



Chatham County Disaster Recovery Plan

RECOVERY SUPPORT FUNCTION 5: INFRASTRUCTURE SYSTEMS ANNEX

SEPTEMBER 2015

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INTRODUCTION

- A. *Recovery Support Function (RSF) 5: Infrastructure Systems Annex* to the Chatham County Disaster Recovery Plan (DRP) serves to identify a range of actions specific to support and coordinate recovery from incidents that have a long-term impact to Chatham County.
- B. *RSF-5: Infrastructure Systems Annex* provides partners, nongovernmental organizations, and community organizations with operational guidance necessary to support long-term recovery activities in the aftermath of a disaster or emergency that results in a long-term impact to the community.
- C. Consistent with the DRP, this Annex is a living document. Chatham County Emergency Management Agency (CEMA) acknowledges additional recovery issues will be identified in the future and will be included in revised editions of this document.

PURPOSE

The purpose of this Annex is to outline the roles, responsibilities, and activities of the agencies and individuals supporting *RSF-5: Infrastructure Systems Annex* for pre and post-event recovery operations.

The purpose of *RSF-5: Infrastructure Systems Annex* is to coordinate public, private, and non-profit efforts to maintain and restore facilities, infrastructure systems, and related services located in Chatham County. In the context of this Plan, infrastructure systems refer to utilities, transportation, privately owned telecommunications and other communications, debris management, and government and civic facilities recovery. This includes coordinating efforts with the State of Georgia, relevant federal agencies, and key private sector partners.

SCOPE AND APPLICABILITY

The scope of this Annex is to provide a framework for coordination during recovery. This includes coordination by the RSF-5 Coordinating and Support Agencies with local governments, other county agencies, the State of Georgia, and the Federal Government, when applicable.

This Annex should be used by the RSF-5 Coordinating and Support Agencies, local governments, other county agencies, and partners in the public, private, and nonprofit sectors.

ASSUMPTIONS

- A. Assumptions identified in the DRP apply to this Annex.
- B. The Coordinating Agency for *RSF-5: Infrastructure Systems Annex* is Chatham County Public Works (CCPW).
- C. *RSF-5: Infrastructure Systems Annex* will be updated as necessary to maintain consistency with the evolving role of RSF 5 Coordinating and Support agencies.
- D. *RSF-5: Infrastructure Systems Annex* Coordinating and Supporting Agencies are primarily responsible for the facilitation of maintenance and restoration of county facilities, critical infrastructure systems, public works operations, road and bridge access, debris management, and other related services.

Additional assumptions include:

- E. Agencies and organizations will provide the services identified for *RSF-5: Infrastructure Systems Annex*.
- F. The Coordinating Agency will actively engage the Supporting Agencies in planning, training, and exercises to ensure an effective operation upon activation.
- G. Redundancies exist within infrastructure systems to facilitate disaster recovery. These systems will be utilized in facilitating post-disaster recovery efforts.
- H. Existing memoranda of understanding (MOU) and memoranda of agreement (MOA) will be employed to access certain services and resources following an incident, to include: law enforcement, community services, communications, transportation, water and sewer.
- I. Non-traditional roles may be necessary for certain response stakeholders. These roles will likely mirror day-to-day responsibilities, but will be employed in settings consistent with recovery priorities. For example, law enforcement may be utilized to provide security at hospitals, shelters, or to direct traffic.

Because of the increased demand for resources, restrictions may make accessibility a challenge.

IMPLEMENTATION

- A. Consistent with the DRP, this Annex may be activated in whole, or in part, during disaster conditions as determined by the Chairman of the Chatham County Commission and the Director of CEMA, through the Command Policy Group (CPG).
- B. The CPG may determine to issue a Declaration of Local Recovery.
- C. In cases where there are long-term or ongoing needs from the public, local governments, or county agencies, *RSF-5: Infrastructure Systems Annex* may specifically be activated.

