

GEORGIA FORESTRY
COMMISSION



GaTrees.org

TEMPLATE Community Forest Storm Mitigation Plan for Georgia Communities March 2018



[This page intentionally left blank.]

Georgia Forestry Commission

**Community Forest
Storm Mitigation Plan
for Georgia Communities
Template**

March 2018

For more information on this Template, contact:

Joan Scales

Program Manager

Sustainable Community Forestry Program

Georgia Forestry Commission

jscales@gfc.state.ga.us or 478.733.2604



Funds for this project were provided by the Urban and Community Forestry Grant Program administered by the Georgia Forestry Commission.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-A, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

How to Use This Template

This template is intended as a tool for guiding a community through the development of a *Community Forest Storm Mitigation Plan* and as a basic plan framework. The *Community Forest Storm Mitigation Planning Workbook* provides that accompanies this template includes step-by-step instructions for completing the template. Both the workbook and template are available on the Georgia Forestry Commission's website at www.gatrees.org.

As you fill in the blanks, check off completed activities, and circle the appropriate selections within brackets, you will begin the assessment of your storm readiness and the development of your plan. You can address the gaps in information, activities and programs that become apparent as you go through the template and then begin to further develop your community forest management program with storm mitigation in mind.

After completing as much of the template as possible, you can either use it as is or use the Word document version of the template available on the GFC website to write a final *Community Forest Storm Mitigation Plan*. Your completed template or plan should be distributed to and implemented by the Storm mitigation team you've assembled during the process. As community forest and storm mitigation program elements are further developed and changes are made in programs and procedures, you can revise your plan to keep it up to date. An annual review is recommended.

For further information on how to use this Template, please contact the Georgia Forestry Commission Sustainable Community Forest Program Forester for your area. Visit www.gatrees.org for a listing of program personnel and for more information on trees and community forests.

PART I. COMMUNITY SETTING

A. COMMUNITY GEOGRAPHY AND SIZE

This Storm Mitigation Plan has been developed for _____
(community name).

Date of adoption: _____ Date of last update: _____

Our community is located in the [Appalachian Plateau] [Ridge and Valley] [Blue Ridge] [Piedmont]
[Upper Coastal Plain] [Lower Coastal Plain] of Georgia.

Our jurisdiction encompasses an area of _____ square miles and has _____ miles of
public roadways.

Our community has a population of _____ as of the last official census.

B. STORM HISTORY AND EXPOSURE

1. Potential Storms and Emergency Events

The primary weather and catastrophic events that have occurred or are likely to occur in our
community that can affect trees include:

- Earthquake
- Flood
- Hail
- Hurricane
- Ice storm
- Pest infestation (list type)

- Salt intrusion
- Snow

- Tornado
- Tropical storm
- Wildfire
- Wind/microburst
- Other _____

2. Snow and Ice Storms

Snow and ice storms are most likely to occur during the months where freezing temperatures are possible—including the following months in our area:

1. _____
2. _____
3. _____
4. _____
5. _____

The largest snow amounts (single event snow totals) are most likely to occur during the following months in our area:

1. _____
2. _____
3. _____
4. _____
5. _____

3. Rainfall and Flooding

The months of the year in our area with the highest average precipitation are:

1. _____
2. _____
3. _____

- 4. _____
- 5. _____
- 6. _____

The driest months of the year (lowest average annual precipitation) in our area are:

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

4. Droughts and Fires

The warmest months of the year in our area are:

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

Our community participates in the *Firewise Communities Program* through the National Fire Protection Association.

5. Other Significant Conditions

Other significant geographic, climatological and meteorological conditions that predispose our community to storms or catastrophic events include:

- 1. _____
- 2. _____
- 3. _____

4. Storm History and Records

The severe storms and catastrophic events that have occurred over the last 30 years in our community are listed below. This chart is also used to record storm events as they occur.

