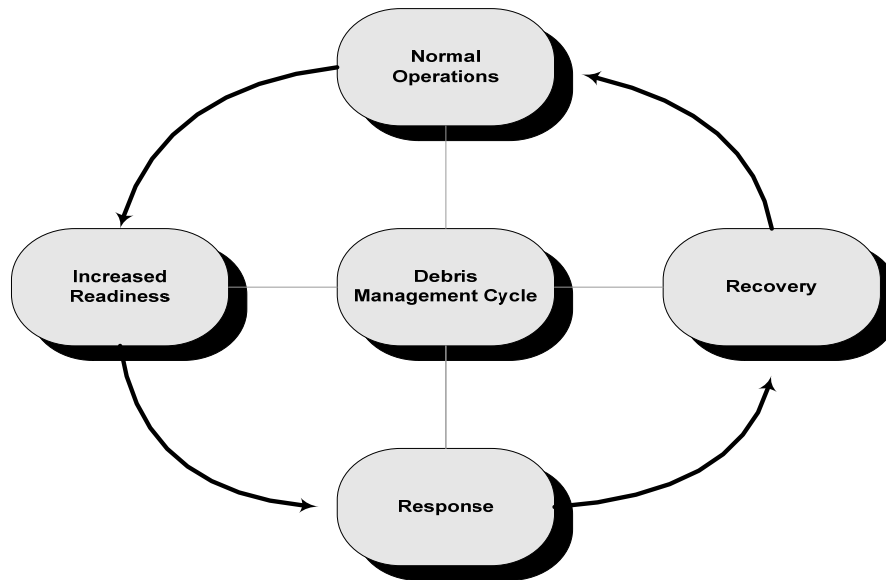


Section 9: Operations

Debris Management Cycle



Concept of Operations

The concept of operations describes how debris management activities will be conducted in response to debris generating events as a phased approach. The phased approach is a four-step cycle that includes normal operations, increased readiness, response, and recovery.

All communities have unique circumstances that impact their responses to disaster events, based on local business/industry, land use, size of the community, topography, economics, etc. The City must address those unique circumstances during the development of the plan. This focus is necessary to address the extraordinary demands placed on public/private resources for debris management following a disaster event.

Having a Disaster Debris Management Plan available will reduce the significance of the issues that accompany the above referenced cycles.

The Debris Management Cycle is a means to visually tie together the variety of debris issues for those responsible for planning and executing debris clean up following a major disaster. The cycle consists of four identifiable phases: Normal Operations; Increased Readiness; Response, and Recovery. Specific debris issues can be identified with each phase. By using this model, emergency planners will be able to identify potential issues before they happen and plan accordingly. Experience has shown that regardless of the type or magnitude of the debris-generating event, the issues identified in the Debris Management Cycle will occur. The only unanswered question is the significance of the issue. The issues will be of minor importance if planned for in advance. However, if issues are not planned for, they will become major issues requiring valuable time and resources.

Section 9: Operations

Conclusion

The Debris Management Cycle provides the Debris Project Manager (DPM) with a framework that identifies when significant debris removal and disposal issues might surface. By knowing when these issues might occur the DPM will be in a position to respond to the pressures from both government officials and the public. Being prepared for the next debris-generating event will reduce the rising costs associated with debris clean-up. Having a Disaster Debris Management Plan on the shelf is the best insurance policy any community can have to insure that their community and fellow citizens can recover as quickly as possible.

Section 9: Operation Phases

Phase (1) Debris Normal Operations

Normal Operations is defined as the period of time before a major debris generating event occurs. This is the period when routine actions necessary to develop or update a Disaster Debris Management Plan occur. A well thought-out plan will become the keystone to any debris cleanup operation.

The plan should be locally developed with external participation to:

- Encourage a diversity of strategic innovations.
- Promote active cooperation.
- Develop points of view based on local experience, capabilities, and limitations.
- Promote information transfer.

Phase (1) - Hurricane Season Preparation (June 1st to November 30th) – Year ‘round

Hurricane season preparation has a part in the continuous operations of the Public Works department, each year, year round.

Phase (1) Checklist:

- Public information (“When an emergency comes...”)
- Detailed planning
- Emergency personnel rosters and assignments
- Training of emergency personnel
- Ensure resource inventories are current
- Confirm agreements with agencies, contractors, etc.
- Prepare to escalate to next stage of alert

Phase (1) Details:

1. Public Information

The bulk of the public information activity for emergency preparedness will continue to come from Emergency Management and the Red Cross. Public Works will enhance this activity by making information available and by ensuring this information gets out to all City personnel and answer questions received by the Public. Public information will be available as part of training.