CONCEPT OF OPERATIONS

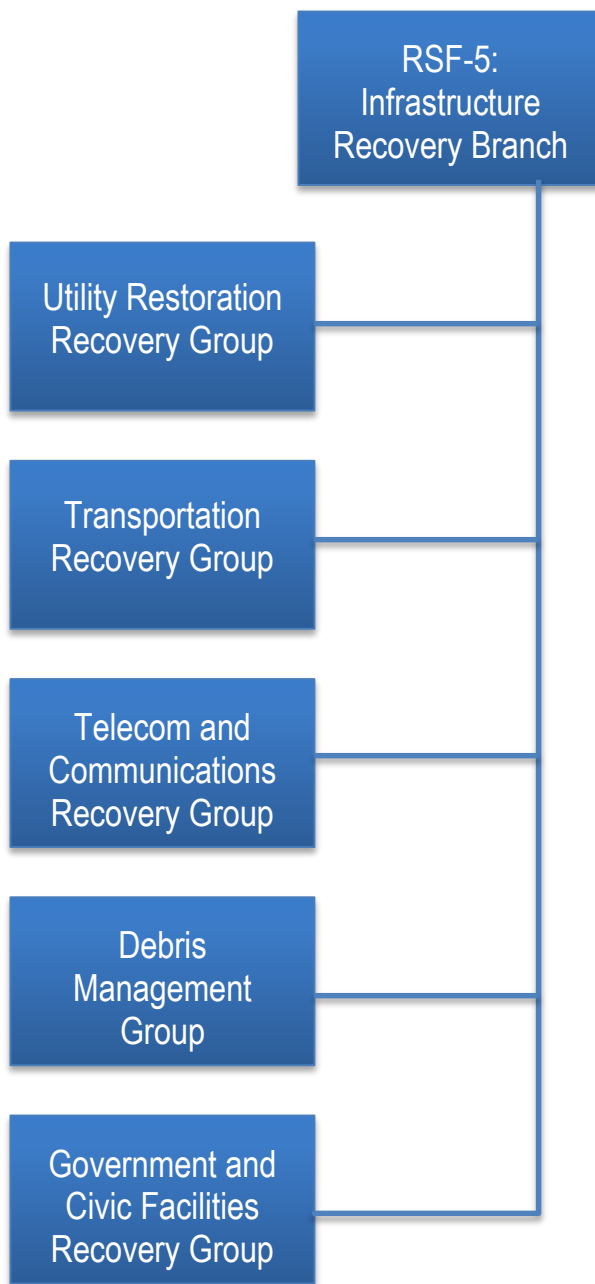
GENERAL

During long-term recovery, RSF-5 Coordinating and Support Agencies will support an organizational structure to maintain or revitalize systems and assets, whether physical or virtual, so vital to the county that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any local, state, tribal, and federal jurisdiction, according to the National Disaster Recovery Framework (NDRF).

ORGANIZATION

RSF-5: Infrastructure Systems Annex is comprised of five Groups which address specific tasks within the mission of restoring facilities, infrastructure systems, and related services located in Chatham County. The Coordinating Agency and Supporting Agencies for each Group are listed below.

Recovery Support Function 4 Organization Chart



UTILITY RESTORATION RECOVERY GROUP

The Utility Restoration Recovery Group coordinates local efforts with state and federal recovery programs designed to restore utilities infrastructure and service to the pre-disaster or improved condition.

Table 1: Utility Restoration Recovery Group Coordinating Agency, Supporting Agencies, and Cooperating Organizations

	Department/Entity
Coordinating Agency	CCPW
Supporting Agencies and Cooperating Organizations	Chatham County Building and Regulatory Services Chatham County Department of Engineering Chatham County – Savannah Metropolitan Planning Commission CEMA Municipal Governments and Agencies Utilities

TRANSPORTATION RECOVERY GROUP

The Transportation Recovery Group coordinates local efforts with State and Federal recovery programs designed to provide post-disaster transportation services, and restore transportation infrastructure and service to the pre-disaster or improved condition.

Table 2: Transportation Recovery Group Coordinating Agency, Supporting Agencies and Cooperating Organizations

	Department/Entity
Coordinating Agency	CCPW
Supporting Agencies and Cooperating Organizations	Airport Commission CEMA Chatham County Department of Engineering Chatham County – Savannah Metropolitan Planning Commission Coast Guard Georgia Department of Transportation Georgia Ports Authority Municipal Governments and Agencies Rail (CSX, Norfolk Southern, Amtrak) U.S. Army Corps of Engineers Utilities

TELECOM/COMMUNICATIONS RECOVERY GROUP

The Telecom/Communications coordinates local efforts with private sector partners, state and federal recovery programs designed to restore the county's communication and telecom capability to the pre-disaster or improved condition.

Table 3: Telecom/Communications Recovery Group Coordinating Agency, Supporting Agencies, and Cooperating Organizations

	Department/Entity
Coordinating Agency	Chatham County Information and Communication Services
Supporting Agencies and Cooperating Organizations	CEMA Municipal Governments and Agencies Savannah Communications Savannah Radio Shop Utilities (Wireless and Wireline)

DEBRIS MANAGEMENT RECOVERY GROUP

The Debris Management Recovery Group coordinates local efforts with state and federal recovery programs designed to remove, transport, store, and otherwise manage debris on public property or right-of-ways during disaster recovery.

Table 4: Debris Management Recovery Group Coordinating Agency, Supporting Agencies, and Cooperating Organizations

	Department/Entity
Coordinating Agency	County Debris Task Force
Supporting Agencies and Cooperating Organizations	CEMA County Jurisdictions Federal Emergency Management Agency Georgia Department of Defense Georgia Department of Natural Resources – Environmental Protection Division Georgia Department of Transportation Georgia Emergency Management Agency Georgia Ports Authority Private Waste Management Contractors

GOVERNMENT AND CIVIC FACILITIES RECOVERY GROUP

The Government and Civic Facilities Recovery Group coordinates the recovery of local facilities, including police and fire stations, dispatch centers, schools, etc.