YEAR	DATE	TYPE OF EVENT/STORM	SEVERITY*	DAMAGE**

*Severity of tornado, winds, or hurricane based on the Enhanced Fujita Scale or Saffir-Simpson Hurricane Scales; or low, medium, or high if not a tornado or hurricane

**Include number of injuries and fatalities and property damage in dollars

C. COMMUNITY FOREST RESOURCE MANAGEMENT

1. Tree Care Manager

The primary tree care manager for the community is the:

- Community [arborist] [forester]
- Streets superintendent
- Traffic engineer
- Public works director
- City manager
- County administrator
- Tree board [chairperson] [member]
- Citizen volunteer
- other _____

Name: _____

Title: _____

Phone Number: _____

E-mail Address: _____

- Our tree care manager is an ISA Certified Arborist.

2. Tree City USA

- Our community is designated a Tree City by the National Arbor Day Foundation.

Our community was first designated a Tree City USA in _____ (year).

Our community has been designated a Tree City USA for _____ year(s), since _____.

As a Tree City, our community has:

- a [public] [private] tree ordinance (included in the appendix)
- total annual tree program expenditures of \$_____ in calendar year _____
- a tree board with _____ # of members (list included in the appendix)
- an annual Arbor Day celebration and proclamation

Our last Arbor Day celebration was held on _____

3. Management Plan

We have a community forest management plan in place (included in the appendix)

Our community forest management plan was first adopted on _____ (date).

Our community forest management plan was last revised on _____ (date).

The person responsible for administering and updating our community forest management plan is:

NOTES:

PART II. STORM PREPARATION

A. STORM MITIGATION TEAM

1. Emergency Management Personnel

Local Emergency Management Director

Name: _____ Radio # _____

Title: _____

Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Georgia Emergency Management Agency (GEMA) Field Coordinator

Name: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Federal Emergency Management Agency (FEMA) Region IV Regional Administrator

Name: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

2. Government Staff

[City Manager/Designee] [County Administrator/Designee]

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Public Information Officer

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

[Public Safety Officer]/[Police Chief]/[County Sheriff]

Name: _____ Radio # _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

[Fire Chief]

Name: _____ Radio # _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Public Works Director

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

[Streets Superintendent]/[Traffic Engineer]

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

[Arborist]/[Forester]/[Tree Care Manager]

Name: _____ Radio # _____

Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Parks and Recreation Director

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Planning Director

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

GIS Manager

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Additional Government Staff

Title: _____

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Title: _____

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Title: _____

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Title: _____

Name: _____ Radio # _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

3. Utility Companies and Departments

Electric Utility

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Gas Utility

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Telephone/Cable/Fiber Optic Utilities

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Water and Sewer Utility

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Other Utility Companies

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company/Department: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

4. State Agencies

Georgia Forestry Commission

Name: _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Cooperative Extension Service

Name: _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Other State Agencies

Name: _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

5. Contractors

Debris Removal Contractors

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Tree Service Contractors

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Landscape Contractors

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

6. Equipment and Materials Vendors

Equipment Rental Vendor

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Tree Nursery Vendors

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Company: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

7. Volunteer Organizations

Tree Board Chairperson

Name: _____

Address: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Local Agencies and Non-Profit Organizations

Name: _____

Title: _____

Organization: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

8. Community Forest Management Program Sponsors

Reforestation Sponsors

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

9. Additional Team Members and Emergency Contacts

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

Name: _____

Title: _____

Organization/Company/Agency: _____

Primary Phone Number: _____ Alternate Phone Number: _____

E-Mail Address _____

B. COMMUNITY FOREST RESOURCE ASSESSMENTS

Our community has made the following assessments of the tree resource and has available the information indicated below for use in storm preparation, response, and mitigation. This information is available from the tree care manager.

1. Tree Canopy Assessment

We have completed a tree canopy assessment, and

_____ % of our community is covered with tree canopy as of _____ (year)

The method used for determining our tree canopy is described below:

Previous tree canopy assessments have been made.

_____ % in _____ (year)

_____ % in _____ (year)

_____ % in _____ (year)

Our tree canopy cover has [increased] [decreased] over the _____ # years of measurement. Additional changes in our tree canopy cover over time are described below.

A tree canopy goal of _____ % has been set by the community.