2. Detailed Planning

Disaster preparedness is a year ‘round activity. Certain personnel responsible for keeping contact lists and response plans up to date must be cognizant of the importance of these activities throughout the year. Individuals responsible for the upkeep of City-wide equipment will ensure that emergency equipment is maintained in a state of readiness throughout the year for use in emergency situations including hurricanes.

Section 9: Operation Phases

2. Detailed Planning (Cont'd.)

Preplanning meetings should take place between Public Works and other entities under “blue sky” conditions to ensure sound planning is taking place, and the proper contacts are being made. Preplanning meetings should include (at a minimum) the following:

- Who
- Purpose
- Date

Detailed planning includes detailed team assignments within each equipment staging area and identification of critical paths that should be cleared first in the event of a disaster. It also includes the identification of suitable storage and staging areas for mass debris removal efforts. This information is included in Zone 1 through Zone 7 Debris Removal, respectively.

3. Emergency Personnel Rosters and Assignments

Overall personnel rosters and assignments are contained with the Zone 1 through Zone 7 Debris Removal of this plan. Rosters and assignments will be reviewed on a regular basis and again in the event of an approaching disaster. Again, the details of equipment staging areas and first push assignments are found in Zone 1 through Zone 7 Debris Removal.

4. Training of Emergency Personnel

On a larger scale the Public Works Department will ensure that both personal and professional hurricane preparedness training is conducted each year for their personnel, at the beginning of the hurricane season. In addition, quarterly emergency equipment training will be conducted to enhance readiness. At a minimum, personnel will be trained to set up and operate various necessary equipment. Lesson plans and training logs will be on hand at each of the divisions.

5. Ensure Resource Inventories Are Current

Resource inventories should be reviewed on a quarterly basis.

6. Confirm Agreements with Agencies, Contractors, Etc.

7. Prepare to Escalate to Next Stage of Alert

Phase (1) Department Responsibilities:

- Review the Comprehensive Emergency Management Plan.
- Public Information (“When an emergency comes...”).
- Detailed planning.

Section 9: Operation Phases

Phase (1) Department Responsibilities (Cont'd.):

- Maintain an emergency telephone list of personnel with addresses, skills and other vital data (*see Appendix B*). This list is to be updated monthly. The list must be consistent with normal division structure, normal job assignment, defining whether or not the employee is a driver and/or heavy equipment operator, etc.
- Emergency personnel rosters and assignments.
- Training of Debris Management Task Force staff.
- Ensure resource inventories are current.
- Confirm agreements with agencies, contractors, etc.
- Develop debris clearance contract specifications for mobilization and use of contract capability.
- Maintain list of priority streets for debris clearance.
- Maintain list of Heavy Equipment Contractors to assist with debris removal.
- Maintain list of suppliers for repair parts, tire repairs, fuel and lubricants. The City should be able to contact these suppliers on a twenty-four (24) hour basis.
- Prepare to escalate to next stage of alert.

Section 9: Operation Phases

Phase (2) Increased Readiness

Increased readiness is defined as the anticipation of an event, such as a hurricane or flood. This is the time when existing plans are reviewed and updated, if required. All departments/divisions that have debris clean up responsibilities as defined in the Disaster Debris Management Plan should be alerted. Key personnel and equipment should be relocated to safe areas to ensure their availability during the Response Phase of the Disaster Debris Management Cycle. Some debris generating events, such as earthquakes and tornadoes, will have little or no response time. Therefore, many of the actions will rollover into the Response Phase.

The size and composition of a required staff will depend on the magnitude of the disaster. A pre-disaster debris planning staff (Debris Management Task Force) may be quite small; however, following a major disaster, additional staff members will be required. The key debris staff positions should be full-time personnel supplemented from other departments/divisions/agencies staffs responsible for debris removal and disposal activities, such as the National Guard; State Department of Transportation; Federal Emergency Management Agency (FEMA), and the U.S. Army Corps of Engineers (USACE). Key personnel should be alerted and deployed either before or immediately after the disaster and should remain part of the Debris Management Task Force (DMTF) staff throughout the disaster cleanup to maintain continuity during the debris removal and disposal operations.

The staff should be comprised of personnel to perform the following functions:

Public Works Department Administrative Staff:

Assist City Finance and Administration, and Logistics Section's regarding housekeeping, supplies, equipment, funding, and accounting.

Contracting and Procurement:

Operations Section will assist Logistics Section regarding Bidding requirements, advertisements for bids, instructions to bidders, and contract development.

Legal:

Operations Section will provide contract review, right-of-entry permits, community liability, condemnation of buildings, and land acquisition for temporary debris storage and reduction sites.

