGA ELEMENTARY SCHOOL	13902	BROMFIELD ROAD	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
GE	SPRINGBROOK HIGH SCHOOL #798	201	VALLEYBROOK DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
H	ST. ANDREWS EPISCOPAL SCHOOL	8804	POSTOAK ROAD	POTOMAC	ELLIOTT F. BRUMBAUGH	3019835200
LE	STEDWICK ELEMENTARY SCHOOL #568	10631	STEDWICK ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	STONE MILL ELEMENTARY SCHOOL #653	14323	STONEBRIDGE VIEW DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	STONEGATE ELEMENTARY SCHOOL #316	14811	NOTLEY ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	STRATHMORE ELEMENTARY SCHOOL #822	3200	BEAVERWOOD LANE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	STRAWBERRY KNOLL ELEMENTARY SCHOOL #569	18820	STRAWBERRY KNOLL ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	SUMMIT HALL ELEMENTARY SCHOOL #563	101	DEER PARK ROAD WEST	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	TAHOMA #799	7921	LYNBROOK DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3842
LE	TAKOMA PARK ELEMENTARY SCHOOL #754	7511	HOLLY AVENUE	TAKOMA PARK	PAMELA K. MONTGOMERY	(301) 279-3425
LE	TAKOMA PARK MIDDLE SCHOOL #755	7611	PINEY BRANCH ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	THOMAS S. WOOTON HIGH SCHOOL #234	2100	WOOTON PARKWAY	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	THOMAS W. PYLE MIDDLE SCHOOL #428	6311	WILSON LANE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
GE	THURGOOD MARSHALL ELEMENTARY SCHOOL #244	12260	McDONALD CHAPEL DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	TILDEN MIDDLE SCHOOL #232	11211	OLD GEORGETOWN ROAD	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	TRAVILAH ELEMEMTARY SCHOOL #216	13801	DUFIEF MILL ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	TWINBROOK ELEMENTARY SCHOOL #206	5911	RIDGEWAY AVENUE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
LE	VEIRS MILL ELEMENTARY SCHOOL #772	11711	JOSEPH MILL ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
GE	WALTER JOHNSON HIGH SCHOOL #424	6400	ROCK SPRING DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
HE	WALT WHITMAN HIGH SCHOOL #427	7100	WHITTIER BOULEVARD	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WASHINGTON GROVE ELEMENTARY SCHOOL #552	8712	OAKMONT STREET	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WATKINS MILL HIGH SCHOOL #545	10301	APPLE RIDGE ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WATERS LANDING ELEMENTARY SCHOOL #109	13100	WATERS LANDING DRIVE	GERMANTOWN	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WATKINS MILL ELEMENTARY SCHOOL #561	19001	WATKINS MILL ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WAYSIDE ELEMENTARY SCHOOL #235	10011	GLEN ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WELLER ROAD ELEMENTARY SCHOOL #777	3301	WELLER ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WESTOVER ELEMENTARY SCHOOL #504	401	HAWKSBURY LANE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WESTBROOK ELEMENTARY SCHOOL #408	5110	ALLAN TERRACE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WESTLAND MIDDLE SCHOOL #412	5511	MASSACHUSETTS AVENUE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WHEATON WOODS ELEMENTARY SCHOOL #788	4510	FAROE PLACE	ROCKVILLE	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WHEATON HIGH SCHOOL #782	12601	DALEWOOD DRIVE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425

HAZCAT	NAME	NUMBER	STREET	CITY	CRO NAME	CRO DAY PHONE
LE	WHETSTONE ELEMENTARY SCHOOL #558	19201	THOMAS FARM DRIVE	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WHITE OAK MIDDLE SCHOOL #811	12201	NEW HAMPSHIRE AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WILLIAM TYLER PAGE ELEMENTARY SCHOOL	13400	TAMARACK ROAD	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WILLIAM H. FARQUHAR MIDDLE SCHOOL #507	16915	BATCHELORS FOREST ROAD	OLNEY	PAMELA K. MONTGOMERY	(301) 279-3425
GE	WINSTON CHURCHILL HIGH SCHOOL #602	11300	GAINSBOROUGH ROAD	POTOMAC	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WOODLIN ELEMENTARY SCHOOL #764	2101	LUZERNE AVENUE	SILVER SPRING	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WOOD ACRES ELEMENTARY SCHOOL #417	5800	CROMWELL DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WOODFIELD ELEMENTARY SCHOOL #704	24200	WOODFIELD ROAD	GAITHERSBURG	PAMELA K. MONTGOMERY	(301) 279-3425
LE	WYNGATE ELEMENTARY SCHOOL #422	9300	WADSWORTH DRIVE	BETHESDA	PAMELA K. MONTGOMERY	(301) 279-3425

Critical Facilities
County Buildings and Offices

Emergency Operations Center
1300 Quince Orchard Boulevard
Gaithersburg, MD 20878

Executive Office Building
101 Monroe Street
Rockville, MD 20850

Stella Werner County Council Office Building
100 Maryland Avenue
Rockville, MD 20850

Rockville Center
255 Rockville Pike
Rockville, MD 20850

County Offices
401 Hungerford Drive
Rockville, MD 20850

DOT Fleet Service Management
16630 Crabbs Branch Way
Derwood, MD 20855

County Fleet Maintenance
1283 Seven Locks Road
Rockville, MD 20854

Montgomery County DOT

Div of Operations/Highway Maintenance Section
101 Orchard Ridge Drive, 2nd Floor
Gaithersburg, Maryland 20878
Phone 240-777-6000

Maintenance Depot Locations
(debris management locations identified with ***)

Bethesda District*
1283 Seven Locks Road
Rockville, Maryland 20850
Phone 301 279-8330

Colesville District*
14335 Cape May Road
Silver Spring, Maryland 20904
Phone 301 476-7651

Damascus Area (Satellite location in Gaithersburg East District)
26149 Ridge Road
Damascus, Maryland 20872
Phone 301 253-1599

Gaithersburg-East District
16640 Crabbs Branch Way
Gaithersburg, Maryland 20855
Phone 301 840-2704

Gaithersburg-West District
16640 Crabbs Branch Way
Gaithersburg, Maryland 20855
Phone 301 840-2705

Poolesville Depot* (Satellite location in Gaithersburg West District)

19200 Jerusalem Road
Poolesville, Maryland 20837
Phone 301 972-7829

Silver Spring District*
8710 Brookeville Road, Building B
Silver Spring, Maryland 20910
Phone 301 565-7428

Critical Facilities—Police Headquarters and District Stations

Montgomery County Police Headquarters
2350 Research Boulevard
Rockville, MD 20850

EMERGENCY 911 Non-Emergency 301-279-8000

District Stations

1st District
1451 Seven Locks Road
Rockville, Maryland 20854
(301) 279-1591

2nd District
7359 Wisconsin Avenue
Bethesda, Maryland 20814
(301) 652-9200

3rd District
801 Sligo Avenue
Silver Spring, Maryland 20910
(301) 565-7744

4th District
2300 Randolph Road
Wheaton, Maryland 20902
(240) 773-5500

5th District
20000 Aircraft Drive
Germantown, Maryland 20874
(301) 840-2650

6th District
18749 N. Frederick Rd.
Gaithersburg, Maryland 20879
(240) 773-5700

Critical Facilities—Montgomery County Colleges

Germantown Campus

Pinkney Innovation Complex for Science and Technology (PIC MC)

20200 Observation Drive, Germantown, MD 20876

Vice President/Provost: Margaret Latimer

(240) 567-5000

Rockville Campus

51 Mannakee Street, Rockville, MD 20850

Vice President/Provost: Kimberly Kelley

(301) 279-5000

Takoma Park/Silver Spring Campus

7600 Takoma Avenue, Takoma Park, MD 20912

Vice President/Provost: Bradley Stewart

(240) 567-1300

APPENDIX N: CRITICAL DISASTER DEBRIS MANAGEMENT STAFF RESPONSIBILITIES

One of the primary functions of this plan is to delineate a basic organization and assign specific responsibilities. During disaster debris management 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.

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. Department of Environmental Protection, Recycling and Resource Management Division and Department of Transportation

There will be two Co-Debris Managers since debris management responsibilities in the event of a significant disaster fall within two departments.

DEP RRMD is responsible for solid waste management in the County, and as such, is responsible for the transport, processing and recycling or disposal of disaster debris in the event of a major natural or man-made emergency in order to protect public health and expedite recovery.

DOT is responsible for the debris management affecting public rights-of-way and/or public property, as a result of a major natural or technological emergency, in order to facilitate vehicular and pedestrian traffic and to minimize safety risks. DEP will avail debris management contractors to DOT for road debris clean-up and removal if DOT requests.

Both DEP and DOT will coordinate activities with the Department of Police, Montgomery County Fire and Rescue Service (MCFRS), Department of Health and Human Services (DHHS), utilities, and other agencies, where applicable.

DEP RRMD and DOT Designated Positions Roles and Responsibilities

Position	Primary Roles/Responsibilities
Chief, Recycling and Resource Management Division	• Serve as Debris Co-Manager • Provide RRMD staff for inspections and contract coordination • Provide pre-position contracts for debris management services • Provide pre-position contracts for debris management monitoring services. The Director of the Department of Transportation (DOT) will: ▪ Appoint the Deputy Director, DOT to the role of the County DM. ▪ Provide damage assessment teams to the Department of Permitting Services (DPS) to

Position	Primary Roles/Responsibilities
	coordinate assessment operations of County government facilities. ▪ Provide damage assessment reports for all County facilities and property, including maintained bridges and roads. ▪ Ensure that a sufficient number of inspectors and staff attend damage assessment training programs every year, as requested by the OEM&HS.
Director of the Department of Transportation (DOT)	• Appoint the Deputy Director, DOT to the role of the County DM. • Provide damage assessment teams to the Department of Permitting Services (DPS), to coordinate assessment operations of County government facilities. • Provide damage assessment reports for all County facilities and property, including maintained bridges and roads. • Ensure that a sufficient number of inspectors and staff attend damage assessment training programs every year, as requested by the OEM&HS.
County Co-Debris Managers (DM) – Debris Manager, Chief, RRMD	• Activate one, or more if necessary, of the three debris management services contracts for debris removal and processing. • Activate the contracts for debris management monitoring services and for debris monitoring services • Provide a Debris Coordinator to the staff to coordinate all relevant debris assignments. • Provide personnel and equipment to operate and staff the Debris Contractor Oversight Team (DCOT), including communications equipment, transportation, etc. • Receive regular updates from the Debris Coordinators regarding cleanup progress and any problems encountered or expected. • Coordinate all damage assessment issues pertaining to debris with the Director, DPS. • Appoint a Deputy Debris Manager (DDM)-who is the Section Chief, RRMD Resource Conversion Section - responsible for daily control of all relevant operations.

Position	Primary Roles/Responsibilities
	• Provide a Public Information Officer (PIO) to coordinate all media reports related to debris operations.
County Co-Debris Managers (DM) – Debris Manager, Deputy Director, Department of Transportation	• Provide personnel and equipment to assist in clearing major evacuation routes and access to critical facilities. • Provide a Debris Coordinator to the staff to coordinate all relevant debris assignments. • Provide personnel and equipment to remove and dispose of debris as directed through the Debris Coordinator. Implementation of debris management contractors is available upon request to DEP. • Ensure that necessary administrative staff and equipment support, including administrative support personnel, computers, desks, chairs, etc. are in place. • Receive regular updates from the Debris Coordinator regarding cleanup progress and any problems encountered or expected. • Implement a notification system to alert appropriate staff where and when to report for duty. This system must be current to ensure key staff can readily be reached. • Convene disaster debris coordinating meetings. • Appoint a Deputy Debris Manager (DDM)—Chief, DOT Division of Operations—responsible for daily control of operations. • Provide media relations in coordination with the County's Public Information Office Director. *Points of Contact:* *Deputy Director, DOT* *Chief, DEP Recycling and Resource Management Division*
Deputy Debris Managers (DDMs)	• The County Co-DMs and DDMs will be supported by a joint debris staff made up of personnel from other appropriate County department staff personnel as required. • Responsible for daily operational control of the staff. All requests for debris removal or disposal from the emergency response staff will go through the DDMs. Requests for debris removal from public facilities and roadways will be reviewed and approved by the County DDMs before being directed to the

Position	Primary Roles/Responsibilities
	appropriate debris management coordinators to implement the request. • Assess the extent of damage and resulting debris and issue directives to the appropriate debris management coordinators who in turn will notify their departments to execute the tasking as defined by their department's standard operating guidelines. • Ensure that all contractor debris removal and disposal operations are properly monitored utilizing personnel assigned to the Debris Contractor Oversight Team (DCOT). • Keep the County DDMs and staff informed on all ongoing Debris management operations through, at a minimum, daily meetings and/or reports. • Maintain a daily journal and file on all debris related documents and issues. *Points of Contact:* *Chief, DOT Division of Operations* *Chief, DEP Recycling and Resource Management Division, Resource Conversion Section*
DOT Operations Debris Coordinator	• Maintain a listing of all available DOT equipment identified for possible debris clearing and disposal missions. • Coordinate all DOT debris assignments approved by the DDM. • Ensure that required logistical support is available, including cell phones, transportation, etc. • Ensure that the DDMs are kept informed of cleanup progress and any problems encountered or expected. *Primary Point of Contact: Chief, DOT Highway Maintenance Section*
DEP RRMD Debris Coordinator	• Maintain a listing of all available RRMD equipment identified for possible debris clearing and disposal missions. • Coordinate all RRMD debris assignments approved by the DDMs. • Ensure that required logistical support is available, including cell phones, transportation, etc. • Ensure that the DDMs are kept informed of cleanup progress and any problems encountered or expected. *Primary Point of Contact: DEP, RRMD Resource Conversion Section, Senior Engineer*

Position	Primary Roles/Responsibilities
DEP Environmental Compliance Manager	• Assure that all applicable environmental requirements are followed during debris management operations • Coordinate the cleanup of waste materials and residues from a hazardous materials release, in accordance with the EOP, Annex P, "Environmental Protection" and DEP's Response Procedures for Hazardous Materials Spills. • Monitor the activities of cleanup waste contractors to ensure an acceptable and safe level of work and provide progress reports to the appropriate State agency. • Assess whether there is a need to remove materials from the site. If these materials cannot be moved, the area must be made secure until cleanup begins. • Notify State agencies of the need for support services in coordinating cleanup operations, when appropriate. • Ensure that required logistical support is available, including cell phones, transportation, etc. • Ensure that the DDMs are kept informed of cleanup progress and any problems encountered or expected. *Primary Point of Contact: DEP, Environmental Compliance Group Supervisor*
Public Information Office (PIO)	Develop an information management plan to advise the public of risks associated with debris removal, informing them of processing and staging locations and how operations are progressing. Flyers, newspapers, radio, and TV public service announcements will be used to encourage public cooperation for activities such as: • Separating burnable and non-burnable debris; • Segregating Household Hazardous Waste (HHW); • Placing disaster debris at the curbside; • Keeping debris piles away from fire hydrants and valves; • Reporting locations of illegal dumping sites or incidents of illegal dumping; • Segregating recyclable materials; and • Disseminate pickup schedules through the local news media. *Point of Contact: Public Information Office*
Debris Contractor Oversight Team (DCOT) Supervisor	Provide overall coordination of the following: • Planning and conducting Debris Management Site inspections, quality control, and other contractor oversight functions.

Position	Primary Roles/Responsibilities
	• Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor. • Making recommendations to the County Co-DMs regarding distribution of County staff and contractor work assignments and priorities. • Reporting on progress and preparation of status briefings. • Obtain all necessary permits for establishing debris management sites. • Providing input to the PIO on debris cleanup activities and pickup schedules. • Providing yearly training and refresher training for all personnel assigned to debris management monitoring responsibilities. • Coordinating training requirements with the County OEM&HS. Points of Contact: *Operations and Recycling Center Managers, and Environmental Compliance and Safety Manager*
Safety Officer	• Oversee the operational safety of debris management operations, including the health and safety of staff and contractors involved in debris management operations. • Create a safety plan. • Ensure safety messages are developed and briefings are conducted. • Exercise emergency authority to stop and prevent unsafe acts during debris operations. • Revise Incident Management Plans for safety considerations. • Investigate accidents and near misses. • Participate in planning meetings. • Review and approve the medical plan. Point of Contact: *Department of Finance, Division of Risk Management*

APPENDIX O: CONTACT INFORMATION FOR KEY POSITIONS

2021 Debris Management Team

Debris Co-Managers	
Division Chief, DEP RRMD	Willie Wainer Office: 240-777-6402 Mobile: 240-447-5675 Willie.Wainer@montgomerycountymd.gov
Deputy Director, DOT	Emil Wolanin Office: 240-777-8788 Mobile: 301-674-8959 Emil.Wolanin@montgomerycountymd.gov
Deputy Debris Managers	
Section Chief, DEP RRMD Operations	[TO BE FILLED] Office: Mobile: Email:
Division Chief, DOT Highway Services	Richard Dorsey Office: 240-777-7600 Mobile: 240-372-1810 Richard.Dorsey@montgomerycountymd.gov
DOT Operations Debris Coordinator	
Chief of Operations, DOT Highway Services	Jeff Knutsen Office: 240-777-7634 Mobile: 240-876-7896 Jeff.Knutsen@montgomerycountymd.gov
DEP RRMD Debris Coordinator	
RRMD Senior Engineer	Jamie Foster Office: 240-777-6574 Mobile: 240-832-0414 Jamie.Foster@montgomerycountymd.gov
DEP Environmental Compliance Manager	
Environmental Compliance Supervisor, DEP	Steve Martin Office: 240-777-7746 Mobile: 301-370-0252 Steve.Martin@montgomerycountymd.gov
Public Information Officer	
Public Information Office	Neil Greenberger Public Information Officer Office: 240-777-6532 Mobile: 240-205-1915 Neil.greenberger@montgomerycountymd.gov
Safety Officer	
Division of Risk Management	Gary Stafford Office: 240-777-8907 Gary.Stafford@montgomerycountymd.gov

Debris Contractor Oversight Team	
Operations Manager	Richard Buss Office: 240-777-6561 Richard.Buss@montgomerycountymd.gov
Recycling Center Manager	Lonnie Heflin Office: 240-777-6562 Mobile: 301-968-5041 lonnie.heflin@montgomerycountymd.gov
M-NCPPC Debris Coordinator	
Recycling Center Manager	Lonnie Heflin Office: 240-777-6562 Mobile: 301-968-5041 lonnie.heflin@montgomerycountymd.gov
Environmental Compliance and Safety Manager	David Rosenbaum Office: 240-777-6571 David.Rosenbaum@montgomerycountymd.gov

APPENDIX P: HAZARDOUS STUMP EXTRACTION AND REMOVAL ELIGIBILITY

FEMA Public Assistance Program and Policy Guide FP 104-009-2, June 2020 Chapter 7.I.B.3. Stump Removal

(c) Stump Removal
For stumps that have 50 percent or more of the root-ball exposed, removal of the stump and filling the root-ball hole are eligible. If grinding a stump in-place is less costly than extraction, grinding the stump in-place is eligible.

Stump removal in areas with known or high potential for archeological resources usually requires that FEMA further evaluate and consult with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO). If the Applicant discovers any potential archeological resources during stump removal, the Applicant must immediately cease work and notify FEMA.

Contracted Stump Removal
FEMA only reimburses contracted costs charged on a per-stump basis if:

- The stump is 2 feet or larger in diameter measured 2 feet above the ground; and
- Extraction is required as part of the removal.

The Applicant needs to ensure the price for stump removal includes extraction, transport, disposal, and filling the root-ball hole.

For stumps that have less than 50 percent of the root-ball exposed, FEMA only provides PA funding to flush cut the item at ground level and dispose of the cut portion based on volume or weight. Grinding any residual stump is not eligible.

For stumps smaller than 2 feet in diameter, or for stumps of any size that do not require extraction, FEMA only provides PA funding based on volume or weight as removal of these stumps does not require special equipment. If the Applicant claims reimbursement of these stumps on a per stump basis, FEMA limits PA funding based on a unit price for volume or tons, calculated using the Stump Conversion Table (Located on the following pages of this Attachment).

If the Applicant incurs additional costs in picking up stumps 2 feet or larger in diameter that the contractor did not extract, it should complete the Hazardous Stump Worksheet ((Located on the following pages of this Attachment) and present documentation to substantiate the costs as reasonable based on the equipment required to perform the work.

