



Collier County

Solid & Hazardous
Waste Management

Disaster Debris Management Plan 2025

PROMULGATION

Collier County Disaster Debris Management Plan

The Collier County Disaster Debris Management Plan (DDMP) provides a comprehensive framework for management of debris following a disaster. It addresses the roles and responsibilities of government organizations as well as private firms and non-governmental organizations that might have a role in debris operations.

The Collier County DDMP ensures consistency with current policy guidance and describes the interrelationship with other levels of government and Stakeholders. The plan will continue to evolve, responding to lessons learned from actual disaster and emergency experiences, ongoing planning efforts, training and exercise activities, state and federal guidance.

Therefore, in recognition of the role of Collier County in managing debris following a disaster and with the authority vested in me as the Division Director of the Bureau of Emergency Services, I hereby promulgate the Collier County DDMP.

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Completed by Tetra Tech, Inc.

RECORDS OF CHANGES

The following table documents the revisions made to this plan. This plan should be reviewed and updated annually.

| Revision Date | Summary of Major Changes | Revised Sections | Revised By (Name and Department) |
|---------------|--------------------------|------------------|----------------------------------|
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| | | | |

CONTENTS

PROMULGATION..... ii

RECORDS OF CHANGES iii

TABLE OF CONTENTSError! Bookmark not defined.

1. OVERVIEW 8

 1.1. Collier County Overview..... 8

 1.2. Debris Management Plan Overview 9

 1.3. Plan Development.....9

 1.4. Authorities and References..... 10

Authorities 10

References 11

2. EVENTS AND ASSUMPTIONS 12

 2.1. HISTORICAL EVENTS..... 12

3. STAKEHOLDERS 24

 3.1. County Logistics 24

 3.2. Roles and responsibilities 24

 3.3. Contacts.....25

 3.4. State and Federal Assistance..... 25

State Assistance 26

Federal Assistance 26

 3.5. Private Sector Business Enterprise 27

 3.6. Pre-Positioned Contracts for Debris Recovery..... 27

Debris Clearance and Removal Contractor..... 27

Debris Monitoring Firm..... 28

 3.7. Nonprofit sector.....28

4. PLANNING STAGES..... 30

5. NORMAL OPERATION ACTIONS..... 31

 5.1. COOP/Preparedness/Response Plan Updates..... 31

 5.2 Outside Stakeholder Updates..... 32

 5.3. Review and Update Maps 32

 5.4. Evaluate DMS Locations 33

Considerations for DMS Selection 33

Qualification Criteria 33

5.5. Establish and Maintain Pre-Positioned Contracts 34

5.6. Debris Hauler Services for Smaller Incidents and as a Supplement to Larger Incidents..... 35

5.7. Review FEMA Guidance 35

5.8. Launch Public Outreach Campaigns..... 35

5.9. Conduct Meetings and Trainings Between Key Stakeholders 36

5.10. Check functionality of emergency equipment and stock up on emergency supplies..... 36

6. Levels I – IV: FORECASTED OR NAMED STORM..... 37

6.1. Level I-II: Initiate Preparations 37

 Alert Key Stakeholders..... 37

 Verification and Approvals for County Processes..... 37

 Initiate Public Outreach 38

 Activate Resource Management..... 38

6.2. Level III: Finalize Preparations 39

6.3. Level IV: Hurricane Eventuality 39

7. LEVEL V: Post Event Action Plan and Response..... 40

7.1. Activate Monitoring Firm and Debris Removal Contractors 40

7.2. Emergency Road Clearance & Life Safety Operations 42

7.3. DMS Selection & Damage Assessment 43

7.4. Initiate Discussions with FEMA 44

7.5 Obtain FEMA Guidance for Private Non-Commercial Property 45

7.6. Public Communication..... 46

8. LEVEL VI - RECOVERY OPERATIONS..... 47

8.1. DMS recovery Operations 47

8.2. ROW Debris Removal Operations 49

8.3. Debris Monitoring..... 49

8.4. Ineligible Debris..... 51

8.5. HHW Debris Removal and Disposal 51

8.6. White Goods Removal and Recycling..... 52

8.7. ROW Stump Removal as Necessary 52

8.8. Hazardous Trees And Limbs 52

8.9. Sand..... 53

8.10. Private Property Debris removal 53

8.10.1. Private Roads..... 54

8.10.2. Private Non-Commercial Property..... 54

8.10.3. Private Commercial Property Debris Removal..... 55

8.11. Managing Damage Claims from Debris operations 55

| | |
|---|-----------|
| 8.12. Briefings with Key Personnel. Report Debris Volume & Recovery Costs | 56 |
| 8.13. Provide Public Information Updates on the Status of Disaster Debris Recovery Operations | 56 |
| 9. LEVEL VII: CLOSE OUT PROCESSES | 57 |
| 9.1. Communicate Project Close-out to Residents via Press Release | 57 |
| 9.2. Close-Out and remediate DMS | 57 |
| 9.3. Conduct Project Close-out Meetings with FEMA and External Agencies | 57 |
| 10. OVERVIEW OF RULES AND REGULATIONS | 59 |
| 10.1. Federal Regulations and Guidance | 59 |
| National Environmental Policy Act (NEPA) | 59 |
| Resource Conservation and Recovery Act (RCRA) | 59 |
| National Historic Preservation Act (NHPA) | 60 |
| Endangered Species Act | 60 |
| Clean Water Act (CWA) | 60 |
| Clean Air Act (CAA) | 60 |
| National Emission Standard for Hazardous Air Pollutants (NESHAP) | 60 |
| Executive Order 11990, Protection of Wetlands | 60 |
| FEMA Publication 104-009-2 – Public Assistance Program and Policy Guide, Version 5 | 60 |
| Public Assistance Debris Monitoring Guide, March 2021 | 61 |
| 10.2. Disaster-Specific Guidance | 61 |
| 10.3. Other Relevant Documents | 61 |
| Robert T. Stafford Disaster Relief and Emergency Assistance Act | 61 |
| Code of Federal Regulations: Title 44 – Emergency Management and Assistance | 61 |
| Sandy Recovery Improvement Act (SRIA) of 2013 | 62 |
| Disaster Recovery Reform Act of 2018 | 62 |
| 10.4. State of Florida Regulations | 63 |
| Guidance for Establishment, Operation, and Closure of Disaster Debris Management Sites | 63 |
| Hazardous Waste Handling Standards | 63 |
| 11. FUNDING SOURCES FOR DISASTER DEBRIS OPERATIONS | 63 |
| 11.1. FEMA Public Assistance (PA) Program | 63 |
| Cost and Damage Thresholds | 63 |
| Cost-Sharing | 63 |
| 11.2. Consequences of Non-Compliance | 64 |
| 11.3. FEMA Hazard Mitigation Grant Program | 65 |
| 11.4. Department of Housing and Urban DeVelopment: Community Development Block Grant – Disaster Recovery | 65 |
| 11.5. Other Funding Options | 65 |

APPENDIX LISTING

- A. Action Levels
- B. Key Contact Listing
- C. Debris Management Site Analysis
- D. Sample Public Outreach
- E. Maps
- F. Field Documents
- G. Private Roads Ordinance
- H. Right of Entry Form
- I. Health and Safety Strategy
- J. Interlocal Agreements and Memorandums of Understanding
- K. Roles and Responsibilities
- L. Action Items
- M. Road Maintenance Preparedness Plan
- N. Stormwater Preparedness Plan
- O. Parks and Recreation Preparedness Plan
- P. Public Utilities Department Continuity of Operations Plans
- Q. Contract Guidance
- R. Debris Removal Contractor and Monitoring Firm Solicitations
- S. Civil Emerg Ordinance and FEMA Guidance
- T. Private Road List
- U. Damage Incident Reporting Form and Example
- V. Debris Hauler Scope of Work for Smaller Incidents or Incident Support
- V2. Debris Solicitation Spreadsheet for Smaller Incidents or Incident Support

1. OVERVIEW

1.1. COLLIER COUNTY OVERVIEW

Collier County is the largest county in land area east of the Mississippi River, with approximately 2,025 square miles of land and 112 square miles of inland surface water. The County is bordered on the north by Lee and Hendry Counties; south by Monroe County; and east by Broward and Miami-Dade Counties.

| | |
|---|------------------|
| Collier County Population (2024 Census Population Estimate)* | 416,233 |
| City of Everglades City Population (2020 Census) | 352 |
| City of Marco Island Population (2022 Census Estimate) | 16,210 |
| City of Naples Population (2022 Census Estimate) | 19,704 |
| Countywide Peak Season Population (2020**) | 469,125 |
| Dwelling Units (2023) | 245,477 |
| Land Area (square miles) | 1,993.32 |
| Water Bodies (square miles) | 112 |
| Federal & State Lands: Parks, Preserves, Refugees (acres) (2022) | 955,409 |
| Number of Golf Courses (Public & Private) | 75 |
| Miles of County Maintained Roads**** | 1,186.272 |
| Public Roads (County) | 1,185.41 |
| Private Roads (Gated) | 740.27 |
| Private with Public Access (Non-Gated with Public Access or City) | 960.18 |
| State or Federal Roads | 282.39 |

* [U.S. Census QuickFacts: Collier County, Florida](#)

** [Collier County Growth Management Website:https://www.colliercountyfl.gov/government/growth-management/divisions/planning-and-zoning-division/comprehensive-planning-section/population-and-demographics](https://www.colliercountyfl.gov/government/growth-management/divisions/planning-and-zoning-division/comprehensive-planning-section/population-and-demographics)

*** [U.S. Census Bureau - QuickFacts Collier County, Florida](#)

**** [Florida Department of Transportation, 2023 City County Mileage Report, October 4, 2024](#)

1.2. DEBRIS MANAGEMENT PLAN OVERVIEW

Collier County government is responsible to provide for the public health, safety, and welfare of the residents of Collier County and recognizes the responsibility to be prepared for a debris-generating event. Collier County has designated the **Solid and Hazardous Management Division** with the responsibility to safely remove debris from the County's right of ways. This Disaster Debris Management Plan (DDMP) (Plan) does not address debris in waterways which falls under the responsibility of the Growth Management Division.

Situated on the Southwest Coast of Florida, Collier County is highly vulnerable to natural disasters, such as hurricanes, tornadoes, flooding, and wildfires. Disasters most often produce substantial volumes of debris, creating hazardous conditions that endanger public health, welfare, and safety and disrupt the essential daily lifestyle and economy of the community. These disruptions are a result of the following:

- Obstructed or unsafe roadways
- Obstructed or unsafe right-of-way and pedestrian walkways
- Environmental offenses resulting from hazardous material spills or releases; the resulting contamination 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 that Collier County be prepared to provide all necessary disaster recovery services and have the means to recover all eligible costs from state and federal agencies that have funds available to assist local governments in coping with all natural and human-caused disasters.

Protection of public health, welfare, life, and safety are the highest priorities and it is mandatory that there be an early, safe, and quick response to restoring environmentally safe and economically viable conditions to the disaster-affected areas. This objective has the highest priority in the County's planning efforts as well as the ability to deal with all damage. It is to this end that Collier County developed this Disaster Debris Management Plan (DDMP).

The purpose of the County DDMP is to outline the components critical to the success of preparing the County for a natural disaster and debris removal operations in the aftermath. The DDMP 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. Key components of a successful debris removal operation is the County's understanding of the following elements prior to a debris-generating event:

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

1.3. PLAN DEVELOPMENT

To initiate the planning process for disaster preparation and recovery, Collier County has identified the resources necessary for critical decisions and successful recovery efforts. The DDMP will outline resources

plans, policies, and procedures to ensure compliance with the best national practices for debris management.

Major components of this DDMP, including the following:

- Roles and responsibilities
- Planning assumptions
- Debris collection and removal strategy
- Debris management sites and final disposal facilities
- Debris removal on private property
- Use of force account labor and contracted debris services
- Debris monitoring operations
- Risk and damage assessment
- Health and safety requirements
- Environmental and regulatory requirements
- Public information
- Debris monitoring and removal service contracts
- Note: Waterway debris removal is under the responsibility of the Growth Management Department. The Waterway Debris Plan can be found in **Appendix N** of this plan. All disaster debris management operations will be coordinated with the County as the applicant.

1.4. AUTHORITIES AND REFERENCES

The Collier County DDMP is developed, promulgated, and maintained under the following County, state, and federal authorities, and references:

Authorities

- 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
- Disaster Recovery Reform Act (DRRA) of 2018
- US Code, Title 44, Volume 1, Chapter 1, Emergency Management and Assistance, Parts 0 – 399 Federal Emergency Management Agency, Department of Homeland Security.
- US Code, Title 44, Volume 1, Chapter 4, Emergency Management and Assistance, Parts 400 – 499 Department of Commerce and Department of Transportation.
- US Code, Title 42, Chapter 103, Comprehensive Environmental Response, Compensation, and Liability (CERCLA) and Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA).
- US 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).
- US Code, Title 2, Grants and Agreements.
- Florida Statutes Title XXIX Public Health, Chapter 403.7071, Management of Storm-Generated Debris
- Code of Laws and Ordinances of Collier County, Florida; in particular, Chapter 38 Civil Emergencies and Chapter 118 Solid Waste. H.R. 4460 – Disaster Recovery Reform Act, 2018

References

- Homeland Security Presidential Directive 8, National Preparedness, December 17, 2003
- National Disaster Recovery Framework, Second Edition, Department of Homeland Security, December 10, 2024
- Public Assistance Debris Monitoring Guide, March 2021
- National Response Framework, Department of Homeland Security, Fourth Edition, October 28, 2019
- NIMS, Department of Homeland Security, Third Edition, October 2017
- NIMS Guide for County Officials, National Association of Counties, October 2006
- FEMA Preliminary Damage Assessment Guide, July 2025
- FEMA PDA Pocket Guide, July 2025
- FEMA Public Assistance Alternative Procedures FAQ for Debris Removal
- FEMA Comprehensive Preparedness Guide (CPG) 101, September 2021
- FEMA Public Assistance Program and Policy Guide (PAPPG) Version 5, January 2025
- FEMA State Lead Public Assistance Guide (SLPAG), February 2019
- Collier County All-Hazards Guide, 2018

2. EVENTS AND ASSUMPTIONS

2.1. HISTORICAL EVENTS

Since 1876, Collier County has been impacted by sixteen (16) hurricanes and five (5) tropical storms (see Table 2-1), making it one of the more active areas on the Gulf Coast. Hurricanes have impacted the County from the southeast, west, southwest, and almost directly from the south. Additionally, tropical systems that affect the County from the east may not decrease in magnitude because they have already made landfall. Hurricane Wilma increased in strength over the Everglades after an initial landfall temporarily decreased its strength to a Category 2 storm.

Most recently, Collier County was affected by Hurricane Milton which made landfall on October 9, 2024, near Siesta Key as a category 3 hurricane. This hurricane resulted in a total of 34,027 cubic yards of debris in Collier County. 25,592 cubic yards of the debris were vegetative while the remainder, 8,434 cubic yards, consisted of construction and demolition debris.

In 2022, Collier County sustained major impacts from Hurricane Ian which made landfall as a category 4 hurricane on September 28, 2022, at Cayo Costa. A total of 1,371,802 cubic yards of debris was collected from Collier County from Hurricane Ian. In addition, 92 units of E-waste, 1,952 units of white goods, and 11,255 pounds of household hazardous waste were collected in response to Hurricane Ian.

In Table 2-1 is a list of the hurricanes and tropical storms for which Collier County received a declaration of disaster and/or collected debris. The table also lists the quantities of vegetation, construction and demolition (C&D) debris collected, and the number of debris management sites (DMS) used in response to the disaster.