Operations:

Debris Project Manager of the Operations Section will provide supervision of government and contract resources and overall project management.

Section 9: Operation Phases

Debris Project Manager and Debris Coordinator:

Will handle such matters as detailed damage assessment; identification of project tasks; assignments of tasks; preparation of estimates, plans, and specifications; and recommendation of contract award.

The Debris Manager and/or Debris Coordinator should assess debris characteristics, such as:

- Quantities and types.
- Rural, urban, and/or agricultural locations.
- Number of private homes, mobile homes, public facilities, and commercial establishments damaged or destroyed.
- Miles of roads affected by type such as rural, urban, and/or expressway.
- Quantity and types of household hazardous wastes.

Public Information Specialist:

Debris Project Manager will be responsible for submitting information to Operations Section Chief to forward to the City's Public Information Officer to Coordinate press releases; contacts with local organizations, individuals, and media; and public notices for debris removal and disposal contracts.

The Debris Project Manager (DPM) and Debris Coordinator (DC) along with Debris Management Task Force (DMTF) staff should coordinate all debris removal and disposal activities. They should establish contact with all local, State, and Federal agencies responsible for disaster response and recovery operations. Additionally, the staff should develop local contracts for debris removal and disposal services and coordinate requests for additional assistance from FEMA.

Phase (2) Hurricane Approach – Approximately 48 hours before expected landfall

Hurricane approach is defined as the period of time and the corresponding Public Works activities that would be taking place approximately 48 hours before expected landfall.

Phase (2) Checklist:

- Review plans and make personal preparations
- Assign personnel to fill vacancies
- Test communications
- Fuel vehicles and dispatch as appropriate
- Review Emergency Equipment Location Roster
- Prepare to escalate to next state of alert

Section 9: Operation Phases

Phase (2) Details:

1. Review plans and make personal preparations/assign personnel to fill vacancies

A full and comprehensive briefing of all personnel in each of the areas of responsibility above will be conducted as to individual tasks to be performed by assigned personnel. This briefing is to take place at the earliest possible opportunity after the emergency has been declared and response is directed by the Debris Project Manager (DPM). It is the responsibility of the DPM to ensure that the emergency and associated response plan details are clearly communicated to all employees within their area of supervision.

2. Same as number 1 above.

3. Test Communications

All communications should be tested. This includes base radios, vehicular radios, base phones, vehicular phones, and extra cellular phones. Testing of phones with phone jacks and radios in the Disaster Debris Management Center (DDMC) is also required to ensure that their operations center will be functioning to respond to the impending disaster. Communications testing should also include area to area testing to determine the extent of radio and cell phone coverage from one zone to another.

4. Fuel Vehicles

Equipment and vehicles will be placed in a state of readiness with the storm approaching. Vehicles and equipment will be fueled and assigned to various personnel, as necessary, and depending on the impending storm. Response plans should be reviewed with all personnel. Personnel may be sent home at various times prior to landfall of the storm so that they may prepare their homes and families for the event and be ready to report to work for clean-up after the storm passes.

5. Review Emergency Equipment Location Roster

Review roster for location of equipment and supplies.

6. Prepare to escalate to next state of alert

- All water coolers will be filled with fresh water.
- First aid kits will be checked for availability, content, and condition.
- All chain saws will be fueled and made ready. In the event of a category 3 or worse storm event, these chain saws will be distributed to specific individuals and stored in vehicles taken to the homes of designated personnel.
- All personnel working in the field will be issued hard hats and safety vests to wear while working in the field, provided they are available in sufficient quantity. Define length of work shift and provide for relief, meals, etc., for work crews.
- Construction inspectors will determine/confirm what equipment would be useful in the tasks at hand and is readily available from private contractors. Plot where this equipment is located throughout the County. Itemize and prioritize work tasks for field crews.

Section 9: Operation Phases

6. Prepare to escalate to next state of alert (Cont'd.):

- All radio traffic will be strictly limited to storm/disaster related issues only.

Phase (2) Zone Team Assignments:

- During Phase 2 Supervisor's should verify team assignments, assign trucks and/or heavy equipment, and ensure tools have been checked on each truck.
- Supervisors should review road clearing priority list and its associated map with each team.
- Zones 1 through 7 – for Team Assignments. Team Leaders will be issued Crew Cab or Pickup Truck, and 1 Flatbed loaded with tools.