Table 5: Government and Civic Facilities Recovery Group Coordinating Agencies, Supporting Agencies and Cooperating Organizations

	Department/Entity
Coordinating Agency	CCPW
Supporting Agencies and Cooperating Organizations	CEMA Chatham County Building Safety and Regulatory Services Chatham County Department of Engineering Chatham County – Savannah Metropolitan Planning Commission Municipal Governments Savannah-Chatham County Public School System Utilities

OPERATIONS

For recovery, Infrastructure Systems support functions are broken down into three main categories

- Pre-Event and Preparedness – Objectives and actions to take place prior to a disaster/emergency.
- Short-Term Recovery – Objective/actions to be addressed as quickly as possible after the activation of the Recovery Committee, excluding immediate life-safety and property protection actions/objectives. Some of these objectives/actions may start during the response phase, but will transition into short-term recovery.
- Intermediate and Long-Term Recovery – Objectives/actions characterized by operations that may provide sustained temporary measures to bridge the gap into permanent solutions, or return life to normal or an improved state.

The following pages break down infrastructure systems operations in each of these three categories for the three groups within this support function.

PRE-EVENT AND PREPAREDNESS OPERATIONS

The following describes objectives to be addressed by the entities that comprise each RSF-5 Recovery Group prior to a disaster. Some of the objectives identified below may be singular actions, while others should be continuously addressed to ensure the county's recovery preparedness.

Utility Restoration Group

- **Coordinate inventory and prioritization for utility restoration.** Under the direction of the Coordinating Agency and in collaboration with public and private sector partners, and key system users, this Group will develop a pre-disaster inventory for critical utilities (power, gas, water) throughout the county that will be updated every five years. This inventory will include restoration prioritization guidance, and any relevant plans, policies and procedures for the restoration of critical utilities following an incident. This collaborative prioritization will take into account the private sector nature of utility providers, as well as the critical infrastructure needs of the county. The Utility Restoration Group should give consideration to sites identified as Disaster Recovery Centers (DRC), shelters, short-term and interim housing, as well as major employers, commodity distributors and other locations with a focus on the maintenance of basic lifelines and services. To the greatest extent possible, the Group will also ensure emergency mitigation measures identified in the Chatham County Hazard Mitigation Plan are considered and implemented during the immediate restoration of utilities to the county.

Transportation Recovery Group

- **Pursue MOUs and standby contracts.** The Coordinating Agency, in collaboration with CEMA, will work with owners and operators of transportation systems, including local and state government agencies and regional authorities, to develop MOUs that outline coordinated response activities, roles, and responsibilities specific to a significant disaster. These MOUs should address provision of post-incident transportation service coordination and as well as long-term infrastructure restoration.
- **Prioritize transportation infrastructure restoration.** The Coordinating Agency, in collaboration with the CEMA, will work with owners and operators of transportation systems to develop a pre-event prioritization of infrastructure restoration. This

includes major roads and railways, critical for transportation throughout the county for debris management, commerce, and passenger transportation. Prioritization of specific modes of transportation should also be undertaken, and coordination amongst transportation service providers will be critical in ensuring that interim transportation services focus on sharing of resources and assets to move impacted residents around the county and to neighboring jurisdictions. The Transportation Recovery Group should also give consideration to sites identified for DRCs, short-term or interim housing, as well as major employers, commodities distributors, and other key recovery functions, with a focus on the maintenance of basic lifelines and services.

Telecom/Communications Recovery Group

- **Coordinate inventory and prioritization for telecom infrastructure restoration and reconstruction.** The Coordinating Agency, along with public and private sector partners will develop a pre-disaster inventory to be updated every five years, and prioritization guidance and plans for capital repairs and reconstruction following an incident, including consideration of recovery needs according to damage assessments. This prioritization will take into account the critical infrastructure needs of the county.

Debris Management Recovery Group

- **Maintain debris removal plans.** The Debris Management Recovery Group should maintain the county's debris removal plans. These plans contain the lists for prioritization of key rights-of-way and processes and procedures for debris removal. In addition, the Group should ensure that contracts and MOU are consistent with the county's needs and the debris removal plan.

Government and Civic Facilities Recovery Group

- **Pursue MOUs and on-demand contracts.** The Coordinating Agency, in collaboration with the CEMA, will work with government and civic facility operators, including local and state government agencies and regional authorities, to develop MOUs that outline coordinated response activities, roles, and responsibilities specific to a significant disaster. These MOUs should address provision of post-incident restoration coordination and as well as long-term facility restoration.

- **Coordinate inventory and prioritization for facility restoration and reconstruction.** The Coordinating Agency, along with public and private sector partners will develop a pre-disaster inventory, and prioritization guidance and plans for capital repairs and reconstruction following an incident, including consideration of recovery needs according to damage assessments. This prioritization will take into account the critical facility needs of the county.

SHORT-TERM RECOVERY OPERATIONS

The following Short-Term Recovery objectives must be addressed as quickly as possible after the activation of the Recovery Plan, and will likely meet pressing unmet needs of county residents and businesses (excluding immediate life-safety and property-protection objectives). In some cases, objectives identified below may describe elements of functional continuity with response operations identified in the county Emergency Operations Plan (EOP). Therefore, the objectives listed below may begin during the response phase and transition into Short-Term Recovery. Objectives described below will be the continued responsibility of this Recovery Group into intermediate and long-term recovery, if necessary.