2. Public Tree Inventory

An inventory of public trees was last completed in _____ (year), and the community has the number of public trees shown below growing on:

Street rights-of-way _____ (# of trees)

Public parks _____ (# of trees)

Public cemeteries _____ (# of trees)

Public school campuses _____ (# of trees)

Yards around public offices and facilities _____ (# of trees)

We have _____ (# of trees) street trees 24 inches DBH and greater

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

- Our tree inventory information is available in an [Excel spreadsheet] [GIS shapefile] [hardcopy format] and is available from the tree care manager
- Our inventory includes the location of all street trees determined using GPS and we have a GIS shapefile of our street trees
- Our public tree inventory is included as a layer on our community's geographic information system
- A map of the locations of street trees 24 inches DBH and greater is available from the tree care manager

3. Tree Risk Assessment

- Our community has on file in the tree care manager's office a copy of the ANSI standards and best management practices for tree risk assessment.
- Our community has a tree risk assessment program or plan.
- Our community has a tree risk assessment plan.
- A Level 1 tree risk assessment is conducted every _____ years.

The date of the most recent Level 1 tree risk assessment is _____.

- A Level 2 tree risk assessment is conducted every _____ years.

The date of the most recent Level 2 tree risk assessment is _____.

4. Tree Benefits and Value

- We have information on the dollar value of the benefits that our tree canopy provides.

The dollar value of the annual benefits provided by our community trees, based on our tree canopy assessment, is \$_____.

The dollar values of the benefits our tree canopy provides include:

- \$_____ aesthetic and other benefits
- \$_____ air quality benefits
- _____ pounds of carbon dioxide benefits including sequestration and avoidance
- \$_____ carbon dioxide benefits
- \$_____ energy benefits
- _____ gallons of stormwater intercepted
- \$_____ stormwater benefits

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

We have information on the dollar value of the benefits that our street trees provide.

The dollar value of the annual benefits provided by our public street trees, based on our tree inventory, is \$_____.

The annual benefits per tree average \$_____.

The dollar values of the benefits our street trees provide include:

\$_____ aesthetic and other benefits

\$_____ air quality benefits

_____ pounds of carbon dioxide benefits including sequestration and avoidance

\$_____ carbon dioxide benefits

\$_____ energy benefits

_____ gallons of stormwater intercepted

\$_____ stormwater benefits

5. Community Forest Management Costs

We have information on our annual community forest management costs.

The total annual cost of managing our public [street] [park] [cemetery] [school] [facility] includes costs for:

\$_____ Tree inventory

\$_____ Tree risk assessment

\$_____ Tree purchases

\$_____ Tree planting (staff)

\$_____ Tree planting (contract)

\$_____ Mulching (labor)

\$_____ Mulch materials

\$_____ Pruning (staff)

\$_____ Pruning (contract)

\$_____ Supplemental support (cabling and bracing, contract)

\$_____ Lightning protection system installation (contract)

\$_____ Pest management

\$_____ Irrigation (staff)

\$_____ Inspection (staff)

\$_____ Removal (staff)

\$_____ Removal (contract)

\$_____ Equipment

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

\$ _____ Supplies

\$ _____ Consulting services (community forest management, planning, tree risk assessment, inventory, inspections)

\$ _____ Infrastructure repairs due to trees

\$ _____ Leaf and limb pick-up

\$ _____ Liability/claims for damages

\$ _____ Administration (describe the administrative and overhead costs included)

\$ _____ Other costs (describe the administrative and overhead costs included)

Our annual community forestry program expenditures total \$ _____.

Street trees represent _____% of our total public tree population.

The pro-rated cost of managing our street tree population is \$ _____ (multiply total annual community forestry program expenditures by the percentage of the tree population represented by street trees).

6. Benefit to Cost Ratio of Community Forestry Management

The total value of the benefits provided by our tree canopy is \$ _____ (A).

The total value of the benefits provided by our street trees is \$ _____ (B).

The total cost of our annual community forest management program is \$ _____ (C).

The total cost of managing our street tree population is \$ _____ (D).

The total cost of our annual tree risk assessment program is \$ _____ (E).

For every \$1 our community spends on community forest management, we receive \$ _____ back in benefits from our tree canopy (A divided by C).