(d) Documentation Requirements
The Applicant must provide all of the following documentation to support the eligibility of removing tree limbs, branches, stumps, or trees that are still in place:

- Specifics of the immediate threat with the U.S. National Grid (USNG) location and photograph or video documentation that establishes the item is on public property;
- Diameter of each item removed (measurement must be 2 feet up the trunk from the ground for stumps and 4.5 feet up for trees); Quantity of material to fill root-ball holes; and
- Equipment used to perform the work.

STUMP CONVERSION TABLE

Diameter to Volume Capacity

FEMA quantifies the amount of cubic yards of debris for each size of stump based on the following formula:

$$\frac{[(\text{Stump Diameter}^2 \times 0.7854) \times \text{Stump Length}] + [(\text{Root-Ball Diameter}^2 \times 0.7854) \times \text{Root-Ball Height}]}{46{,}656}$$

- 0.7854 is one-fourth Pi and is a constant. 46,656 is used to convert cubic inches to cubic yards and is a constant.

The formula used to calculate the cubic yardage used the following factors, based upon findings in the field:

- Stump diameter measured 2 feet up from the ground
- Stump diameter to root-ball diameter ratio of 1:3.6
- Root-ball height of 31 inches

See table on the following page:

Stump Diameter(Inches)	Debris Volume (Cubic Yards)	Stump Diameter(Inches)	Debris Volume (Cubic Yards)
6	0.3	46	15.2
7	0.4	47	15.8
8	0.5	48	16.5
9	0.6	49	17.2
10	0.7	50	17.9
11	0.9	51	18.6
12	1	52	19.4
13	1.2	53	20.1
14	1.4	54	20.9
15	1.6	55	21.7
16	1.8	56	22.5
17	2.1	57	23.3
18	2.3	58	24.1
19	2.6	59	24.9
20	2.9	60	25.8
21	3.2	61	26.7
22	3.5	62	27.6
23	3.8	63	28.4
24	4.1	64	29.4
25	4.5	65	30.3
26	4.8	66	31.2
27	5.2	67	32.2
28	5.6	68	33.1
29	6	69	34.1
30	6.5	70	35.1
31	6.9	71	36.1
32	7.3	72	37.2
33	7.8	73	38.2
34	8.3	74	39.2
35	8.8	75	40.3
36	9.3	76	41.4
37	9.8	77	42.5
38	10.3	78	43.6
39	10.9	79	44.7
40	11.5	80	45.9
41	12	81	47
42	12.6	82	48.2
43	13.3	83	49.4
44	13.9	84	50.6
45	14.5		

HAZARDOUS STUMP WORKSHEET

Applicant: _____ Date: _____

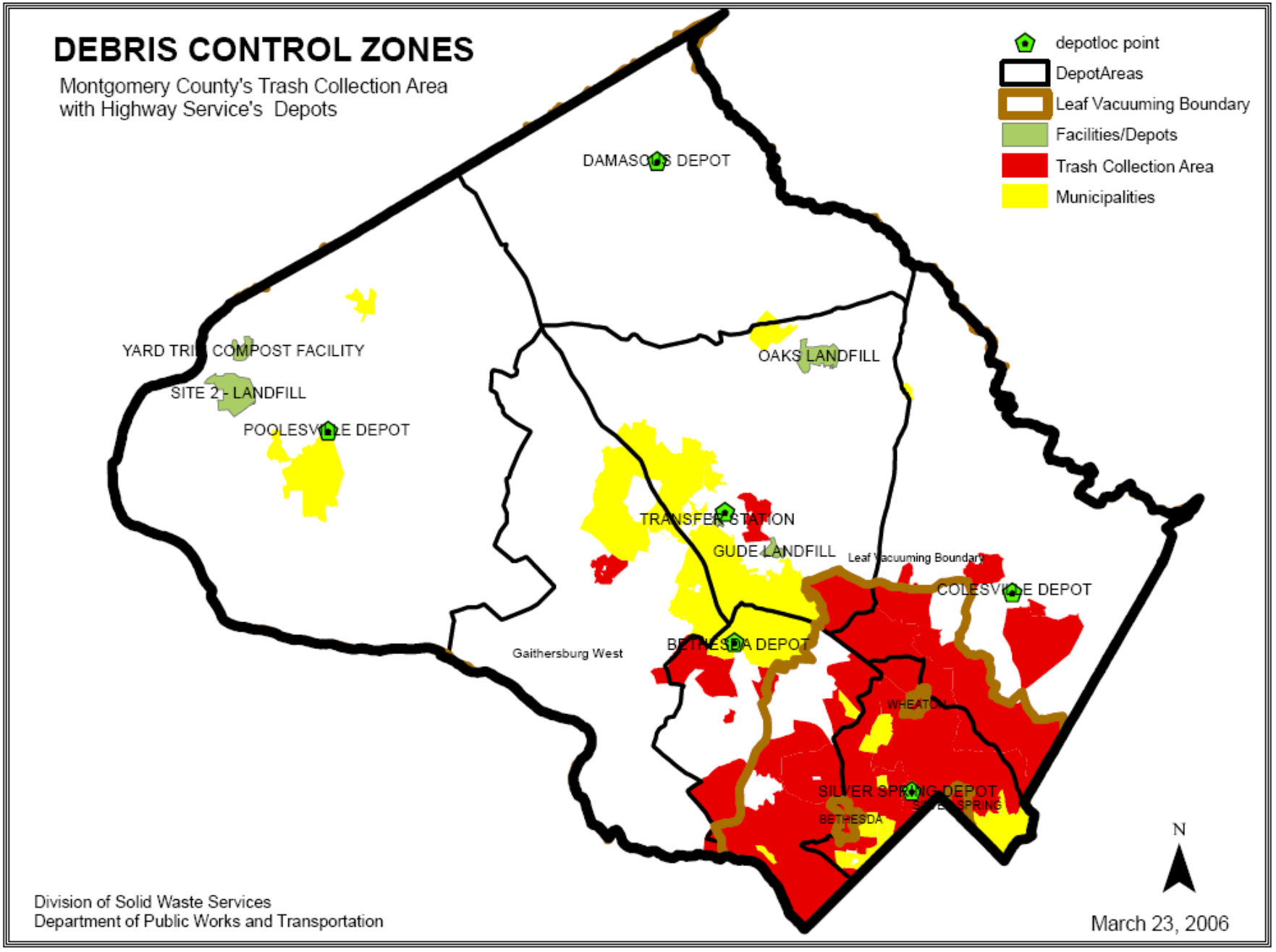
Applicant Representative: _____ Signature: _____

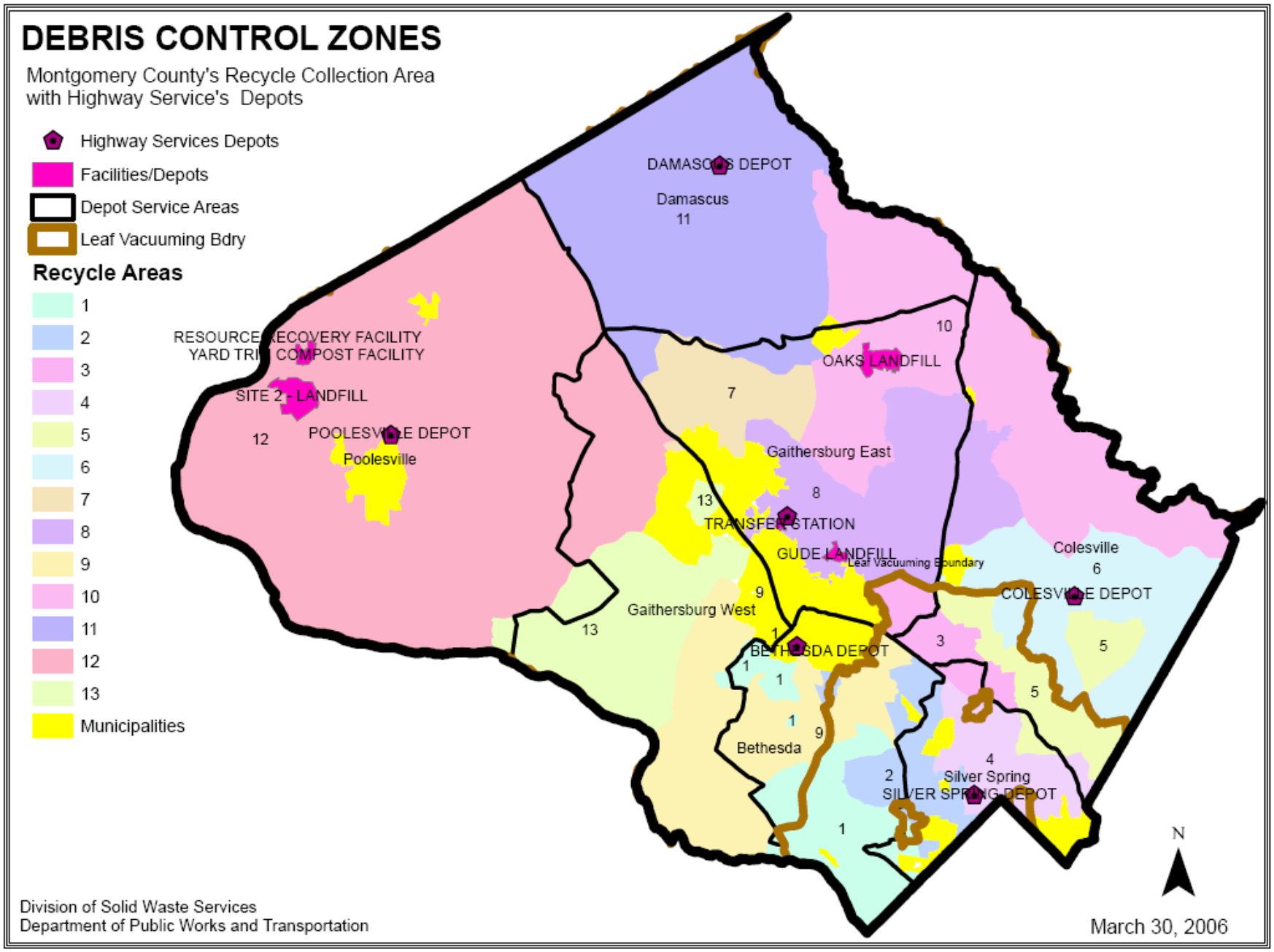
FEMA Representative (if available) _____ Signature: _____

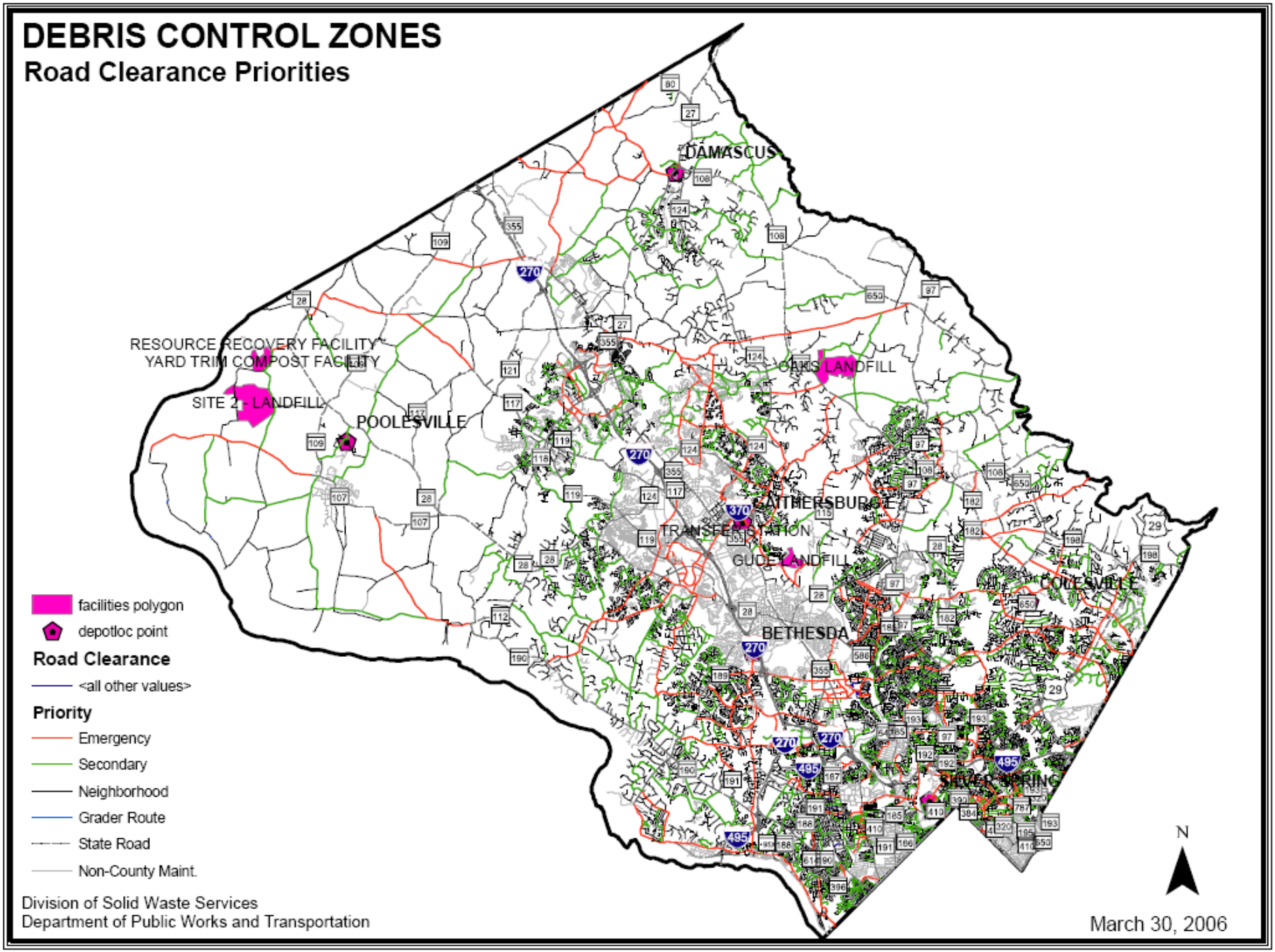
	Physical Location (i.e., Street address, road, cross streets, etc.)	Description of Facility (ROW, Park, City Hall, etc.)	Hazard Yes/No	Global Positioning System (GPS) Location	Tree Size (Diameter)	Eligible Yes/No	Fill for Debris Stumps In CY	Comments (See attached sketch, photo, etc.)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

APPENDIX Q: DEBRIS ZONES, PRIORITY ROADS, AND DEBRIS CLEARING EQUIPMENT

DEBRIS ZONES AND MAP


DEBRIS CONTROL ZONES
Montgomery County's Trash Collection Area
with Highway Service's Depots
depotloc point
DepotAreas
Leaf Vacuuming Boundary
Facilities/Depots
Trash Collection Area
Municipalities
DAMASCUS DEPOT
YARD TRIM COMPOST FACILITY
SITE 2 - LANDFILL
POOLESVILLE DEPOT
OAKS LANDFILL
TRANSFER STATION
GUDE LANDFILL
Leaf Vacuuming Boundary
COLESVILLE DEPOT
BETHESDA DEPOT
Gaithersburg West
WHEATON
SILVER SPRING DEPOT
SILVER SPRING
BETHESDA
N
Division of Solid Waste Services
Department of Public Works and Transportation
March 23, 2006


DEBRIS CONTROL ZONES
Montgomery County's Recycle Collection Area
with Highway Service's Depots
Highway Services Depots
Facilities/Depots
Depot Service Areas
Leaf Vacuuming Bdry
Recycle Areas
1
2
3
4
5
6
7
8
9
10
11
12
13
Municipalities
DAMASCUS DEPOT
Damascus
11
RESOURCE RECOVERY FACILITY
YARD TRIM COMPOST FACILITY
SITE 2 - LANDFILL
POOLESVILLE DEPOT
Poolesville
12
OAKS LANDFILL
10
7
Gaithersburg East
8
13
TRANSFER STATION
GUDE LANDFILL
Leaf Vacuuming Boundary
Colesville
6
COLESVILLE DEPOT
9
Gaithersburg West
13
1
BETHESDA DEPOT
3
5
1
1
5
1
9
Bethesda
4
2
Silver Spring
SILVER SPRING DEPOT
1
N
Division of Solid Waste Services
Department of Public Works and Transportation
March 30, 2006


DEBRIS CONTROL ZONES
Road Clearance Priorities
DAMASCUS
RESOURCE RECOVERY FACILITY
YARD TRIM COMPOST FACILITY
SITE 2 - LANDFILL
POOLESVILLE
OAKS LANDFILL
GAITHERSBURG
TRANSFER STATION
GUDE LANDFILL
KENSINGTON
BETHESDA
SILVER SPRING
facilities polygon
depotloc point
Road Clearance
<all other values>
Priority
Emergency
Secondary
Neighborhood
Grader Route
State Road
Non-County Maint.
Division of Solid Waste Services
Department of Public Works and Transportation
N
March 30, 2006

PRIORITY ROADS

11TH AVE
13TH ST
16TH ST
1ST AVE
1ST ST
270 TO W370 RAMP
2ND AVE
370 TO S270 RAMP
3RD AVE
82ND PL
ABBOTSFORD CIR
ACACIA AVE
ADELPHI RD
AIRCRAFT DR
AIRPARK RD
ALBEMARLE ST
ALDERTON LA
ALDERTON RD
ALLAN TER
ALLANDALE RD
AMBLESIDE DR
AMERICAN WAY
AMES RD
AMHERST AVE
ASPEN HILL RD
ASTON MANOR DR
ATHEY DR
ATHEY RD
AUBURN AVE
AUTO PARK AVE
AUTOMOBILE BLV
AUTUMN DR
AVENEL RD
AVERY RD
BALD CYPRESS DR
BALLINGER DR
BALTIMORE AVE
BALTIMORE RD
BANNISTER LA
BANNOCKBURN DR
BARNESVILLE RD
BARRON ST
BATCHELLORS FOREST RD
BATTERY LA
BAUER DR
BAUGHMAN DR
BAYFIELD ST
BEALLSVILLE RD
BENTLEY LA
BERRYVILLE RD
BETHESDA AVE
BETHESDA CHURCH RD
BEXHILL DR
BICKERSTAFF WAY
BIG ROCK RD
BIG WOODS RD
BILLMAN LA
BLACKISTONE RD
BLACKWELL RD
BLAINE DR
BLAIR MILL RD
BLAIR RD
BLOOM DR
BLUEFORD RD
BLUERIDGE AVE
BLUHILL RD
BLUNT RD
BOILING BROOK PKW
BOLAND FARM RD
BOLEYN TER
BONANZA WAY
BONIFANT RD
BRICKYARD RD
BRIERLY RD
BRIGGS CHANEY RD
BRIGGS RD
BRIGHTON DAM RD
BRIMSTONE ACADEMY DR
BRINK RD
BROAD BROOK DR
BROAD GREEN DR
BROADBIRCH DR
BROADMORE RD
BROCK DR
BROOKE FARM DR
BROOKE RD
BROOKEVILLE RD
BROOKEWAY DR
BROOKFIELD DR
BROOKHAVEN DR
BROOKLAWN TER
BROOKSIDE DR
BROOKVILLE RD
BROSCHART RD
BROXBURN DR
BRUCE DR
CABIN JOHN HWY
CABIN JOHN PKW
CABIN JOHN PKWY RAMP
CABLE DR
CADDINGTON AVE
CALVERTON BLV
CAMERON ST
CANNON RD
CANTRELL RD
CAPE MAY RD
CAPITOL VIEW AVE
CARONA DR
CARRIAGE CT
CARRIAGE RD
CARROLL AVE
CARROLTON RD
CASHELL RD
CASTLE BLV
CATTAIL RD
CAVALIER DR
CAVANAUGH DR
CEDAR LA
CEDAR ST
CEDAR TREE DR