Utility Restoration Group

- **Reassess and re-prioritize utility restoration.** The Utility Restoration Group initially follows prioritization established in pre-disaster planning, unless pressing needs present themselves as a result of the disaster. Basic prioritization will be in accordance with the priorities established in the development of a pre-disaster inventory as well as existing prioritization methods. As the recovery process progresses, the Utility Restoration Group will need to reassess and re-prioritize utility restoration based upon the impact of the incident and needs of the community. This is identified in the Recovery Action Plan (RAP).
- **Coordinate the restoration or interim provision of utility infrastructure and services.** The Utility Restoration Recovery Group will work with public and private sector providers of utility services to coordinate and execute immediate restoration of utility services according to damage assessments based on the above prioritization.
- **Assess and communicate major or long-term utility reconstruction costs.** The Utility Restoration Recovery Group will assess and communicate the estimated costs and resource needs associated with major long-term utility reconstruction projects. These needs and costs will be incorporated into the Initial Recovery Support Function Proposal. See Appendix 5-2.

- **Provide public information related to utility service and restoration.** The Utility Restoration Recovery Group, in close collaboration with private sector utility providers, will provide public information related to utility interruptions and restoration, for distribution by the Recovery Public Information Officer (RPIO). This may also include communication regarding the degraded condition of infrastructure, remediation approaches required due to the impact of the disaster on the systems (e.g., boil water orders), or specific information regarding the restoration of utilities to communities and homes.

Transportation Recovery Group

- **Coordinate the restoration or interim provision of critical transportation infrastructure and services.** The Transportation Recovery Group will work with public and private sector providers and managers of transportation infrastructure to coordinate and execute immediate restoration of utility services that support public transportation according to damage assessments. Such restoration will follow prioritization established in pre-disaster planning in addition to the Initial RSF Project Proposal. Recovery planning should take into consideration that it is likely that an increase in public transportation ridership will occur following the disaster. (See Appendix 5-1.)
- **Assess and communicate major or long-term transportation reconstruction costs.** The Transportation Recovery Group will assess the estimated costs associated with major and long-term transportation reconstruction projects. These costs will be communicated to *RSF-1: Disaster Recovery and Redevelopment Assistance Coordination and Planning Annex*, as well as the Recovery Finance Section (See Appendix 1-3)
- **Provide public information related to transportation service and restoration.** The Transportation Recovery Group will provide public information related to transportation, transit service, infrastructure interruptions, interim solutions or service alterations, and restoration, for distribution by the RPIO.

Telecom/Communications Recovery Group

- **Restore essential communications capability.** The Telecom/Communications Recovery Group will assess and prioritize the immediate restoration and repair of critical communications infrastructure. Prioritization will be accomplished through the

development of the initial RSF action plans (See Appendix 1-2). Basic prioritization will be in accordance with the pre-event prioritization of recovery priorities.

- **Assess and communicate major or long-term telecom reconstruction costs.** The Telecom/Communications Recovery Group will assess and communicate to *RSF-1: Disaster Recovery and Redevelopment Assistance Coordination Annex* and Planning as well as the Recovery Finance Section, the estimated costs associated with long-term capital reconstruction projects.
- **Provide public information related to impacted communications infrastructure.** The Telecom/Communications Recovery Group will provide public information related to impact status, interim solutions, and restoration, for distribution by the Recovery Public Information Officer.

Debris Management Recovery Group

- **Reference and continue to execute debris removal and management, as necessary.** The Debris Management Recovery Group will refer to the County Debris Management Plan for continued guidance regarding debris removal, management, storage, and disposal operations. Debris removal is typically one of the first major issues that must be addressed in recovery. Large piles of organic and non-organic debris can become public health concerns and once dry, can become a fire threat. This Group will ensure that all disaster-generated debris is properly and immediately disposed of according to the type of debris being handled, contamination factors, and environmental impacts.

The cost to collect and dispose of debris can be defrayed through Public Assistance (PA) grants from the Federal Emergency Management Agency (FEMA). Debris located on public lands and right-of-ways may be eligible. The Debris Management Group will provide any additional guidance regarding tracking debris costs to ensure the county is capable of recouping eligible expenses.

The management and removal of Chemical, Biological, Radiological, or Nuclear contaminated debris will require the development of a separate strategy.

- **Evaluate debris reduction strategies.** The Debris Management Recovery Group will refer to the County Debris Management Plan for existing debris reduction strategies. Based upon the incident and recovery needs of the community, the Debris Management Recovery Group should identify and select the best debris

reduction strategy available. The group should take into account the impacts of the disaster, the type of debris, and the quantity of debris to be managed.

- **Provide public information related to debris.** The Debris Management Recovery Group will provide public information related to debris clearance and management for distribution by the RPIO.