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

For every \$1 our community spends on management of the street tree population, we receive \$_____ back in benefits from our public street trees. (B divided by D)

For every \$1 our community spends for tree risk assessment, we receive \$_____ back in benefits from our public street trees (B divided by E).

C. STORM MITIGATION MAP

A storm mitigation map has been developed and is included as part of our plan.

Copies of the storm mitigation plan are available in the office(s) of the:

- Emergency Response Manager
- Tree Care Manager
- [Public Works Director]/[Traffic Engineer]
- Other

The storm mitigation map can also be accessed online at:

Our storm mitigation map includes the following information:

Critical Facilities

Hospitals

Other critical health care facilities (list below)

Fire stations

Police stations

Communications networks and facilities

- Electric utilities
- Other utility networks and facilities (list below)

- Water system
- Sanitary sewer system

Transportation Network

- Street network
- Priority streets to critical facilities (highlighted)

Trees

- All public trees
- Large canopy public trees highlighted
- Tree canopy density

Emergency Response Sites

- Emergency management centers
- Homeland Security offices
- Personnel and equipment staging areas
- Debris staging areas
- Debris storage areas

The person responsible for developing and updating our storm mitigation map is:

D. TREE RISK MITIGATION

1. Short-term Tree Risk Mitigation

- We have a short-term tree risk mitigation program in place.

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

The number of trees identified during our tree risk assessment that require mitigation total _____, including:

_____ that require risk reduction pruning

_____ that require supplemental support

_____ that require lightning protection systems

_____ that require pest management

_____ that require removal

The number of trees scheduled to be pruned for risk mitigation each year is _____.

The number of trees scheduled to be cabled for risk mitigation each year is _____.

The number of trees scheduled for lightning protection system installation each year is _____.

The number of trees scheduled for pest management each year is _____.

The number of trees scheduled to be removed for risk mitigation each year is _____.

The number of trees scheduled to be planted to replace trees removed for risk mitigation each year is _____.

2. Long-term Tree Risk Mitigation

The additional routine community forest management activities and program components that are in place in our community to further mitigate tree risk and storm damage on a long-term basis are:

- Tree care standards and best management practices
- Tree ordinance
- Ongoing training program for tree care personnel
- Established tree care budget
- Alternate program funding mechanisms
- Tree bank
- Routine street tree inspection program
- Routine large tree inspection program
- Routine pruning program
- Routine tree planting program

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

- Routine tree mulching, irrigation, and soil aeration
- Recommended tree species list
- Species selection guidelines
- Site selection guidelines
- Minimum rooting area and soil volume requirements
- Growing space protection requirements
- Critical root zone protection requirements
- Public information and education program
- Program analysis and feedback

E. EQUIPMENT AND SERVICES

The available equipment for storm mitigation, response, and recovery is listed below along with the department or other source committed to supply the equipment (equipment rental vendor, contractor, or another government entity).

EQUIPMENT DESCRIPTION	NUMBER OF UNITS NEEDED/AVAILABLE	DEPARTMENT/SOURCE OF SUPPLY
Supervisor Vehicles	/	
Crew Vehicles	/	
Aerial Lift Trucks	/	
Loaders	/	
Chippers	/	
Refuse Packers	/	
Dump Trucks	/	
Barricades	/	
Traffic Safety Cones	/	
Lighting Equipment	/	
Chain Saws	/	
Hand Saws	/	
Pole Pruners	/	
Cell Phones	/	
Portable Radios	/	
Computers/Tablets	/	
GPS Units	/	
Cameras	/	

EQUIPMENT DESCRIPTION	NUMBER OF UNITS NEEDED/AVAILABLE	DEPARTMENT/SOURCE OF SUPPLY
Clipboards	/	
Data Sheets	/	
DBH Tapes	/	
Safety Vests	/	
Hardhats	/	
Eye Protection	/	
Ear Protection	/	
First Aid Kits	/	
Other	/	
	/	
	/	

F. MEMORANDA OF UNDERSTANDING AND ADVANCED READINESS CONTRACTS

1. Memoranda of Understanding

Copies of existing MOUs are included in the template appendix.

Memoranda of understanding (MOUs) for storm preparation, response and recovery have been executed by the local government with the communities, agencies, organizations, groups and individuals listed below.