Table 2-1: Natural Disasters Affecting Collier County

| # | Category | Name | Date of Landfall | Vegetation Collected (CY) | C&D Collected (CY) | Number of DMS | Date of Declaration of Disaster | Disaster Relief Policy in Place |
|----|----------------|---------|------------------|---------------------------|--------------------|---------------|---------------------------------|---------------------------------|
| 1 | 3 | Betsy | 09/08/1965 | Unk | Unk | Unk | 09/14/1965 | FDRA ¹ |
| 2 | 5 | Andrew | 08/24/1992 | Unk | Unk | Unk | 08/24/1992 | Stafford Act ² |
| 3 | 3 | Opal | 10/04/1995 | Unk | Unk | Unk | 10/04/1995 | Stafford Act |
| 4 | 2 | Georges | 09/25/1998 | Unk | Unk | Unk | 09/25/1998 | Stafford Act |
| 5 | 1 | Irene | 10/15/1999 | Unk | Unk | Unk | 10/20/1999 | FEMA 323 ³ |
| 6 | 2 | Frances | 09/5/2004 | Unk | Unk | Unk | 09/04/2004 | FEMA 323 |
| 7 | 3 | Ivan | 09/16/2004 | Unk | Unk | Unk | 09/16/2004 | FEMA 323 |
| 8 | 3 | Jeanne | 09/25/2004 | Unk | Unk | Unk | 09/26/2004 | FEMA 323 |
| 9 | Tropical Storm | Bonnie | 08/12/2004 | Unk | Unk | Unk | 08/13/2004 | FEMA 323 |
| 10 | 4 | Charley | 08/13/2004 | Unk | Unk | Unk | 08/13/2004 | FEMA 323 |

¹ 1950 Federal Disaster Relief Act

² Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) 1988

³ FEMA's Public Assistance Applicant Handbook (FEMA 323) 1999

| # | Category | Name | Date of Landfall | Vegetation Collected (CY) | C&D Collected (CY) | Number of DMS | Date of Declaration of Disaster | Disaster Relief Policy in Place |
|----|-------------------------|------------------|-----------------------------|---------------------------|--------------------|---------------|---------------------------------|-----------------------------------|
| 11 | 1 (Florida Landfall) | Katrina | 08/25/2005 | Unk | Unk | Unk | 08/28/2005 | FEMA 323 |
| 12 | Tropical Storm | Rita | 09/24/2005 | Unk | Unk | Unk | 09/20/2005 | FEMA 323 |
| 13 | 3 | Wilma | 10/24/2005 | 162,869 | 0 | 0 | 10/24/2005 | FEMA 323 |
| 14 | Tropical Storm | Fay | 08/18/2008 | 0 | 0 | 0 | 08/21/2008 | FEMA 325 ⁴ |
| 15 | 1 | Isaac | 08/28/2012 | 0 | 0 | 0 | 10/18/2012 | FEMA 325 FEMA 327 ⁵ |
| 16 | Tropical Storm | Debby | 06/26/2012 | 0 | 0 | 0 | 07/03/2012 | FEMA 325 FEMA 327 |
| 17 | Severe Storm | NA | 2016 | 44,032 | 0 | 2 | Not declared | PAPPG v1 ⁶ |
| 18 | 3 | Irma | 09/10/2017 | 3,001,989 | 135,326 | 7 | 9/10/2017 | PAPPG v2 ⁷ |
| 19 | 5 | Dorian | No landfall on US mainland. | 0 | 0 | 0 | 08/30/2019 | PAPPG v3.1 ⁸ |
| 20 | EF0 Tornado | NA | 01/16/2022 | 0 | 28 | 0 | NA | PAPPG p ⁹ |
| 21 | 4 | Hurricane Ian | 9/28/2022 | 811,441 | 539,635 | 2 | 09/23/2022 | PAPPG v4 |
| 22 | 1 | Hurricane Nicole | 11/10/2022 | 0 | 0 | 0 | 11/7/2022 | PAPPG v4 |
| 23 | 4 | Helene | 9/26/2024 | 0 | 0 | 0 | 9/28/2024 | PAPPG v4 |
| 24 | 3 | Milton | 10/9/2024 | 25,593 | 8,434 | 1 | 10/11/2024 | PAPPG v4 |

Collier County has also been affected by tornadoes. On January 16, 2022, five tornadoes tore through southwest Florida. One of those tornadoes moved through Lely. The EF0 tornado had a path 15 miles long and 75 yards wide. It started 6 miles north-northwest of Marco Island and ended 6 miles south-southwest of Golden Gate. The tornado was on the ground from 9:07 a.m. to 9:35 a.m. Winds as estimated to have reached 85 miles per hour. The winds were strong enough to overturn a semi-tractor trailer.

A second EF0 tornado formed in Collier County at 10:53 a.m. northwest of Chokoloskee and ended at 11:01 a.m., 4 miles northeast of Everglades City. The second tornado was on the ground for 5.5 miles and was 75 yards wide. Winds from the second tornado were also estimated to have reached 85 miles per hour.

While both hurricanes and tornadoes are possible in the County, the most likely debris-generating event to strike Collier County is a tropical cyclone. A tropical cyclone is defined as a low-pressure system with closed

⁴ FEMA 325 Public Assistance, 2007

⁵ FEMA 327 Public Assistance Monitoring Guide, 2010

⁶ FEMA Public Assistance Program and Policy Guide, version 1

⁷ FEMA Public Assistance Program and Policy Guide, version 2

⁸ FEMA Public Assistance Program and Policy Guide, version 3.1

⁹ FEMA Public Assistance Program and Policy Guide, version 4

circulation that has sustained winds of at least 39 mph (tropical storms). A tropical cyclone becomes a hurricane when sustained winds reach 74 mph. The damaging forces of hurricanes and tropical storms include high velocity winds, rain, and storm surge, which can have devastating effects on buildings, residences, vegetation, and public infrastructure. As winds increase, so does the damage and quantity of debris.

Storm surge results from low pressure in the center of the storm that allows water levels of the ocean to rise and lift, then fall gently. Wave action from wind on top of the surge, or lifting, is what causes flooding as waves and surge approach the land. The most severe damage frequently occurs in coastal areas. Areas including coastal Collier County, City of Naples, City of Marco Island, City of Everglades City, and Chokoloskee are extremely vulnerable to damage caused by storm surge and tide.

The coastal population of Collier County has increased over the years, putting more people and structures at risk to a natural disaster. The quantity of debris generated by such an event would depend on the path, intensity, duration, and timing of the storm. The County and municipalities must be ready to effectively manage a massive debris cleanup effort following a hurricane.

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 tropical events as well as historical data from past impacts to Collier County.

The USACE Model is based on the formula $Q=H(C)(V)(B)(S)$

Where:

- Q = Cubic Yards (CY of debris)
- H = Number of households in the community
- C = Storm Category Factor
- V = Vegetative characteristic multiplier
- B = Commercial multiplier
- S = Precipitation characteristic multiplier

Collier County is susceptible to hurricane impacts that occur from multiple directions. The most probable hazards with potential to generate widespread debris in the County were evaluated. Additionally, within each hazard, multiple scenarios, each with different magnitudes of debris generation potential should be considered. No two scenarios are alike. The completion of models for various scenarios assists the County in planning and preparing for any event that might occur.

The following Table (2-2) focuses on debris-generating events that may significantly impact a large portion of Collier County and generate high debris volumes. Resources may be strained throughout the County, and a Presidential Disaster Declaration for Category A Public Assistance (PA) would be immediate or imminent due to the following:

- Widespread debris and damages throughout the County
- Widespread power outages
- Debris volume exceeds the capacity of local resources

Post-event debris estimates have the potential to exceed 4,000,000 CY. It is likely that this type of event would exceed the County's capacity to conduct debris removal and management with internal resources. The period for debris removal and demobilization may last from a few months to one year and beyond. These estimations are an important part of preparing for an impending disaster.

Table 2-2: Estimated Debris Generated from a Declared Disaster Declaration

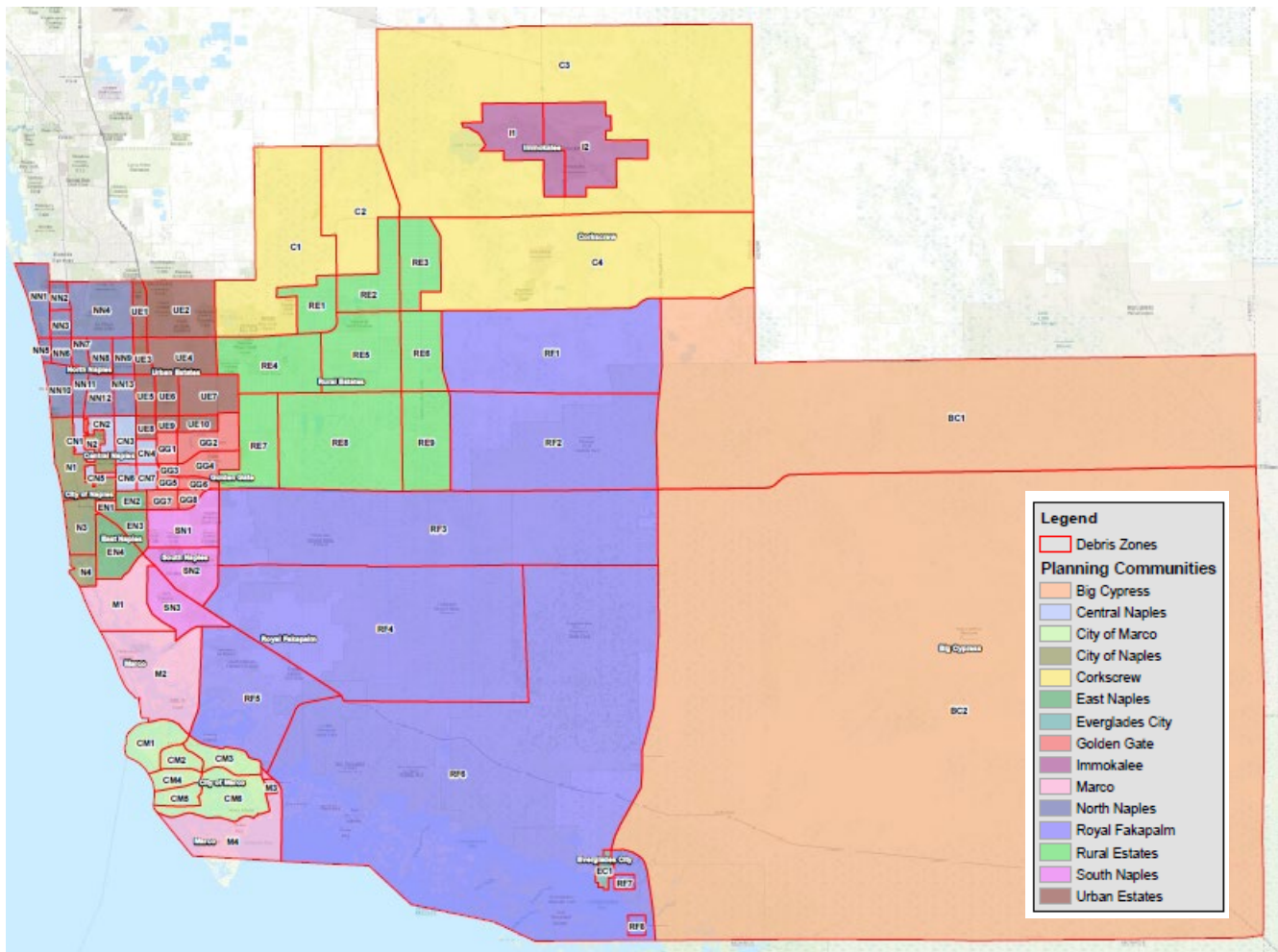
| Collier County (Total) | | | | |
|--------------------------------|--------------------------|------------------------------------|-------------------------|---|
| Storm Category | Total Debris (CY) | Operational Timeline (Days) | DMS Acres Needed | Debris Removal Containers Needed |
| Category 1 | 650,000 | 30 | 44 | 103 |
| Category 2 | 2,610,000 | 60 | 179 | 207 |
| Category 3 | 8,480,000 | 90 | 581 | 448 |
| Category 4 | 16,310,000 | 120 | 1,119 | 647 |
| Category 5 | 26,100,000 | 180 | 1,790 | 690 |
| City of Naples | | | | |
| Storm Category | Total Debris (CY) | Operational Timeline (Days) | DMS Acres Needed | Debris Removal Containers Needed |
| Category 1 | 40,000 | 30 | 3 | 6 |
| Category 2 | 160,000 | 60 | 11 | 13 |
| Category 3 | 520,000 | 90 | 35 | 28 |
| Category 4 | 990,000 | 120 | 68 | 39 |
| Category 5 | 1,590,000 | 180 | 109 | 42 |
| City of Marco Island | | | | |
| Storm Category | Total Debris (CY) | Operational Timeline (Days) | DMS Acres Needed | Debris Removal Containers Needed |
| Category 1 | 30,000 | 30 | 2 | 5 |
| Category 2 | 140,000 | 60 | 10 | 11 |
| Category 3 | 440,000 | 90 | 30 | 23 |
| Category 4 | 860,000 | 120 | 59 | 34 |
| Category 5 | 1,370,000 | 180 | 94 | 36 |
| City of Everglades City | | | | |
| Storm Category | Total Debris (CY) | Operational Timeline (Days) | DMS Acres Needed | Debris Removal Containers Needed |
| Category 1 | 408 | 2 | 1 | 1 |
| Category 2 | 1,632 | 4 | 1 | 2 |
| Category 3 | 5,305 | 7 | 1 | 4 |
| Category 4 | 10,202 | 14 | 1 | 4 |
| Category 5 | 16,324 | 20 | 1 | 4 |

Table 2-3 lists debris zones in the County as well as the concentration of debris that might be seen in those debris zones as a result of a Category 3 hurricane.