Phase (2) Department Responsibilities:

- Review plans and encourage personnel to make adequate arrangements for safety/welfare of dependents to include personal property measures.
- Debris Project Manager (DPM) shall brief all Supervisors on emergency conditions.
- Debris Project Manager (DPM) shall encourage personnel to make adequate arrangement for safety/welfare.
- Supervisors shall designate emergency teams; assign duties, vehicles and equipment.
- Recheck personnel list and update as needed.
- Test communications.
- Top off fuel tanks, generators.
- Have all vehicles and equipment checked and serviced. Fuel vehicles and dispatch as appropriate.
- Check availability of contractors and equipment.
- Proper and safe use of hand tools and chain saws is mandatory.
- Maintain an inventory list of sign material needed in case of emergency repairs.
- Prepare to escalate to next stage of alert.

Section 9: Operation Phases

Phase (3) Response Phase

Local government is the first to respond to a disaster. Response efforts are first directed to activities that protect lives, public health and safety, such as evacuations and sheltering, fire fighting, utility restoration and clearing roads of debris. Damage assessment should be conducted to identify necessary life-saving actions, assess magnitude of the damage and determine if additional resources are needed. When a disaster occurs and a locality has responded to the best of its ability but is overwhelmed by the magnitude of the damage it turns to the State for help.

The Response Phase follows the debris-generating event. It includes actions necessary to implement the Disaster Debris Management Plan and begin tasks necessary to protect lives and property in the affected community. Debris is normally cleared from the traveled portion of the main roads allowing access to key facilities and to expedite the movement of emergency vehicles. If the event exceeds the capabilities of the Department of Public Works and/or Division of Solid Waste Management, actions should be taken to obtain additional equipment and manpower through mutual aid agreements and/or contracting. These actions will be expedited if mutual aid agreements are in place and sample scopes of work for equipment rental contracts are in draft form within the Disaster Debris Management Plan.

Assigned Debris Management Task Force (DMTF) staff will determine the impact and magnitude of a disaster's damage on individuals, families, businesses, and public property. They will conduct an initial zone by zone windshield survey to identify the type of debris and to estimate amounts of debris on the roadways. The results of the windshield surveys will also be provided to the Debris Project Manager (DPM) to be submitted to the EOC. It is the responsibility of local officials to bring disaster impacts to the attention of state officials. It is then the responsibility of the Governor to use the information gathered by state and local officials during the Preliminary Debris Assessment (PDA) process to determine if federal assistance should be requested.

The PDA is conducted once the State determines that the recovery effort is beyond state and local capabilities. A team is made up of officials from the Federal Emergency Management Agency (FEMA) along with the State officials. Local officials round out the PDA team. The task of the PDA team is to:

- Inspect the damage first hand
- Determine the scope of the damage
- Estimate recovery costs

The results of the PDA process will determine whether or not the Governor requests Federal involvement in the recovery process. The Governor's request is addressed to the President but submitted through the appropriate FEMA Regional Director. After a Presidential Declaration has been made, FEMA will designate the areas eligible for federal assistance and will announce the type of assistance available. FEMA provides supplemental assistance for State and local recovery expenses and the Federal share will always be at least 75% of the eligible costs. The remaining 25% of the costs may be split by the state and local community. A method to conduct an assessment is to divide the community into sectors using the following criteria:

Section 9: Operation Phases

- Type of debris (structural, trees, sediment, mixed)
- Location of debris
- Volume of debris (large versus small)
- Land use (residential, business, agricultural)
- Location of existing and potential temporary storage and volume reduction sites
- Location of existing and potential permanent public and/or private landfills

The following formulas are provided to assist in arriving at uniform debris estimates:

- 1 Story Building:

$$\frac{L'xW'xH'}{27} = \text{_____ CY} \times 0.33 = \text{_____ CY}$$

- Debris Pile:

$$\frac{L'xW'xH'}{27} = \text{_____ CY}$$

- Tons to Cubic Yards for Construction and Demolition Debris:

$$\text{Tons} \times 2 = \text{_____ CY}$$

- Tons to Cubic Yards from Woody Debris:

$$\text{Tons} \times 4 = \text{_____ CY}$$

- Cubic Yards to Tons for Construction and Demolition Debris:

$$\frac{\text{Cubic Yards}}{2} = \text{_____ T}$$

- Cubic Yards to Tons for woody Debris:

$$\frac{\text{Cubic Yards}}{2} = \text{_____ T}$$

Phase (3) Hurricane Approach – Imminent landfall – Less than 24 hours before expected landfall

Hurricane Approach – Phase (3) is defined as the period of time that the height of the storm, and the corresponding destruction is the worst, or imminent landfall.