Neighboring communities:

- _____
- _____
- _____
- _____
- _____

Local agencies:

- _____
- _____

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

- _____
- _____
- _____

Non-profit organizations:

- _____
- _____
- _____
- _____
- _____

Other individuals and groups:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

2. Advanced Readiness Contracts

- Copies of existing ARCs are included in the template appendix.

Advanced readiness contracts (ARCs) for storm preparation, response and recovery have been executed by the local government with the vendors and contractors listed below.

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Equipment Rental Vendors

- _____
- _____
- _____
- _____
- _____

Debris Removal Contractors

- _____
- _____
- _____
- _____
- _____

Mulch Grinding Contractors

- _____
- _____
- _____
- _____
- _____

Tree Service Contractors

- _____
- _____
- _____
- _____
- _____

Tree Suppliers

- _____
- _____
- _____
- _____
- _____

Landscape Contractors

- _____
- _____
- _____
- _____
- _____

G. COMMUNICATION, INFORMATION, EDUCATION AND AWARENESS

1. Communication

- We have a designated call center established for notification of fallen and hazardous trees and tree damage.

The name and contact information for the call center is:

Name of Call Center: _____

Address: _____

Phone Number: _____

Fax Number: _____

Website: _____

E-Mail Address: _____

Call Center Director/Contact: _____

2. Information and Education

Internal Information Sharing

During storm preparation, information will be shared internally by:

- Phone
- E-mail
- Cloud-based storage site
- Quarterly meetings
- Semi-annual meetings
- Annual meetings

The person responsible for coordinating internal information sharing about community forest storm damage mitigation planning, preparation, response and recovery is:

External Information Sharing

- Government website _____
- Community forest management program website _____
- Facebook page _____
- Twitter account _____
- Phone (see storm mitigation team contact list)
- E-mail (see storm mitigation team contact list)
- Cloud-based storage site _____
- Meetings
 - Quarterly
 - Semi-annual
 - Annual

The person responsible for coordinating external information sharing and education about storm preparation, response and recovery is:

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

Information and Education Topics

- The community has information readily available to disseminate to the public on storm preparation, response and recovery.

The information available by topic and format is indicated in the chart below.

TOPIC	WRITTEN SCRIPT	RECORDED PSA	ARTICLE/PRESS RELEASE	WEBSITE/SOCIAL MEDIA	BROCHURE/PAMPHLET/HANDOUT
Benefits of trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tree maintenance standards and BMPs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When and how to hire an arborist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chainsaw safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm severity and damage magnitude	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris pick-up schedule and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type of debris to be collected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expected clean-up time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-storm hazards—hangers, leaning trees, downed power lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caring for storm damaged trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tree selection and planting BMPs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The outlets that will be used for disseminating information on storm preparation, response and recovery include:

- Websites
- Social media
- Radio stations
- Television stations
- Newspapers
- Public meetings

The person responsible for distributing written information, press releases and public service announcements to the public and the media is:

The person responsible for coordinating educational opportunities for the public is:

3. Awareness

- The community coordinates the dissemination of storm preparation information during state-wide and national weather and emergency awareness programs.

The dates of upcoming statewide and national weather and emergency awareness weeks and days that will be the focus of information dissemination are listed below:

- Air Quality Awareness Week _____
- Fire Prevention Week _____
- Hurricane Preparedness Week _____
- Severe Weather Preparedness Week _____
- Tsunami Awareness Week _____
- Flood Awareness Week _____
- Heat Awareness Day _____
- Lightning Safety Awareness Week _____

H. PREPARATION RECORD KEEPING

The following records are maintained and kept in the tree care manager’s office and online in a cloud-based storage service as appropriate.