Table 2-3: Estimated CY of Debris Generated by Area for a Category 3 Wind Event

| Debris Zone | Cat 3 Estimated CY | Debris Zone | Cat 3 Estimated CY | Debris Zone | Cat 3 Estimated CY | Debris Zone | Cat 3 Estimated CY |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 129,199 | 21 | 90,488 | 41 | 164,292 | 56-1 | 5,322 |
| 2 | 45,869 | 22 | 148,970 | 42 | 58,880 | 56-2 | 5,322 |
| 3 | 239,212 | 23 | 135,164 | 43 | 260,329 | 56-3 | 4,773 |
| 4 | 70,641 | 24 | 40,964 | 44 | 161,565 | 56-4 | 17,859 |
| 5 | 155,769 | 25 | 199,063 | 45 | 267,923 | 57-1 | 9,488 |
| 6 | 122,191 | 26 | 51,020 | 46 | 290,668 | 57-10 | 55,035 |
| 7 | 80,527 | 27 | 69,485 | 47 | 65,357 | 57-11 | 25,150 |
| 8 | 130,676 | 28 | 122,135 | 48 | 131,793 | 57-12 | 0 |
| 9 | 40,377 | 29 | 63,671 | 49 | 196,847 | 57-13 | 25,434 |
| 10 | 59,240 | 30 | 95,564 | 50 | 122,153 | 57-14 | 985 |
| 11 | 111,510 | 31 | 29,033 | 51 | 47,952 | 57-15 | 43,104 |
| 12 | 16,874 | 32 | 16,817 | 52 | 51,172 | 57-2 | 43,331 |
| 13 | 82,326 | 33 | 313,641 | 53 | 71,266 | 57-3 | 44,979 |
| 14 | 101,870 | 34 | 31,362 | 54 | 13,522 | 57-4 | 10,662 |
| 15 | 226,183 | 35 | 1,288 | 55 | 9,526 | 57-5 | 15,946 |
| 16 | 133,839 | 36 | 16,458 | 56 | 25,207 | 57-6 | 32,082 |
| 17 | 151,016 | 37 | 94,863 | 57 | 20,851 | 57-7 | 72,913 |
| 18 | 64,978 | 38 | 164,860 | 58 | 19,658 | 57-8 | 44,108 |
| 19 | 182,889 | 39 | 72,383 | 59 | 117,722 | 57-9 | 3,068 |
| 20 | 26,343 | 40 | 25,112 | 55-5 | 6,950 | | |

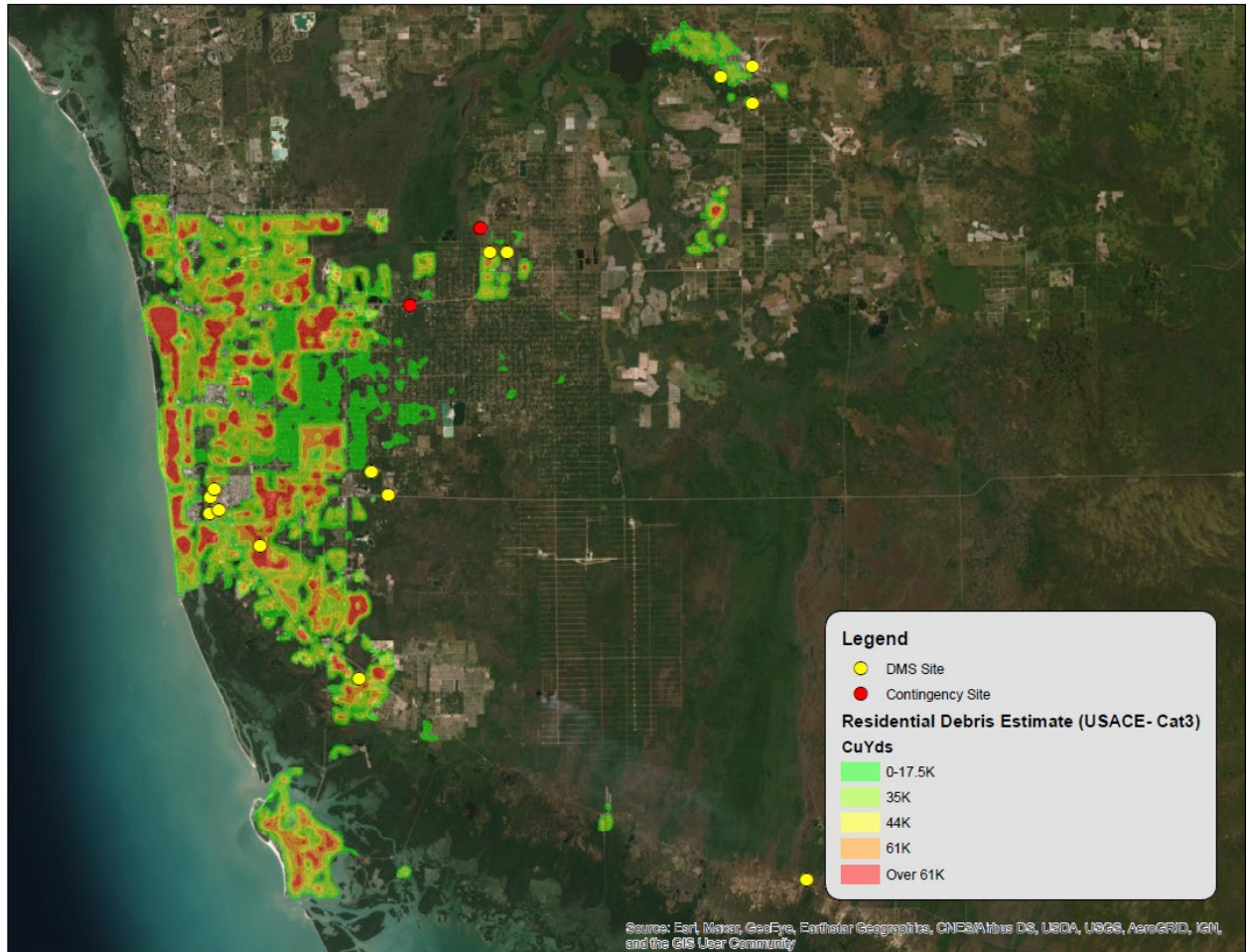
Map 2-1 depicts the debris zones in the County.



Map 2-1: Debris Zones Map

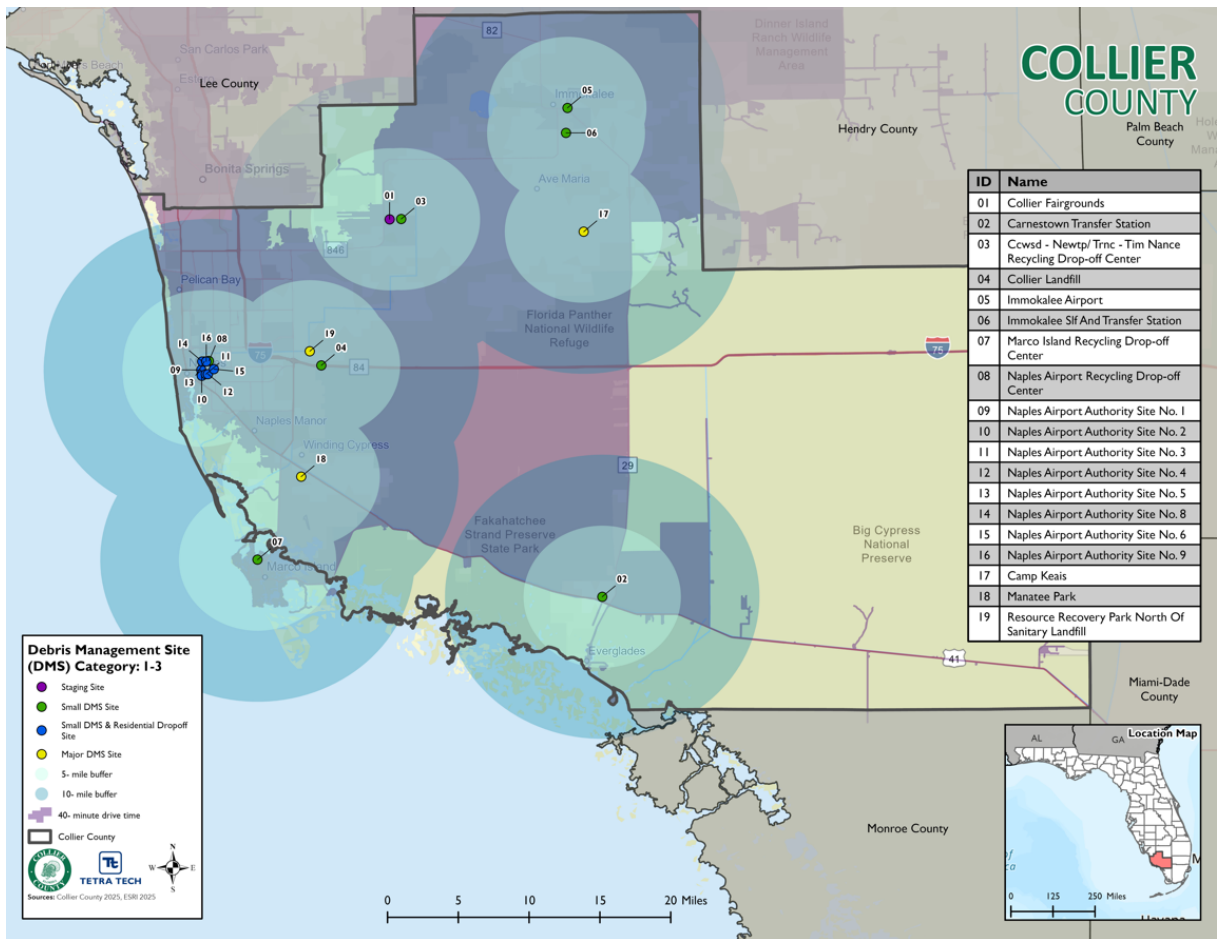
Map 2-2 depicts the concentration of debris throughout the County for a Category 3 storm in relation to the location of debris management sites.

Map 2-2: DMS Sites in Relation to Debris Estimates from a Category 3 Storm



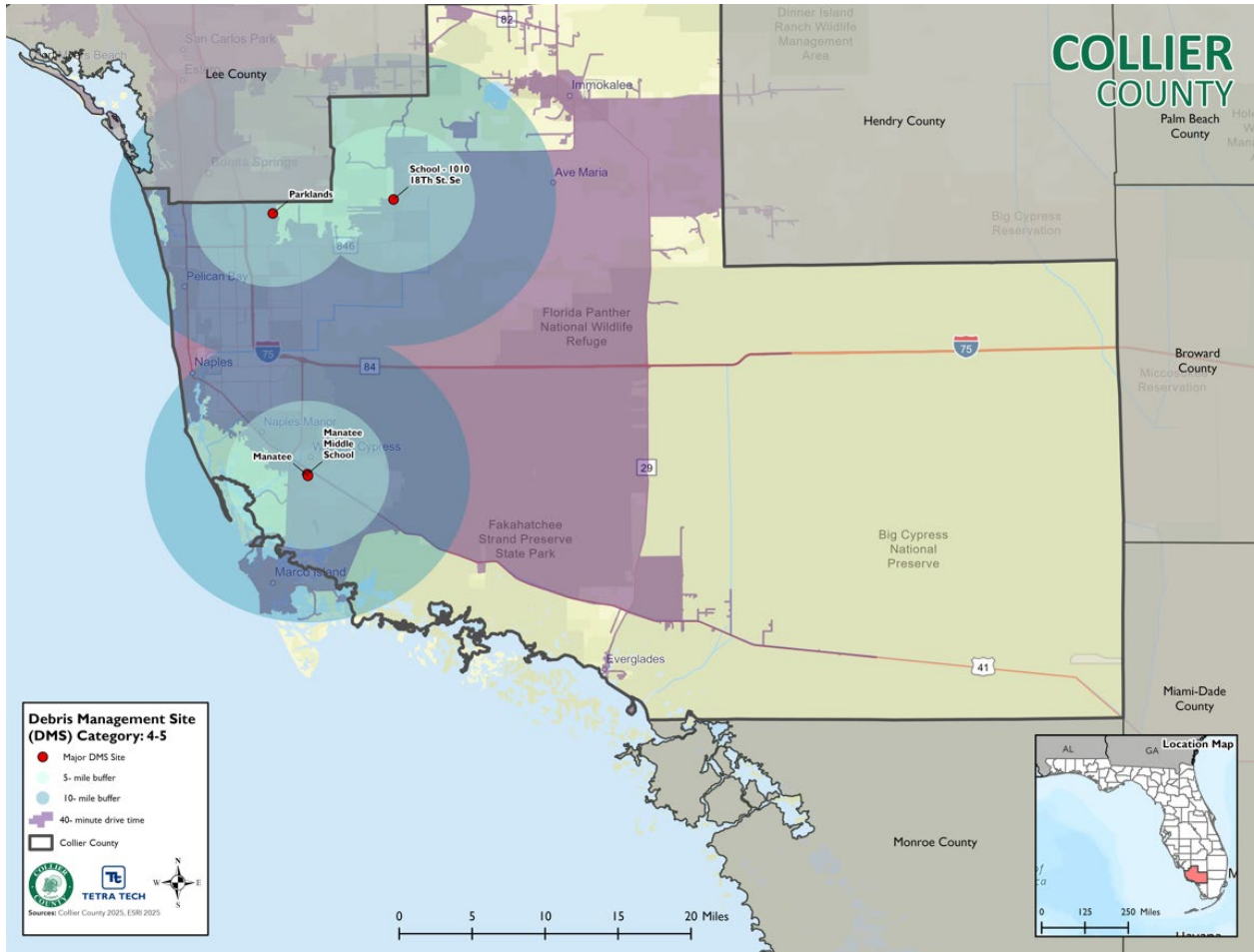
Map 2-3 shows the locations of DMS designated for use in category 1-3 storms and the 5-mile, 10-mile and 40-minute drive time distance from each site.

Map 2-3: The 5-Mile, 10-Mile, and 40-Minute Drive Time Buffer from Each Category 1 – 3 DMS



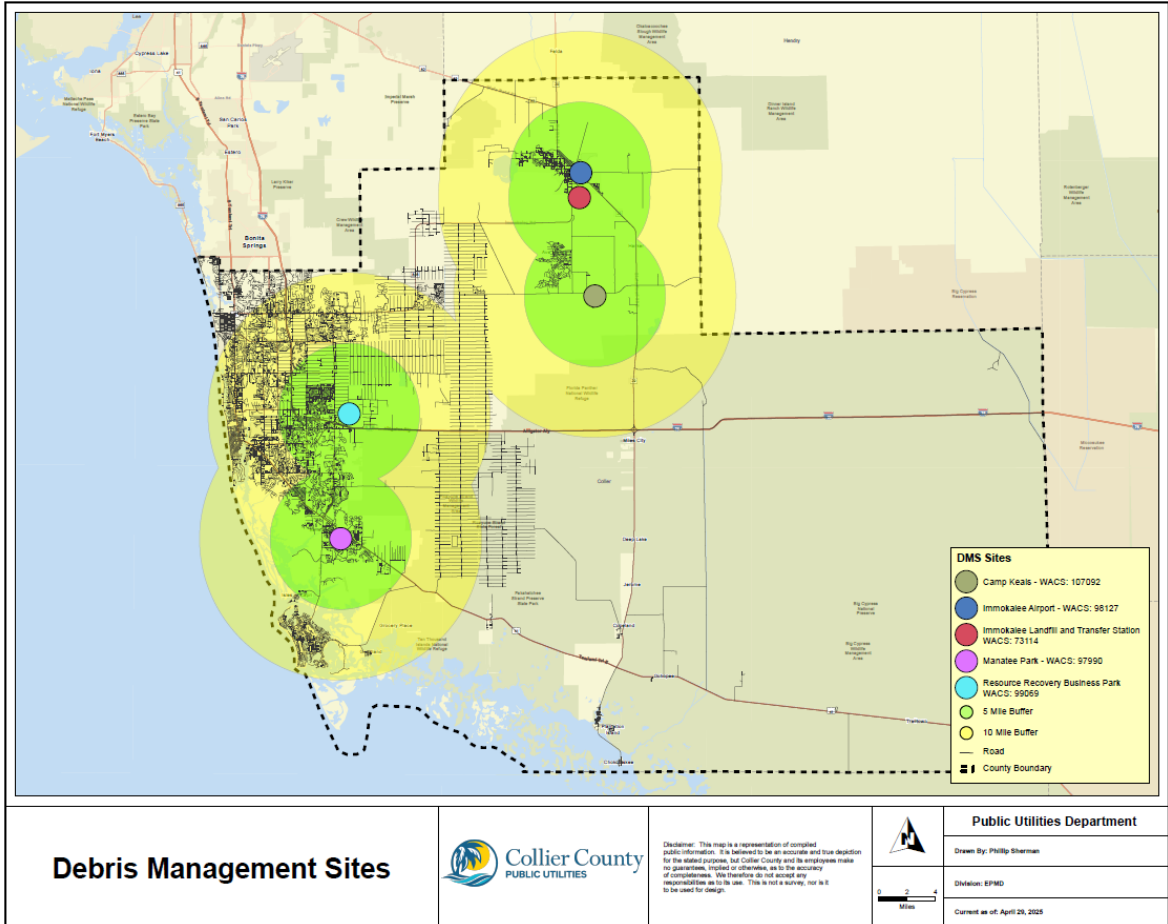
Map 2-4 shows the locations of DMS designated for use in category 4-5 storms and the 5-mile, 10-mile and 40-minute drive time distance from each site. .