Government and Civic Facilities Recovery Group

- **Coordinate inventory and prioritization for facility restoration and reconstruction.** The Government and Civic Facilities Recovery Group, along with public and private sector partners will prioritize repairs and reconstruction following an incident, including consideration of recovery needs according to damage assessments. This repair and restoration will take into account the critical facility needs of the county.
- **Provide public information related to government and civic facility status and access.** The Government and Civic Facilities Recovery Group will coordinate with the Recovery Public Information to inform the public as to the current status, availability, and accessibility of government and civic facilities.
- **Assess and communicate major or long-term government and civic facility restoration costs.** The Government and Civic Facilities Recovery Group will continuously develop estimated costs to repair/restore facilities as well as continuously assess the impact to services and revenue derived from activities impacted by the incident's impact to government and civic facilities.

INTERMEDIATE AND LONG-TERM RECOVERY OPERATIONS

The following Intermediate and Long-Term Recovery Objectives are characterized by operations that may provide sustained temporary measures to bridge the gap into permanent solutions, return life to normal or an improved state, or otherwise support the objectives of other Recovery Groups. Objectives described under short-term recovery (above) will be the continued responsibility of this Recovery Group into intermediate and long-term recovery, if necessary.

Utility Restoration Group

- **Coordinate the permanent restoration and reconstruction of major critical utilities infrastructure.** The Utility Restoration Recovery Group will work with public and private sector providers of utility services to coordinate and execute the

reconstruction of major utilities infrastructure. Such restoration will follow prioritization established in pre-disaster planning and be accomplished through the development of the initial RSF action plans, which includes input and coordination across the RSFs from *RSF1: Disaster Recovery Assistance Coordination and Planning Annex*. This reconstruction will be consistent with the larger community recovery effort by coordinating with housing, human services, essential services, and economic recovery priorities.

As the county works to prioritize critical infrastructure restoration and reconstruction, consideration must be given on whether to use as-built designs so as to restore pre-disaster condition (which can accelerate reconstruction by skipping many engineering, planning, and permitting steps), versus the opportunity to implement mitigation measures in order to enhance community resilience. Where possible, the Group will incorporate mitigation activities and rebuild accordingly. Refer to the Chatham County Redevelopment Plan for additional guidance.

Transportation Recovery Group

- **Coordinate the full restoration of transportation infrastructure.** The Transportation Recovery Group will work with county, public authority, and private sector providers/managers of transportation infrastructure to execute the reconstruction of transportation infrastructure. This includes incorporating existing, pre-disaster plans, such as Master Plans, where appropriate. See Appendix 5-1.

As the county works to prioritize critical infrastructure restoration and reconstruction, consideration must be given on whether to use as-built designs so as to restore pre-disaster condition (which can accelerate reconstruction by skipping many engineering, planning, and permitting steps), versus the opportunity to implement mitigation measures in order to enhance community resilience. Where possible, the county will incorporate mitigation activities identified in the Chatham County Hazard Mitigation Plan.

Telecom/Communications Recovery Group

- **Coordinate the permanent restoration and reconstruction of telecom/communications infrastructure.** The Telecom/Communications Group will coordinate and execute the reconstruction of communications infrastructure, as needed. Such restoration will follow prioritization established in pre-disaster planning

and be accomplished through the RSF Implementation Plan, while supporting mitigation and economic recovery priorities.

- **Ensure mitigation measures are considered.** The Telecom/Communications Group will coordinate with local, state, and federal partners to identify and implement mitigation opportunities, or other projects for permanent reconstruction or relocation of infrastructure so as to reduce future risk and enhance community resilience. Mitigation and improvement planning should be present in all capital redevelopment plans, including those for private sector medical providers such as area hospitals.

Debris Management Recovery Group

- **Address permanent debris disposal and site-capacity issues.** In the case that local or contracted landfill capacity is exceeded, or if materials to be removed are not allowed or cannot be accommodated by local or contracted landfills or other storage facilities, the Debris Management Recovery Group will explore and recommend alternative solutions for storage and disposal of such debris.

Government and Civic Facilities Recovery Group

- **Coordinate the permanent restoration and reconstruction of government and civic facilities.** The Government and Civic Facilities Recovery Group will work with public and private sector facility operators to coordinate and execute the reconstruction of government and civic facilities. Such restoration will follow prioritization established in pre-disaster planning and be accomplished through the development of the Initial RSF Project Proposal and RSF Implementation Plan, which includes input and coordination across the Recovery Support Functions from *RSF-1: Disaster Recovery Assistance Coordination and Planning Annex*. This reconstruction will be consistent with the larger community recovery effort by coordinating with housing, human services, essential services, and economic recovery priorities. In the process, the Group should also consider and implement temporary measures to restore critical facilities until permanent measures can be enacted.
- **Ensure mitigation measures are considered.** The Government and Civic Facilities Group will coordinate with local, state, and federal partners to identify and implement mitigation opportunities, or other projects for permanent reconstruction or relocation of facilities to reduce future risk and enhance community resilience. Mitigation and

improvement planning should be present in all capital redevelopment plans, including those for private sector medical providers such as area hospitals.

COMMUNICATIONS

RSF-5: Infrastructure Systems Annex members will communicate with each other using telephones, text, or email depending on which mode is functioning. To the greatest extent possible, RSF-5 agencies will leverage established communication mechanisms, including listserv, email groups, and messaging boards to facilitate coordination.