Phase (3) Checklist:

- Mobilize equipment
- Activate Emergency Operations Centers
- Establish emergency communications

Section 9: Operation Phases

Phase (3) Checklist (Cont'd.):

- Secure facilities and equipment
- Pre-position equipment for emergency operations and rescue
- Conduct only necessary emergency operations
- Provide public instructions
- If needed, activate evacuation plans
- Prepare to escalate to next stage of alert
- Send personnel home (?)

Phase (3) Details:

1. Following warnings issued by Emergency Management that landfall of a hurricane is imminent and will impact Central Florida, and/or resolution by the City of Leesburg declaring an emergency, the Debris Project Manager, Debris Coordinator, and all designated Supervisors will confer at the City of Leesburg Public Works Department. Particulars of the meeting will be based on the specifics of the storm event.
2. The conference room will also serve as the Disaster Debris Management Center (DDMC). Assignments will be reviewed. Personnel may be sent home, in shifts, to personally prepare for the oncoming storm and/or sent to their designated areas, with assigned vehicles to “get ready” (refer to readiness checklists). Details should be immediately communicated to all other Public Works employees.
3. Disaster Debris Management Center (DDMC) set up.
4. Move designated phones into DDMC to serve as emergency operations center for Public Works Department.

Phase (3) Department Responsibilities:

- Activate Disaster Debris Management Center-gather pertinent forms and supplies anticipated for possible storm event.
- Establish emergency communications.
- Secure facilities and equipment.
- A blanket work order for storm damage has been created. A work order will be created for the contractor for storm repair and debris cleanup.
- The Debris Project Manager shall coordinate activities of the staff between the Disaster Debris Management Center and field personnel.
- The Fleet Manager and staff shall maintain vehicles and equipment as required, including generators.
- All employees shall be contacted for instructions. Debris Project Manager shall initiate call-up of personnel or notification of standby condition.
- The Administrative staff will be assigned to the Disaster Debris Management Center.
- The contractor with the equipment is to be on standby at the Public Works yard.
- All employees shall contact the Public Works Department for instructions if they are away from home during an emergency.

Section 9: Operation Phases

Phase (3) Department Responsibilities (Cont'd.):

- As directed by the Debris Project Manager, notification shall be made to employees of mandatory call back and relocation of families to one of the Red Cross shelters, or employees' shelter.
- Define what is available and what equipment is in need of repair.
- Ensure that all equipment (including vehicles, generators and construction equipment) is fueled.
- Organize small equipment (portable generators, hand tools, barricades, flashlights, batteries, additional supplies, rain gear, etc....and distribute to crews).
- Close down all construction projects in progress prior to the disaster and secure loose objects.
- Coordinate with GIS for maps for work crews, other agencies and private contractors.
- Encourage personnel to make adequate arrangements for safety, and welfare of dependents, to include personnel property protection measures prior to reporting for duty. The City will provide some limited shelter areas for employee's families during the emergency.
- Notify Disaster Debris Management Center as to the location of your family.
- Personnel shall be assigned tasks which they are qualified to perform.
- Personnel shall be under the supervision of the Debris Project Manager.
- First Aid Kits shall be on hand for each clean-up crew.
- Contact local contractors to assess availability of privately owned vehicles and equipment for emergency assistance.
- Prepare to escalate to next stage of alert.

Section 9: Operation Phases

Phase (4) Recovery Phase

The Recovery Phase may last from a few weeks to many months depending on the magnitude of the debris-generating event. This phase represents the actual removal and disposal actions needed to bring the community back to pre-disaster condition. This phase will represent the most challenges to the Debris Management Task Force (DMTF) staff, especially if they have failed to consider the following disposal issues:

- Location and capacity of existing public and private landfills
- Location and capacity of potential temporary storage sites
- Volume reduction methods:
 - Burning
 - Grinding
 - Recycling
 - Environmental concerns
 - Conversion of contracts from equipment rental to either unit price or lump sum
 - Contract monitoring requirement
 - Volunteers
 - Federal and State agencies

There are three primary burning methods available:

- Open burning
- Air curtain pit burning
- Incineration

Each burning method should be considered before selection and implementation as part of the overall volume reduction strategy.

Controlled open burning is a cost-effective method for reducing clean woody debris in rural areas. Clean woody debris presents little environmental impact and the resulting ash can be used as a soil additive by the local agricultural community. Local agricultural extension personnel should be consulted to determine if the resulting ash might be recycled as a soil additive. This action will help develop support for controlled open burn operations. The controlled open burning option should be terminated if mixed debris enters the waste stream. Uncontrolled open burning is the least desirable method of volume reduction since it lacks any type of environmental control.