AMITY DR
ANCIENT OAK DR
ANNAPOLIS ROCK RD
ANSTED RD
APPLE GROVE RD
APPLE RIDGE RD
APPLEDOWRE WAY
ARBOR VIEW RD
ARCHDALE RD
ARCOLA AVE
ARCTIC AVE
ARLINGTON RD
ARLISS ST
ARROWHEAD RD
ASHFORD RD
ASHLAND DR
ASHTON RD
BEAUMONT RD
BEAVER RIDGE RD
BEAVERWOOD LA
BEDFORDSHIRE AVE
BEECH AVE
BEECH TREE RD
BEECHCRAFT AVE
BEECHVUE LA
BEETHOVEN BLV
BEL PRE RD
BELFAST RD
BELLEHAVEN BLV
BELLS MILL RD
BELMART RD
BELTON RD
BENNINGTON DR
BENT BRANCH RD
BONIFANT ST
BOSWELL LA
BOU AVE
BOURNEFIELD WAY
BOWIE MILL RD
BOWMAN MILL DR
BOXWOOD RD
BRADFORD RD
BRADLEY BLV
BRADLEY LA
BRADMOOR DR
BRAHMS AVE
BRANDERMILL DR
BRANDY HALL LA
BRENNON LA
BRIARBUSH LA
BRIARDALE RD
BRUNETT AVE
BRUNSWICK AVE
BRYANTS NURSERY RD
BUCKINGHAM DR
BUCKLODGE RD
BUCKNELL DR
BUEHLER RD
BULLS RUN PKW
BUNCHBERRY CT
BUNCHBERRY LA
BURCHAP DR
BURDETTE RD
BURLINGTON AVE
BURNING TREE RD
BURNT HILL RD
BURNT MILLS AVE
BUSHEY DR
CENTERWAY RD
CENTRAL AVE
CENTURY BLV
CESSNA AVE
CHANUTE DR
CHAPMAN AVE
CHASE AVE
CHELTENHAM DR
CHELTON RD
CHENNAULT WAY
CHERBOURG DR
CHERRY GROVE DR
CHERRY HILL RD
CHERRY VALLEY DR
CHERRYDALE DR
CHESHIRE DR
CHESTER MILL RD

DEBRIS CLEARING EQUIPMENT INVENTORY

DEPOT EMERGENCY EQUIPMENT INVENTORY FOR DEBRIS MANAGEMENT AGENCY

Equipment	Bethesda	Colesville	Damascus	Gaith. E.	Gaith. W.	Poolesville	Silver Spring	Total
Single Axle Truck	26	26	8	21	6	16	27	130
Tandem Axle Truck								0
Stake Body Truck				1			1	2
Bucket Truck							4	4
Off Road Truck								0
Skid Loader	1	1			2			4
Skid Loader w/grapple							1	1
Backhoe	1	1		1			1	4
Loader 1-3yd	2	2	2	2	2	2	2	14
Loader 3yd +							1	1
Grader			1			1		2
Gradall	1		1	2		1	1	6
Rubber Tire Excavator								0
Walking Floor Trailer	2	2			2			6
Trailer	5	4 FTLR	1	4	3	1	2	16
Track Loader						2	2	4
Track Hoe							1	1
Track Dozer								0
Wood Chipper 9"-16"	1		1	1	1	2	6	12
Tub Grinder 11'-14'								0
Wood Beast #3680								0
Tractor/Trailer			1	1				2

Bethesda Depot, 1283 Seven Locks Road, Rockville, MD 20850
Colesville Depot, 14335 Cape May Road, Silver Spring, MD 20904
Damascus Depot, 26149 Ridge Road, Damascus, MD 20872
Gaithersburg Depot, 16640 Crabbs Branch Way, Rockville, MD 20877
Silver Spring Depot, 8710 Brookville Road, Silver Spring, MD 20910
Poolesville Depot, 19200 Jerusalem Church Road, Poolesville, MD 20837

APPENDIX R: MUNICIPALITY INFORMATION

Municipalities that have entered into a Memorandum of Understanding (MOU) with Montgomery County will find useful information in this appendix that includes, but is not limited to:

- Contact information of incorporated municipalities that have entered into an MOU with the County
- County Point of Contact
- MOU
- Flowcharts outlining the disaster recovery, debris removal, and reimbursement process

Municipality Contact Information

Municipality	Point-of-Contact	Email Address	Phone Number
Town of Chevy Chase	Todd Hoffman	townoffice@townofchevychase.org	301-654-7144
The Village of Chevy Chase Section 5	Ashley Kavanaugh	manager@chevychasesection5.org	301-986-5481
The Village of Chevy Chase Section 3	Andy Leon Harney	villagemanager@chevychasesection3.org	301-656-9117
Town of Chevy Chase View	Jana Coe	janacoe@chevychaseview.org	301-949-9274
Chevy Chase Village	Ellen Sands	elissa.leonard@chevychasevillagemd.gov	301-654-7300
City of Gaithersburg	Willie (Skip) Lanham	cityhall@gaithersburgmd.gov	301-258-6300
Town of Garret Park	Andrea Fox	managerandrea@garrettparkmd.gov	301-933-7488
Town of Glen Echo	Beth Boa	townhall@glenecho.org	301-320-4041
Town of Kensington	Matt Hoffman	Mayor.Council@tok.md.gov	301-949-2424
Village of Martin's Additions	James D. Gaston	manager@martinsadditions.org	301-656-4112
Village of North Chevy Chase	Dana Peterson	chair@northchevychase.org	301-654-7084
Town of Poolesville	Preston King	townhall@poolesvillemd.gov	301-428-8927
City of Rockville	Erica Shingara	cityclerk@rockvillemd.gov	240-314-8280
City of Takoma Park	Ron Hardy	JessieC@takomaparkmd.gov	301-891-7267
Town of Washington Grove	John Compton	washgrove@comcast.net	301-926-2256

County Point of Contact

Following a declared disaster where the County activates its debris removal and debris monitoring contractors, Municipalities should contact the County's Department of Environmental Protection Recycling and Resource Management Division (DEP RRMD) Debris Coordinator. The County's current DEP RRMD Debris Coordinator's information can be found below and in **Appendix O: Contact Information for Key Positions**.

DEP RRMD Debris Coordinator	
RRMD Senior Engineer	Jamie Foster Office: 240-777-6574 Mobile: 240-832-0414 Jamie.Foster@montgomerycountymd.gov

MEMORANDUM OF UNDERSTANDING
BETWEEN MONTGOMERY COUNTY
AND THE _____

This Memorandum of Understanding ("MOU") is by and between Montgomery County, Maryland, a body corporate and politic, and a political subdivision of the State of Maryland ("County") and the _____ _____ , Maryland, a municipal corporation of the State of Maryland ("Jurisdiction").

RECITALS

1. The County has a Debris Management Plan, approved by the Federal Emergency Management Agency (FEMA) in December 2008, which is part of the County's approved Emergency Operations Plan.

2. The County updated the Debris Management Plan in December 2021.

3. The updated Debris Management Plan will include provisions for the clearing, collection, removal and processing of debris resulting from a significant hazard or disaster occurring in the County.

4. The County wishes to include the Jurisdiction as a party able to use the provisions of the Debris Management Plan for the clearing, collection, removal and processing of debris resulting from a Declaration of Emergency due to a significant disaster or other significant hazard or disaster occurring in the County, and under the terms of this MOU.

5. The Jurisdiction desires to be able to use the provisions of the Debris Management Plan for the clearing, collection, removal and processing of debris collected within the Jurisdiction or designated privately owned area resulting from a significant disaster occurring in the County, upon the County's activation of the Debris Management Plan and under the terms of this MOU.

NOW THEREFORE, in consideration of the terms of this MOU, the parties agree as follows:

1. The recitals are incorporated herein as if fully set forth.

2. Definitions

Ancillary Fees -Ancillary Fees are those costs associated with debris removal that are not covered by specific transportation and disposal charges. They include, but are not limited to, administrative and data management costs, staffing costs for monitors and others directly associated with the debris management operations, supplies, temporary utilities and other justifiable expenses necessary for conducting debris management operations.

County Representative - The County Representative will be the Montgomery County Department of Environmental Protection, Division of Solid Waste Services Division Chief or his designee.

Debris Management - The collection, processing, and recycling or disposal of items and materials broken, destroyed, or displaced by a natural or man-made significant disaster.

Debris Management Plan-The County's plan, and part of the County's Emergency Operations Plan, for the collection, processing, and recycling or disposal of debris generated by a significant disaster.

Declaration of Emergency-A formal declaration by the Governor of Maryland that a state of emergency exists, making jurisdictions within the State eligible for reimbursement for certain emergency related expenditures.

Eligible Material - Eligible Material refers to material whose management costs are eligible for reimbursement under FEMA guidelines such as debris blocking roads.

While Eligible Material generally refers to debris on public roads and along public rights-of-way, under specific circumstances outlined in FEMA policy and regulatory documents, FEMA may also designate material on private roads and property as Eligible Material. In these cases, specific guidance from a FEMA official would be required before materials on private roads or property would be included for management under the Debris Management Plan.

Estimated Disposal Fee - Prior to knowing actual management and disposal costs and the final level of FEMA reimbursement for debris management, the County will set an Estimated Disposal Fee to cover ongoing costs for management of debris which should approximate the actual costs for management of the material. This will be an amount calculated to cover the cost per ton or per cubic yard of processing, recycling or disposal of debris that will be paid at the gate or invoiced to parties bringing material to temporary or permanent debris management facilities.

Facility - A Facility is a building, works, system, equipment, or an improved or maintained natural feature.

Federal Emergency Management Agency (FEMA) - The federal agency which oversees the federal response and financial reimbursement to jurisdictions when a formal declaration of emergency has been issued.

Final Adjusted Fee-The Final Adjusted Fee considers all costs and reimbursement and may result in a rebate to jurisdictions that paid the Estimated Disposal Fee during the clean-up of debris.

Jurisdiction - One of the nineteen (19) legally defined municipalities or two (2) special taxing districts within Montgomery County, Maryland that is managed by a public body or individual and has explicitly defined boundaries

Jurisdiction Representative - The Jurisdiction Representative is the individual authorized to mobilize resources and make financial commitments on behalf of a jurisdiction relative to debris management.

Jurisdiction's Vehicles and Equipment-Jurisdiction's Vehicles and Equipment includes all types of dump trucks, stake body trucks, demolition trailers, walking floor trailers, front end loaders, cranes, grapples, wood chippers and grinders, and any other equipment used in the collection, management and transportation of debris.

Loading Location - Loading Location refers to the specific street and address or approximate address of where debris is loaded into a vehicle and recorded on a ticket by a Monitor.

Monitors - Monitors are individuals under contract to Montgomery County or participating jurisdictions whose job it is to document the loading and receipt of debris for the purpose of preparing necessary information to obtain FEMA reimbursement for the costs of managing Eligible Material. This term may be used in the singular or plural form.

Permanent Debris Management Site - An existing waste management facility with required federal, State and local permits, routinely operating in accordance with applicable laws and regulations that is part of the County's permanent integrated waste management program.

Monitoring Contract - A contract between Montgomery County and a firm qualified to observe and document the clean-up after an emergency event and prepare all necessary documents for submittal to FEMA for reimbursement of debris management costs.

Temporary Debris Management Site - A Temporary Debris Management Site is any site approved by Montgomery County for the short-term receipt, processing and reloading or transfer of debris to meet the short-term needs for debris storage in response to an emergency.

3. Obligations of the County when this MOU is Signed by a Jurisdiction

   A. The County agrees that the Jurisdiction will be able to use the provisions of the Debris Management Plan for the clearing, collection, removal and processing of debris collected within the recorded boundaries of the Jurisdiction resulting from a significant hazard or disaster occurring in the County, upon the County's activation of the Debris Management Plan and under the terms of this MOU.

B. The County agrees to allow the Jurisdiction to piggyback/bridge the County's contracts with debris management contractors and Monitoring Contract(s), upon the County's activation of the Debris Management Plan and under the terms of this MOU.

C. The County allows the Jurisdiction to deliver debris or cause debris to be delivered to the Temporary and Permanent Debris Management Sites listed in the Debris Management Plan or any other County-approved site, upon the County's activation of the Debris Management Plan and under the terms of the MOU.

D. The County contractor's debris management Monitors at the Temporary and Permanent Debris Management Sites will determine the total volume of debris and the amount of debris with sufficient and proper documentation such as completed load tickets to be submitted for debris management cost reimbursement, delivered or caused to be delivered by each Jurisdiction.

E. Jurisdictions eligible to apply directly to FEMA for reimbursement must do so. The County will not submit reimbursement requests to FEMA on their behalf, if FEMA will accept applications directly from the Jurisdiction. If for some reason the Jurisdiction is not eligible to apply directly to FEMA for reimbursement, the County will reimburse them for any FEMA reimbursement received relative to their Eligible Material.

4. Obligations of the Jurisdiction

The Jurisdiction agrees that in exchange for the preceding commitments of the County and as conditions precedent to the County's commitments, the Jurisdiction will comply with all applicable paragraphs below:

A. Pay the County an Estimated Disposal Fee* per cubic yard of debris for each cubic yard of debris collected within the recorded boundaries of the Jurisdiction by the Jurisdiction, the Jurisdiction's contractors and County contractors** and delivered to the Temporary and Permanent Debris Management Sites, upon activation of the Debris Management Plan, within thirty (30) days of invoicing by the County. Some portion of this fee may be reimbursed at a later date, depending upon the amount of federal and State reimbursement the County receives.

B. Pay an Ancillary Fee* per cubic yard of debris for each cubic yard of debris collected within the recorded boundaries of the Jurisdiction by the Jurisdiction, Jurisdiction's contractors and County contractors** and delivered to the Temporary and Permanent Debris Management Sites, the Ancillary Fee will be based on work that County staff or County contractor staff must perform that is not directly related to collecting and disposing or recycling the debris.

C. Settle with the County on the Final Adjusted Fee which may result in a rebate or an invoice to the Jurisdiction depending upon levels of reimbursement and whether the Estimated Disposal Fee is over- or under-estimated actual costs.

* Estimated Disposal Fees and Ancillary Fees will be established at the time of a Declaration of Emergency and will vary depending upon the severity of the event and the level of outside resources required. Estimated Disposal Fees will be based on the current tipping fees at the Shady Grove Processing Facility and Transfer Station plus any additional per ton costs related to the emergency. Ancillary Fees will be based on actual non-disposal costs related to the emergency proportionally divided among parties delivering debris to County facilities.

**Exclusive of costs associated with debris removed from County, federal and State maintained roads and property within the Jurisdiction which are the responsibilities of the respective parties.

D. Provide, or cause to be provided, properly trained Loading Location Monitors at locations within the recorded boundaries of the Jurisdiction where debris is collected and loaded onto vehicles.

E. Train or retain Loading Location Monitors to estimate cubic volumes of debris loaded into vehicles, measure the dimensions and estimate the capacity of each vehicle transporting debris to the temporary or permanent debris management sites, and document the type of debris loaded on the load ticket.

F. Use the County's load tickets or develop a load ticket that includes sufficient criteria listing information to identify vehicles transporting debris, the vehicle's debris carrying capacity, type of debris, date, identification of the Loading Location Monitor, location where the debris was loaded and other relevant information, including a detailed map of the Jurisdiction including street names and boundaries. The load ticket must also indicate whether the vehicle was machine loaded and compacted or hand-loaded (note: hand-loaded vehicles are only eligible for reimbursement for 50 percent of the vehicle capacity).

G. Assure that all of the Jurisdiction's Vehicles and Equipment and other equipment that the Jurisdiction uses or causes to be used for debris hauling must be in compliance with all applicable federal, State and County rules and requirements.

H. Assure that all the Jurisdiction's Vehicles and Equipment and other equipment that the Jurisdiction uses or causes to be used for debris hauling must be capable of unloading debris without the assistance of other equipment.

I. Assure that the Jurisdiction's Vehicles and Equipment and other equipment that the Jurisdiction uses or causes to be used is capable of holding debris to be transported without spillage and able to be filled to capacity.

J. Assign and affix a number on each side of the equipment in at least three inch high lettering. The lettering must be easy to read in contrast to the color of the equipment where the identification is affixed. There must also be a sign showing the maximum volume, in cubic yards, of the load bed to each piece of equipment assigned to transport debris that is easily

visible by Monitors. The Jurisdiction may use the County's records for identification purposes of the vehicles provided that the County has inspected these vehicles and issued the vehicles a County solid waste license.

K. Assure that the Loading Location Monitors must have the following information for each piece of equipment used to haul debris: Provide the County Representative or his/her designee information about the type of vehicle; make and model; license plate number; equipment number; and maximum measured volume, in cubic yards, of the load bed for each piece of equipment to haul debris. All vehicles used to haul debris will be jointly measured by a Jurisdiction Representative and a county representative before such vehicle or trailer is placed into service.

L. Assure that all debris is safely secured on each vehicle hauling debris. The Jurisdiction Representative or his/her representative must inspect each load before departure to Temporary and Permanent Debris Management Sites or other approved destinations. Debris must be covered by a tarp or equivalent covering during transport. Debris may not extend beyond the vehicle's bed.

M. Observe side boards on trucks and trailers so that they do not exceed a height of three (3) feet above the metal truck bed or trailer body.

N. Prohibit hand loaded trailers unless approved by the County Representative. Approved hand loaded trailers will have their measured volume reduced by 50 percent.

O. Provide maps to the County and a complete list of streets with the Jurisdiction's recycling and municipal waste disposal collection routes.

5. Terms

This MOU is effective on the date executed below by the County's Chief Administrative Officer. Either party may terminate this MOU upon 60 days written notice to the other party.

(SIGNATURE PAGE TO FOLLOW)

In **WITNESS WHEREOF**, the parties have executed this agreement this ____ day of _____20____.

SIGNATURES

MONTGOMERY COUNTY, MARYLAND

_____ _____

City Manager Date

Andrew Kleine Date

Chief Administrative Officer

Recommendation:

Recommendation:

_____ _____

Director of public Works Date

Adam Ortiz, Director Date

Department of Environmental Protection

APPROVED AS TO FORM AND LEGALITY

BY THE OFFICE OF THE _____

ATTORNEY

_____ _____

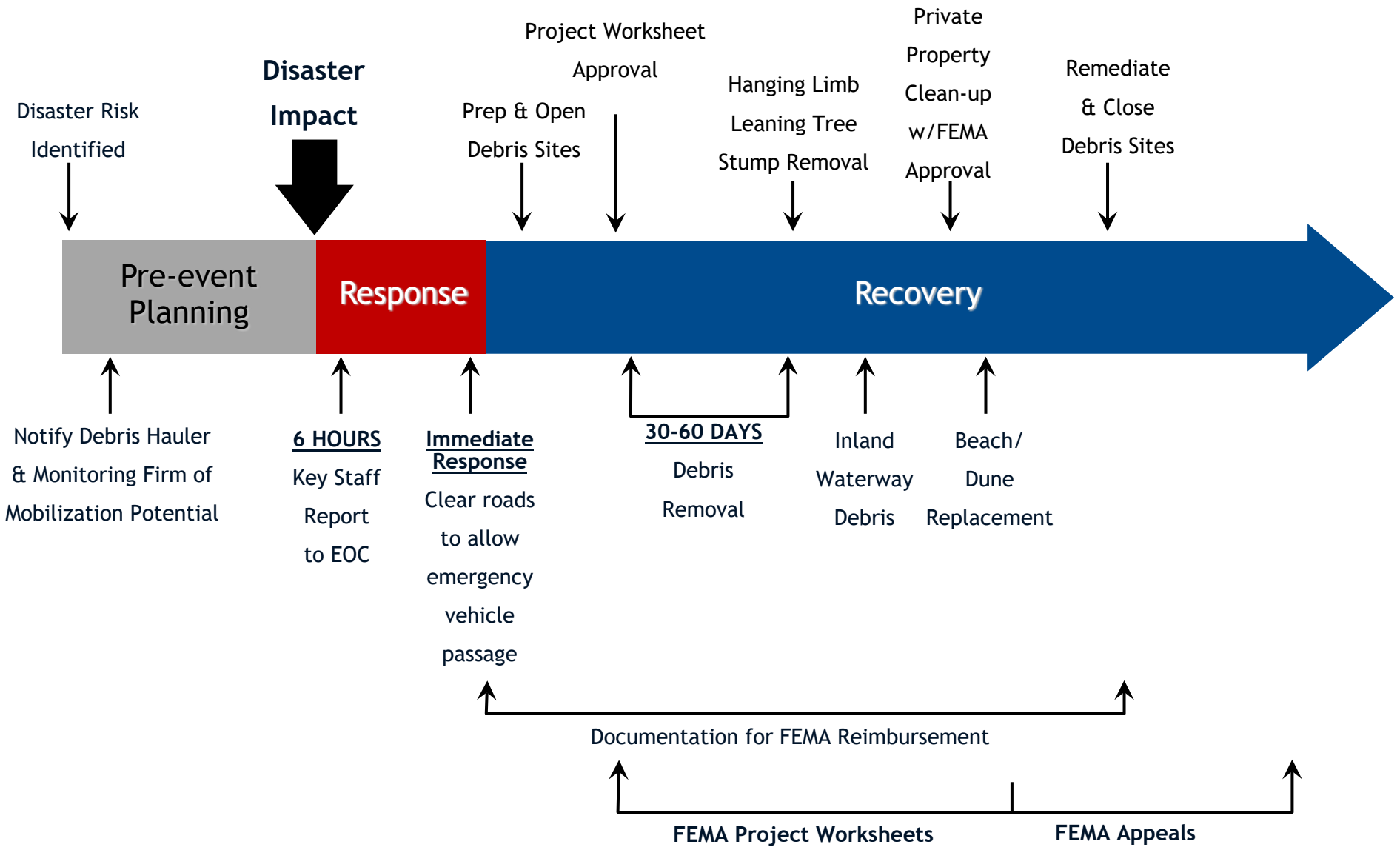
By: Date

By: Date

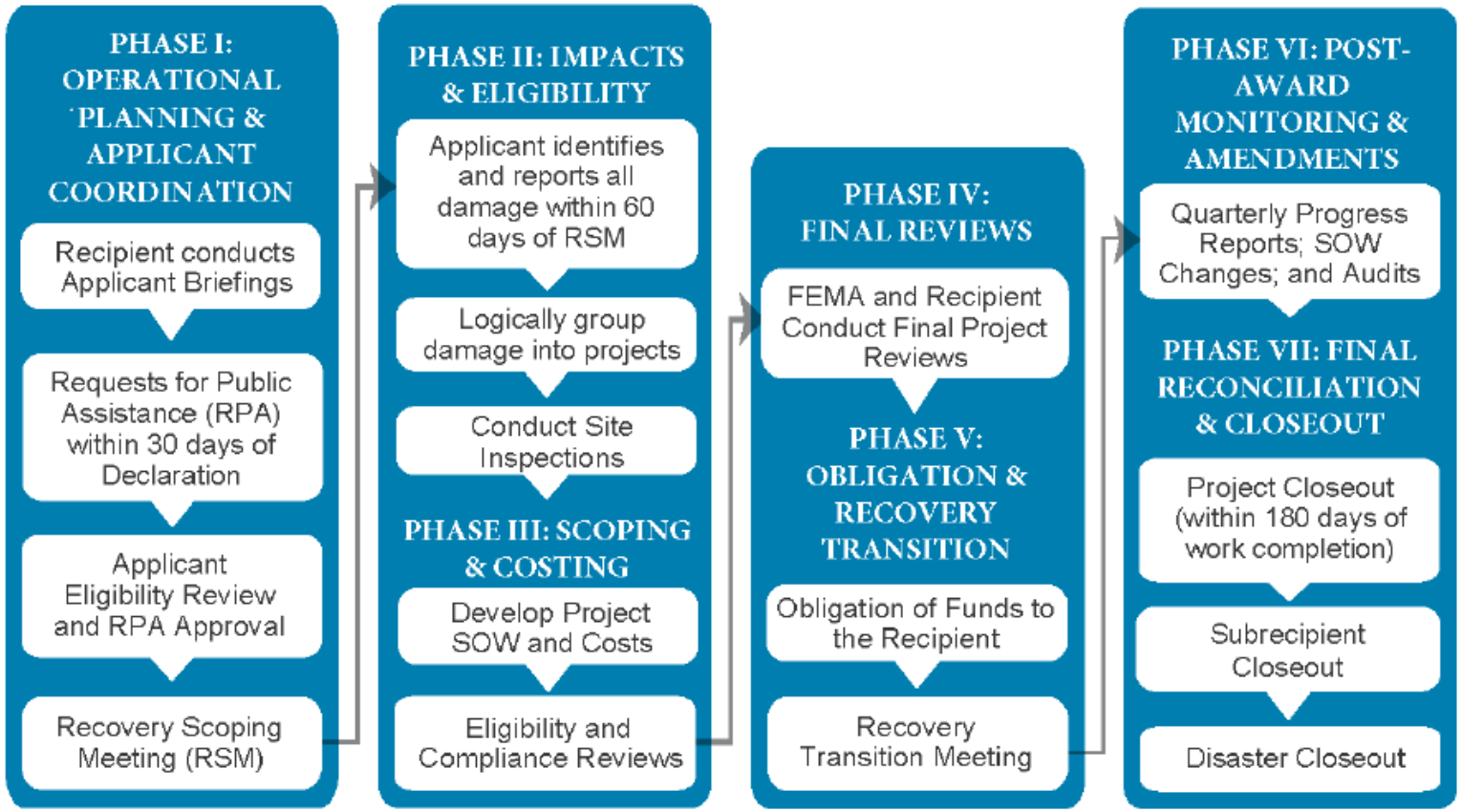
Debris Monitoring Operations
Disaster Management Timeline

Preparedness	• Debris planning • Contracting • Training
Immediate Response	• Damage assessment • Emergency roadway clearing
Recovery	• Right-of-way • Leaner, hanger, stump • Private property • Special program
Closeout	• FEMA reimbursement • Audit

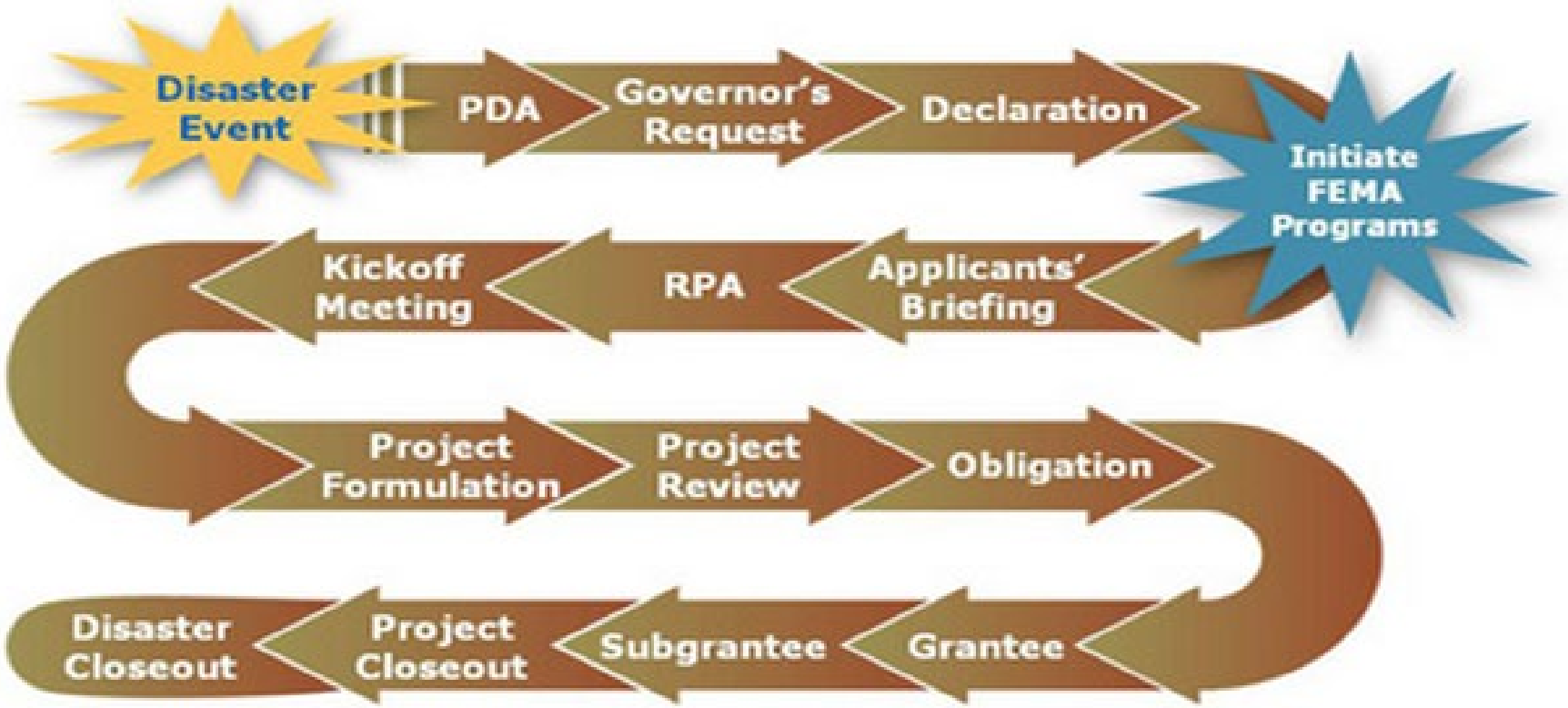
Sample Timeline of Recovery



Understanding the FEMA Public Assistance Program Process



FEMA


Disaster Event
PDA
Governor's Request
Declaration
Initiate FEMA Programs
Applicants' Briefing
RPA
Kickoff Meeting
Project Formulation
Project Review
Obligation
Grantee
Subgrantee
Project Closeout
Disaster Closeout

APPENDIX S: DMP DEVELOPMENT RECORDS

On August 24, 2021, a meeting was conducted to provide training and to discuss updates to the DMP. To remain in compliance with the Emergency Management Accreditation Program, this appendix contains the agenda, presentations, and attendee list from that meeting. The meeting was conducted via Microsoft Teams Meeting in accordance with social distancing guidelines at the time due to the COVID-19 pandemic.

[Documents begin on next page]

Montgomery County
Debris Management Plan
Annual Debris Management Training Summary

August 24, 2021

Purpose: The purpose of the annual debris management training meeting was to discuss new developments in disaster debris management and FEMA public assistance policies and provide an overview of the key concepts in the Disaster Debris Management Plan. The training also provided participants the opportunity to discuss needed updates and changes to the plan.

Agenda

- Welcome: Jamie Foster, Montgomery County
- Discuss updates to FEMA policies: Simon Carlyle, Tetra Tech
- Provide an overview of disaster debris removal monitoring: Simon Carlyle, Tetra Tech
- Discuss technology updates in disaster debris removal: Simon Carlyle, Tetra Tech
- Discuss mobilization and debris removal strategies: Barrett Holmes, Crowder Gulf
- Discuss lessons learned in disaster debris removal: Barrett Holmes, Crowder Gulf
- Open discussion: Jamie Foster, Montgomery County

Meeting Outcomes:

- Training presentations were provided by Tetra Tech and Crowder Gulf.
- Training participants were provided the opportunity to ask questions and provide suggestions for plan revisions. No suggestions were received during the meeting.

Annual Emergency Management Training
TETRA TECH
Montgomery County, MD – August 24th

Overview
TETRA TECH
FEMA Updates
Disaster Debris Removal Monitoring Overview
Technology Updates
• Recoverytrac™ Timekeeper
• Recoverytrac™ Fleet
• Unmanned Aircraft Systems (UAS)

TETRA TECH

FEMA Updates

What's new for 2021?

FEMA Updates

Alternative Procedures Pilot Program

TETRA TECH

Features:

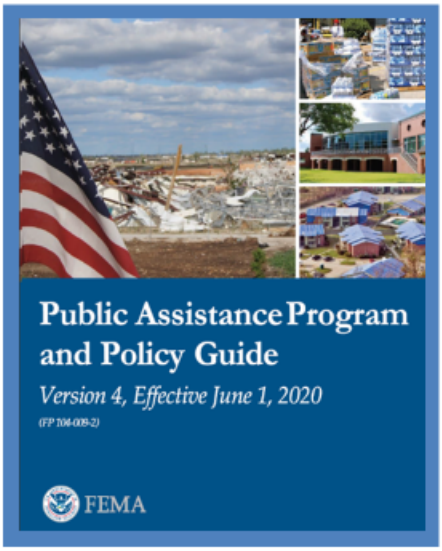
- ~~Federal Share Sliding Scale~~
- ~~Recycling Revenues~~
- ~~Debris Management Plan~~
- Regular and Over-time Reimbursement

FEMA Updates
PAPPG Update, Version 4 – June 2020

TETRA TECH

Updates:

- Reorganizes and simplifies language
- Incorporates the entire program delivery process
- Focuses on outcome driven recovery



FEMA Updates
PAPPG Update, Version 4 – Private Property Debris

TETRA TECH

Updates:

- Written request identifying the specific properties or areas where private property debris removal activities will occur
- FEMA initiates review and surveys
- With exception of debris removal from commercial property, the Applicant does not need to wait for FEMA approval to start work (p.108)

FEMA Updates

PAPPG Update, Version 4 – Private Property Debris

TETRA TECH

Updates:

- Debris removal from Private Roads is eligible for reimbursement if:
  - The road has unrestricted access to the public (no locks, gates or guards)
  - The road is frequently traveled

TETRA TECH

Disaster Debris Removal Monitoring

Overview

complex world | CLEAR SOLUTIONS™

Debris Monitoring – Why it's important

- Necessary if applying for federal grants
- Most communities don't have the resources available to meet FEMA's documentation requirements
- Debris removal costs will likely be the most expensive aspect of recovery
  - From 1980 to 2019 the overall damage/cost of climate disasters exceeds $1.6 trillion (246 events)
- Documentation is critical – Audits are inevitable

PER CAPITA IMPACT INDICATORS

2021 Statewide per Capita Impact Indicators	**$1.55**
2021 County per Capita Impact Indicators	**$3.78**

10

PER CAPITA IMPACT INDICATORS

TETRA TECH

What does that mean for Montgomery County?

Statewide Disaster Declaration Threshold

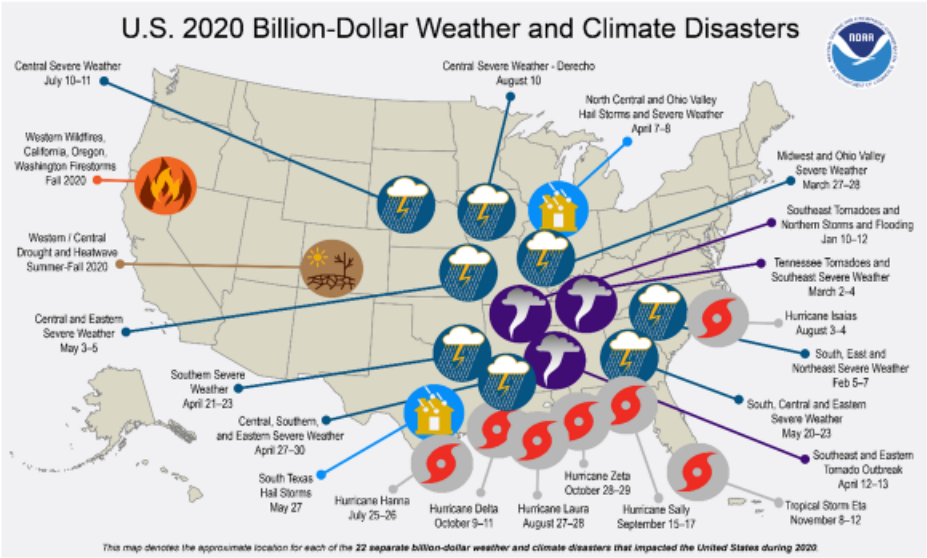
$9,370,804

Montgomery County Threshold

$3,971,600

11

TETRA TECH



Debris Monitoring Operations
Disaster Management Timeline

TETRA TECH

Preparedness	• Debris planning • Contracting • Training
Initial Response	• Damage assessment • Emergency roadway clearing
Recovery	• Right-of-way • Leaner, hanger, stump • Private property • Special program
Closeout	• FEMA reimbursement • Audit

Initial Response

TETRA TECH

Days 1–5

- Twice daily meeting with contractors
- Public information notices
- Debris hotline number
- Subcontractor hiring/referral process
- DMS preparation
- DMS plan
- DMS regulations
- Truck certification
- ROW debris removal operations
- Documentation

Truck Certification Process

TETRA TECH

RecoveryTrac Truck Certification Audit Report — Trucks Certified On: *All

CITY OF AUSTIN SEVERE WINTER STORM ROW COLLECTION - Truck Certification Summary

	Tot Trucks Certified	Tot Certified Capacity	Avg Certified Capacity
⊟Contractor: DRC	9	557	61.89
Totals:	9	557	61.89

CITY OF AUSTIN SEVERE WINTER STORM ROW COLLECTION - Project Truck Certification Details

Contractor: DRC

Sub-Contractor 1: DNR

Sub-Contractor 2	Truck No.	Capacity	Cert Date	Status	Vehicle Tag	Vehicle Type	Vehicle Features	QC Audit Approval
⊟N/A	805808	42	04/21/2021 3:35 PM	ACTIVE	TB6452 (MI)	SELF-LOADING TRUCK		QC Pending

Primary Box (L x W x H): 202x93x92 = 1728512.0 (+)

Type: Box (L x W x H): 31x93x79 = 226874.0 (+)

Total Volume: 1955386.0 Cu Inches (46685E)= 41.86 CuYDs

Driver-Placard View | Side View | Back-Interior View | Front View

Measurements

TETRA TECH

- Deductions are taken when any permanent object in the truck bed reduces the capacity of the debris truck's overall volume.

Truck Certification Key Points

- Truck certification is the most critical component of debris removal operations.
- Measure internal capacity of truck.
- Each truck must receive:
  - Truck certification form
  - Placard displayed on driver's side
  - Photograph of vehicle and driver
- Ensure that truck is completely empty.

Truck Certification Activities What to Expect

- Monitor throughout debris removal process:
  - Sideboards look broken or removed.
  - Placard looks altered.
  - Trucks capacity does not appear to match placard.
  - Request that truck gets re-measured.
- Truck must be recertified if it switches cities/counties.
- No tailgate on truck.

Public Information/Emergency Set-out Procedures

TETRA TECH

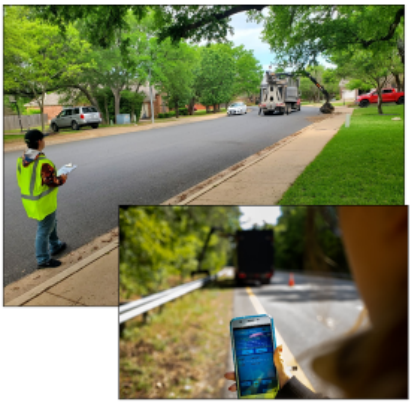
Debris should be staged separately by debris type along the ROW.	Do not bag debris; only loose debris will be collected.	Do not mix HHW with any of the other staged debris types.
Do not mix household garbage with any of the other staged debris types.	Do not place debris near water vaults, fire hydrants, or any other above-ground utility.	Do not place debris on driveways.

19

ROW Collection

TETRA TECH

- Debris that is a result of a disaster incident can be placed along the ROW or curbside for collection.
  - Vegetative debris: tree limbs, branches, and other leafy material
  - Construction and demolition (C&D) debris: damaged components of buildings (excluding reconstruction debris)
  - Household hazardous waste (HHW): paints, stains, solvents, etc.
  - White goods: refrigerators, air conditioners, etc.



20

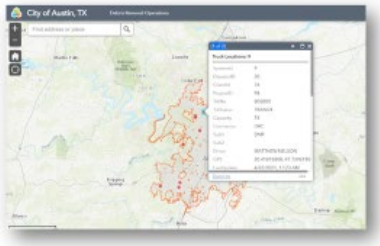
Collection Monitoring Documentation

What is a load ticket?

- A load ticket is a form that monitors fill out with who, what, where, when, and how eligible ROW disaster debris is picked up.
- Load tickets are used to keep track of how much disaster debris is picked up and how much it will cost.

Tracking Capabilities

- Waypoint Tracking
- Monitor Location
- Truck Locations
- Incident Reporting
- Pass Maps



Debris Monitoring
What to Expect

TETRA TECH

Long days	Project challenges	Property damage	Stress/fatigue	Complaints
Expect to work sunrise to sunset, 7 days/week	Issues will occur	A few mailboxes and water meters will suffer	After a week or two of 16-hour days, tempers can flare	Some residents will expect their ROWs hand-raked.

Disposal Monitoring Responsibilities

TETRA TECH

- Make load calls for each inbound truck.
- Check for documentation errors in the field.
  - Contact collection monitor immediately to fix problem.
- Ensure trucks leave empty.
- Check trucks for alterations.