- Storm mitigation team contact information
- Storm mitigation team meeting announcements, agendas and minutes
- Community Forest Storm Mitigation Plan
- Storm mitigation map
- Memoranda of understanding
- Advance readiness contracts
- Data and cost information for:
 - Program administration (personnel and overhead)
 - Tree canopy assessments
 - Tree risk assessments

Community Forest Storm Mitigation Plan PART II. STORM PREPARATION

- Tree inventory assessments
- Tree pruning
- Cabling and bracing
- Lightning protection
- Tree removal
- Other tree maintenance

- Date, amount and source of volunteer hours for program activities
- Public information scripts, public service announcements and press releases

NOTES:

PART III. STORM RESPONSE

A. MOBILIZATION

Crews will be mobilized to clear fallen trees and woody debris from the highest priority areas as first, as identified on the storm mitigation map. These priority areas will include:

- Priority roads
- Priority facilities
- Buildings, vehicles or other situations with a personal injury
- Buildings and vehicles without injured persons
- Utility repair
- Remaining rights-of-way, public buildings and public facilities

The person responsible for mobilizing resources to respond to storm damage and dispatching crews to remove fallen trees and woody debris is:

B. DEBRIS MANAGEMENT

1. Debris Staging and Storage

- One or more debris storage sites that will accommodate large volumes of woody debris and logs have been established.

Debris storage sites have been established in the following locations:

The person responsible for coordinating debris staging and storage is:

2. Debris Estimation

The person responsible for debris estimation is:

C. TREE RISK AND DAMAGE ASSESSMENTS

- Tree risk and damage assessments will be performed within 30 days of the storm event by one or more of the following groups or individuals:
 - Government staff
 - Consultants
 - Trained volunteers
 - Urban Forest Strike Teams

The person responsible for coordinating tree risk and damage assessment crews is:

Trees with the following conditions and structural defects should be pruned or removed to reduce further damage potential:

- Hangers (detached limbs hanging in the crown; remove limb only)
- Splitting limbs (prune or remove)
- Splitting trunks (cable or remove)
- Leaning trunk with soil broken and heaved opposite the lean (remove)
- Other conditions (list below)

- We have a policy in place that trees that do not pose an imminent risk of failure will not be removed until a tree damage assessment has been completed to avoid the removal of trees that are still viable and valuable to the community.

The person responsible for determining which standing trees should be removed is:

D. INFORMATION

The person responsible for providing information to the public during a storm event is:

E. RESPONSE RECORD KEEPING

During initial storm response, the following records will be retained:

- Tree and debris removal call log
- Debris removal costs
- Debris volume estimates
- Number and location of trees removed
- Number and location of tree pruned
- Number and location of stumps removed
- Hazardous tree, limb, and stump removal costs (see section 5a, 5b, and 5c, below)
- Contractor invoices
- Staff hours by person
- Equipment hours by piece of equipment
- Volunteer hours by person and activity; volunteer contact information
- Tree damage assessment data and costs

F. FEMA PUBLIC ASSISTANCE GRANTS

FEMA Public Assistance Program and Policy Guide

https://www.fema.gov/sites/default/files/2020-06/fema_public-assistance-program-and-policy-guide_v4_6-1-2020.pdf

1. Hazardous Trees Documentation

Documentation retained for hazardous tree removal includes:

- Spreadsheet showing the number of trees removed and size and location of each tree
- Location of hazardous trees removed including the street/road name and GPS coordinates of each tree removed along public rights-of-way, and the property address and GPS coordinates of each tree removed from private property
- Photographs of trees cut flush with the ground along with a certification that the trees were 6 inches or larger in diameter

2. Hazardous Limbs Documentation

Documentation retained for hazardous limb removal includes:

- Spreadsheet showing the location of the trees and number of limbs cut on each tree (information on number of hazardous limbs removed per tree is not necessary if removal was contracted for on a per-tree basis)
- Certification that the limbs were 2 inches or larger in diameter
- Locations of hazardous limb removals including the street/road name and GPS coordinates of each tree with hazardous limbs removed along public rights-of-way, and the property address and GPS coordinates for trees with hazardous limbs removed on private property
- Photographs showing the number of limbs cut

3. Hazardous Stumps Documentation

Documentation retained for hazardous stump removal includes:

- Number of hazardous stumps removed, locations, and sizes
- Quantity of fill material required to fill the remaining hole
- Photographs of the stumps removed

The person responsible for documenting the hazardous trees, limbs and stumps removed is:

PART IV. STORM RECOVERY

A. POST-STORM MITIGATION ANALYSIS

Listed below are the activities that contributed most to the mitigation of tree-related damage during the most recent storm(s):

1. _____
2. _____
3. _____
4. _____
5. _____

Listed below are the greatest areas of need identified during the most recent storm(s) for preparation and mitigation for future storms:

1. _____
2. _____
3. _____
4. _____
5. _____

B. SUMMARY OF TREE LOSSES

- A summary of the number of public trees lost by species and DBH category will be completed after each storm event, using the chart on the following page.