Messaging to the public regarding infrastructure systems will be coordinated with the public information function established to support recovery. This might include coordination with CEMA, including social media and mass alerts.

RESPONSIBILITIES

CHATHAM COUNTY PUBLIC WORKS

- Serve as the Coordinating Agency for RSF-5, coordinating governments and other infrastructure owners and operators to achieve recovery
- Notify Support Agencies when RSF-5 has been activated
- Restore infrastructure systems to support a viable, sustainable community and improve resilience to and protection from future hazards
- Coordinate the restoration or interim provision of utility infrastructure and services
- Assess and communicate major or long-term utility reconstruction costs
- Coordinate across jurisdictions to coordinate projects and adjudicate resources
- Pursue MOUs and on-demand contracts
- Spearhead development of an Infrastructure Systems Recovery Action Plan (RAP)
- Reference and continue to execute debris removal and management, as necessary
- Address permanent debris disposal and site-capacity issues
- Maintain debris removal plans
- Coordinate the permanent reconstruction of major critical utilities infrastructure

CHATHAM COUNTY DEPARTMENT OF ENGINEERING

- Participate in Utility Restoration Recovery Group
- Participate in Transportation Recovery Group
- Coordinate the permanent reconstruction of transportation infrastructure and prioritize transportation infrastructure restoration
- Assess and communicate major or long-term transportation reconstruction costs

CHATHAM EMERGENCY MANAGEMENT AGENCY

- Notify Coordinating Agency of the activation of RSF-5
- Participate in Utility Restoration Recovery Group
- Support Telecom/Communications Recovery Group Coordinating Agency
- Participate in Transportation Recovery Group
- Provide public information related to utility service and restoration
- Provide public information related to transportation service and restoration
- Provide public information related to debris

CHATHAM COUNTY – SAVANNAH METROPOLITAN PLANNING COMMISSION

- Participate in Transportation Recovery Group
- Coordinate with Public Works in identifying restoration, rebuilding, and resilience strategies

CHATHAM COUNTY BUILDING AND REGULATORY SERVICES

- Participate in Utility Restoration Recovery Group

CHATHAM COUNTY INFORMATION AND COMMUNICATION SERVICES

- Coordinate inventory and prioritization for telecom infrastructure restoration and reconstruction
- Restore essential communications capability
- Assess and communicate major or long-term telecom reconstruction costs
- Coordinate the permanent reconstruction of telecom/communications infrastructure

DIRECTION, COORDINATION, AND CONTROL

To ensure scalability and flexibility in the mobilization of recovery operations, the Infrastructure System RSF may be activated (for Incident Command System (ICS)-purposes) as a branch, group, unit, or division, and may be functionally or geographically subdivided, at the discretion of the Operations Section Chief, as circumstances dictate and consistent with ICS.

ANNEX MANAGEMENT AND MAINTENANCE

CEMA is the executive agent for this Annex, including administration and maintenance. Supporting documents will be updated periodically to incorporate new direction and changes based on lessons learned, exercises, and actual events.

Changes will include additions, supplemental material, and deletions. No proposed change should contradict or override authorities or other plans contained in statute, order, or regulation. Any department or agency with assigned responsibilities within the Annex may propose a change. CEMA is responsible for coordinating proposed modifications to the Appendices with Coordinating Agencies, Support Agencies, and other stakeholders. CEMA will coordinate review and approval for proposed modifications as required.

After any coordination is conducted, including approval of final language, CEMA will issue an official Notice of Change. The notice will specify the date, number, subject, purpose, background, and action required, and provide the change language on one or more numbered and dated inserted pages replacing the modified pages in the Annex. Modifications will be considered part of the DRP for operational purposes pending the formal revision and re-issuance of the final Annex. Interim changes can be further modified or updated using the above process. CEMA will distribute the Notice of Change to participating agencies, specifically identified coordinating and support agencies.

CEMA is responsible for an annual review of the entire DRP and a complete revision every two years (or more frequently if the County Commission or GEMA deems necessary).

APPENDICES

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APPENDIX 5-1 INFRASTRUCTURE GROUP CHECKLISTS

RSF-5 – Utility Restoration Group Checklist

Preparedness Phase	Notes
<input type="checkbox"/> Coordinate inventory and prioritization for utility restoration <ul style="list-style-type: none"> <input type="checkbox"/> Power <input type="checkbox"/> Water <input type="checkbox"/> Sewer <input type="checkbox"/> Telephone <input type="checkbox"/> Data <input type="checkbox"/> Other _____ <input type="checkbox"/> Develop inventory and pre-event prioritization with public and private sector utility providers. <input type="checkbox"/> Review existing utility restoration plans, procedures, and guidelines.	