Map 2-4: The 5-Mile, 10-Mile, and 40-Minute Drive Time Buffer from Each Category 4 – 5 DMS



Map 2-5 shows the locations of major DMS locations with 5-mile and 10-mile distance from each site.

Map 2-5: The 5-Mile and 10-Mile Distance from each major DMS



The list below provides the DMS locations used for this analysis.

Table 2-4: Sites Used for DMS Location Analysis

| COUNT | AREA | WACS ID | NAME | ACREAGE | USE OF SITE | ADDRESS |
|-------|-----------------|---------|---|---------|---|---|
| 1 | CENTRAL EAST | 73046 | COLLIER COUNTY LANDFILL (CCLF) | 20+/- | SMALL DMS | 3750 WHITE LAKE BOULEVARD - NAPLES |
| 2 | NORTH NE | 107092 | CAMP KEAIS | 75.0 | MAJOR DMS | 6875 ROCK SPRINGS RD, IMMOKALEE |
| 3 | NORTH NE | 98134 | COLLIER FAIRGROUNDS | 4.5+ | STAGING SITE | 14756 IMMOKALEE RD NAPLES, FL, 34120 |
| 4 | NORTH NE | 97991 | SCHOOL - 1010 18TH ST. SE | 115 | MAJOR DMS. ONLY IF CATEGORY 4 OR HIGHER | 1010 18TH STREET SE - NAPLES |
| 5 | NORTH NORTHEAST | 99137 | TRNC - TIM NANCE RECYCLING DROP-OFF CENTER | ??? | SMALL DMS & RESIDENTIAL DROP OFF SITE (D) | 825 39TH AVENUE NE - NAPLES (CC APPRAISER ADDRESS : 808 39TH AVE) |
| 6 | CENTRAL WEST | 100585 | NAPLES AIRPORT AUTHORITY SITE NO. 4 | 2.5 | SMALL DMS & RESIDENTIAL DROP OFF SITE | EAST OF TERMINAL ROAD 160 AVIATION DRIVE Naples, FL, 34104 |
| 7 | CENTRAL WEST | 99069 | RESOURCE RECOVERY BUSINESS PARK (RRC&D, TBP) - West | 40+ | MAJOR DMS | 3730 WHITE LAKE BOULEVARD, NAPLES |
| 8 | NORTH NE | 98127 | IMMOKALEE AIRPORT | 5 | SMALL DMS & RESIDENTIAL DROP OFF SITE (D) | 199 AIRPORT ROAD (700 CR 846 EAST) |
| 9 | SOUTH SE | 73088 | CARNESTOWN TRANSFER STATION | 3 +/- | SMALL DMS & RESIDENTIAL DROP OFF SITE (D) | 31201 TAMIAMI TRAIL EAST - CARNESTOWN |
| 10 | CENTRAL WEST | 100583 | NAPLES AIRPORT AUTHORITY SITE NO. 2 | 8 | SMALL DMS & RESIDENTIAL DROP OFF SITE | 160 AVIATION DRIVE SOUTH OF NORTH ROAD |
| 11 | SOUTH SE | 97990 | MANATEE PARK | 15-20 | MAJOR DMS | 1890 ROOST ROAD |
| 12 | CENTRAL WEST | 104835 | NAPLES AIRPORT AUTHORITY SITE NO. 9 | | SMALL DMS & RESIDENTIAL DROP OFF SITE | 2600 CORPORATE FLIGHT DR |
| 13 | CENTRAL WEST | 106196 | NAPLES AIRPORT AUTHORITY SITE NO. 8 | 4 | SMALL DMS AND RESIDENTIAL DROP OFF SITE | WEST OF PATRIOT WAY Naples, FL, 34112 |
| 14 | CENTRAL WEST | 100586 | NAPLES AIRPORT AUTHORITY SITE NO. 5 | 2.5 | SMALL DMS AND RESIDENTIAL DROP OFF SITE | ENTERPRISE AVE & WEST OF CORPORATE FLIGHT DR |
| 15 | NORTH NE | 73114 | IMMOKALEE LANDFILL (ITS) AND TRANSFER STATION | 15+ | SMALL DMS AND RESIDENTIAL DROP OFF SITE (D) | 700 STOCKADE ROAD - IMMOKALEE |
| 16 | CENTRAL WEST | 100584 | NAPLES AIRPORT AUTHORITY SITE NO. 3 | 5 | SMALL DMS AND RESIDENTIAL DROP OFF SITE | WEST OF TERMINAL DRIVE |
| 17 | NORTH NW | 107476 | School District – Parklands | 15 | MAJOR DMS. ONLY IF CATEGORY 4 OR HIGHER | Logan Blvd North - Parklands Collier County |

| COUNT | AREA | WACS ID | NAME | ACREAGE | USE OF SITE | ADDRESS |
|-------|--------------|---------|--|---------|---|--|
| 18 | SOUTH SE | 73044 | Marco Island Recycling Drop-Off Center | | RESIDENTIAL DROP OFF SITE | 990 Chalmer Drive, Marco Island |
| 19 | CENTRAL WEST | 73105 | Naples Airport Recycling Drop-Off Center | | RESIDENTIAL DROP OFF SITE | 2640 Corporate Flight Rd, Naples |
| 20 | South SW | 98132 | Manatee Middle School | | MAJOR DMS. ONLY IF CATEGORY 4 OR HIGHER | 1920 Manatee Road, Naples, FL 34114 |
| 21 | CENTRAL WEST | 108382 | NAPLES AIRPORT AUTHORITY SITE NO. 6 | 3 | SMALL DMS & RESIDENTIAL DROP OFF SITE | 3150 RADIO RD Naples, FL, 34104 |
| 22 | CENTRAL WEST | 100582 | NAPLES AIRPORT AUTHORITY SITE NO. 1 | | SMALL DMS & RESIDENTIAL DROP OFF SITE | 160 AVIATION DRIVE-GATE 2W Naples, FL, 34104 |

3. STAKEHOLDERS

3.1. COUNTY LOGISTICS

All County departments and agencies shall maintain accurate, up to date records of **personnel** and their associated **roles and responsibilities** and **contact information**, and **listings and location of critical assets and equipment**, and other identified resources that will aid in recovery of a debris generating event. Such documentation may be used to support reimbursement from any state or federal assistance that may be requested or required.

All County departments and agencies supporting debris operations should ensure 12-hour staffing capability during implementation of debris recovery mission or as directed by the County Manager or designee.

Reference **Appendix B** for contact information, **Appendix K** for roles and responsibilities, and **Appendix L** for time delineated action items for each supporting agency.

3.2. ROLES AND RESPONSIBILITIES

The **Collier County Public Utilities Department, Division of Solid and Hazardous Waste Management (SHWMD)** will be responsible for the annual review and update of this plan and right of way debris removal efforts. **SHWMD** has identified key positions for managing the debris mission recovery, herein referred to as the **Debris Team**, that includes:

- Director of Solid and Hazardous Waste Management
- Manager, Waste Reduction and Recycling
- Manager, Finance & Administration
- Manager, Education & Collections
- Manager, Environmental Compliance
- Manager, Capital Improvement

The Debris Team will identify a County Debris Manager. This individual will be tasked with coordinating debris operations in collaboration with the **EOC** and other County departments, the debris hauler, debris monitor, as well as state and federal agencies. Further, many positions from **SHWMD** have been identified to support the EOC, while others are assigned to provide damage assessments and coordination, and others to operate in a **Continuity of Operations Plan (COOP)** fashion. These positions shall keep their Alert Collier Role updated accordingly. Those who perform damage assessments and coordination do not report to the EOC and are in the field coordinating efforts between the **Debris Team** and the Contractor and other support, as needed.

Appendix K highlights major roles and responsibilities that are critical to supporting a debris recovery mission, while Sections 5 through 9 detail time delineated Action Items for all County and non-County agencies that aide in debris recovery missions. It is critical for this listing be reviewed as part of the annual DDMP. For an abbreviated listing, reference **Appendix L**.

Many agencies support the debris recovery mission in a liaison or tool and resource fashion and are not necessary part of a particular phase, rather integrated into the process. **Appendix K and L** provide checklist style references of the detailed reference within this text.

Risk

The **Risk Management Department** serves as the County's liaison for insurance claims, County asset damage, and employee safety, including review of any safety plans. They serve an integral part to ensure health and safety policies are followed in matters of debris removal, as well as maintain insurance claims. To effectively document damages and expenses, it is recommended that **Facilities Management** and **Risk Management** coordinate to ensure proper documentation is in place to facilitate reimbursement with insurance, grant, or other monies, including but not limited to pre-existing condition and insurance claim information, if applicable.

3.3. CONTACTS

Coordinated efforts in a natural disaster for recovery require collaboration and communication between multiple agencies, including but not limited to;

1. **Collier County Public School District (CCPS)**
2. **Collier County Sheriff's Office (CCSO)**
3. **Collier County Fire Districts**
4. **Florida Power and Light (FPL)**
5. **TECO**
6. **Florida Department of Environmental Protection (FDEP)**
7. **County Manager Office (CMO)**
8. **County Attorney Office (CAO)**
9. **Emergency Operations Center (EOC)**
10. **Solid & Hazardous Waste Management (SHWMD)**
11. **Water Sewer District (WSD)**
12. **Stormwater**
13. **Facilities**
14. **Road and Bridge**
15. **Parks and Recreation**
16. **Fleet**
17. **GIS**
18. **IT**
19. **Risk**
20. **Communications**
21. **Procurement**
22. **Management and Budget**

The Debris Management Key Contact List, located in **APPENDIX B**, includes names, titles, and contact info for critical stakeholders involved in disaster debris management.

3.4. STATE AND FEDERAL ASSISTANCE

National Incident Management System Compliance

The National Incident Management System (NIMS) provides a systematic, proactive approach to guide departments and agencies at all government levels, as well as, 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 County **EOC** requires debris and emergency management personnel to possess a basic understanding of NIMS concepts and principles. In all events, documentation of this coursework completion by personnel is required for FEMA reimbursement.

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 for resources to the **Florida Division of Emergency Management, State Emergency Operation Center** for further disposition and action.

Operation of temporary debris staging sites and final disposal will require close cooperation with the **FDEP**, Southeast District.

The **Florida Department of Transportation (FDOT)** 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. A map of State Roads is included in **APPENDIX E**.

Federal Assistance

The County **EOC** staff may request federal assistance when advised by the **County Debris Manager** or designee 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 IV**. Further, the **EOC** will assist other agencies for federal aid needs and ensure compliance with federal assistance programs.

Federal agencies participating in technical or direct debris removal assistance:

- **FEMA** – May assist in providing technical assistance for debris operations, assists in the environmental and historical preservation review process, manages the Public Assistance grant program reimbursement process, and provides procurement assistance.
- **United States Army Corps of Engineers (USACE)** – May assist in the removal of debris from publicly maintained commercial harbors and from and 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 (United 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 Environmental Protection Agency (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.

3.5. PRIVATE SECTOR BUSINESS ENTERPRISE

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 debris generating incident, the County can be augmented by contracted service providers. The County maintains a listing of active Contracts that can aide in Natural Disaster Recovery and a listing of general contractors that could support that the County and specify if they have a contract with the County.

3.6. PRE-POSITIONED CONTRACTS FOR DEBRIS RECOVERY

The County maintains pre-positioned contracts for debris removal and monitoring that can support the County following a disaster that generates a large amount of debris. **APPENDIX B:** Key Contacts, lists the contact information for the County Monitoring Firm and Debris Removal Contractors. **APPENDIX R:** Debris Removal Contractor and Monitoring Firm Solicitation, includes additional details regarding the evaluation and selection of the debris removal and monitoring contractors and the subsequent executed contracts.

It is also recommended that through the **Procurement & Contracts Administration Department**, redundant contracts for needs and supplies are maintained and an updated listing of contractors/vendors and what they may be able to support in the event of a disaster are provided to Debris Response Agencies. Examples include security guards, generators, pumper trucks, etc.

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. 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 to have an active voice in debris operations.
- 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 time-lines, to local officials.
- Know, understand, and comply with federal regulations for disaster assistance programs.

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.
- Perform DMS monitoring.
- Conduct disposal monitoring.
- 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.

3.7. NONPROFIT SECTOR

The County may 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 appropriate County agencies 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 aligned with the Health and Safety Strategy (see **APPENDIX I**). 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.

Partnerships with nonprofit shall be coordinated with the **County Attorney's Office (CAO)** for legal compliance.

3.8. DOCUMENTATION

Accurate and complete cost tracking is critical to obtain assistance for disaster-related costs. Emergency protective measures can be eligible for reimbursement. Reimbursement, audits, and contractor payments are managed through **Budget**, and they shall dictate paperwork flow and processes. **Budget** may seek guidance and/or resources from other agencies in this regard.

Cost and resource tracking shall commence as soon as warning is activated, and staff must carefully identify resources and document work that is separate from daily job duties. Accounting best practices for tracking costs includes the following:

- Identify a person that 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.

4. PLANNING STAGES

This section provides guidance required for all operations of debris-generating event, related to the debris recovery mission. For the purposes of this DDMP, the following Levels are detailed (a printable version can be found in [APPENDIX A](#)):

| | |
|---|--|
| Normal Operations Level: | Outside of hurricane/storm season. Typically, December through May. |
| Level I: Hurricane Alert: | A hurricane/storm is heading in the general direction of Southwest Florida and should be monitored for the possibility of striking Collier County. 36 to 72 hours prior to land fall. |
| Level II: Hurricane Watch: | A hurricane/storm is heading towards Collier County and may threaten to strike. 24 to 36 hours prior to land fall. |
| Level III: Hurricane Warning: | A hurricane/storm is headed directly towards Collier County and surrounding areas and is expected to strike within 24 to 12 hours prior to landfall. |
| Level IV: Hurricane Eventuality: | A hurricane/storm is imminent. All preparations should have been made by this time. |
| Level V: Hurricane Response: | When the hurricane/storm has diminished as determined by the Emergency Management Director. Emergency Personnel are tending to life safety circumstances and FPL assessing needs. |
| Level VI: Hurricane Recovery: | Once a storm has passed, recovery process activated by Emergency Management Director, indicating it is safe for Damage Assessment and operations to commence. |
| Level VII: Hurricane Post Event: | The majority of major roads are clear and operations are well underway. |

The Stages do not include response and recovery time frames, as severity, nature, and other attributes will dictate the recovery mission timeframes. At any of these stages the **CMO** or **CAO** may delegate signature authority for legal documents, including mutual agreements, interlocal agreements, and contracted service providers. In addition, the **Board of County Commissioners** may develop or implement policies and/or Ordinances that can affect a Recovery Mission.

5. NORMAL OPERATION ACTIONS

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 incidents. Therefore, it is imperative to maintain a constant state of preparedness throughout normal operations by reviewing and updating the plan annually.