Collection Tracking Procedure

- Ensure debris is storm generated and in an eligible location
- Inspect the area for preexisting damage
- Collect way point for individual piles
- Notate any missed piles via incident report tool
- Closeout collection portion of ticket

Disposal Tracking Procedure

- Inspect load
- Quantify load
- Confirm all collection information is captured
- Generate contractor ticket copy
- Complete log entry

Final Disposal

- It is critical that plans and contingencies for final disposal of vegetative and mixed debris are established.
- Final disposal sites must be properly permitted.
- Debris must be properly disposed/applied at final disposal site.
- Audits are inevitable.

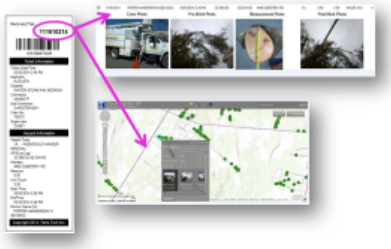
Specialized Debris Removal

TETRA TECH

Special Debris Removal Common Activities

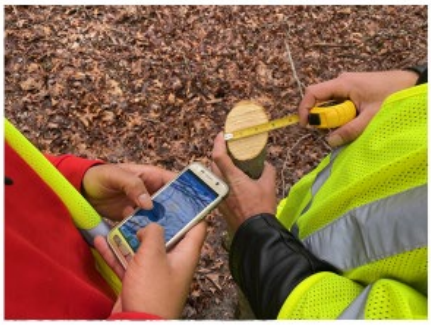
TETRA TECH

- Hanging limb and leaning tree removal (leaners and hangers)
- Private property debris removal (PPDR)
- Public parks
- Stump removal
- Vessel and vehicle recovery
- Animal carcass collection
- White goods
- Hazardous waste



Hazardous Tree Management Procedures

TETRA TECH



Hazardous Tree Management Procedures

TETRA TECH

1. Information and supporting photos are uploaded directly to our database for QA/QC checks as work in the field is completed
2. QA/QC manager verifies photographs for FEMA regulation compliance and that all measurements meet the County's contractual agreement.

RecoveryTrac™ advantages:

- Automatically associates photographs
- Compresses and securely stores photos for field validations and audits in real time

Citizen Collection Centers

- Service citizens in rural or sparsely populated areas where curbside collection may take longer.
- Provide alternative to challenging residential areas where curbside collection is not practical (streets with low-hanging trees or power lines, narrow streets, etc.).
- Provide security to avoid illegal disposal.

Invoicing

- Invoicing kickoff meeting
- Data standards
- Electronic hauler invoice
- Invoicing process
- Retainage

Project Closeout

- Approve closure/remediation of DMS
- Ensure damage claims are resolved
- Transfer original documentation from contractors to applicant
- FEMA/state field validations
- Project worksheet close-out
- Audits

Tetra Tech Technology Updates

1. *RecoveryTrac™ Time Keeper*
2. *RecoveryTrac™ Fleet*
3. *Unmanned Aircraft System (UAS)*

Tetra Tech Technology
RecoveryTrac™ Time Keeper

- Replaces old paper system
- Designed to:
  - Invoice accurately and timely
  - Minimize administrative costs
  - Maintains the security settings required by the USACE ADMS system
  - Easy and efficient (limited training)
  - Enhanced QA/QC

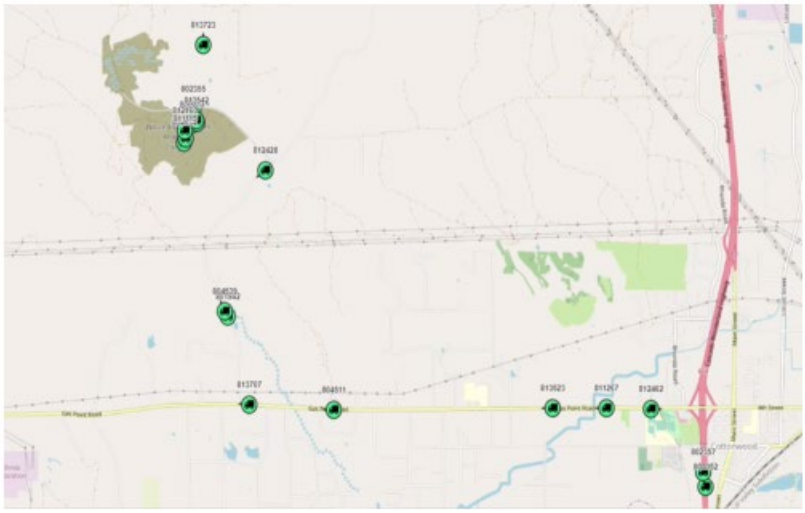
Tetra Tech Technology
RecoveryTrac™ Time Keeper

Captures:

- Time and breaks in online and offline mode
- Documents GPS time preventing fraud
- Documents location where time was entered
- Tracks time to the correct project sub-code.
- Generates a daily log with days, comments, and tickets
- Allows for incident tracking or photographic documentation along the way

Tetra Tech Technology
RecoveryTrac™ Fleet

TETRA TECH

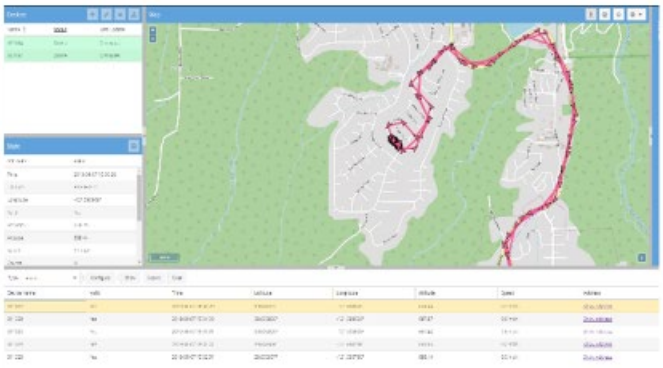


Tetra Tech Technology
RecoveryTrac™ Fleet

TETRA TECH

Captures:

- Speed
- Location
- Time
- Truck number
- Subcontractor number
- Active/not active
- Return times
- Directional location

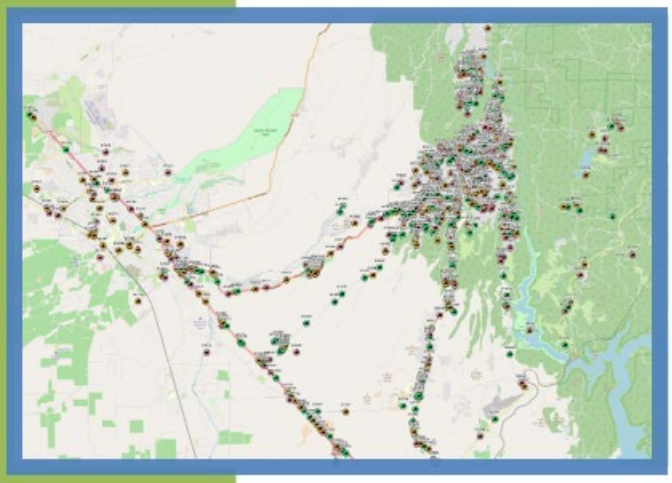


Tetra Tech Technology
RecoveryTrac™ Fleet

TETRA TECH

Case Study:
Caltrans, Butte County

- Stakeholders: Caltrans, CALOES, CalRecycle, Tetra Tech, CHP
- Tetra Tech Fleet technology was used to maintain traffic patters of over 1,000 trucks a day and over 3,500 routes.
- Data captured: 546,000,000 million GPS locations



Tetra Tech Technology
Unmanned Aircraft System (UAS)

TETRA TECH

Capabilities:
— Expedited damage assessments
— Ability to survey inaccessible areas
— Progress tracking
— Before and after comparisons

Tetra Tech Technology
Unmanned Aircraft System (UAS)

TETRA TECH

Case Study:
Camp Fire – Paradise, CA

- Identified critical traffic issues for the purpose of truck routing
- Provided a system-wide view of traffic flow and vehicle progression
- Drone footage captured at key locations during peak travel time

Tetra Tech Technology
Unmanned Aircraft System (UAS)

TETRA TECH

Case Study:
Camp Fire – Paradise, CA

- Drones used for site assessment and pre-planning for debris removal crews on properties with unreachable owners or access issues

Tetra Tech Technology
Unmanned Aircraft System (UAS)

TETRA TECH

Case Study:
Hurricane Irma – Collier County, FL

- Drones were used to document pre and post debris removal conditions of waterways throughout Collier County, FL.
- Drones were also used to help determine waterway ingress/egress locations while assessing potential hazards within the work zone.
- Debris removal locations and quantities were documented during contractors operations

Questions and Discussion

TETRA TECH

CROWDER GULF
Disaster Recovery & Debris Management

Montgomery County, MD
Debris Management Training

Prepared for:
Montgomery County, MD

Presented by:
Barrett Holmes, Regional Manager
Barton Holmes, Project Manager

August 24, 2021

Agenda

- History & Background
- Recent Activations
- Debris Response Model
- Conclusion/ Questions

CROWDER GULF
Disaster Recovery & Debris Management

CROWDER GULF
Disaster Recovery & Debris Management

History & Background

1. 50+ Years of Experience
2. Full Service Debris Management Firm
3. 485+ Disaster Recovery Projects
4. Collected over 450+ Million CY of Debris
5. Managed up to 91 Contracts & 106 DMS Simultaneously

2020 Contract Activations

Hurricanes Laura, Sally, and Zeta

- Up to 33 Simultaneous Contract Activations in TX, LA, MS, AL, and TN.
- Over 19.75 Million CY Collected
- 51 DMS Managed

Tornadoes in Nashville & Chattanooga, TN

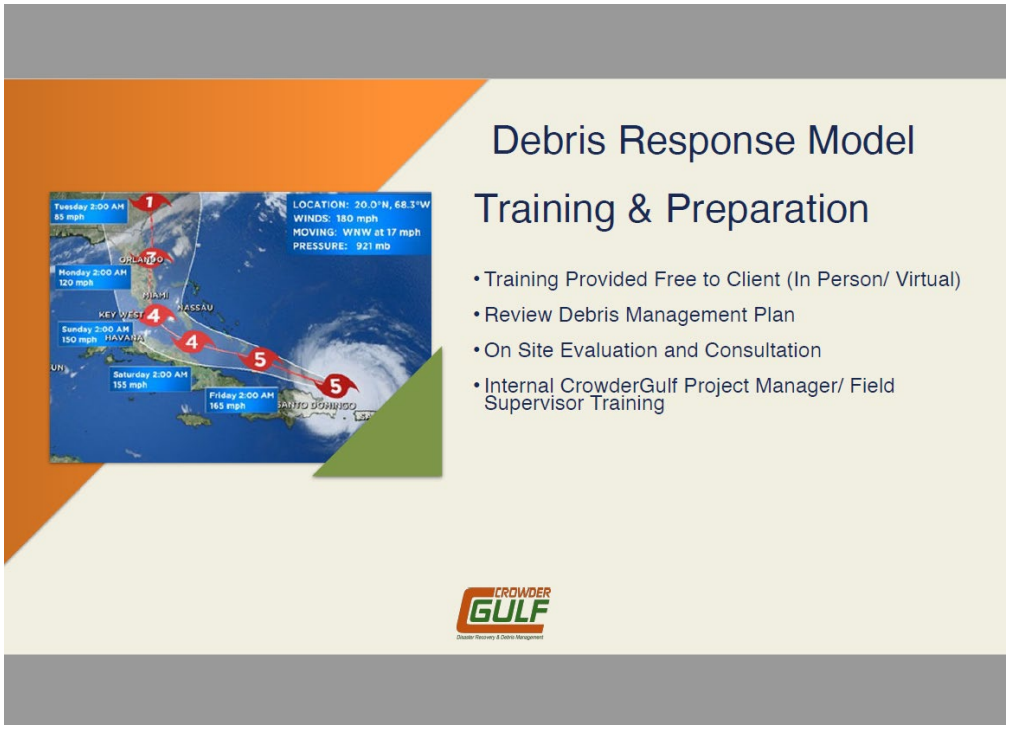
- 35,000 CY removed within 48 hours
- 100,000 CY removed within 7 days
- 350,000 CY removed within 21 days
- All Completed exercising COVID Pandemic Protocols

2018 Contract Activations

Hurricanes Florence & Michael

- Over 18.8 Million CY of Debris Collected
- 34 Simultaneous Contract Activations in FL, GA, SC, and NC.
- 34 DMS Managed
- Resources & Management Teams remained in place from Hurricane Florence when Hurricane Michael made landfall.

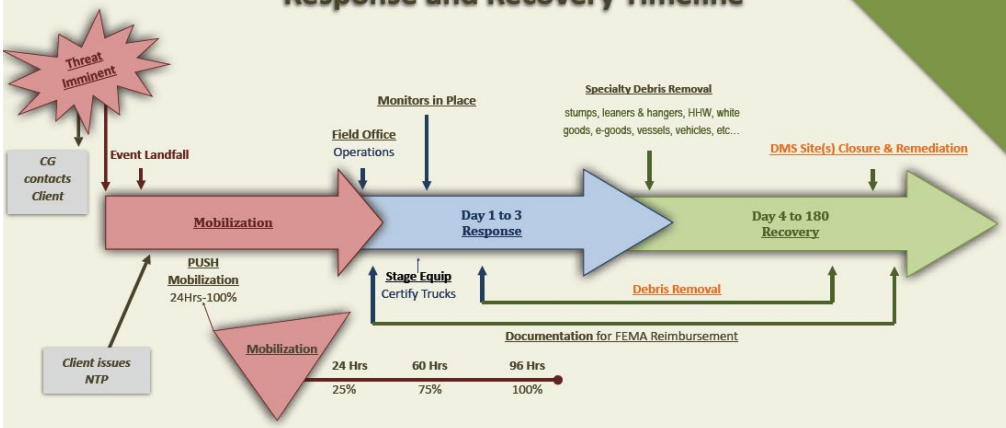
CROWDER GULF
Disaster Recovery & Debris Management
6 Step Debris Response Model
Training & Preparation
Step 1
• Training provided free to client (In Person or Virtual)
• Review Debris Management Plans
• On site evaluations
Mobilization
Step 2
• Notification
• On the ground assessments
• Emergency Push as needed
Establish DMS Locations
Step 3
• Pre-Event
• On Site Evaluation recommended
Debris Removal
Step 4
• Hazardous Limbs & Tree Removal
• Stump Removal
• Construction & Demolition (C&D) Debris
• Sand Removal, Screening, & Return to beach as needed
• Marine Debris as needed
Close Out
Step 5
• Sign Off DMS Locations
• Final Invoicing
Lessons Learned
Step 6
• Prepare for future events
• Incorporate Lessons Learned Into Future Training


Debris Response Model
Training & Preparation
• Training Provided Free to Client (In Person/ Virtual)
• Review Debris Management Plan
• On Site Evaluation and Consultation
• Internal CrowderGulf Project Manager/ Field Supervisor Training
Tuesday 2:00 AM 85 mph
Monday 2:00 AM 120 mph
Sunday 2:00 AM 150 mph
Saturday 2:00 AM 155 mph
Friday 2:00 AM 165 mph
LOCATION: 20.0°N, 68.3°W
WINDS: 180 mph
MOVING: WNW at 17 mph
PRESSURE: 921 mb
ORLANDO
MIAMI
NASSAU
KEY WEST
HAVANA
SANTO DOMINGO
CROWDER GULF

Mobilization

- Establish Communication
- Position/ Reposition equipment and crews out of harms way.
- On the Ground Assessments
- Emergency Push (As Needed; Starts within 12 hours of NTP)
- Await Notice to Proceed (NTP)

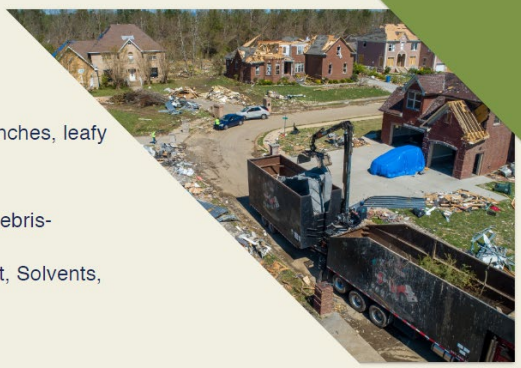
Response and Recovery Timeline



Establish DMS/ Final Disposal Locations

- Debris Management Sites (DMS) are used to store debris until it is reduced & hauled away.
- Sites should be identified & evaluated prior to Event
- Sites should (ideally) be able to accommodate all-weather debris hauling operations.
- Primary & Alternate Plans for Final Disposal of Veg & Mixed Debris
- All must be properly permitted

Debris Removal



- Vegetative Debris- Tree Limbs, branches, leafy material
- Hazardous Limbs & Trees
- Construction & Demolition (C&D) Debris- Damaged structures
- Household Hazardous Waste- Paint, Solvents, etc
- White Goods- Refrigerators, etc

Special Debris Removal

- Leaners & Hangers
- Stump Removal
- Private Property Debris Removal
- Marine Debris Removal
- Animal Carcasses
- Sand Screening

Historically Sensitive Areas

- Houston Baptist Church Cemetery in Port Wentworth, GA (Hurricane Matthew)
  - Small equipment & hand work to minimize disturbance
- Use appropriate equipment for the job
  - Ropes, Pulleys, Bucket Trucks, Cranes
  - Mats & Cribbing
  - Low Ground Pressure Equipment
  - Grinders to remove stumps (as needed)

Environmentally Sensitive Areas

- Audubon Zoo in New Orleans, LA (2020)
- Greenways & Park Complex on Hilton Head Island, SC (Hurricane Matthew)
- Gulf Shores, AL (Hurricane Sally)
  - Wetlands, Bike, and Walking Trails

- Use appropriate equipment for the job
  - Ropes, Pulleys, Bucket Trucks, Cranes
  - Mats & Cribbing
  - Low Ground Pressure Equipment
  - Grinders to remove stumps (as needed)
  - Ponsse Wheeled Forestry Processor/ Forwarder

Close Out

- DMS Reclamation & Sign Off
- Final Invoicing/ Reconciliation
- Audits are inevitable
- "After Action Review" with Client

Lessons Learned

- Prepare for Future Events
- Implement best practices in future training
- Build relationships between Client, Contractor, and Monitor
- Multiple DMS/ Final Disposal (Permitted) locations identified prior to activation
- Yearly training
- We are YOUR resource 24/7/365

CROWDER GULF
Disaster Recovery & Debris Management

Contact CrowderGulf

Disaster Administrative Office
5629 Commerce Blvd East
Mobile, AL 36619

(800) 992-6207

Barrett Holmes, Regional Manager
bholmes@crowdergulf.com
(864) 569-6611

www.CrowderGulf.com

Training Participants

The following individuals and organizations were invited to participate in the online training and received copies of the training presentations. The meeting was conducted via the Microsoft Teams online meeting platform in accordance with social distancing guidelines as a result of the COVID-19 pandemic.

Montgomery County, Maryland Staff
Boldosser, Michael
Bubar, Patrice
Crisostomo, Chuck
Foster, Jamie
Garner, Melissa
Heflin, Lonnie
Kamran, Farooq
Knutsen, Jeffrey
Leahy, James
McClelland, James
Miziorko, Matthias
Moroney, Ted
Salter, Aaron
Serrano, Timothy
Suprata, Steven
Wainer, Willie

Other Jurisdictions/Organizations Represented
Barnesville, Town of
Brookeville, Town of
Chevy Chase View, Town of
Chevy Chase Village of, Section 3
Chevy Chase Village, Town of
Chevy Chase, Town of
Chevy Chase, Village of, Section 5

Friendship Heights, Village of
Gaithersburg, City of
Garrett Park, Town of
Glen Echo, Town of
Kensington, Town of
Martin's Additions, Village of
North Chevy Chase, Village of
Poolesville, Town of
Rockville, City of
Takoma Park, City of
Washington Grove, Town of
Contractor Partners Represented
Ceres Environmental Operations
Crowder Gulf
Tetra Tech

Updates Made to the DMP for 2021

Main Plan

- Updated household # listed in the population table.
- Updated references section – added the FEMA Monitoring Guide, March 2021
- Updated straight line wind debris estimates
- Updated ice storm debris forecast analysis
- Updated Debris Operations Strategy to be consistent with the Appendix F Debris Management Checklist.
    - Pre-event checklist and action description
    - Post-event checklist and action description

Appendix D: Field Documents

- Added Collection Monitor log form
- Added Disposal Monitor log form
- Added Rented Equipment Summary form
- Added Contract Summary Record form

Appendix E: Health and Safety Strategy

- Made miscellaneous formatting revisions.