Recovery Phase	Notes
<input type="checkbox"/> Reassess and re-prioritize utility restoration <ul style="list-style-type: none"> <input type="checkbox"/> Power <input type="checkbox"/> Water <input type="checkbox"/> Sewer <input type="checkbox"/> Telephone <input type="checkbox"/> Data <input type="checkbox"/> Other _____ <input type="checkbox"/> Assess Priority Sites <ul style="list-style-type: none"> <input type="checkbox"/> Disaster Recovery Centers <input type="checkbox"/> Shelters <input type="checkbox"/> Short-Term/Interim Housing <input type="checkbox"/> Major Employers <input type="checkbox"/> Commodity Distributors <input type="checkbox"/> Ensure Hazard Mitigation Measures are considered. <input type="checkbox"/> Coordinate interim provision of utility infrastructure and services.	

<ul style="list-style-type: none"><input type="checkbox"/> Assess and communicate major or long-term utility construction costs.<input type="checkbox"/> Provide public information related to utility service and restoration.<input type="checkbox"/> Coordinate the permanent restoration and reconstruction of major critical utilities infrastructure.	
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RSF-5 – Transportation Recovery Group Checklist

Preparedness Phase	Notes
<input type="checkbox"/> Pursue Memoranda of Understanding (MOUs) and on-demand contracts <ul style="list-style-type: none"> <input type="checkbox"/> Local Agencies <input type="checkbox"/> State Agencies <input type="checkbox"/> Regional Authorities <input type="checkbox"/> Private-Sector Vendors <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ <input type="checkbox"/> Prioritize transportation infrastructure restoration. <input type="checkbox"/> Develop inventory of critical transportation infrastructure.	

Recovery Phase	Notes
<input type="checkbox"/> Coordinate the restoration or interim provision of critical transportation infrastructure and services <input type="checkbox"/> Assess and communicate major or long-term transportation reconstruction costs. <input type="checkbox"/> Provide public information related to transportation service and restoration. <input type="checkbox"/> Coordinate the full restoration of transportation infrastructure. <input type="checkbox"/> Ensure mitigation measures are considered.	

RSF-5 – Telecom/Communications Recovery Group Checklist

Preparedness Phase	Notes
<input type="checkbox"/> Coordinate inventory and prioritization for telecom infrastructure restoration and reconstruction <ul style="list-style-type: none"> <input type="checkbox"/> Data Systems <input type="checkbox"/> Telephone Systems <input type="checkbox"/> Radio Systems <input type="checkbox"/> Network Systems <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ 	

Recovery Phase	Notes
<input type="checkbox"/> Restore essential communications capability. <input type="checkbox"/> Assess and communicate major or long-term telecom reconstruction costs. <input type="checkbox"/> Provide public information related to impacted communications infrastructure. <input type="checkbox"/> Coordinate the permanent restoration and reconstruction of telecom/communications infrastructure. <input type="checkbox"/> Ensure mitigation measures are considered.	

RSF-5 – Debris Management Group Checklist

Preparedness Phase	Notes
<ul style="list-style-type: none"><input type="checkbox"/> Review and Maintain Debris Removal Plans.<input type="checkbox"/> Ensure Contracts and MOUs for debris management are consistent with the county's needs and the debris removal plan.	

Recovery Phase	Notes
<ul style="list-style-type: none"><input type="checkbox"/> Reference and continue to execute debris removal and management, as necessary.<input type="checkbox"/> Evaluate debris reduction strategies.<input type="checkbox"/> Provide public information related to debris<input type="checkbox"/> Address permanent debris disposal and site-capacity issues.	

RSF-5 – Government and Civic Facilities Recovery Group Checklist

Preparedness Phase	Notes
<input type="checkbox"/> Pursue Memoranda of Understanding and on-demand contracts. <input type="checkbox"/> Coordinate inventory and prioritization for facility restoration and reconstruction. <ul style="list-style-type: none"> <input type="checkbox"/> Critical Facilities (County) <input type="checkbox"/> Critical Facilities (Local) <input type="checkbox"/> Civic Facilities <input type="checkbox"/> Disaster Recovery Facilities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ 	

Recovery Phase	Notes
<input type="checkbox"/> Coordinate inventory and prioritization for facility restoration and reconstruction. <input type="checkbox"/> Provide public information related to government and civic facilities. <input type="checkbox"/> Assess and communicate major or long-term government and civic facility restoration/reconstruction costs. <input type="checkbox"/> Coordinate permanent restoration and reconstruction of government and civic facilities <input type="checkbox"/> Ensure mitigation measures are considered.	