Air curtain pit burning and/or incineration offers an effective means to expedite the volume reduction process while substantially reducing the environmental concerns caused by open burning. The air curtain burning method incorporates a pit constructed by digging below grade or building above grade (if a high water table exists) and a blow unit. The incinerator is prefabricated and can be transported by truck to sites with high water tables. The blower unit and pit make up an engineered system that must be precisely configured to properly function. The blower unit must have adequate air velocity to provide a “curtain effect” to hold smoke in and to feed air to the fire.

Section 9: Operation Phases

Phase (4) Recovery Phase (Cont'd.)

Specifications and statement of work should be developed to expedite the proper use of the system. Experience has shown that many contractors and subcontractors are not fully knowledgeable of the system's operating parameters. Before awarding a contract, the debris staff should assure that contractors are knowledgeable about air curtain burner operating procedures.

Phase (4) Hurricane Approach – Imminent landfall – Less than 12 hours before expected landfall

Phase (4) Department Responsibilities:

- All Debris Management Task Force (DMTF) staff including contractors shall report to the City of Leesburg Public Works Department site.
- All communication equipment should be checked.
- All vehicles and equipment shall be re-checked for fuel, water, oil. The vehicles and equipment shall be checked for normal operating conditions.
- Report deficiencies to Public Works Fleet Services shop for repair. The direct contractor will supply equipment.
- Water and food sources should be prepared for a twenty-four (24) hour duration.
- Instruct contractor and personnel as to their duties during the storm.
- Conduct inspection of buildings and facilities before, during and after storm.
- Provide maps and sign material to assist private contractors if needed.
- Prepare to escalate to next stage of alert.

Section 9: Operation Phases

Phase (5) Hurricane Aftermath – First push (first 100 hours after the storm)

Hurricane Aftermath – Phase 5 is defined, for Public Works purposes, as the first push, generally the first 100 hours after the storm. This is the time that critical roadways are being cleared, possibly one lane, with debris being pushed to the side. It is not the intent to be able, necessarily, to address the debris removal at this time for large-scale storm events.

Throughout this phase, it is imperative that no matter what assignment you might be carrying out, you remember to document, document, document! Use the forms that have been created in case of such an event, take notes, take lots and lots of pictures. Documentation will be key to getting the assistance we need during recovery and getting financial reimbursement following the event. We will not be able to have too much documentation.

Phase (5) Checklist:

- Mobilize personnel.
- Establish communication with Disaster Debris Management Center and EOC
- Conduct emergency operations with due regard for safety of personnel
- Zones to begin first push
- Begin situational and damage assessments
- Determine need for additional resources
- Alert sources of assistance for possible staged departure
- Repair vital facilities and access to those facilities
- Prepare to lower activity level to recovery phase

Phase (5) Details:

1. **Mobilize personnel.**
2. **Establish communication with Disaster Debris Management Center and EOC**

First use radios, if needed try phone or fax to establish communications link.

3. **Conduct emergency operations with due regard for safety of personnel**

You may be inadvertently called out before the disaster has truly passed. You are expected to use common sense and make executive decisions...if conditions are not yet safe for you or the people reporting to you, take cover. Stay in contact with the Debris Project Manager and/or the Debris Coordinator, however, so that they are aware of the conditions you are in.

4. **Zones to begin “First Push” clearance of previously prioritized City roads**

Section 9: Operation Phases

5. **Begin situational and damage assessments**

Part of the initial phase of recovery is damage assessment for the purpose of locating additional resources to impacted areas and for communicating to State and Federal officials should the event be bigger than can be handled by City forces alone. Forms that have been created for such an event will make damage assessment easier in the field. Document, document, document everything that you can. Damage assessments should be made to the Debris Project Manager and/or Operations Section Chief at the EOC. Emergency Management will coordinate with State and Federal officials.

6. **Determine need for additional resources**

One zone may call for assistance from other zones. The Operations Section Chief and/or Incident Commander may call for assistance from cities or adjacent counties. The City may call for assistance from other agencies or from State or Federal officials.

7. **Alert sources of assistance for possible staged departure**

Assistance may be needed by one zone from the other zones in the case of more isolated disasters. Such scenarios should be included in staff's year 'round training.

In the event of a City-wide disaster each zone will be first concerned with their assigned first push routes. Following an assessment that the disaster will require additional assistance, the Operations Section Chief and/or Incident Commander will begin seeking assistance through surrounding counties. The EOC will seek assistance from State and Federal sources should the disaster be of that magnitude.

8. **Repair vital facilities and access to those facilities**

Pre-determined zone teams should begin to assess, clear their assigned "first push" routes.

9. **Prepare to lower activity level to recovery phase**

Long term recovery, as in the case of a major disaster, may go on for days, weeks or months. For the Public Works Department this effort will include debris removal and road repair. Details on this phase will be developed in the Phase (6) section of this plan.