Appendix F: Disaster Debris Management Checklist

- Updated Appendix F: Debris Action Plan to be consistent with the debris operations strategy
    - Normal operations tasks
    - Pre-event tasks
    - Response tasks
    - Recovery tasks

Appendix J: Disaster Debris Hauler Scope of Work

- Inserted the debris hauler scope of work requirements.

Appendix R: Municipality Information

- Updated the MOU to reflect the update to the DDMP in 2021.

Appendix S: DMP Development Records

- Updated to provide information on the

Appendix T

- Updated the plan maintenance information.

Appendix U 2020 Tabletop Exercise After-Action Report and Exercise Materials

- Added Appendix U to include the 2020 Tabletop Exercise documents including:
    - After-Action Report
    - Exercise Situation Report
    - Exercise presentation
    - Exercise participant list

APPENDIX T: METHOD AND SCHEDULE OF ROUTINE PLAN EVALUATION, MAINTENANCE, AND REVISION

The Montgomery County Office of Department of Environmental Protection (DEP) is responsible for developing, evaluating, maintaining, revising, and distributing the Debris Management Plan.

Each Plan, Policy Manual, and/or Standard Operating Guide/Procedure includes a method and schedule for evaluation, maintenance, and revision in order to ensure routine review, evaluation and update over the lifecycle of each document.

The Method and Schedule for the Montgomery County Debris Management Plan is reflected in the chart below:

	Method	Schedule
Evaluation	1. Annual Training	1. August 2021
Maintenance	1. Updated County and Contractor contact information 2. Updated DMS Appendix	1. September 2021 2. September 2021
Revision	1. DMP revisions to capture FEMA PAPPG changes	1. September 2021

APPENDIX U: 2020 TABLETOP EXERCISE AFTER-ACTION REPORT AND MATERIALS

Montgomery County

Disaster Debris Management Tabletop Exercise After-Action Report

March 2020

Montgomery County
Disaster Debris Management Tabletop Exercise
After-Action Report

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Purpose 1

Scope 1

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Participating Agencies 2

Exercise Scenario 3

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INTRODUCTION

Background

Disasters often produce substantial volumes of debris, creating hazardous conditions that endanger the public and disrupt the essential daily lifestyle and economy of the community. Disasters will result in large expenditures of labor, equipment, materials, and supplies at substantial cost. Montgomery County (County) understands the disruption that can be caused by a storm or other debris-generating event and the need to respond quickly and efficiently to protect the health and safety of County residents. It is imperative that the County continues to prepare to provide an early, safe, and quick response to restoring environmentally safe and economically viable conditions to disaster-affected areas. It is to this end that the County elected to complete a tabletop exercise focused particularly on those departments and staff involved in debris operations.

This after-action report provides the outcomes of the exercise, participant feedback, and recommendations to enhance the County's debris management preparedness program.

Purpose

The purpose of the debris operations tabletop exercise was to provide personnel with an opportunity to discuss a large debris-generating incident that affects multiple public entities within the County. The exercise focused on key decisions and coordination for debris management within the County.

Scope

This exercise was designed to evaluate the County's ability to respond to a debris-generating event. To that end, the exercise focused on debris management after a large debris-generating disaster event such as an Ice Storm. Pertinent elements of the Sperry-Piltz Ice Accumulation (SPIA) Index were used to develop the exercise scenario. See Exhibit 2 for the complete training modules including detailed descriptions of the scenario and questions designed to facilitate robust discussion.

Schedule

The following table provides the exercise schedule.

Activity	Timeframe	Duration
Sign In	10:00 – 10:15	15 minutes
Introduction	10:15 – 10:30	15 minutes
Debris Planning	10:30 – 11:30	60 minutes
Lunch	11:30 – 12:30	60 minutes
Module 1	12:30 – 1:15	45 minutes
Break	1:15 – 1:30	15 minutes
Module 2	1:30 – 2:15	45 minutes
Debrief	2:15 – 3:00	45 minutes

Exercise Objectives

Exercise objectives are the cornerstone of designing and developing this tabletop exercise. The selected exercise objectives define the specific goals of the exercise, provide the framework for scenario development, and provide evaluation criteria by focusing on what the exercise aims to accomplish. The debris planning team developed the following objectives for this exercise:

Operational Coordination

- Coordinate decision making among the various County departments and operations service centers in response to a debris-generating incident.
- Prioritize debris removal operations and coordinate resources accordingly.
- Coordinate public assistance documentation processes.

Public and Private Services and Resources

- Demonstrate the ability to mobilize and coordinate with private sector resources to aid in response to a large-scale, debris-generating incident.

Situational Assessment

- Demonstrate the ability to share information regarding damage assessments, debris estimates, and the status of debris management operations with the County EOC, and County, state and Federal officials as necessary.

Participating Agencies

This exercise included a total of 16 participants, including 5 county representatives, 6 private contractors, and 5 representatives from incorporated municipalities within the County. See Exhibit 1 for the attendee sign-in list.

Exercise Scenario

Module 1: Ice Storm Response

Monday, August 5, 2019, 2:00 p.m. – Hurricane Watch

Situation

- Friday, January 8th 6:00pm – 24 hours prior to impact
  - Weather reports indicate high probability of a destructive ice storm
    - Storm monitoring and preparedness activities

- Sunday, January 10th 6:00am – 12 hours post-impact
  - Initial damage assessments estimate slightly more than 800,000 cubic yards of debris caused by the ice storm throughout the county
    - Immediate post-response activities

Module 2: Emergency Push

Saturday, August 10, 2019, 10:00 a.m. – Critical Roads

Situation

- Wednesday, January 13th – 4 days post-impact
  - Slightly warmer weather causes ice to begin melting
  - Reports of heavy rains over the next 72 hours
  - Catastrophic dam breach warnings
    - Continue Ice Storm recovery activities

- Saturday, January 16th – 7 days post-impact
  - Multiple days of heavy rain and melting ice
  - Catastrophic failure of the Needwood and Frank Dams
    - Estimated number of residential parcels impacted: 6,329
    - Estimated debris generated: 284,805 cubic yards

EXERCISE EVALUATION

The following section provides an overview of the actions related to the two modules and highlights the outcomes of the discussion. The analysis and recommendations are provided to enhance the preparedness, response, and recovery capabilities within the County related to debris operations.

Analysis

During the exercise, participants focused most of their time and questions on the policies, procedures, and timeline of disaster recovery. Since the last major disaster to hit the County was a straight-line windstorm in 2012, many of the participants did not have first-hand or recent experience dealing with debris removal post disaster.

During the discussion, participants focused on overarching issues that impacted the entire County, such as contractor services, limited resources, and communication. They also focused on planning forward to maintain readiness for long-term recovery operations.

Specific concerns shared by many participants in the exercise included updating various maps, equipment lists, key personnel contact information, delegation of responsibilities, distribution of information to the public, and flow of information between the County, its contractors and utility companies, such as PEPCO.

During the exercise, and from participant feedback at the end of the exercise, there was an expressed concern that PEPCO, the local electric utilities provider, would have made a valuable addition to the exercise. Participants noted that the flow of information to and from PEPCO lends a critical role in the disaster recovery decision-making process, especially during the first push phase of recovery.

Recommendations

1. Each year updated forms, lists, and maps should be uploaded to a central drive that will be easily accessible to all key Emergency Management and County staff.
2. Familiarize County and Municipality staff on the process of reporting downed powerlines to PEPCO and clearing debris from the lines so they can be repaired.
3. Create maps detailing City, County, DOT, private, and gated roads.
4. Annually update maps of push routes and ensure that key personnel and contractors have a copy.
5. Assign detailed roles and responsibilities for key positions and review them annually.
6. Establish clear guidelines on when to issue a Notice to Proceed to County contractors. Identify which County staff member will be responsible for issuing the Notice to Proceed.
7. Establish a list of critical staff that require expedited access to cell signals to maintain a constant line of communication with other key disaster recovery personnel. Establish

priority cell phone service through Wireless Priority Service (WPS) through the Department of Homeland Security.

8. Establish a communication center that has a fully stocked and charged cache of laptops, phones, walkie-talkies and radios.
9. Provide a list of Frequently Asked Questions regarding the debris management process to aid the Emergency Operations Center call center staff in addressing customer calls and concerns.
10. Coordinate with residents in gated communities to develop a list of all gated communities within the County's debris management jurisdiction in order to execute right of entry agreements, better manage and communicate expectations regarding debris clean up during future events, and create an up to date list of gate codes which needs to be maintained to ensure the County has access to remove debris on private roads if directed to do so by the Board of County Commissioners.
11. Provide annual training for staff with responsibilities in preparing for, responding to, and in recovering from a debris generating incident.
12. Distribute educational materials to residents that regards setting out debris on the right of way. Debris haulers will not pick up bagged debris.
13. Identify land that can be used as debris management sites. The County currently only has one site. After a disaster, public parks and private land are easier to secure.

EXHIBIT 1: EXERCISE ATTENDEES

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Enter Sign in Sheet PDF

EXHIBIT 2: TRAINING MODULE

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SITUATION MANUAL

Disaster Debris Recovery Tabletop Exercise

Montgomery County, Maryland

March 12th, 2020

Contents

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PREFACE

As part of the region's commitment to enhancing emergency preparedness, Montgomery County (County) is sponsoring this Tabletop Exercise (TTX) to be better prepared to respond to a debris generating incident in coordination with local, state, federal and contract partners. Prior to this exercise, the County and coordinating agencies recognized that a disaster can produce a substantial volume of debris, creating hazardous conditions that endanger the public and disrupt the essential daily lifestyle and economy of the community. This TTX will be used to further refine plans and identify improvement opportunities in how The County plans for, responds to, and recovers from debris- generating incidents.

This situation manual (SitMan) was developed with input, advice, and assistance from County staff involved in development of the County's Debris Management Plan (DMP).

The SitMan provides exercise participants with all the information necessary to fulfill their roles in the exercise. The SitMan is tangible evidence of the County's commitment to ensure coordinated efforts for response to any disaster in the region. The County's planning team intends to provide guidance and improvement planning as next steps for operational plans, procedures, and related documents for future response and recovery operations. The intent of this exercise is to ensure a standard level of awareness among County staff and other partner stakeholder agencies.

This SitMan document and all information discussed as part of the exercise is FOR OFFICIAL USE ONLY.

For more information, please consult the following point of contact:

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Resource Conversion Section
Recycling and Resource Management Division
Department of Environmental Protection
16101 Frederick Road
Derwood, MD 20855
Office: (240) 777-6574
Mobile: (240) 832-0414
Email: jamie.foster@montgomerycountymd.gov

EXERCISE SCHEDULE

Activity	Timeframe	Duration
Sign In	10:00 – 10:15	15 minutes
Introduction	10:15 – 10:30	15 minutes
Debris Planning	10:30 – 11:30	60 minutes
Lunch	11:30 – 12:30	60 minutes
Module 1	12:30 – 1:15	45 minutes
Break	1:15 – 1:30	15 minutes
Module 2	1:30 – 2:15	45 minutes
Debrief	2:15 – 3:00	45 minutes

INTRODUCTION

Background

The County is aware that a disaster can produce a substantial volume of debris, creating hazardous conditions that endanger the public and disrupt the essential daily lifestyle and economy of the community. It is the County's vision to be prepared to address a debris generating incident and to provide an early, safe, and quick response to restoring environmentally safe and economically viable conditions to disaster-affected areas. The County is hosting this TTX to be better prepared to respond to a debris generating incident in coordination with local, state, federal and contract partners.

Purpose

The purpose of this exercise is to validate the ability of the County to mobilize resources and respond to and recover from a debris generating incident. Planning considerations associated with phases of debris operations (see Appendix A for graphic) will be discussed.

The TTX is intended to establish a collaborative learning environment for participants to exercise the response to a large-scale debris-generating incident that involves multiple agencies within the region.

Scope

Exercises are designed to evaluate plans, training, and/or equipment. The scope of this TTX is to evaluate protocols to prepare for, respond to, and recover from a debris generating incident.

Exercise Objectives

Exercise objectives are the cornerstone of designing and developing this TTX. The selected exercise objectives define the specific goals of the exercise, provide the framework for scenario development, and provide evaluation criteria by focusing on what the exercise aims to accomplish. The Exercise Planning Team (EPT) developed the exercise objectives in Table 1.

Table 1. Exercise Objectives and Associated Capabilities

Mission Areas: Response, Recovery	
Core Capability	**Exercise Objective**
Operational Coordination	▪ Coordinate decision-making among affected and supporting entities in response to a debris-generating incident. ▪ Prioritize debris removal operations among affected public entities and coordinate resources accordingly. ▪ Provide support to individuals with disabilities and access and functional needs during debris operations.

Public and Private services and Resources	▪ Demonstrate the ability to mobilize and coordinate with private sector resources to aid in response to a large-scale, debris-generating incident.
Situational Assessment	▪ Demonstrate the ability of affected entities to share information regarding damage assessments, debris estimates, and the status of debris management operations within the County.
Public Information and Warning	▪ Evaluate procedures for coordinating public information messages to ensure consistent, timely and accurate messages are delivered to the public.

Participants

The term participant encompasses many groups of people, not just those taking part in the exercise. Groups of participants involved in the exercise and their roles and responsibilities are as follows:

Players. Players discuss their agency's role in and response to the situation presented based on expert knowledge of response procedures, current plans and procedures, and insights derived from training.

Evaluators. Evaluators observe and record the discussion during the exercise, participate in data analysis, and help draft the after-action report.

Facilitators. Facilitators provide situation updates and moderate discussions. Facilitators also provide additional information or resolve questions as required.

Exercise Guidelines

Participants are expected to adhere to the following assumptions and guidelines during the TTX:

- The Debris Management Plans and local policies and procedures are being evaluated, not participants. Therefore, the TTX will be held in an open, low-stress, no-fault environment. Varying viewpoints or disagreements are expected.
- Participants should respond on the basis of their knowledge of current plans and capabilities (that is, using only existing assets) and insights derived from training.
- Decisions are not precedent-setting and may not reflect an organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Identifying issues is not as valuable as suggesting or recommending actions to improve response and preparedness efforts. Problem-solving efforts should be the focus.

Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted. Exercise participants' acceptance of the assumptions and artificialities listed below are essential in any exercise, and players should not allow these considerations to negatively impact their participation.

- The scenario is plausible, and events occur as presented.
- There is no hidden agenda or trick questions.
- All players receive information at the same time.

EXERCISE SCENARIO

Module 1: Ice Storm Response

Situation

- Friday, January 8th 6:00pm – 24 hours prior to impact
  - Weather reports indicate high probability of a destructive ice storm
    - Storm monitoring and preparedness activities

- Sunday, January 10th 6:00am – 12 hours post-impact
  - Initial damage assessments estimate slightly more than 800,000 cubic yards of debris caused by the ice storm throughout the county
    - Immediate post-response activities

Notes

Key Issues

- Roads across the region are blocked by debris hindering the access of emergency vehicles and utility crews.
- There are widespread power failures and reports of structural damage to critical facilities, homes, roads and bridges.
- News helicopters begin spot coverage of the devastation.
- Hazardous materials might lie within the debris.
- 911 receives calls regarding injured and missing people.

Notes

Questions for Discussion

1. What should be the priorities for the jurisdiction at this time?
2. How will you conduct damage assessments?
3. What would be your process for declaring a disaster?
4. What policies and processes are in place to track costs for reimbursement?
5. What resources will be used for debris clearing and how will they be requested and managed?
6. How will debris operations be coordinated with utility restoration operations?
7. Does the jurisdiction have pre-qualified contractors for debris operations?
8. How will you determine when to activate standby contracts for debris hauling and monitoring services? How will they be managed?
9. What should be communicated to the public and how?
10. How will you track expenses including force account labor and use of equipment?
11. How will debris operations on state or association-owned roadways occur?
12. What protocol(s) for emergency procurement will be followed?

Notes

Module 2: Ice Storm and Flooding

Situation

- Wednesday, January 13th – 4 days post-impact
  - –Slightly warmer weather causes ice to begin melting
  - –Reports of heavy rains over the next 72 hours
  - –Catastrophic dam breach warnings
    - Continue Ice Storm recovery activities

- Saturday, January 16th – 7 days post-impact
  - –Multiple days of heavy rain and melting ice
  - –Catastrophic failure of the Needwood and Frank Dams
    - Estimated number of residential parcels impacted: 6,329
    - Estimated debris generated: 284,805 cubic yards

Notes

Key Issues

- Preliminary debris estimates have been completed.
- Additional debris from dam failure added to estimate.
- Additional resources are acquired to clear roads and collect debris.
- Trucks are being prepared for debris collection and hauling operations.
- Division of resources between ice storm and dam failure recovery.
- The news media is wanting answers to their inquiries regarding debris operations.
- Misinformation is being spread on social media.
- Residents with access and functional needs express concern with their ability to move debris from their property to the right of way.

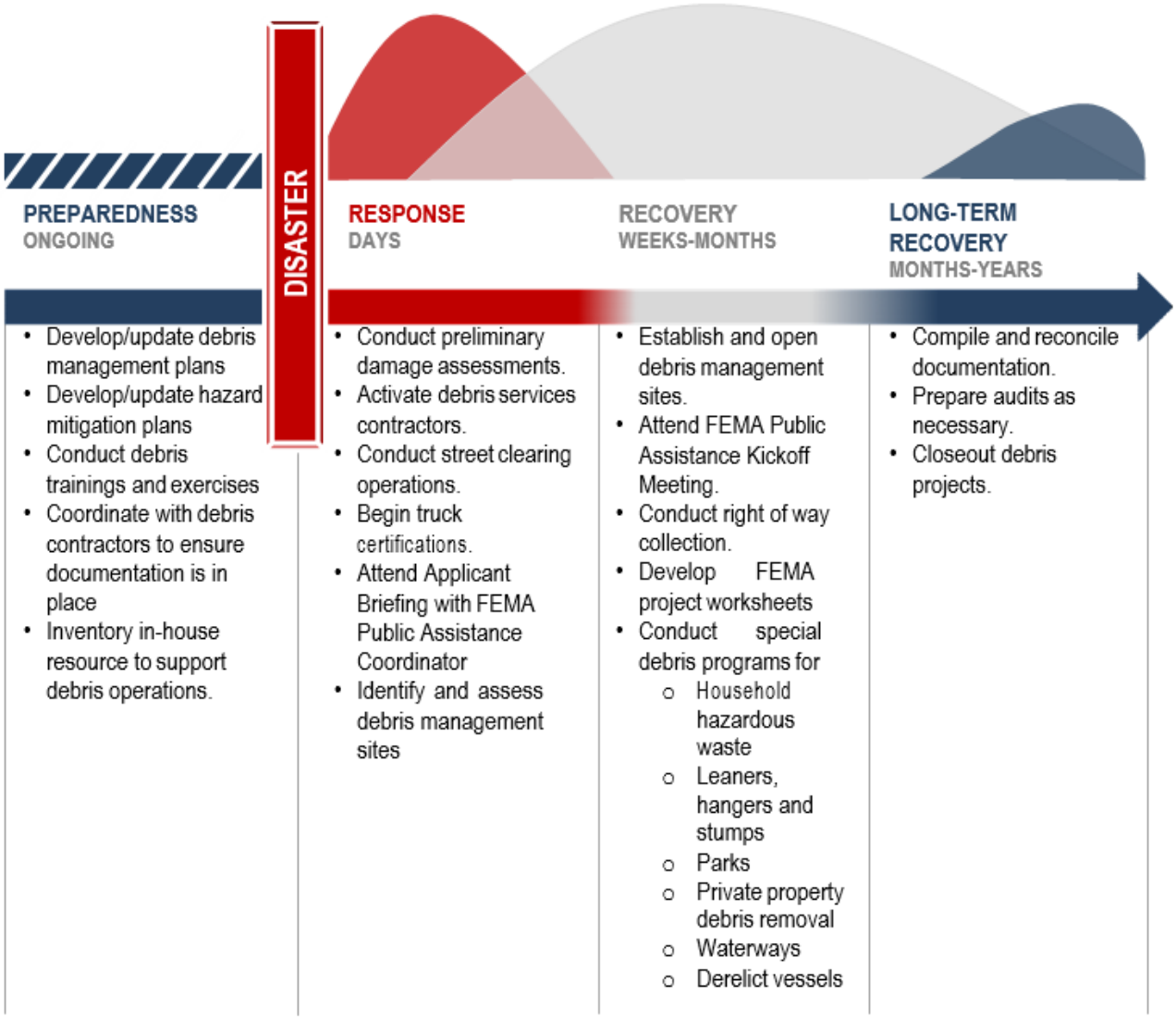
Notes

Questions for Discussion

1. What should be the priority at this point in the scenario?
2. What department or point-of-contact is lead for debris operations?
3. How will you determine where to open temporary debris management sites?
4. What permits and/or certifications will be needed to activate contracts as well as open and operate debris management sites?
5. How should debris operations be monitored to ensure compliance with Public Assistance policies?
6. What message should be communicated to the public at this point in the scenario? How should the development and dissemination of public information be coordinated among the jurisdictions?
7. What actions should be taken to ensure that staff with roles in response to such an emergency are adequately prepared to fulfill their responsibilities?
8. What coordination will need to take place with landfill operators and recycling facilities? How should the disposal of debris be coordinated among jurisdictions?
9. How can volunteer organizations aid the jurisdiction in debris management operations? How will the jurisdiction coordinate and manage volunteer organizations (e.g., Voluntary Organizations Active in Disaster or VOAD)? How will the jurisdiction document volunteer hours, equipment and materials for Public Assistance purposes?
10. What coordination is needed for the assessment and removal of hazardous materials?
11. How should debris operations within waterways be coordinated?