The normal operations phase is the ideal time for the **Debris Team** to work with **Procurement** to establish or review pre-positioned contracts with its monitoring firm and debris removal contractor(s), and work with **Real Property** to identify and secure pre-approval from the FDEP for locations to serve as DMS locations, and review current local ordinances and their historical impact on debris removal operations.

The normal operations phase is preparation time, an ideal time for **EOC, CMO, the County Leadership, and other lead and supporting departments and agencies** to re-evaluate the roles, responsibilities, and terms of engagement of each entity involved. The purpose of this evaluation is to ensure that 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. The **Debris Team** should coordinate meetings annually with the appropriate agencies and its pre-positioned **monitoring firm, debris removal contractors, and other stakeholders** (i.e. **Road and Bridge**), to ensure appropriate preparedness levels, operational consistency, and effective communication. The normal operations guidance is also provided in **APPENDIX L**.

5.1. COOP/PREPAREDNESS/RESPONSE PLAN UPDATES

It will be the responsibility of each department and agency to review and update their respective COOP/Preparation/Response Plan, and identify resources and address needs to ensure protection of the public's health, safety, and welfare, as well as protection of County assets and staff.

The review will consider at least the following:

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

Each Division's COOP/Preparedness/Response Plan shall discuss preparation plans and identify and detail key roles, responsibilities, and contact information. These documents shall also include an asset listing and note the staging area for critical assets, particularly those assets that may be needed in a recovery mission, such as loaders and generators. The **Debris Team** will coordinate with **GIS** to maintain a map with layers of the critical infrastructure, with overlays for the debris zones in order to highlight and provide reference to contractors and/or other stakeholders.

These documents should be evaluated and updated at least annually to reflect any changes, and of most importance, be updated right before Hurricane Season (typically June 1), to ensure the list of resources and plans are available to help meet response needs. Each County employee is required to utilize Alert Collier and select a role, as defined by each Division's Director, in the event of a named emergency. By

ensuring the Agency's Plan is regularly updated it will assist other Divisions that are responsible for additional or separates tasks during an emergency incident determine if those needs are met (e.g. staffing phones and shelters). Further, this offers the opportunity to provide adequate training with staff on roles and responsibilities, as outlined in their respective plan.

The **Debris Team** will facilitate a request from each agency of at least the following (reference **APPENDIX B**):

- Key Contact's Information and Role
- Access to Critical Infrastructure

Each Agency's Plan can be found in the **APPENDIX M through P** of this DDMP.

5.2. OUTSIDE STAKEHOLDER UPDATES

Outside agencies, like the Florida Department of the Environment (**FDEP**), Collier County Sheriff's Office (**CCSO**), Collier County Public Schools (**CCPS**), Florida Power and Light (**FPL**), **Teco Energy**, and **FDOT** play just as critical of a role as internal County Agencies. They are a critical component to any Debris Recovery Operation for knowing who to call for what resources. That information is essential to have before the need arises. During this time, it is critical to obtain the contacts for Fire Houses, and review Fire District Maps as well. When updating contacts, it is in the County's best interest to review expectations and discuss any anticipated needs. Topic discussions may include resources for security with CCSO, equipment storage with Fire houses, and information flow for areas cleared for FPL access.

Further, the interlocal agreements initiate needs for **CCPS**, the **City of Marco Island**, the **City of Naples**, and **Everglades City**. The **Debris Team** shall meet with these stakeholders regarding needs and priorities, including but not limited to access, especially with some schools serving as a shelter as well.

It is vital **Road and Bridge** key staff review first push communication and needs with the EOC, **CCSO**, and **Fire Districts**.

5.3. REVIEW AND UPDATE MAPS

Reviewing and updating lists and maps is a preparation or Normal Operations required task for a successful debris recovery mission. **Facilities** can provide any new County owned facility, including parks, fire houses, etc., information that is needed to effectively communicate. Further, the same map and nomenclature is a key tool for communication. It is recommended agencies include this information in their COOP/Preparation/Response Plan and update as part of the annual review process during this time. It is also recommended the **Debris Team** obtain the GIS information for these maps to relay information to the debris monitoring and removal contractors as needed.

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 annually. This annual process of identifying private roads, count-maintained roads, and FDOT/State roads is a coordinated effort with the **FDOT** and **Collier County Debris Team, Road & Bridge Division**, and **GIS**. It is recommended **Road and Bridge** maintain an updated map in their COOP/Preparedness/Response Plan to review and update as part of the Plan's required annual update.

To effectively document, and efficiently monitor and remove debris, it is recommended the **Debris Team** obtain the **GIS** layers of these roads to provide to the monitoring and removal contractors. Documentation

is vital for reimbursement processes and operations. Further, it is recommended the **Debris Team** maintain several types of maps for use, consisting of multiple layers, sizes, and writable.

All printed maps should contain the date of information within the maps was updated (not the printed date), a clear legend and title, and if possible, listing of addresses.

The **Debris Team** will request maps with following locations and information from various agencies:

- School locations (noting which are shelters)
- Fire Houses
- Roads (State, Private, County)
- County owned facilities, including Parks and Offices.
- Hospital locations

APPENDIX E contains these maps.

5.4. EVALUATE DMS LOCATIONS

The County's identified DMS locations are listed in **APPENDIX C: Debris Management Site Synopsis**. Locations identified to serve as a DMS following a debris-generating event should be re-evaluated annually by the **Debris Team** and **Real Property** to ensure they remain viable candidates for DMS operation. **Real Property** shall notify the **Debris Team** when other properties might be available to services such as DMS. Location is key to avoid nuisances to the public, as the operations at these Sites could be on-going for several months, consisting of dust, stockpiling of debris and heavy truck traffic. Further, staging areas shall be considered. Just as important, the truck turn-around time will play a significant role in the timeliness of the cleanup efforts and multiple sites strategically located throughout the County will be required for a timely response.

Considerations for DMS Selection

The monitoring firm and debris removal contractors will meet with the **Debris Team** to discuss the opening and operation of pre-identified DMS locations. Before DMS preparation begins, **FDEP** must be notified of the County's intent to utilize DMSs and obtain approval. The **Debris Team** shall inform **Real Property** of intended DMS use so **Real Property** can notify **FDEP**.

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

Qualification Criteria

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

Additional DMS locations may necessary as the development and landscape of the County progresses over time. As additional potential sites are identified, the Investigation of Property Suitability Form in **APPENDIX C**, should be used to evaluate the viability of the identified sites. The Debris Removal Contractor should also be familiar with the Sites, layout of the County, and general areas of the County in order to effectively prioritize and communicate for resourcing.

In the event that the County needs to obtain privately owned land for DMS use, **Real Property** will consult with the County Attorney to execute a Memorandum of Agreement (MOA) with the owner. A sample MOA

is provided in **APPENDIX C**. It is important to note that the County's legal services should review and approve any MOAs on behalf of the County prior to their execution.

During Normal Operation, through **Real Property**, the County can submit Sites to **FDEP** for pre-authorization. The **Debris Team** will initiate this request with **Real Property** as part of the annual DMS evaluation. Current sites listed in **APPENDIX C** have been pre-authorized for DMS use by **FDEP**. The **FDEP** will require notification of the site use and permit Sites for use immediately following a debris-generating event. **FDEP** also will pre-authorize DMS. The **FDEP** also completes a historical and archeological review of potential sites.

The County's Civil Emergency Ordinance (found in **APPENDIX S**), Section 38-7, (c), (2) cites "...temporary staging of vegetative debris.....approved for such use by the community development and environmental services administrator...". This citation is referring an approval based on inspection of the DMSs conducted by the County's **Real Property Management Section of the Facilities Management Division**. The **Debris Team** shall initiate this after obtaining FDEP pre-approval and document approvals and observation reports. If the DMS is found to contain protected species (e.g. gopher tortoises), subsequent follow-ups with the **Real Property Management Section Division** will be required to mitigate prior to use of the DMS.

DMS's are for use only by the County's contracted debris removal contractor. The DMS's cannot be utilized by the public.

As part of this review, the **Debris Team** shall coordinate with the debris contractors for the review of the County's delineated debris zones. The **Debris Team** shall coordinate with the Collier County **Planning Division** for population maps to assess the areas and accesses.

The **Debris Team** shall provide DMS and staging maps shall be provided to **Fire Stations** to ensure appropriate communication in the event of an emergency and receive contact information for such event from the **Fire Stations**.

5.5. ESTABLISH AND MAINTAIN PRE-POSITIONED CONTRACTS

During times of normalcy, the County, through coordination with **Procurement** and other applicable agencies, including the **Debris Team**, should establish and maintain pre-positioned contracts for debris monitoring and debris removal services. **Procurement** shall ensure the procurement of such services are compliant with County procurement practice, including emergency procurement policies, and the procurement competition requirements specified in the Code of Federal Regulations – 2 CFR § 200.326, Contract provisions. FEMA Public Assistance Program and Policy Guide FP 104-009-2, Section V.G. provides requirements for procuring and contracting Disaster Debris Contractors. Reference **APPENDIX Q**.

The County currently has pre-positioned contracts for both debris removal and monitoring. **APPENDIX B**: Monitoring Firm and Debris Removal Contractors, includes the appropriate contact information of the selected vendors. **APPENDIX R**: Debris Removal Contractor and Monitoring Firm Solicitation, includes additional details regarding the evaluation and selection of the debris removal and monitoring contractors and the subsequent executed contracts.

It is also recommended that through **Procurement**, the County maintain redundancy for needs and supplies and provide an updated listing of the contractors/vendors and what they may be able to support in the event of a disaster. Examples include security guards, generators, pumper trucks, etc.

5.6. DEBRIS HAULER SERVICES FOR SMALLER INCIDENTS AND AS A SUPPLEMENT TO LARGER INCIDENTS

The County has examined the use of smaller debris hauling services utilizing such equipment as gooseneck trailers and skid steer loaders to aid in the collection of debris. These resources might be called upon in the event an incident does not require the large grapple trucks used by typical debris hauling firms. An example is if a tornado hits a limited area of the County. These resources might also be called upon when resources are needed in addition to the large grapple trucks to mount an adequate response to a large-scale disaster.

While using these resources can certainly help to address the need to speed debris removal and therefore help speed the recovery of the County, some considerations in using such resources can include:

- Smaller trucks might need higher rates per cubic yard to operate than the grapple trucks.
- Skid steer loaders are not as efficient in loading and compacting debris in the gooseneck trailers.
- A ground person would be needed during the debris removal operations to make sure debris is adequately removed from an area as skid steers are not as adept at picking/scooping up smaller pieces of debris.
- Equipment used should still be certified before being put into service as is done with the larger trucks.
- The contractor should be limited to using his or her own equipment to prevent the numbers of equipment used in the debris removal operations from getting too difficult to manage and control.
- As analysis of the cost should be conducted to ensure the costs associated with the services are reasonable and eligible for reimbursement (assuming reimbursement is available under the Public Assistance Program for the disaster being considered).

A sample request for proposal (RFP) and debris solicitation pricing worksheets have been developed to assist the County in acquiring these resources. The sample RFP and debris solicitation pricing worksheets can be found in [APPENDIX V and V2](#).

5.7. REVIEW FEMA GUIDANCE

Rules and regulations dictating operational procedures change periodically; the **Debris Team** shall have the information in this DDMP updated annually to reflect such changes. Any notable changes in FEMA guidance shall be provided to appropriate stakeholders, i.e., **EOC**. A copy of the most recent FEMA guidance can be found in [APPENDIX S](#)

5.8. LAUNCH PUBLIC OUTREACH CAMPAIGNS

The **Debris Team** will coordinate with **Communication** to advertise preparation releases during Normal Operations. These campaigns shall address Hurricane Season preparation, including storage of household hazardous wastes and Right of Entry (ROE) form completion.

Sample press releases, scripts, and campaigns can be found in [APPENDIX D](#). While these are standard templates tailored to Collier County, it is important to note that once a threat is eminent the messages may require editing prior to release and/or extra approvals through other agencies, like **Communication**.

Campaigns and advertisements for preparation can be conducted through any combination of resources for reaching the public, e.g. social media, US mail, etc. Year round a Frequently Asked Questions (FAQ) is maintained on the solid and hazardous waste management division's website. The FAQs can be found in [APPENDIX D](#).

Further, normal operations is also an appropriate time to go over process flows and standard language for call takers (reference **APPENDIX D**) and educate staff on responses for common questions, for example “*Why was my debris not collected?*”. This ensures the public is receiving the same information regardless of the source. Just the same, this is a good time to evaluate how and what information is provided to the public during the recovery mission. This may require coordination between **EOC, IT, Communication**, and the **Debris Contractors**. For example, to provide the public with a map that depicts areas that where debris was removed that day, it may be necessary to ensure **IT** permits the Debris Monitoring Contractor use to the County’s website. The **Debris Team** is tasked to initiate and determine messaging at time of the event, regarding debris removal, for approval by the Communication Liaison of the **EOC**.

Once a storm is imminent it will be important to advise the public how to separate and set out debris for collection. All marketing shall be in accordance with County standards and any aftermath public information shall specifically be approved by the **County EOC liaison** for public information.

5.9. CONDUCT MEETINGS AND TRAININGS BETWEEN KEY STAKEHOLDERS

Once the **Debris Team** has discussed needs with County agencies and stakeholders, the **Debris Team** will facilitate any necessary meetings with the Contractors to discuss:

- Expectations,
- Roles and Responsibilities,
- Resource needs,
- Logistics, and

Changes to local, state, and federal regulations concerning row disaster recovery operations.

The listing above provides topics of discussion with the appropriate stakeholders, **APPENDIX B**, **APPENDIX K**, and **APPENDIX L** provide more talking points, and **APPENDIX I** includes a Healthy and Safety Plan. The purpose of the health and safety plan is to provide guidance regarding debris removal activities, identify some representative work hazards and the appropriate measures to reduce the risk of injury.

The **Debris Team** shall also consult with Franchisee’s and Contractors for disposal regarding plans, resources, and contacts. With Solid Waste leading a debris recovery mission, the **Solid Waste COOP** will address solid waste operations, however, the **Debris Team** and **SHWMD** will collaborate with the Franchisees for plans for solid waste collection and resource planning.

Lastly, allow time to train staff on assignments. Natural disasters are not a daily occurrence and staff may be not be clear on their assignments, especially if they fall outside the standard scope of work.

5.10. CHECK FUNCTIONALITY OF EMERGENCY EQUIPMENT AND STOCK UP ON EMERGENCY SUPPLIES

It is important to stock up on supplies and check functionality of emergency equipment such as radios to ensure timely preparation. An item could be on backorder, have a long lead time, or requires an update. **APPENDIX A2** contains a basic stock listing and a 72 hour KIT listing.

It is recommended to wait to order items such as batteries that may not have a long-life expectancy until later in the phase. Also be sure to check supply stock and functionality of resources at the **EOC**. This is a good time to ensure cyber keys function as well.

6. LEVELS I – IV: FORECASTED OR NAMED STORM

The Debris Team should begin pre-event preparations when a debris-generating event is moving toward the Southwest Florida region. 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, all stakeholders should be put on alert and be aware they may be required to work extended hours in adverse conditions and outside their typical job duties. All relevant parties will be briefed on their specific roles and responsibilities and be provided adequate time to prioritize personal affairs.

This DDMP is guidance and plans may need to be altered based on the time for preparation, the level of preparation needed, personnel, resources, logistics, and/or storm intensity.

APPENDIX L contains this Pre-Event Preparation Listing below and 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.