Phase (5) Department Responsibilities:

- Begin situational and damage assessments (working directly w/E.O.C.).
- The Operations Section Chief and/or Debris Project Manager (DPM) shall order reinforcement/removal of traffic control signals. Traffic signal locations - These signs will only be utilized by orders from the Operations Section Chief and/or Debris Project Manager (DPM).
- Operations Section Chief and/or Debris Project Manager (DPM) shall activate disaster response/mobilize personnel.
- Debris Project Manager (DPM) shall assign Public Works Department staff to assist with operation of the Disaster Debris Management Center (DDMC).

Section 9: Operation Phases

Phase (5) Department Responsibilities (Cont'd.):

- Operations Section Chief shall maintain communication with Debris Project Manager (DPM) and Disaster Debris Management Center (DDMC).
- DPM shall order direction of debris clearance.
- DPM shall maintain, report, and supervise the total disaster debris clearance task including debris removal, transport and disposal, and determine need for additional resources.
- DPM shall maintain and report on the status of the streets, roads, and thoroughfares in the City detailing the extent and location of blockages from debris and subsequent clearance activities.
- DPM shall coordinate clearing of debris on State roads with Department of Transportation.
- DPM shall coordinate clearing of debris on County roads with Lake County Public Services.
- DPM shall activate debris disposal sites.
- Order Fleet Services Manager to install emergency generators.
- Coordinate with Public Information Officer (PIO) for the release of Public Information Notices for debris removal and resumption of sanitation collection.
- Provide debris clearance contract inspection personnel to inspect, verify, correct and report contractors performance to include collection, cutting, loading, compaction, transportation and off loading of disaster debris.
- Coordinate with County, State and Federal Personnel and Agencies on all disaster debris related matters.
- Clear Public work areas and facilities of debris as required.
- Check City for signage.
- Alert sources of assistance for possible staged departure.
- Repair vital facilities and access to those facilities.
- Prepare to lower activity level to recovery phase.
- Begin clearing debris.
- Maintain record of location of employees.
- Maintain record of time of employees, vehicles, fuel and equipment.
- Instruct crews to be alert for drainage problems and to report roads or streets that need emergency repairs.
- Prepare for the need of any street or roadblocks. The Debris Project Manager will predetermine the placement of roadblocks.
- Coordinate with the Operation Section Chief and up-date problem areas (maps facilities). Check for signage.
- Keep Fleet Services Manager advised on the need of fuel and other supplies.
- Maintain radio communications with all work crews.
- Maintain communications and provide information to the Operation Section Chief when required.
- Maintain status and location of employee's dependents when possible.
- Maintain and record employee accidents
- Notify Operation Section Chief in case of serious injury or death of an employee.
- If disaster is of long duration, arrange for meals and hot liquids for all employees.
- Personnel safety is a primary concern during debris clearance and removal operations. A safety briefing covering the following subjects shall be made to all clean-up personnel prior to start of operations:

Section 9: Operation Phases

Phase (5) Department Responsibilities (Cont'd.):

- No alone individuals - work in pairs or crews.
 - Each clean-up crew shall have some type of communication equipment prior to leaving the yard.
 - Personnel shall wear all required protective equipment: head gear, shoes, work gloves and eye protection when clearing and removing debris.
 - All vehicles and equipment shall have full fuel tanks.
 - Clean-up crews should not wear rings or jewelry during operations.
 - Extreme caution is to be exercised near downed power lines. All work areas shall be cleared through the Debris Project Manager. Electric Department crews shall conduct appropriate clearance of all work areas.
 - At no time shall clean-up personnel attempt to move downed power lines. Personnel in equipment coming in contact with live electrical lines shall remain in the equipment until trained personnel have eliminated the hazard.
 - All personnel must be alert to wildlife and pets running free - poisonous snakes, dogs and other hazards may be present in the debris to be cleared.
 - Broken utility lines - particularly gas, water and sewer lines shall be reported to Debris Project Manager.
 - Personnel under special medication or a doctor's care must assure the Debris Project Manager that they can work safely and have access to medicine on site if needed.
 - All clean-up personnel shall carry potable water with them sufficient for one day's use.
 - Check to be sure that proper fuel is used in chain saws and that equipment is maintained in safe working order.
 - Maintain radio communication with Disaster Debris Management Center and other work crews.
-
- Fleet Services Division will dispatch vehicles and equipment.
 - Fleet Services Division will maintain maintenance records on all vehicles and equipment.
 - Fleet Services Division will check all City emergency power generators.
 - Emergency power generators will be put in place.
 - Fleet Services Manager will notify Leesburg Electric Department when generators are ready for hookup.
 - Fleet Services Manager will assign personnel to operate generators.
 - Fleet Services Division will provide fuel and lubricant for all City vehicles and equipment.
 - Fleet Services Division will provide fuel, lubricant and mechanical assistance for contractors or other Cities which have been approved to assist with clean-up.
 - Fleet Services to maintain records on all fuel and lubricant used. This report will be turned into the Debris Project Manager (DPM) daily.
 - Fleet Services Manager will assign mechanics their duties.
 - Fleet Services Manager will provide information to Debris Project Manager (DPM) as to the status of vehicles and equipment
 - Fleet Services Division will check auto parts and supplies, order if necessary (spare tires, belts, batteries, etc.) for emergency vehicles and equipment.
 - Maintain record of location of Facility Maintenance employees.