APPENDIX 5-2 INFRASTRUCTURE ASSESSMENT FORMS

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CHATHAM COUNTY DISASTER RECOVERY PLAN – RSF-5

INFRASTRUCTURE REPORT		REPORTING UNIT ESF-5	FORM RNA-001 01/00
PROJECT			
DISASTER #	OPS PERIOD	DATE/TIME PREPARED	PREPARED BY
OBSERVATION INFORMATION:			
Weather/Temperature Range:			
Agency/Organization:			
Survey Method: <input type="checkbox"/> Aircraft <input type="checkbox"/> Windshield <input type="checkbox"/> Interview			
Location:			
Latitude:		Longitude:	
Type of Area: <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural <input type="checkbox"/> Industrial			
WASTE WATER TREATMENT PLANTS			
1. Systems: Lagoons _____ Trickling Filter _____ Activated Sludge _____ Other _____			
2. Number of Facilities Affected: _____ Unknown _____			
3. Facility Name: _____			
4. Location: _____			
5. Extent of Damage: Destroyed _____ Major Damage _____ Minor Damage _____ Operational _____			
6. Time to return to service: Hours _____ Days _____ Weeks _____ Longer _____ Unknown _____			
7. Are there bypasses at the plant? Yes _____ No _____ Unknown _____			
8. Is power available to the facility? Yes _____ No _____ Unknown _____			
9. Is generator power available? Yes _____ No _____ Unknown _____			
10. Are interceptor sewers operational? Yes _____ No _____ Unknown _____			
11. Are lift stations operational? Yes _____ No _____ Unknown _____			
12. Do lift stations have bypasses? Yes _____ No _____ Unknown _____			
13. Do lift stations have power? Yes _____ No _____ Unknown _____			
14. Is generator power available? Yes _____ No _____ Unknown _____			
15. Service area of plant: _____ Unknown _____			
16. Service population of plant: _____ Unknown _____			
17. Porta-toilets needed: Yes _____ No _____ Unknown _____			
18. Approximate number needed: _____ Unknown _____			
REMARKS/COMMENTS			
SUMMARY/RECOMMENDATION STATEMENT			
TEAM LEADER		DATE	TIME
DISTRIBUTION:			

CHATHAM COUNTY DISASTER RECOVERY PLAN – RSF-5

INFRASTRUCTURE REPORT		INCIDENT	REPORTING UNIT ESF-5	FORM RNA-002 ©1/00
DISASTER #		OPS PERIOD	DATE/TIME PREPARED	PREPARED BY
OBSERVATION INFORMATION:				
Weather/Temperature Range:				
Agency/Organization:				
Survey Method: <input type="checkbox"/> Aircraft <input type="checkbox"/> Windshield <input type="checkbox"/> Interview				
Location:				
Latitude: Longitude:				
Type of Area: <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural <input type="checkbox"/> Industrial				
ELECTRICAL SYSTEMS (GENERATION)				
1. Systems: Coal-fired _____ Oil-fired _____ Nuclear _____ Gas-fired _____ Other _____				
2. Number of facilities affected: _____ Unknown _____				
3. Facility Name: _____				
4. Location: _____				
5. Damage: Destroyed _____ Major Damage _____ Minor Damage _____ Operational _____				
6. Time to return to service: Hours _____ Days _____ Weeks _____ Longer _____				
7. Generator Power Available: Yes _____ No _____ Unknown _____				
8. Service area of plant: _____ Unknown _____				
9. Service population of plant: _____ Unknown _____				
ELECTRICAL SYSTEMS (TRANSMISSION)				
1. Are power lines down? Yes _____ No _____ Unknown _____				
a. How Many _____ Unknown _____				
2. Are power poles/towers down? Yes _____ No _____ Unknown _____				
a. How Many _____ Unknown _____				
3. Damage: All Down _____ Majority Down _____ Few Down _____ Operational _____				
4. Are substations down? Yes _____ No _____ Unknown _____				
a. How Many _____ Unknown _____				
b. Damage Type: Transformers _____ Switches _____ Power Lines _____ Other _____				
REMARKS/COMMENTS				
SUMMARY/RECOMMENDATION STATEMENT				
TEAM LEADER		DATE	TIME	DISTRIBUTION:

CHATHAM COUNTY DISASTER RECOVERY PLAN – RSF-5

INFRASTRUCTURE REPORT	INCIDENT	REPORTING UNIT ESF-5	FORM RNA-003 01/00
DISASTER #	OPS PERIOD	DATE/TIME PREPARED	PREPARED BY
OBSERVATION INFORMATION:			
Weather/Temperature Range:			
Agency/Organization:			
Survey Method: <input type="checkbox"/> Aircraft <input type="checkbox"/> Windshield <input type="checkbox"/> Interview			
Location:			
Latitude: Longitude:			
Type of Area: <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural <input type="checkbox"/> Industrial			
BRIDGES			
1. Are bridges open to automobile traffic? Yes _____ No _____ Unknown _____			
2. Number of bridges affected _____			
3. Bridge damage: Most destroyed _____ Major Damage _____ Minor Damage _____ In Use _____			
4. If destroyed are alternate Routes Available Yes _____ No _____			
ROADS			
1. Are roads open to automobile traffic? Yes _____ No _____ Unknown _____			
2. Number of roads affected _____			
3. Road damage: Most destroyed _____ Major Damage _____ Minor Damage _____ In Use _____			
4. If destroyed are alternate Routes Available Yes _____ No _____			
AIRPORTS			
1. Are airports open to traffic? Yes _____ No _____ Unknown _____			
2. Number of airports affected _____			
3. Airport damage: Most destroyed _____ Major Damage _____ Minor Damage _____ In Use _____			
4. If destroyed, are alternate landing areas available? Yes _____ No _____			
a. If "yes", where? _____			
b. Estimated distance: _____			
REMARKS/COMMENTS			
SUMMARY/RECOMMENDATION STATEMENT			
TEAM LEADER		DATE	TIME
		DISTRIBUTION:	

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September 2015