Notes

APPENDIX A: PHASES OF DEBRIS OPERATIONS



APPENDIX B: Acronyms

Acronym	Term
DMP	Debris Management Plan
EPT	Exercise Planning Team
SitMan	Situation Manual
TTX	Tabletop Exercise

APPENDIX C: Public Assistance Thresholds

FEMA Public Assistance
Thresholds & Per Capita Indicators
FFY2019 (10/1/2018 - 9/30/2019)

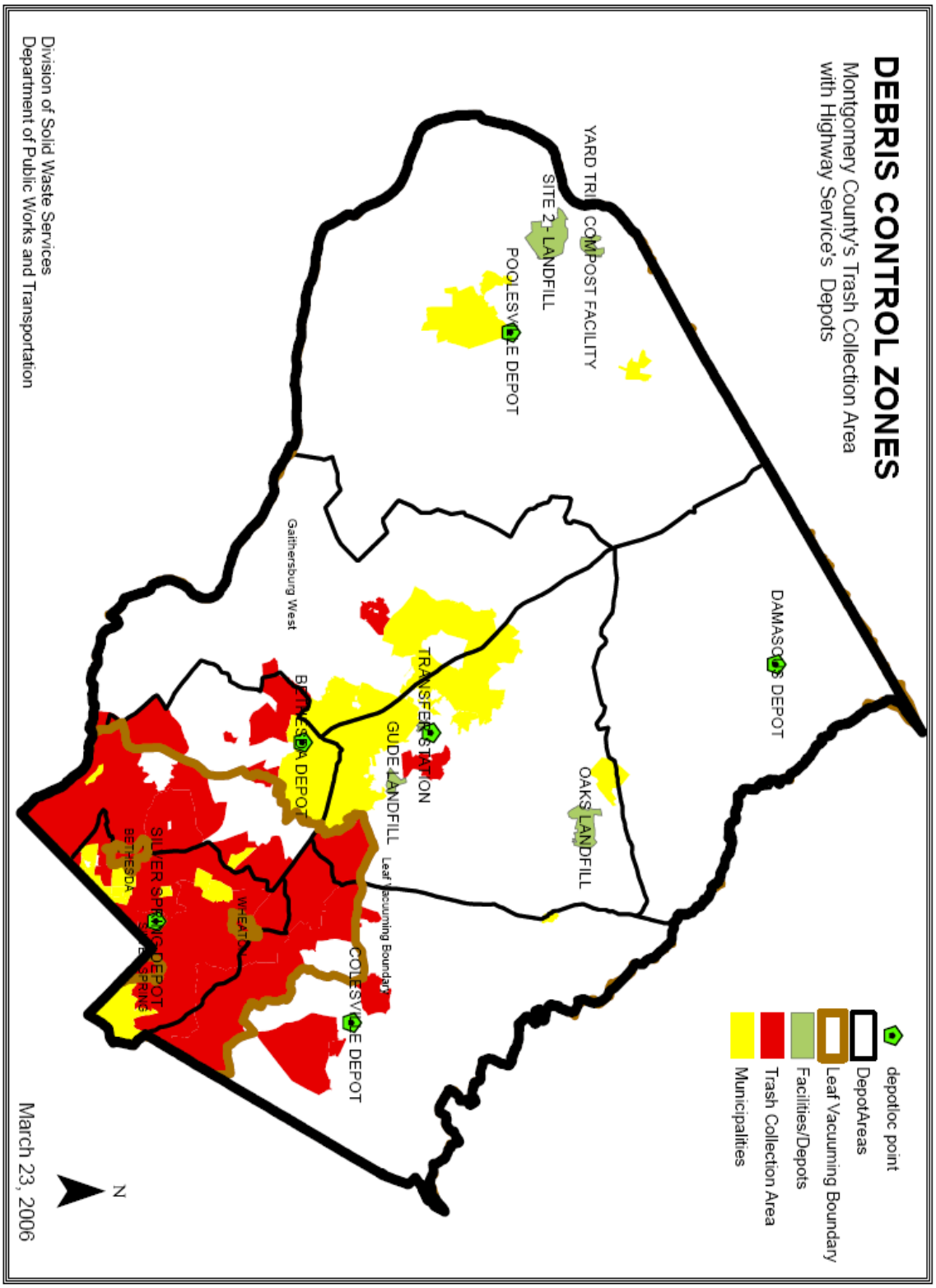
Jurisdiction	Population*	Threshold
Statewide Total	5,773,552	$ 8,660,328.00
Allegany	75,087	283,828.86
Anne Arundel	537,656	2,032,339.68
Baltimore City	620,961	2,347,232.58
Baltimore County	805,029	3,043,009.62
Calvert	88,737	335,425.86
Caroline	33,066	124,989.48
Carroll	167,134	631,766.52
Cecil	101,108	382,188.24
Charles	146,551	553,962.78
Dorchester	32,618	123,296.04
Frederick	233,385	882,195.30
Garrett	30,097	113,766.66
Harford	244,826	925,442.28
Howard	287,085	1,085,181.30
Kent	20,197	76,344.66
Montgomery	971,777	3,673,317.06
Prince George's	863,420	3,263,727.60
Queen Anne's	47,798	180,676.44
St. Mary's	105,151	397,470.78
Somerset	26,470	100,056.60
Talbot	37,782	142,815.96
Washington	147,430	557,285.40
Wicomico	98,733	373,210.74
Worcester	51,454	194,496.12

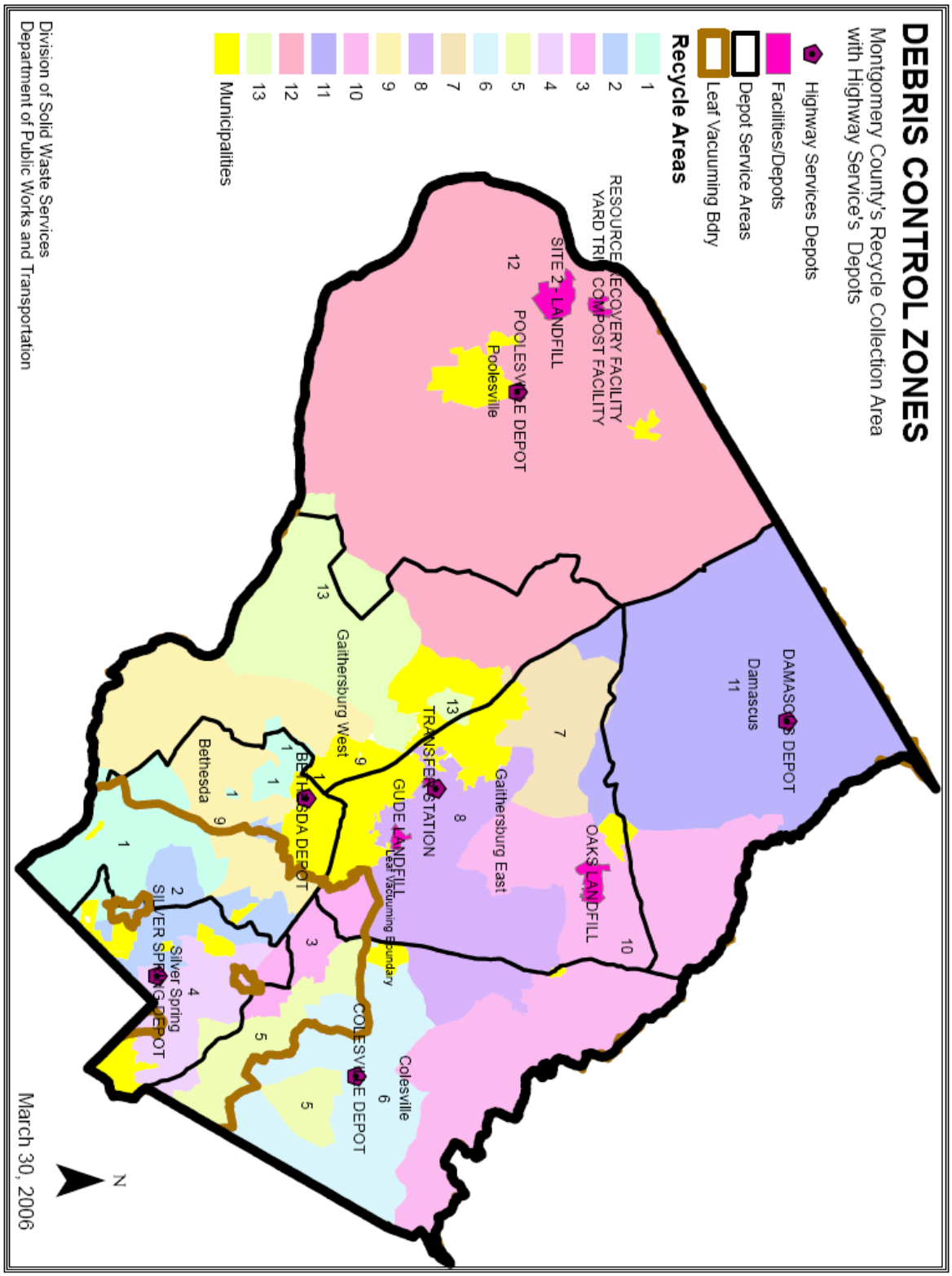
**Populations per 2010 Census*

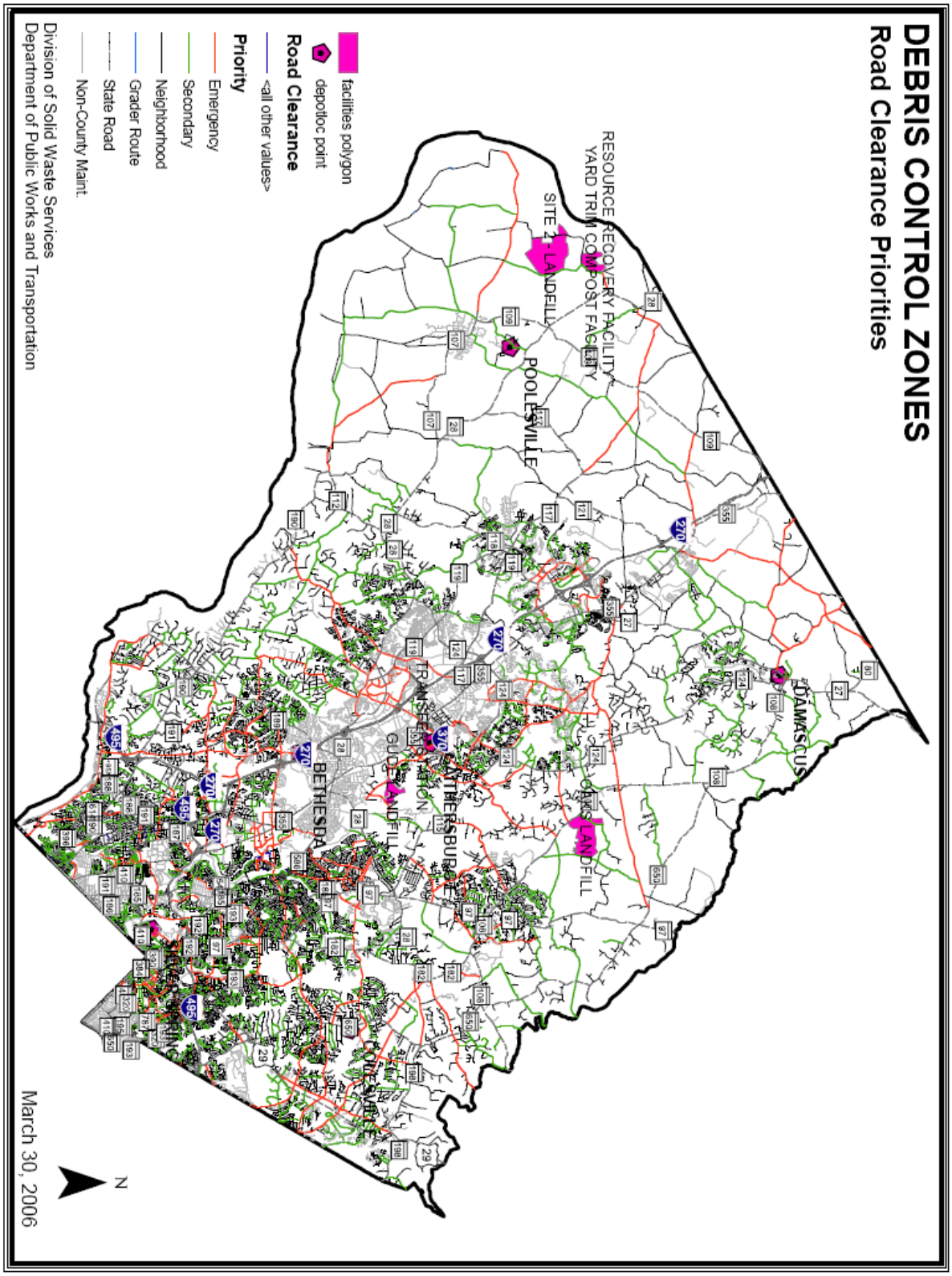
Per Capita Impact Indicators
Countywide: $3.78
Statewide: $1.50

Small Project Thresholds
Minimum: $3,200
Maximum: $128,900

APPENDIX D: Debris Control Zones




DEBRIS CONTROL ZONES
Montgomery County's Recycle Collection Area
with Highway Service's Depots
Highway Services Depots
Facilities/Depots
Depot Service Areas
Leaf Vacuuming Bdry
Recycle Areas
1
2
3
4
5
6
7
8
9
10
11
12
13
Municipalities
RESOURCE RECOVERY FACILITY
YARD TRIM COMPOST FACILITY
SITE 2 - LANDFILL
POOLESVILLE DEPOT
Poolesville
DAMASCUS DEPOT
Damascus
OAKS LANDFILL
Gaithersburg East
TRANSFER STATION
GUDE LANDFILL
Leaf Vacuuming Boundary
Gaithersburg West
BETHESDA DEPOT
Bethesda
SILVER SPRING DEPOT
Silver Spring
COLESVILLE DEPOT
Colesville
N
Division of Solid Waste Services
Department of Public Works and Transportation
March 30, 2006


DEBRIS CONTROL ZONES
Road Clearance Priorities
RESOURCE RECOVERY FACILITY
YARD TRIM COMPOST FACILITY
SITE 1 - LANDFILL
POOLESVILLE
DAMASCUS
DAMS 4 LANDFILL
TRANSFER STATION
GUDELSKY LANDFILL
GAITHERSBURG
BETHESDA
facilities polygon
depotloc point
Road Clearance
<all other values>
Priority
Emergency
Secondary
Neighborhood
Grader Route
State Road
Non-County Maint.
Division of Solid Waste Services
Department of Public Works and Transportation
March 30, 2006
N

TETRA TECH

Montgomery County

Disaster Debris Recovery Tabletop Exercise

March 12th, 2020
10:00 a.m.

16101 Frederick Road
Derwood, MD
20782

MONTGOMERY COUNTY
17 76
GARDEZ BIEN
MARYLAND

complex world | CLEAR SOLUTIONS™

Schedule

Activity	Timeframe	Duration
Sign In	10:00 – 10:15	15 minutes
Introduction	10:15 – 10:30	15 minutes
Debris Planning	10:30 – 11:30	60 minutes
Lunch	11:30 – 12:30	60 minutes
Module 1	12:30 – 1:15	45 minutes
Break	1:15 – 1:30	15 minutes
Module 2	1:30 – 2:15	45 minutes
Debrief	2:15 – 3:00	45 minutes

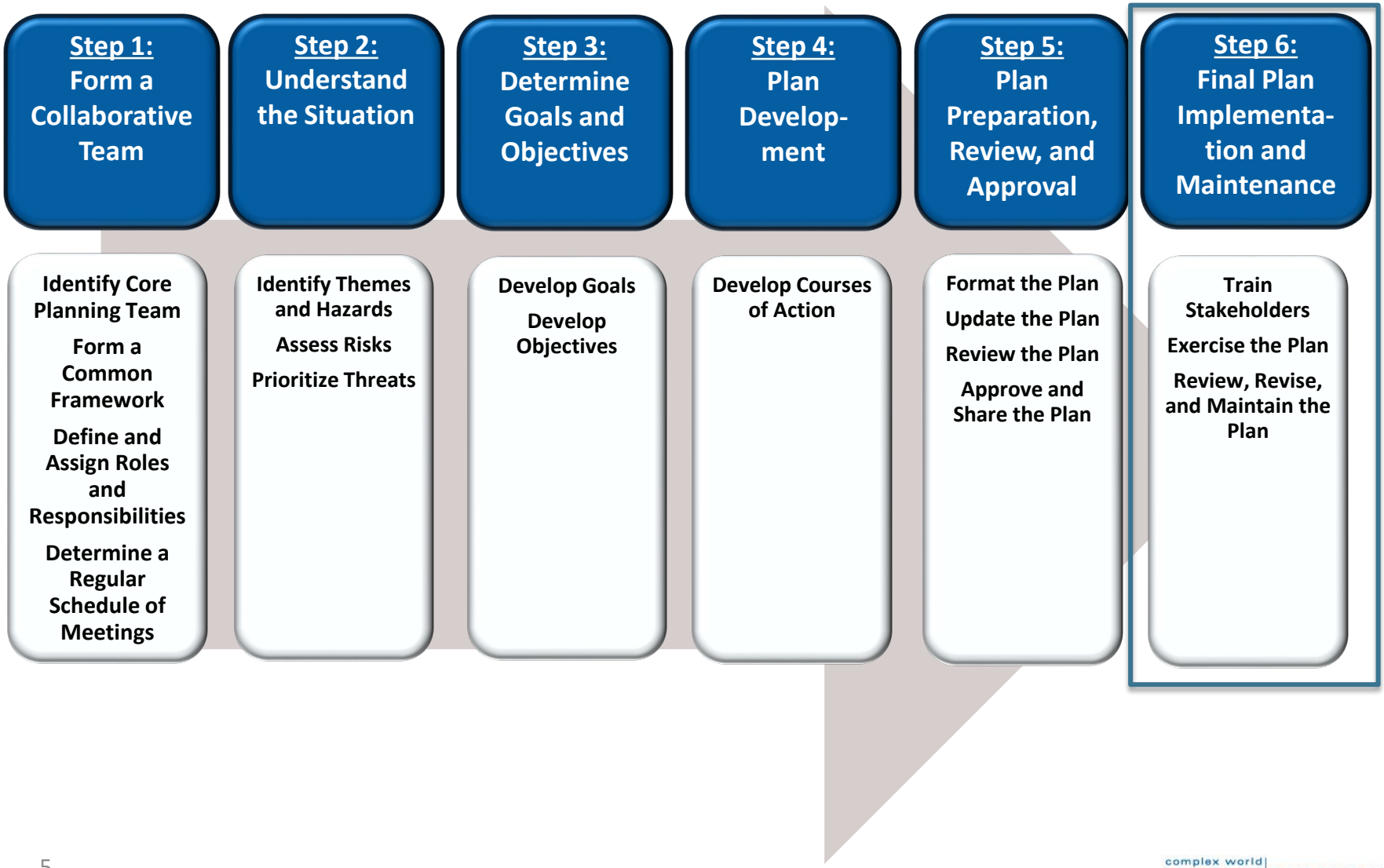
Introductions

- Name
- Agency
- Role

Background

- Disasters often produce substantial volumes of debris.
- Montgomery County (County) developed a Debris Management Plan (DMP).
- The County incorporated the planning and debris management principles from the Federal Emergency Management Agency (FEMA).