Section 9: Operation Phases

Phase (5) Department Responsibilities (Cont'd.):

- Conduct inspection of buildings and facilities before, during and after storm.
- Instruct Facility Maintenance crews to be alert for damage to buildings and facilities. Damage should be reported as soon as possible to Debris Project Manager.
- Facility Maintenance shall maintain a list of material and equipment used. These reports will be turned in daily to the Debris Project Manager. These reports will show the buildings or facilities where materials and supplies were used.
- Facility Maintenance shall provide information to the Debris Project Manager as to the status of buildings and facilities.
- Facility Maintenance may provide parts and building material to other cities or private contractors. Ensure that all parts and material are recorded when used. Parts and material not used will be returned to Facility Maintenance Division
- Facility Maintenance shall ensure that all buildings and facilities are secured.
- Facility Maintenance shall supervise and inspect all repairs made to buildings and facilities even if only temporary repairs were made.
- Ensure that no electrical work is performed by other cities or private contracts without the approval from the Leesburg Building Inspection Department.
- Facility Maintenance Division will supervise all work to be performed by other cities or private contractors prior to starting repairs. All major repairs to building and facilities will be approved by the Debris Project Manager (DPM) and the City Building Official prior to starting repairs.
- Streets/Signs Division shall Install portable stops sign at the designated intersections established by the Debris Project Manager.
- Streets//Signs Division shall Install portable Red Cross Shelters directional signs at the designated intersections established by the Debris Project Manager (DPM). These signs will only be installed by orders from the Operation Section Chief.
- Streets/Signs Division shall maintain a list of all material and repair parts used on a daily base. This report will be turned in the Debris Project Coordinator each day.
- Streets/Signs Division shall provide repair parts and material to assist cities and private contractors. A record will be maintained by the sign technician to be turned in to the Debris Project Manager on a daily basis.

Section 9: Operation Phases

Phase (6) Hurricane Aftermath – Long term debris removal (days, weeks, or months)

Hurricane Aftermath – Phase (6) is defined, for Public Works purposes, as the long-term clean-up effort following a disaster, and could constitute a clean-up effort of several days, weeks, or even months.

Contractor assistance will most likely be needed and obtained for long-term debris clean-up.

Phase (6) Checklist

- Continue to provide assistance to disaster victims
- Oversee contracts for long-term debris removal
- Begin clearing debris

Phase (6) Details:

1. List of potential debris management sites

The use of these sites should be cleared by Debris Project Manager (DPM), depending on the circumstances of the disaster. Debris Management Sites might be long-term or short-term, and they might be used for burn sights. These decisions will have to be made after the disaster has passed and once the extent of damage has been determined.

2. Public Works personnel will be needed to coordinate clean-up efforts with the contractor

Personnel involved in this activity may require additional and specific training in preparation of Phase 6 activation.

3. The focus of Phase 6 activities will be to get the City back to “normal” as soon as possible

Debris Project Manager (DPM) will hope to return the majority of Public Works employees back to regular work duties as soon as possible following the first push.

4. Disposal

Debris disposal will be a major component of both Phase 5 and Phase 6 activities. Continuous communication with the Debris Project Manager and Debris Coordinator is imperative to the success of the debris management plan. This includes the sighting and selection of staging areas, the method of volume reduction and ultimate disposal. The Public Works Department’s up front efforts can either enhance or impede the efforts of the Solid Waste Division of the department. Enhancement is the goal and communication is the key.

Section 9: Operation Phases

- 5. Approved by the City of Leesburg Commissioners, a pre-disaster contract provides for removal/disposal services of disaster-generated debris**

Should the City experience massive destruction wrought by the impact of a hurricane, violent storms, tornadoes, or other disasters, this will help protect public health and safety, minimize economic and environmental impacts, and facilitate restoration.