6.1. LEVEL I-II: INITIATE PREPARATIONS

Alert Key Stakeholders

The **Debris Team** shall notify stakeholders of status. Depending on storm variables this status may be standby or more detailed.

The **Debris Team** shall alert **Budget** to initiate opening a purchase order for contractors.

Discussions with the **monitoring firm** and **debris removal contractor(s)** should address the following key issues:

- Issue a Notice to Proceed to contractors to be involved in debris clearance, removal, and monitoring.
- Availability and amount of assets and resources that will be dedicated to debris removal operations
- Estimated time of mobilization
- Identification of staging area(s) for truck certification
- Changes or special conditions or situations

The **Debris Team** shall advise **Real Property** to Alert **FDEP** of potential DMS sites to open. Based on storms intensity and other considerations, if DMS selections have occurred, seek FDEP approval to open (Template notification can be found in **APPENDIX D**).

Verification and Approvals for County Processes

The Debris Team shall top off fuel levels and ensure charging of electronic devices. Further, back up documents, including but not limited to this DMP, shall be backed up onto a mobile electronic device. Obtaining necessary approvals from **IT** and/or **Communication** and coordinate to allow for the contractor(s) to provide information on County website.

Coordinate with **Budget** and **Purchasing** for PO and Contract need procedures, as well as, discuss the need for emergency procurement provisions.

Budget will provide the appropriate time keeping form and provide directions for completion. This is a critical component for reimbursement, which will be managed by **Budget**, and will be utilized as resource for FEMA reimbursement.

Seek consultation from **Procurement** for issuance of a notice to proceed for contractors. Further, unless directed by the **CMO**, major debris contractors should not be activated, or removal efforts initiated, without a declaration of the Local Civil Emergency Ordinance.

Initiate Public Outreach

To initiate public outreach for preparation (templates found in **APPENDIX D**), includes, but is not limited to, collaborating with **Communication** for standardized messaging to the public regarding debris set out and collection practices and operations. It also includes reviewing, and if appropriate, disseminating updated FAQs to **call-takers**, and other **County Agencies**. Dissemination of specifics may need to wait until post-storm activities, depending on storm damage. The FAQs (found in **APPENDIX D**) are to offer simple guidance for where to direct the public's questions related to debris removal.

Emergency Management and the **Public Information Officer (PIO)**, in coordination with the **Communications Division**, will provide the **County Manager** with a pre-event media press release informing residents of the potential debris removal operation. 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 garbage collection and related County facilities.

In addition, the County should provide information on proper debris setout procedures and estimates on when the cleanup process will begin. A draft press release for this scenario is included in **APPENDIX D: Sample Press Releases and Hurricane Preparedness Campaign**.

Solid Waste shall coordinate with Franchisees for planning and communication and have several response plans depending on storm scenario that can be implemented and conveyed to Leadership and the Public.

The County PIO (**Communications**) should issue press releases regarding segregation of normal household garbage, storm-related vegetative debris, C&D, appliances and white goods, electronic waste, and HHW.

The status of debris operations should be relayed to the public.

Activate Resource Management

Debris and stakeholders that will be coordinating with the Debris Team should always keep their picture ID with them in the event of an evacuation or other needs.

The **Debris Team** shall make field binders at this time as well as provide briefings on expectations, changes, and instructions, directives, and safety (**APPENDIX I**). The **Debris Team** shall keep several copies of time keeping forms and be sure to complete them daily with details of activities with legible handwriting to assist in reimbursement. The **Debris Team** will be directed when and to whom to turn in paperwork. Until then, all paperwork shall be kept in each **Debris Team** member's binder. **APPENDIX L** contains a listing of items to be kept in Debris Team's binder.

Initiate pre-inspection of various areas of the County for projectiles that may be out and document in accordance with directive provided by Debris Team.

Advise Leadership of preparation strategies including at least the following:

- Staff resources (fueled and equipped)
- Contractors on standby or deployed
- Potential debris sites to be utilized

6.2. LEVEL III: FINALIZE PREPARATIONS

During Level III, a final check should be made to ensure preparations to secure resources and staff ahead of the approaching storm are complete. Update the public on the progress of the approaching storm and encourage them to finalize their preparations and review the importance of debris separation after the storm. Reiterate any guidance regarding evacuation or sheltering in place based on the severity of the threat to the public.

Complete the preparation and staging of supplies and equipment that might be used in debris management operations. Encourage staff and other stakeholders to finalize their personal preparations and follow guidance regarding evacuation or sheltering in place based upon the severity of the threat. Finalize sheltering preparations for essential staff that will be called upon to weather the storm in secure locations.

6.3. LEVEL IV: HURRICANE EVENTUALITY

By Level IV, all preparations should be complete. The storm should make landfall within 12 hours. It is likely that effects of the storm will begin to be felt onshore which might hamper any additional preparations and potentially threaten the safety of individuals. At this time, staff and stakeholders should be evacuated or sheltered based upon the severity of the threat.

7. LEVEL V: POST EVENT ACTION PLAN AND RESPONSE

If faced with disaster and additional resources are needed to respond, the County can proclaim a Local Emergency. Proclaiming a Local Emergency would be the first step in responding to and recovering from a disaster. According to Chapter 38, Section 38-56, of the Collier County Ordinances, a Local Emergency can be proclaimed in the **County by the Board of County Commissioners**. However, if a quorum of the **Board of County Commissioners** is unable to meet, the **Chairman of the Board of County Commissioners**, or the **Vice-Chairman**, in his or her absence, and in the absence of the **Chairman and Vice-Chairman**; the next **County Commissioner** in order of seniority, or if two or more were appointed on the same date, then in alphabetical order among them; and in the absence of any **Commissioner**; the **County Manager**, in the absence of the **County Manager**; the **Clerk of Courts**; and in the **Clerk's** absence the **Deputy County Manager** are designated and empowered to declare a local state of emergency whenever the designated person, according to the above order of preference shall determine that a natural or manmade disaster has occurred or that the occurrence or threat of one is imminent and requires immediate and expeditious action. A proclamation declaring a state of emergency shall activate the disaster emergency plans applicable to the County and shall be the authority for the use or distribution of any supplies, equipment, materials or facilities assembled or arranged to be made available pursuant to such plans.

The Local Emergency Proclamation is sent from the County Office of Emergency Management (**OEM**) to the **Florida Division of Emergency Management**. In response to a proclamation of a Local Emergency, the Governor will proclaim a State of Emergency, which authorizes the Governor to expend emergency funds and provide State resources to respond to the incident.

The President of the United States can declare a Major Disaster upon request from the Governor. A Federal declaration of a disaster is requested by the Governor when the disaster is of such severity and magnitude that effective response is beyond the ability of the State and affected local jurisdictions. The Federal disaster declaration can make Public Assistance (PA) available to potentially reimburse the County for disaster debris management operations. Any work performed prior to the declaration may not be eligible for reimbursement.

The initial period of time after a disaster when roadways are cleared of scattered debris, leaning trees, and other obstructions for emergency response vehicles, is reimbursable by FEMA on a time and materials basis. FEMA generally limits the use of time and materials contracts to a reasonable time based on the circumstances during which the Applicant could not define a clear scope of work (SOW). 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 that the reimbursement criteria and duration for time and materials work is subject to change following a disaster.

The steps outlined in this Action Plan occur congruently and require effective communication and concise direction.

7.1. ACTIVATE MONITORING FIRM AND DEBRIS REMOVAL CONTRACTORS

The County will use the damage assessments to determine whether to activate the potential monitoring firm and debris removal contractors. The **County Debris Manager** should immediately meet with County officials to make this determination.

Debris Monitoring Function

Upon activation, the monitoring firm will deploy staff to support truck certification, collection, and disposal monitoring functions. The monitoring firm will train 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 Collier County for monitoring to be completed using an automated debris management system (ADMS). The documentation should include:

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

Note: Make sure proprietary software used by the monitoring company can be offloaded in multiple formats to make future production easier. Also, ensure that a local backup can be obtained.

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. With regard to 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.

The **County Debris Manager** 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.

The Debris Team will ensure the Debris Removal Contractor has secured a final disposal for the mulched debris, C&D, white goods, and electronic waste (e-waste). Without a final disposal location, the county risks fires from piled debris, FDEP citations, or filling up the County's landfill with the debris. The County has contracted with Okeechobee for C&D, and the contractor is permitted to utilize this site for final disposal for C&D.

Any permitted landfill or transfer site can be utilized as a final debris site and the Contract stipulates prices for this hauling based on distance from DMS per cubic yard delivered to the final debris site. The Contractor is to present options to the County for final disposal with pros and cons for each site and associated tip fee (that will be passed on to the County and is reimbursable by FEMA).

HHW Contractor Function

HHW should be collected separately and disposed of or recycled at a properly permitted facility. Collection of HHW can be conducted internally or made the responsibility of the Contractor on a unit rate basis. The Debris Team will make a determination and instruct the Contractor if the collection of HHW is to be included in their responsibilities.

Truck Certification

Truck certification is the most important function in initiating a debris removal operation. Accuracy and documentation of all measurements is critical. According to FEMA, 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 or entered electronically (see **APPENDIX F**: Field Documents). Each debris removal truck will be assigned a unique number for debris tracking and invoice reconciliation purposes. Improperly certified trucks or uncertified trucks will not be allowed to report their debris loads and reimbursement will not be issued. 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

The monitoring contractor will coordinate with the County and with the debris removal contractor to conduct truck certifications before trucks are entered into service.

7.2. EMERGENCY ROAD CLEARANCE & LIFE SAFETY OPERATIONS

Stakeholders:

Debris Team
EOM
R&B

During this phase, **Emergency Management**, in coordination with the **Road Maintenance Division**, should initiate emergency roadway clearing operations. The County will begin emergency road clearance operations using County force account labor and equipment. The Road Maintenance Preparedness Plan (**APPENDIX M**) contains an available list of County resources. 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.

Emergency road clearance priorities will generally depend on a number of factors such as type of disaster, concentration of debris, and available resources. Following a disaster event, **County Emergency Management** and the **Road Maintenance Division** 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. A list of road segments that will require priority for emergency road clearance operations has been prepared by the County and provided in **APPENDIX E**: Emergency Road Clearance Priorities. This map was compiled based on many considerations, including size, proximity to adjacent citizen populations, police and fire department locations, and ingress/egress capabilities for the community.

The **County Road and Bridge Division** 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. A map showing emergency road clearance priorities is provided in **APPENDIX E**: Maps.

Emergency road clearance activities should be announced to the public.

During emergency road clearance, any prioritized areas will be communicated to the **Debris Team** for planning purposes. This may include areas of concentrated debris and/or areas that sustained more extensive damage that may need to be prioritized. These areas may need to be subdivided into smaller work zones and recorded on the County's GIS data.

Debris clearance from private roads can be eligible for reimbursement if:

- The road has unrestricted access to the public (no locks, gates or guards), and
- The road is frequently traveled.

7.3. DMS SELECTION & DAMAGE ASSESSMENT

Stakeholders:

Debris Team
Debris Contractors
Environmental
GIS

Concurrent to emergency push operations, and based on the storm's intensity and any assessments received regarding damage, the County should discuss appropriate DMS locations necessary to drive successful debris recovery. The **County Debris Manager** will review all DMS locations, checking for capacity, permitting requirements, and the type of debris that is approved by FEMA to be accepted at the site. Any follow-up approvals required by **Environmental** shall be initiated and approval to open shall come from **FDEP** (template in **APPENDIX C**). The **debris removal contractor** should perform necessary preparation work to open DMS locations. **APPENDIX C** details requirements for opening of DMS's, including the approvals needed and guidance for setup. Other last-minute factors may influence DMS selection, including, but not limited to, public comments.

Monitoring towers will be located at the ingress and egress of the DMS. Monitoring towers will be high enough so that Tower Monitors can verify the contents inside the debris removal trucks. See **APPENDIX C: Debris Management Site Synopsis**, for DMS locations.

Damage assessments are necessary to determine the extent, location, and types of 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 (Coordinate with **GIS**) to obtain an aerial view of damaged areas within the County. Damage assessment teams are coordinated and directed by **Emergency Management** from the **EOC**. The **Public Utilities Division** will coordinate with the **Fire/Hazardous Materials Teams** to assess hazardous materials debris.

The **County Debris Manager** will coordinate a meeting between the County's contracted debris hauling and debris monitoring firms. This meeting will establish contact information (if changed), timelines, and contractor readiness. When the County's contracted debris haulers and debris monitors arrive to the County, the **County's Debris Manager** will stage them where they are expected to be needed most urgently. The **Debris Manager** will consult the priority and emergency roads list in staging resources.

Environmental Monitoring Program at DMS

Throughout the duration of the project, data should be collected for use in the remediation and close-out of the DMS. Collected data should be compared to previous (pre-storm) 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:

- **Drone Footage of Site Operations** – During the course of 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. Drone pictures and videos 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 **Florida Department of State, Division of Historical Resources, Compliance and Review Section** at (850)-245-6333 for further guidance. Other issues relating to historical or archeological significance of the site should be cleared with the state historical preservation agency.

7.4. INITIATE DISCUSSIONS WITH FEMA

Stakeholders:

Debris Team
Leadership

This request should be made through the Florida Department of Emergency Management (FDEM).

The **County Debris Manager** should immediately request the contact information of the designated FEMA Program Delivery Manager (PDMG) for the disaster. Upon receiving the information, the County should arrange to hold a meeting with the PDMG. It will be critical that the **County Debris Manager** and monitoring firm 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. A meeting should be scheduled with the PDMG that includes attendees from: **Emergency Management, County Officials, Municipalities, PIO, Finance Department, PDMG, Debris Monitoring Firm, Debris Hauling Firm.**

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 contractors and 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. In order 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

Note: Funding for debris removal from unimproved property is typically denied.

7.5. OBTAIN FEMA GUIDANCE FOR PRIVATE NON-COMMERCIAL PROPERTY

Stakeholders:

Debris Team
Leadership

FEMA defines non-commercial property as “a property, structure, or portion of a structure, used by the property owner as their primary residence, such as a house or condominium unit in which the owner resides.” Debris removal from private non-commercial property is typically the responsibility of the property owner. In some cases, where the extent of damage to private property is so widespread that it threatens the public health, safety, and economic recovery of the community, a Private Property Debris Removal (PPDR) program may be needed to facilitate debris removal and recovery of the community.

For PPDR operations to be eligible for funding under the PA Program, a determination must be made that it is in the public interest, and not merely benefiting an individual or a limited group of individuals. To demonstrate that PPDR operations are in the public interest, the public health authority or other authorized public entity must decide that the debris on private property constitutes an immediate threat to life, public health, safety, or the economic recovery of the community at large. The established, specific legal requirements for declaring the existence of a threat to public health and safety must also be described.

The State and FEMA will evaluate the information to determine if it concurs that PPDR operations are in the public interest and will provide a written response to an inclusion request specifying any properties, or area of properties, for which it approves PPDR funding.

Debris removal from private property and gated communities can begin while waiting for approval from FEMA, but it is at risk of non-reimbursement. It is critical that FEMA guidance (see Public Assistance Program and Policy Guide, Version 5, Chapter 7, Section F.1.) for clearing debris from private property and gated communities be followed.

Depending on resources and damage assessments, this may concurrently occur along with other actions listed above.

Emergency demolition of structures located on private property may be eligible when partial or complete collapse is imminent, and that collapse poses an immediate threat to the general public. In some instances, restricting public access to an unsafe structure and the surrounding area, such as securing the area with a fence, is sufficient to alleviate the immediate threat and is more cost-effective than demolition. In these cases, demolition is ineligible. If a structure is condemned prior to the incident, emergency protective measures related to that structure are ineligible. FEMA reviews the Applicant’s demolition process for compliance with all applicable environmental laws, regulations, and EOs.