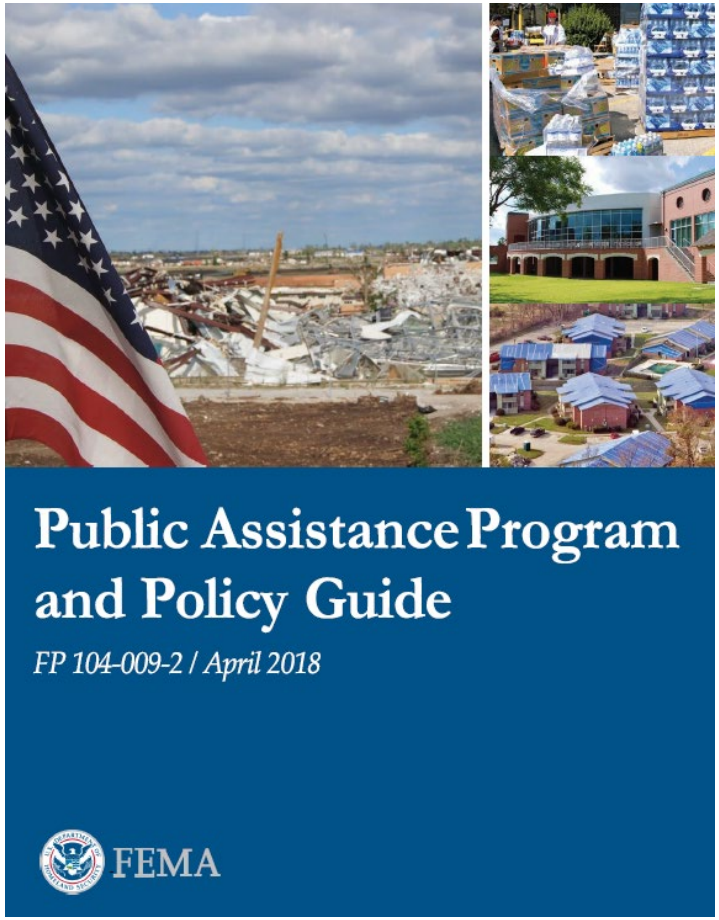
Debris Planning Process



Public Assistance

What is Public Assistance?

- FEMA provides assistance to State, Territorial, Indian Tribal, and local governments and certain types of private nonprofit organizations via its Public Assistance (PA) Program.
- For FEMA to provide assistance, the President must declare that an emergency or major disaster exists.



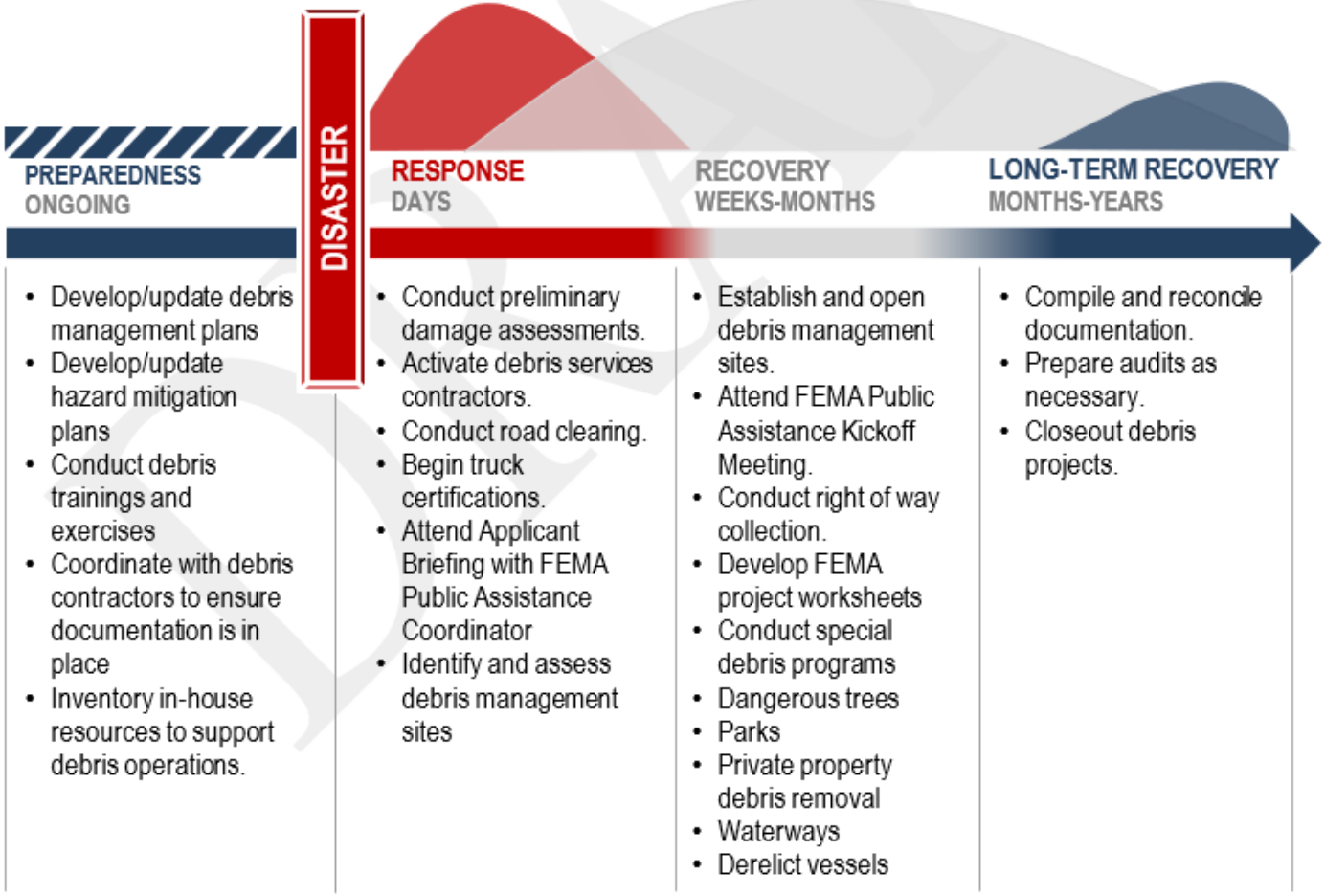
Presidential Declaration

- The Presidential Declaration identifies
  - Federal cost share
  - Type of incident
  - Incident period
  - Designated areas
  - Types of assistance
  - Federal Coordinating Officer (FCO)

Public Assistance Categories

- A – Debris Removal
- B – Emergency Protective Measures
- C – Road and Bridges
- D – Water Control Facilities
- E – Buildings and Equipment
- F – Utilities
- G – Parks, Recreational, Other

DEBRIS MANAGEMENT TIMELINE



Normal Operations

- Update contact lists.
- Evaluate DMS locations.
- Review road list and road maps.
- Establish and maintain pre-positioned contracts.
- Review FEMA guidance.

Normal Operations – DMS Locations

- Temporarily store debris and conduct some form of reduction before the debris is transported to a final disposal facility.
- Considerations in selection of a DMS:
  - Current availability
  - Duration of availability
  - Site ingress/egress
  - Geographic location within the jurisdiction
  - A minimum of 5 acres of usable land

Pre-Incident Checklist

- Download most recent road list and relevant documents to a portable storage device.
- Alert key personnel and place monitoring firm and debris removal contractors on stand-by.
- Review plan with key personnel.
- Issue pre-incident media press releases.

Post-Event Response – Emergency Roadway Clearance

- Push debris off the street on to the right-of-way (ROW).
- Initial focus is on major arteries leading to key County and City facilities.

Post-Incident Response

- Conduct damage assessment.
- Activate monitoring firm and debris removal contractors.
- Begin truck certification.

Post-Incident Response

- Prepare DMS based on concentration of debris.
- Conduct meetings/briefings with key personnel.
- Review debris volume and collection cost assessment.
- Request contact information and a meeting with the FEMA Public Assistance Program Delivery Manager (PA-PDMG).
- Issue media press release.

Separating Your Debris

Debris should be placed curbside, without blocking the roadway or storm drains.

DEBRIS SEPARATION

Separate debris into the six categories shown below.

DO NOT STACK OR LEAN

Placing debris near or on trees, poles, or other structures makes removal difficult. This includes fire hydrants and meters.

UNSURE WHERE TO PLACE DEBRIS?

If you don't have a sidewalk, ditch, or utility line in front of your house, place debris at the edge of your property before the curb.

NO PICKUP ZONE

Any debris placed from the sidewalk toward your property will not be picked up.

Normal Household Trash

Normal household trash and bagged debris of any kind will not be picked up with disaster debris. You should continue to follow your normal garbage removal schedule.

VEGETATIVE DEBRIS

- Leaves (do not put in bags)
- Logs
- Plants
- Tree branches

CONSTRUCTION & DEMOLITION DEBRIS

- Building materials
- Carpet
- Drywall
- Furniture
- Lumber
- Mattresses
- Plumbing

APPLIANCES & WHITE GOODS

- Air conditioners
- Dishwashers
- Freezers
- Refrigerators
- Stoves
- Washers, dryers
- Water heaters

ELECTRONICS

- Computers
- Radios
- Stereos
- Televisions
- Other devices with a cord

HOUSEHOLD HAZARDOUS WASTE

- Cleaning supplies
- Batteries
- Lawn chemicals
- Oils
- Oil-based paints and stains
- Pesticides

For more information contact your local government.

Post-Event Recovery: 2 Days to 2 Weeks

- Open DMS.
- Prioritize roads/areas.
- Issue press release regarding segregation of debris.
- Begin ROW debris removal.
- Perform parks damage assessment.
- Begin environmental monitoring program at DMS locations.
- Coordinate with external agencies.
- Initiate discussions with FEMA.
- Obtain FEMA guidance for gated community and private property debris removal.

Recovery – ROW Collection

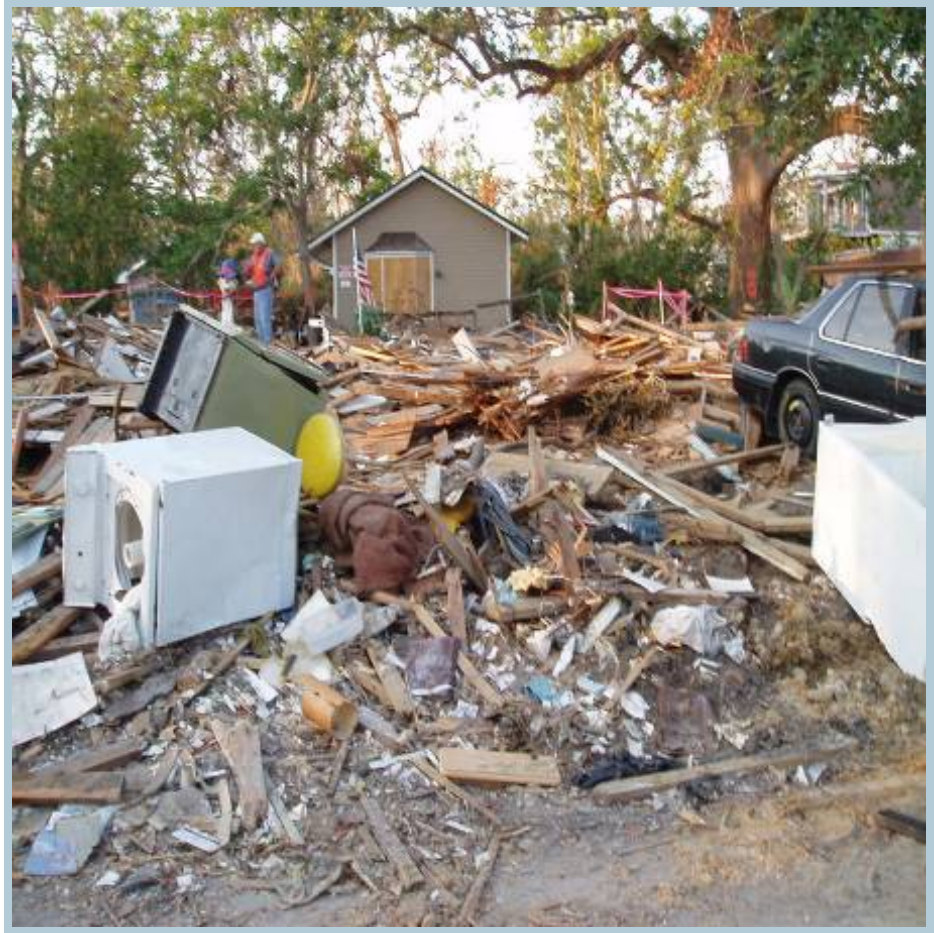
Debris Collection Monitoring

Post-Event Recovery: 2 Weeks to 1 Month

- Maintain and evaluate ROW cleanup.
- Begin ROW stump removal as necessary.
- Open additional DMS as necessary.
- Continue daily meetings with FEMA.
- Begin debris removal from private property and gated communities.
- Communicate project close-out to residents via press release.

Recovery – Additional Passes Throughout the Community

Recovery – Private Property Debris Removal



Dangerous Trees

Post-Event Recovery: 1 Month to 3 Months

- Maintain and evaluate ROW cleanup (vegetative and construction and demolition [C&D]).
- Begin ROW hazardous limbs and trees program.
- Initiate haul-out.
- Progress to weekly meetings with FEMA.

Post-Event Recovery: 3 Months to Project Completion

- Complete all debris recovery activities.
- Identify ineligible debris on ROW.
- Complete the disposal of reduced debris.
- Close-out and remediate DMS.
- Conduct project close-out meetings with FEMA and external agencies.

Please take a 15-minute break.

Tabletop Exercise

Exercise Purpose

- The purpose of this exercise is to validate the ability of counties and municipalities to mobilize resources and respond to and recover from a debris generating incident.
- Planning considerations associated with phases of debris operations will be discussed.
- The TTX is intended to establish a collaborative learning environment for participants to exercise the response to a large-scale debris-generating incident that involves multiple agencies within the region.

Tabletop Exercise Overview

- A tabletop exercise (TTX) is intended to generate discussion of various issues regarding a hypothetical, simulated emergency.
  - Enhance general awareness.
  - Validate plans and procedures.
  - Rehearse concepts.
  - Assess the types of systems needed.

Tabletop Exercise Overview

- Scenario-led discussion
- Tailored discussion questions
- Strengths and areas for improvement of the DMP
- Exercise evaluators/note takers
- After action report

How the Exercise Is Conducted

Hear scenario presentation and receive instructions.

Participate in small group discussion.

Participate in large-group discussion.

Exercise Objectives

Operational Coordination

- Coordinate decision-making among affected and supporting entities in response to a debris-generating incident.
- Prioritize debris removal operations among affected public entities and coordinate resources accordingly.
- Provide support to individuals with disabilities and access and functional needs during debris operations.

Exercise Objectives

Public and Private Services and Resources

- Demonstrate the ability to mobilize and coordinate with private sector resources to aid in response to a large-scale, debris-generating incident.

Situational Assessment

- Demonstrate the ability of affected entities to share information regarding damage assessments, debris estimates, and the status of debris management operations within the County.

Exercise Rules

- Local policies and procedures are being evaluated, not participants. Therefore, the TTX will be held in an open, low-stress, no-fault environment. Varying viewpoints or disagreements are expected.
- Participants should respond on the basis of their knowledge of current plans and capabilities and insights derived from training.
- Decisions are not precedent-setting and may not reflect an organization's final position on a given issue.
- Identifying issues is not as valuable as suggesting or recommending actions to improve response and preparedness efforts. **Problem-solving efforts should be the focus.**

Assumptions and Artificialities

- The scenario is plausible, and events occur as presented.
- There is no hidden agenda or trick questions.
- All players receive information at the same time.

Fight the problems, not the scenario.

Exercise Structure

- Briefing
  - Scenario narrative
- Facilitated discussion
  - Discussion questions
- Participant brief back
  - Incident Command System, table lead
- Debrief
  - Two strengths; two opportunities for improvement

MODULE 1:
ICE STORM RESPONSE

ICE STORM

- Friday, January 8th 6:00pm – 24 hours prior to impact
  - Weather reports indicate high probability of a destructive ice storm
    - Storm monitoring and preparedness activities

- Sunday, January 10th 6:00am – 12 hours post-impact
  - Initial damage assessments estimate slightly more than 800,000 cubic yards of debris caused by the ice storm throughout the county
    - Immediate post-response activities

ICE STORM

Key Issues

- Roads across the region are blocked by debris hindering the access of emergency vehicles and utility crews.
- There are widespread power failures and reports of structural damage to critical facilities, homes, roads and bridges.
- News helicopters begin spot coverage of the devastation.
- Hazardous materials might lie within the debris.
- 911 receives calls regarding injured and missing people.

Small-Group Discussion

ICE STORM

Questions for Discussion

- What should be the priorities for the jurisdiction at this time?
- How will you conduct damage assessments?
- What would be your process for declaring a disaster?
- What policies and processes are in place to track costs for reimbursement?
- What resources will be used for debris clearing and how will they be requested and managed?
- How will debris operations be coordinated with utility restoration operations?
- Does the jurisdiction have pre-qualified contractors for debris operations?
- How will you determine when to activate standby contracts for debris hauling and monitoring services? How will they be managed?
- What should be communicated to the public and how?
- How will you track expenses including force account labor and use of equipment?
- How will debris operations on state or association-owned roadways occur?
- What protocol(s) for emergency procurement will be followed?

Large-Group Discussion

MODULE 2:
ICE STORM RECOVERY AND FLOODING

ICE STORM & FLOODING

- Wednesday, January 13th – 4 days post-impact
  - Slightly warmer weather causes ice to begin melting
  - Reports of heavy rains over the next 72 hours
  - Catastrophic dam breach warnings
    - Continue Ice Storm recovery activities

- Saturday, January 16th – 7 days post-impact
  - Multiple days of heavy rain and melting ice
  - Catastrophic failure of the Needwood and Frank Dams
    - Estimated number of residential parcels impacted: 6,329
    - Estimated debris generated: 284,805 cubic yards

ICE STORM & FLOODING

Key Issues

- Preliminary debris estimates have been completed.
- Additional debris from dam failure added to estimate.
- Additional resources are acquired to clear roads and collect debris.
- Trucks are being prepared for debris collection and hauling operations.
- Division of resources between ice storm and dam failure recovery.
- The news media is wanting answers to their inquiries regarding debris operations.
- Misinformation is being spread on social media.
- Residents with access and functional needs express concern with their ability to move debris from their property to the right of way.

Small-Group Discussion

ICE STORM & FLOODING

Questions for Discussion

- What should be the priority at this point in the scenario?
- What department or point-of-contact is lead for debris operations?
- How will you determine where to open temporary debris management sites?
- What permits and/or certifications will be needed to activate contracts as well as open and operate debris management sites?
- How should debris operations be monitored to ensure compliance with Public Assistance policies?
- What message should be communicated to the public at this point in the scenario? How should the development and dissemination of public information be coordinated among the jurisdictions?
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- What coordination is needed for the assessment and removal of hazardous materials?
- How should debris operations within waterways be coordinated?

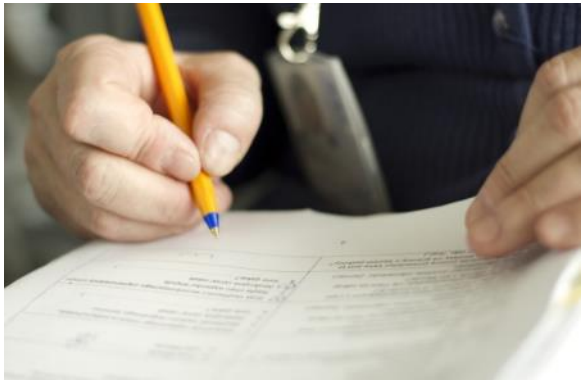
Large-Group Discussion

DEBRIEF

- Strengths
- Areas for improvement
- Lessons learned
- Best practices
- Next steps

Thank You for Your Participation!

- Please complete the Participant Feedback Form.
- If you did not sign in at check-in, sign in before you leave.



Montgomery County, MD
Debris Management Plan
Tabletop Exercise
March 12th, 2020

Name	Position	Telephone	E-mail Address
Danny Sides	Project Manager	336-215-5509	dsides@ashbritt.com
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