The total number of public trees lost in the most recent storm by species and size category are:

Species Common Name	Number of Trees by DBH Category						
	< 6"	7-12"	13-18"	19-24"	25-30"	31-36"	>36"
TOTAL							

C. INVENTORY OF POTENTIAL PLANTING SITES

Tree Planting Site Inventory Worksheet

Site Type*	Location	Street	Address	Growing Space**	Recommended Species

*Street, Park, Cemetery, Facility, School, etc.
**Mature tree size of large, medium, or small

Inventory Date _____

Page _____ of _____

D. TREE SPECIES SELECTION

- Our community has adopted an official list of trees recommended for planting in our area that is used as a guide for selecting trees for planting on public property.

In our area fast-growing and weak-wooded species to be avoided include:

- Bradford Pear
- Red Mulberry
- Siberian Elm
- Hackberry/Sugarberry
- Water Oak
- _____
- _____
- _____
- _____
- _____

E. TREE REPLACEMENT PLAN

To replace trees lost in each storm event, a public tree replacement plan will be developed that takes into account the number of tree losses, number of available planting sites inventoried, and available resources. We will adopt a goal of planting a specific number of trees per year an appropriate number of years.

- We have developed a written 3-year maintenance plan that includes mulching, watering, pest management, training pruning and inspection of all newly planted trees.

The person responsible for developing and coordinating the community’s tree replacement plan is:

The person responsible for new tree maintenance is:

F. TREE REPLACEMENT PARTNERS

The person(s) responsible for soliciting financial, labor and material assistance for tree replacement are:

- Tree care manager
- Storm mitigation team members
- _____
- _____
- _____
- _____
- _____

Tree replacement program partners include:

G. ONGOING TREE RISK MITIGATION

- We have an ongoing tree risk mitigation program that focuses on:
 - Improvement of tree health
 - Routine tree pruning
 - Quality tree species, tree and site selection
 - Routine tree maintenance including watering, mulching, pest management, and inspections
 - Tree protection

The person responsible for coordinating ongoing tree risk mitigation is:

H. INFORMATION AND EDUCATION

- We have in place a program to identify the individuals, organizations and companies that deserve recognition for their efforts in storm response and recovery.

The person responsible for coordinating the recognition program for response and recover is:

During long-term response, our community forest information and education program will continue and will focus on the following topics:

- Tree and tree canopy loss results
- Tree planting programs and grants
- Availability of assistance and materials, including volunteer labor, replacement trees, mulch
- When and how to hire an ISA Certified Arborist
- Ongoing tree risk assessment
- Tree health maintenance
- Crown restoration pruning
- Recommended species for planting
- Tree planting techniques
- Tree benefits

Information and education programs that will be utilized during long-term recovery to communicate with the public will include:

- Recognition programs for responders
- Field demonstrations
- Neighborhood workshops
- Website content
- Newspaper articles

- Public service announcements

I. RECOVERY RECORD KEEPING

- Staff hours
- Equipment hours
- Contractor invoices
- Donations by source with contact information
- Volunteer hours
- Tree purchase data (nursery source, number purchased by species and cultivar) and costs
- Tree planting data (species, location, date) and costs
- Tree survival data (annual results)

The person(s) responsible for maintaining long-term recovery records are:

APPENDICES

Additional supplemental information and documents included as part of our *Community Forest Storm Mitigation Plan* are located in the appendices that follow.

- Appendix A _____
- Appendix B _____
- Appendix C _____
- Appendix D _____
- Appendix E _____
- Appendix F _____
- Appendix G _____
- Appendix H _____
- Appendix I _____
- Appendix J _____

**GEORGIA FORESTRY
COMMISSION**



GaTrees.org