Conditions for Eligibility

For demolition to be eligible, the County must take the following actions:

Certify that the structures are unsafe and pose an immediate threat to lives, public health, or safety.

Provide documentation to confirm its legal authority and responsibility to enter private property and demolish privately-owned unsafe structures. This includes:

Citation of the law, ordinance, code, or emergency powers for which it is exercising its legal authority to demolish privately-owned unsafe structures. The authority cited must be applicable to the structural condition representing the immediate threat and not merely the Applicant's uniform level of services.

Confirmation that a legally authorized official of the Applicant has ordered the exercise of public emergency powers or other appropriate authority to enter onto private property in the designated area in order to demolish privately-owned unsafe structures and remove the resulting debris.

Indemnify the Federal Government and its employees, agents, and contractors from any claims arising from the demolition of privately-owned unsafe structures and the removal of the resulting debris.

Before FEMA will provide PA funding, the County must provide confirmation that it satisfied all legal processes and obtained permission requirements from the property owners (rights-of-entry) and agreements to indemnify and hold harmless the Federal Government. Additionally, the County must provide documentation to support that it obtained all necessary permits and complied with environmental and historic preservation requirements.

Duplication of Benefits in Private Property Debris Removal – If the County conducts private property debris removal it must coordinate with property owners to recover any insurance proceeds and credit FEMA the federal share of any insurance proceeds collected. In some cases, FEMA might provide Individual Assistance to individuals for debris removal. FEMA will closely monitor such circumstances, so it does not fund the same work under both programs..

9.1. PUBLIC COMMUNICATION

Stakeholders:

Debris Team
Communications
Leadership

A press release developed by the **County Debris Manager** or designee and the PIO in coordination with the **Communications Division** that has been approved by County officials should be issued to various media sources, posted on the County website, posted on County social media sites, and/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 public information message are located in **APPENDIX D: Sample Public Outreach**.

In addition, a public facing dashboard will be maintained by the Monitoring Firm supplying information regarding where debris trucks are forecasted to be operating, the status of debris operations, the quantities of debris collected thus far and from where it was collected.

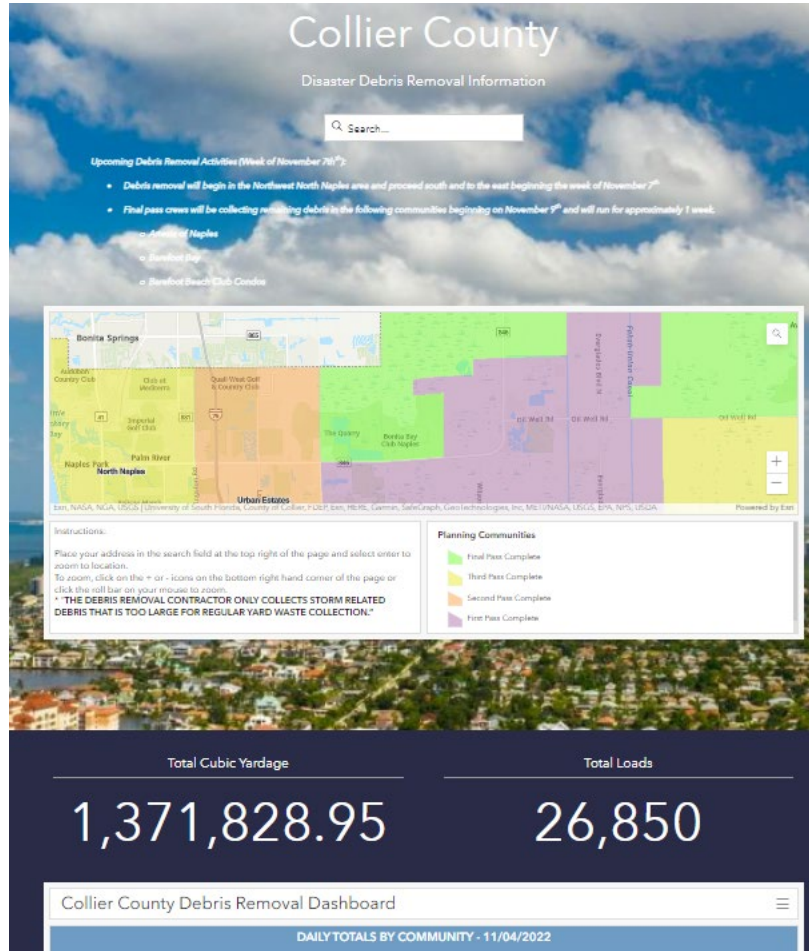


Figure 7-1: Sample Page from the Collier County Debris Removal Dashboard

At this point all call-takers should have been briefed on responses to provide the public information. Emphasis should also be placed on the completion of ROEs as needed.

10. LEVEL VI - RECOVERY OPERATIONS

Recovery operations can be chaotic without the proper communication and flow. Below outline processes that outline effective communication and demonstrate proper preparation.

10.1. DMS RECOVERY OPERATIONS

Stakeholders:

- Debris Team
- Leadership

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 debris is deposited. The following action items are recommended to compile baseline information:

- **Photograph the site** – Digital photos should be taken to capture the state 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 water** – If possible and deemed necessary, soil and groundwater samples will be taken before debris reduction 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.

If at any time initial DMS's are anticipated to or 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.

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. It is unlikely under current guidelines that incineration will be a method used for reduction of debris as there are currently bans on burning of debris within Collier County.

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 construction & demolition (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.

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.

Haul-Out to Final Debris Disposal

Processed and reduced debris from a 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. The Debris Removal Contractor is required to provide a final disposal for the mulched debris, C&D, and White Goods. Without a final disposal location, the county risks fires of piled debris, FDEP citations, or filling up the County's landfill with the debris. The County is contracted with Okeechobee for C&D, and the contractor is permitted to utilize this site for C&D final disposal.

Any permitted landfill can be utilized as a final debris site and the Contract stipulates prices for this hauling based on distance from DMS per CY delivered to the final debris site. The Contractor is to present options to the County for final disposal with pros and cons for each site and associated tip fee (that will be passed on to the County and is reimbursable by FEMA).

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.

It will be important that the County and monitoring firm ensure the debris removal contractor obtains proper disposal tipping fee information. **APPENDIX F**: Field Documents, contains a sample haul-out ticket that will be used by the potential monitoring firm as reimbursement documentation for the County.

10.2. ROW DEBRIS REMOVAL OPERATIONS

Stakeholders:

Debris Team
Leadership

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 that 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.

10.3. DEBRIS MONITORING

To receive Public Assistance reimbursement for the removal of debris by debris removal contractors, FEMA requires that the County monitor debris removal operations. Monitoring debris removal operations requires observation and documentation of all work from the point of debris collection to final disposal. This is to ensure that all work performed is in accordance with Public Assistance guidelines and all applicable Federal and State and Local laws and regulations. Failure to properly monitor debris removal operations could jeopardize Public Assistance funding. It is possible for the County to use its own staff for monitoring, but FEMA also allows for contractor resources to be used. The County has hired a contractor to oversee the monitoring functions. The monitoring contractor can conduct truck certifications (as discussed in Section 7.1) as well as serve as Collection (or loading site) monitors and Disposal (or Tower/Site) monitors.

Collection Monitors

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 Collier County for monitoring to be completed using an automated debris management system (ADMS). The documentation should include:

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

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 located in **APPENDIX F: 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.

The Monitoring Contractor performs 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

Disposal Monitors

When the truck arrives at either a DMS, landfill, or other site to drop the debris load, the Disposal Monitor will document the amount of debris collected by making a judgment call (or "load 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 or recovery facility for beneficial reuse (Landfills are listed below)
 - Matching landfill receipts and/or scale house records to haul-out tickets
 - Reviewing ROW Debris for Ineligible Debris

10.4. 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. This debris must be hauled directly to a final disposal landfill or transfer station to reduce associated handling costs.

10.5. HHW DEBRIS REMOVAL AND DISPOSAL

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 or contracted out on a unit rate basis. The following action items are recommended to the County with regard to HHW removal:

- Communicate to County residents the eligibility of HHW following an event. It is important that residents separate HHW from other debris, such as vegetative, C&D, etc., to ensure that 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 **FDEP**. Describe the HHW collection program and permitted facilities to be used for disposal or recycling.

10.6. WHITE GOODS REMOVAL AND RECYCLING

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 or contracted out on a unit rate basis. The following action items are recommended to the County with regard to white goods removal:

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

10.7. ROW STUMP REMOVAL AS NECESSARY

For stumps that pose a hazard to the public 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.

- FEMA only reimburses contracted costs charged on a per-stump basis if extraction is required as part of the removal. The County needs to ensure the price for stump removal includes extraction, transport, disposal, and filling the root-ball hole..

10.8. HAZARDOUS TREES AND LIMBS

Stakeholders:

Debris Team
Leadership

A ROW leaners/hangers program should be initiated if it is determined that 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 the FEMA Public Assistance Program and Policy Guide provides the following guidance on eligibility requirements for leaners and hangers.

Hazardous Tree – A hazardous tree is a standing tree that presents a hazard to the public due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem or limbs, and the direction and lean of the tree. Bracing a tree is eligible as category B work. However, pruning, maintenance, trimming, and landscaping are ineligible. FEMA considers incident-damaged trees to be hazardous and eligible for removal if the tree presents a hazard to the public due to conditions including, but not limited to:

- Deterioration or physical damage to the root system, trunk, stem, or limbs;²⁵¹ or
- The direction and lean of the tree per the Occupational Safety and Health Standards.²⁵²

- For trees that have 50 percent or more of the root-ball exposed, removal of the tree and root-ball and filling the root-ball hole are eligible. For contracted removal of a tree with a root-ball, FEMA will not reimburse two separate unit costs to remove the tree and its root-ball.
- For trees 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 after cutting the tree is not eligible.

Hazardous Limb or Branch Removal – Removal of broken limbs or branches that pose an immediate threat to the public is eligible. FEMA does not fund removal of broken limbs or branches located on private property unless:

- The limbs or branches extend over the public ROW;
- The limbs or branches pose an immediate threat; and
- The Applicant removes the hazard from the public ROW (without entering private property).

Only the minimum cut necessary to remove the hazard is eligible. For example, cutting a branch at the trunk is not eligible if the threat can be eliminated by cutting it at the closest main branch junction.

It is imperative that the contractors obtain any and all necessary permits or temporary licenses to ensure compliance with local ordinances and full financial reimbursement.

Unit Rate Tickets and Photos

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 located in **APPENDIX F: 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. Photos must show the threat that the leaner or hanger poses to the public to be eligible for reimbursement.

10.9. SAND

Stakeholders:

Debris Team
Leadership

After a hurricane, storm surge can often deposit sand inland on to roads which can hinder transportation and potentially pose a hazard to vehicles. Since sand is often displaced from beaches during hurricanes, one use of the sand removed from rights of way is to use it to replenish beach sand. Because sand removed from roadways can also contain harmful debris, it must be sifted first to ensure any flotsam is first removed rendering the sand safe to be used on beaches. After removal from the ROW, the sand would be taken to a DMS. Trucks at the DMS will load the sand into a sifter to remove debris. The sifted sand can then be transported to a local beach. Since the FDEP Beaches Programs within the Office of Resilience and Coastal Protection, has the primary mission of protecting, restoring, and managing Florida's coastal systems, the County will need to coordinate with FDEP on the use of sand from the ROW in beach replenishment or potential other uses for the sand.

10.10. PRIVATE PROPERTY DEBRIS REMOVAL

Stakeholders:

Debris Team

Leadership

10.10.1. PRIVATE ROADS

Under the latest Public Assistance Program and Policy Guide, Version 5, private roads are those that are not owned by, or operated by, or otherwise the legal responsibility of a public entity, such as orphan roads, roads in gated communities, or homeowners' association roads. Debris removal from private roads can be eligible for reimbursement if:

- The road has unrestricted access to the public (no locks, gates or guards), and
- The road is frequently traveled.

If the public has restricted road access (e.g., behind locks, gates, or guards) or the private roads are unrestricted but rarely used by the public, then the County must demonstrate that the debris removal is in public interest. FEMA has the authority to determine whether such debris removal is eligible.

10.10.2. PRIVATE NON-COMMERCIAL PROPERTY

Debris removal from private non-commercial property is typically the responsibility of the property owner. In some cases, where the extent of damage to private property is so widespread that it threatens the public health, safety, and economic recovery of the community, a PPDR program may be needed to facilitate debris removal and recovery of the community. For PPDR operations to be eligible for funding under the PA Program, a determination must be made that it is in the public interest, and not merely benefiting an individual or a limited group of individuals. To demonstrate that PPDR operations are in the public interest, the County public health authority or other authorized public entity must make a determination that the debris on private property constitutes an immediate threat to life, public health, or safety, or to the economic recovery of the community at large. The established, specific legal requirements for declaring the existence of a threat to public health and safety must also be described.

The State and FEMA will evaluate the information to determine if it concurs that PPDR operations are in the public interest and will provide a written response to an inclusion request specifying any properties or area of properties for which it approves PPDR funding.

Debris removal from private property and gated communities can begin while waiting on approval from FEMA at risk of non-reimbursement. It is critical, that FEMA guidance (see Public Assistance Program and Policy Guide, Version 5, Chapter 7, Section F.1.) for clearing debris from private property and gated communities be followed.

Depending on resources and damage assessments, this may concurrently occur along with other actions listed above.

Emergency demolition of structures located on private property may be eligible when partial or complete collapse is imminent, and that collapse poses an immediate threat to the general public. In some instances, restricting public access to an unsafe structure and the surrounding area, such as securing the area with a fence, is sufficient to alleviate the immediate threat and is more cost-effective than demolition. In these cases, demolition is ineligible. If a structure is condemned prior to the incident, emergency protective measures related to that structure are ineligible. FEMA reviews the Applicant's demolition process for compliance with all applicable EHP laws, regulations, and EOs.

1. Conditions for Eligibility

For demolition to be eligible, the County must:

- Certify that the structures are unsafe and pose an immediate threat to lives or public health and safety;

- Provide documentation to confirm its legal authority and responsibility to enter private property and demolish privately-owned unsafe structures. This includes:
 - Citation of the law, ordinance, code, or emergency powers for which it is exercising its legal authority to demolish privately-owned unsafe structures. The authority cited must be applicable to the structural condition representing the immediate threat and not merely the Applicant's uniform level of services.
 - Confirmation that a legally authorized official of the Applicant has ordered the exercise of public emergency powers or other appropriate authority to enter onto private property in the designated area in order to demolish privately-owned unsafe structures and remove the resulting debris; and
- Indemnify the Federal Government and its employees, agents, and contractors from any claims arising from the demolition of privately-owned unsafe structures and removal of the resulting debris.

Before FEMA will provide public assistance funding, the County must provide confirmation that it satisfied all legal processes and obtained permission requirements from the property owners (rights-of-entry) and agreements to indemnify and hold harmless the Federal Government. Additionally, the County must provide documentation to support that it obtained all necessary permits and complied with environmental and historic preservation requirements.

10.10.3. PRIVATE COMMERCIAL PROPERTY DEBRIS REMOVAL

Removal of debris from commercial properties, such as mobile home parks, private (or gated) communities, industrial parks, golf courses, cemeteries, apartments, condominiums, and trailer parks, is generally ineligible because commercial enterprises are expected to retain insurance that covers debris removal. In very limited, extraordinary circumstances, the State and FEMA may provide an exception. To be considered for an exception, the County will need to prepare an inclusion letter requesting consideration for the ineligible property. In those cases, the County must provide an inclusion letter to the State and FEMA documenting that it has the legal authority and responsibility to remove the debris, cite all applicable sources of authority, and indemnify the United States for any claims arising from the debris removal activities. In addition, the County must demonstrate that the debris removal from commercial properties is in the public interest. The State and FEMA will evaluate the information and provide a written response and approval for those commercial properties for which it approves funding for debris removal. Commercial properties and businesses should be advised in the affected areas to:

- Monitor news regarding debris collection protocols in the jurisdiction.
- Consult with Local Building Official for any additional requirements specific to the jurisdiction.
- If the property owner performs debris removal, the owner must comply with all applicable regulations.

10.11. MANAGING DAMAGE CLAIMS FROM DEBRIS OPERATIONS

Despite best efforts, claims from damage to personal property are somewhat inevitable in disaster debris operations. Some damage can be avoided through public information by asking residents not to stack debris against mailboxes, poles, fire hydrants, trees, and meters. However, when damage does happen it will be tracked, and the County will coordinate with the contractor to address the issue. Damages may be identified by the monitoring firm in which case the monitoring firm will file an incident report through their reporting system. Residents may also recognize damage and call in to 311 to report it. In this case, 311 will enter the

information about the damage into City Works, the County's work order system. The damage claims will be assembled on a spreadsheet by a County Solid & Hazardous Waste Management staff member who will track the damage reports and coordinate with the contractor to affect a remedy to the claims.

10.12. BRIEFINGS WITH KEY PERSONNEL. REPORT DEBRIS VOLUME & RECOVERY COSTS

Stakeholders:

Debris Team
Leadership
Key Staff

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.

The County should coordinate with the **FDOT** and other relevant agencies to ensure debris is being collected and documented appropriately. Coordination with **FDOT** is imperative with regard to state maintained roads.

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, safety, 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.

The **County Debris Manager**, 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 **Administrative Services Department** will begin to collect required documentation for the development of FEMA Project Worksheets (PW).

It will be critical to maintain strong communication with the County's assigned FEMA representatives. The daily meetings will help to ensure maximum coordination and expedite resolving any operational problems that may occur.

10.13. PROVIDE PUBLIC INFORMATION UPDATES ON THE STATUS OF DISASTER DEBRIS RECOVERY OPERATIONS

Communicate the status of debris operations to the public. Continue to emphasize the importance of segregating debris while ROW debris collections continues.

11. LEVEL VII: CLOSE OUT PROCESSES

For the purpose of 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. See the County agency appendices (**Appendices M – P**) for a list of County resources available for this purpose. As noted in the Disaster Response and Recovery Timeline (See **Appendix L**), 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 disaster-specific guidance (DSG) and require some level of FEMA pre-validation. However, if the County determines that there is an immediate and imminent threat to public health and safety, these programs can be expedited.

11.1. COMMUNICATE PROJECT CLOSE-OUT TO RESIDENTS VIA PRESS RELEASE

The project close-out press release should focus on clarifying any ineligible debris confusion and communicating a debris setout deadline to minimize illegal dumping. Contractor's Protocol for leaners/hangers and private property/gated community debris removal programs, if applicable, should be communicated at this time to the **Debris Team**, and reviewed by stakeholders, that may include **Risk, Facilities, and Road and Bridge**. Depending on the severity of the debris-generating event, project close-out may be further away.

Through coordination with **Communications**, 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 third pass. In a smaller debris-generating event, the second pass could be announced earlier.

11.2. CLOSE-OUT AND REMEDIATE DMS

Stakeholders:

Debris Team
Leadership

FDEP 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 **FDEP**. The results of any required environmental samples should be included with the written notice.

11.3. CONDUCT PROJECT CLOSE-OUT MEETINGS WITH FEMA AND EXTERNAL AGENCIES

Stakeholders:

Debris Team
Leadership

Prior to the project close-out 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 the potential monitoring firm, should compile all contractor invoices, contracts, and other documentation supporting debris removal operations in preparation of the project close-out meeting.

County personnel will perform random oversight and auditing procedures during a declared emergency event. Random inspections, assessments, or audits to serve as protective measures to maintain the highest standard of accountability and performance in accordance with the terms, conditions of contract and state, local guidelines. This systematic approach guarantees that the county can rely on its vendors to deliver essential services during declared emergencies while upholding transparency and efficiency in their operations.

12. OVERVIEW OF RULES AND REGULATIONS

Several State and Federal agencies can play active role in regulating debris management activities. Having a good understanding of these agencies and the role they play can assist Collier County conducting debris management activities in a manner that is compliant with State and Federal regulations. Table 10-1 below, summarizes the debris related activities that might be performed and the role of regulatory agencies.

Table 10-1: Regulatory Agencies and Debris Management Operations

| Debris-Related Activity | Regulatory Agency |
|---|---|
| DMS | <ul style="list-style-type: none"> FDEP – Opening and closing of DMS Florida Forest Service – Open burning permit Florida Division of Historical Resources (FDHR) – If items of historic significance are found at a DMS Florida Division of Air Resource Management – Air quality at DMS reducing debris through burning |
| Widespread Hazardous Materials Contamination | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> U.S. Fish and Wildlife Service |
| Waterways Debris Removal | <ul style="list-style-type: none"> USACE – Primary responsibility 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 Natural Resources Conservation Services (United 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 |
| Demolition | <ul style="list-style-type: none"> FDHR – State historic review of the property FDEP – Environmental review of the property |

12.1. FEDERAL REGULATIONS AND GUIDANCE

The documents described in this section establish the legal authority for local governments to engage in debris cleanup operations and seek reimbursement from the federal government. The County should review these documents annually to familiarize themselves with the governing statutes and to identify any changes to the rules and regulations.

National Environmental Policy Act (NEPA)

NEPA regulations can be found in CFR Parts 1500 – 1508. The act requires that 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.

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>.

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.

Endangered Species Act

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.

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.

Clean Air Act (CAA)

The CCA 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.

National Emission Standard for Hazardous Air Pollutants (NESHAP)

Provides standards for demolition of structures containing asbestos as well as the disposal and reporting of asbestos. The SWACC must be consulted by local jurisdictions in any operations involving the handling and disposal of asbestos.

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.

FEMA Publication 104-009-2 – Public Assistance Program and Policy Guide, Version 5

The Public Assistance Program and Policy Guide (PAPPG) combines all Public Assistance (PA) policy into a single volume and provides an overview of the PA Program implementation process with links to other publications and documents that provide additional process details. This document incorporates and supersedes language from PA Program publications and 9500 Series documents.

FEMA has archived superseded PA publications and policy documents at www.fema.gov/publications-archive and www.fema.gov/media-library/assets/documents/128488, respectively. These policy and guidance documents remain in effect for incidents declared prior to January 1, 2016. The language in V1.0 is in effect for incidents declared between January 1, 2016 and March 31, 2017. The language in V2.0 is in effect for incidents declared between April 1, 2017 and August 22, 2017. The language in V3.1 is in effect for incidents declared between August 23, 2017 and May 31, 2020. The language in V4 is in effect from June 1, 2020 to January 5, 2025. The language in V5 is in effect from January 5, 2025 until the next version is released.

An electronic version of PAPPG (V5) is available at: [PA Program and Policy Guide version 5](#)

Version 5 of the PAPPG is effective for all emergencies and major disasters declared on or after June 1, 2020. It supersedes Version 3.1 of the PAPPG which was published on April 1, 2018 and is effective for all emergencies and major disasters declared between August 23, 2017 and May 31, 2020. FEMA archives previous versions of the PAPPG at www.fema.gov/media-library/assets/documents/186271.

Public Assistance Debris Monitoring Guide, March 2021

The Public Assistance Debris Monitoring Guide provides guidance on monitoring debris removal operations and eligibility requirements associated with necessary work and reasonable costs to carry out a debris monitoring program. The purpose of a debris monitoring program is to ensure accurate documentation of debris removal and disposal operations and associated costs. An electronic version of the guidance can be found at https://www.fema.gov/sites/default/files/documents/fema_debris-monitoring-guide_sop_3-01-2021.pdf.

12.2. DISASTER-SPECIFIC GUIDANCE

Disaster-specific guidance (DSG) is a policy statement issued in response to a specific post-event situation or need in a state or region. Each DSG is issued a number and is generally referred to along with its numerical identification.

DSG typically relate to the authorization of private property cleanup, cleanup, and payment of stumps, or notification of large projects. County staff should be aware of any new DSG that is issued by FEMA following an event.

12.3. OTHER RELEVANT DOCUMENTS

The two primary directives developed by the federal government that provide for the authorization and use of federal funds to reimburse local governments for disaster-related expenses are the Stafford Act and the Code of Federal Regulations – Title 44 Emergency Management and Assistance (44 CFR). A brief summary of these laws and other directives are provided below.

Robert T. Stafford Disaster Relief and Emergency Assistance Act

The Stafford Act authorizes the PA Program. The fundamental provisions of the Stafford Act are as follows:

- Authorizes FEMA to administer federal disaster assistance
- Defines the extent of coverage and eligibility criteria of the major disaster assistance programs
- Authorizes grants to the states
- Defines the minimum federal cost-sharing levels
- An electronic version of the Stafford Act is available at:

<http://www.fema.gov/about/stafact.shtm>

Code of Federal Regulations: Title 44 – Emergency Management and Assistance

Procedural requirements for PA Program operations are provided by 44 CFR. These regulations are designed to implement a statute based upon FEMA's interpretation of the Stafford Act. They govern the PA Program and outline program procedures, eligibility, and funding.

An electronic version of 44 CFR is available at:

http://www.access.gpo.gov/nara/cfr/waisidx_03/44cfrv1_03.html

Sandy Recovery Improvement Act (SRIA) of 2013

The Stafford Act was amended by the Sandy Recovery Improvement Act (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.

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Disaster Recovery Reform Act of 2018

On Oct. 5, 2018, the President signed the Disaster Recovery Reform Act 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 and aim to reduce the complexity of FEMA and build the nation's capacity for the next catastrophic event.

- The law 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 provisions can be read at: <https://www.fema.gov/disaster-recovery-reform-act-2018>

12.4. STATE OF FLORIDA REGULATIONS

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

The FDEP has developed guidance to assist jurisdictions in the establishment, operation, and closure of DMS locations. The procedure as outlines the process for gaining pre-authorization of a new DMS as well as annual pre-authorization for existing DMSs. A copy of the document can be found at the FDEP website.

Hazardous Waste Handling Standards

State standards for hazardous waste management are located at Rule Chapter 62-730 of the Florida Administrative Code and can be viewed at

<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-730>

13. 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.

13.1. FEMA PUBLIC ASSISTANCE (PA) 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.

Cost and Damage Thresholds

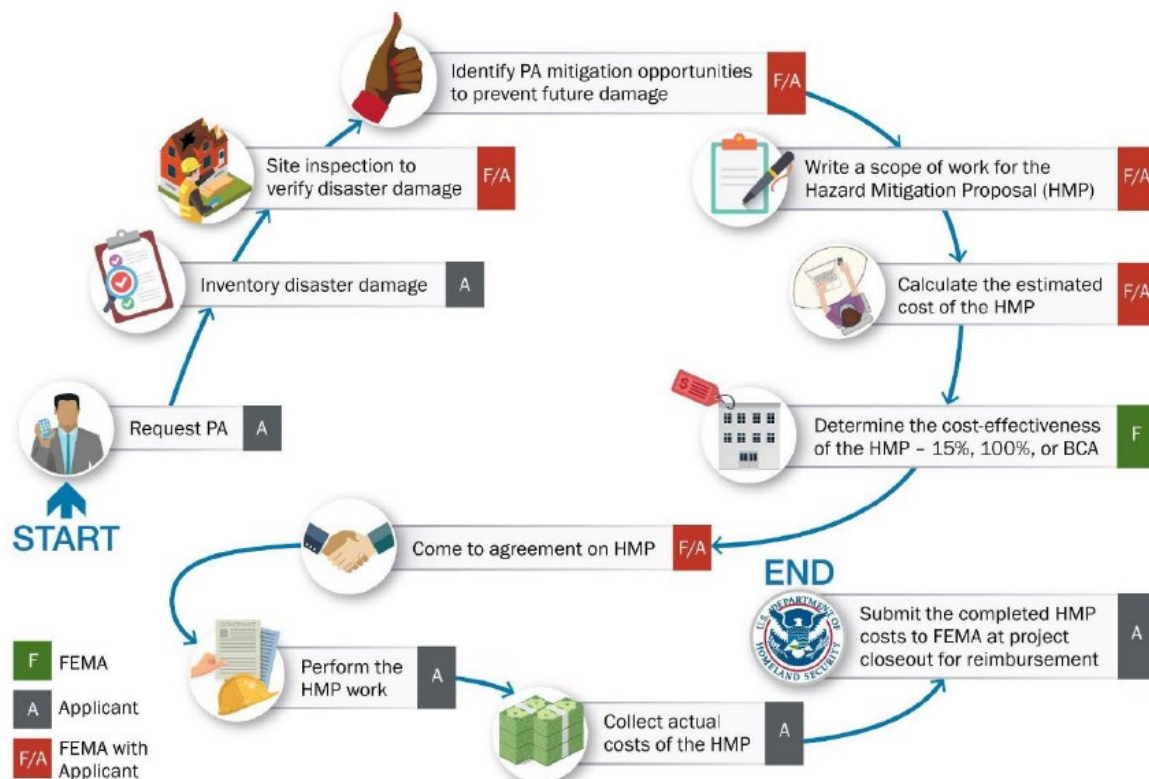
To qualify to receive PA funding, the State of Florida must meet a threshold of cost and damages set by regulation, as must each County for which assistance is requested. Reimbursement is made to the affected jurisdictions, following joint damage assessments. The threshold amounts that must be met are based upon the number of individuals in the population (per capita), are determined annually, and are posted on the FEMA website at <https://www.fema.gov/assistance/public/tools-resources/per-capita-impact-indicator>. For 2025 the Statewide threshold indicator is \$1.89, and the County threshold indicator is \$4.72. Given a Statewide population of 23,372,215 and a population in Collier County of 416,233, according to the U.S. Census Bureau, the threshold for the State would be \$44,173,486 and the County threshold would be \$1,964,619.

Cost-Sharing

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 serves as the grant administrator or the grantee. The grantee determines how the non-federal share is funded. Figure 11.1 provides a summary of the process flow for the PA Program.

Figure 11-1: PA Grant Program Process Flow



13.2. CONSEQUENCES OF NON-COMPLIANCE

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.

13.3. FEMA HAZARD MITIGATION GRANT PROGRAM

The purpose of HMGP 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 key purpose of this grant program is to enact mitigation measures that reduce the risk of loss of life and property from future disasters. This webpage includes extensive resources and job aids to streamline project implementation. The primary guidance document for this program is the HMA Guidance. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

FEMA offers a variety of disaster assistance programs with different eligibility requirements. HMGP 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. HMGP 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.

Key Program Points

- HMGP funding is limited; therefore, recipients and local government officials must make difficult decisions as to the most effective use of grant funds.
- Not all projects may be selected.
- “Think about the end at the beginning” – Upon start of the funded project, the recipient and subrecipient should be mindful of the Period of Performance (POP) and federal close-out requirements.

13.4. 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.

13.5. 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
- US Department of Agriculture Farm Services Agency Emergency Programs

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

