



**FLOYD COUNTY
HAZARD MITIGATION
PLAN UPDATE
2020 - 2025**

Floyd County Emergency Management Agency

Lux Mitigation and Planning Corp.

Floyd County, Georgia
Hazard Mitigation Plan Update
2020 – 2025



Prepared for the Floyd County Board of Commissioners

12 East 4th Street

Rome, Georgia 30161

706.291.5111

www.romefloyd.com

Floyd County's Hazard Mitigation Plan Update 2020

This document was funded in part by the Hazard Mitigation Planning Grant awarded to the Floyd County Emergency Management Agency by the Georgia Emergency Management Agency (GEMA) to fulfill the requirements of the Federal Disaster Mitigation Act of 2000 (DMA 2000). Floyd County's Hazard Mitigation Plan 2016 was updated by the Floyd County Hazard Mitigation Plan Update Committee and was prepared by Lux Mitigation and Planning Corp. For additional information, please contact Floyd County Emergency Management Agency.

Director Tim Herrington
Floyd County Emergency Management Agency
407 East 12th Street
Rome, Georgia 30161
herringtont@floydcountyga.org
706.236.5002

Resolution – Floyd County

RESOLUTION – FLOYD COUNTY, GEORGIA

FLOYD COUNTY HAZARD MITIGATION PLAN UPDATE 2020-2025

WHEREAS, Floyd County and its municipalities recognize that it is threatened by several different types of natural and man-made hazards that can result in loss of life, property loss, economic hardship and threats to public health and safety; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has required that every county and municipality have a pre-disaster mitigation plan in place, and requires the adoption of such plans in order to receive funding from the Hazard Mitigation Grant Program; and

WHEREAS, a Hazard Mitigation Plan is a community’s plan for evaluating hazards, identifying resources and capabilities, selecting appropriate actions, and developing and implementing the preferred mitigation actions to eliminate or reduce future damage in order to protect the health, safety and welfare of the residents in the community; and

WHEREAS, the Floyd County Hazard Mitigation Plan Update 2020 - 2025 has been prepared in accordance with FEMA requirements at 44 CFR 201.6; and

WHEREAS, the Plan will be updated every five years;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Commissioners of Floyd County, Georgia, that:

- 1) Floyd County, Georgia, has adopted the Floyd County Hazard Mitigation Plan Update 2020 - 2025; and
- 2) It is intended that the Plan be a working document and is the first of many steps toward improving rational, long-range mitigation planning and budgeting for Floyd County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Board of Commissioners of Floyd County, Georgia, in regular session this ____ day of _____, 20__.

Chairperson

County Clerk

Resolution – Floyd County Municipalities

Requirement §201.6(c)(5)

RESOLUTION – CITY OF ROME, GEORGIA

FLOYD COUNTY HAZARD MITIGATION PLAN UPDATE 2020-2025

WHEREAS, Floyd County and its municipalities recognize that it is threatened by several different types of natural and man-made hazards that can result in loss of life, property loss, economic hardship and threats to public health and safety; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has required that every county and municipality have a pre-disaster mitigation plan in place, and requires the adoption of such plans in order to receive funding from the Hazard Mitigation Grant Program; and

WHEREAS, a Hazard Mitigation Plan is a community’s plan for evaluating hazards, identifying resources and capabilities, selecting appropriate actions, and developing and implementing the preferred mitigation actions to eliminate or reduce future damage in order to protect the health, safety and welfare of the residents in the community; and

WHEREAS, the Floyd County Hazard Mitigation Plan Update 2020 - 2025 has been prepared in accordance with FEMA requirements at 44 CFR 201.6; and

WHEREAS, the Plan will be updated every five years;

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and City Commission of Rome, Georgia, that:

- 1) The City of Rome, Georgia, has adopted the Floyd County Hazard Mitigation Plan Update 2020 - 2025; and
- 2) It is intended that the Plan be a working document and is the first of many steps toward improving rational, long-range mitigation planning and budgeting for Floyd County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and Commission of the City of Rome, Georgia, in regular session this _____ day of _____, 20__.

Mayor

City Clerk

RESOLUTION – CITY OF CAVE SPRING, GEORGIA

FLOYD COUNTY HAZARD MITIGATION PLAN UPDATE 2020-2025

WHEREAS, Floyd County and its municipalities recognize that it is threatened by several different types of natural and man-made hazards that can result in loss of life, property loss, economic hardship and threats to public health and safety; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has required that every county and municipality have a pre-disaster mitigation plan in place, and requires the adoption of such plans in order to receive funding from the Hazard Mitigation Grant Program; and

WHEREAS, a Hazard Mitigation Plan is a community’s plan for evaluating hazards, identifying resources and capabilities, selecting appropriate actions, and developing and implementing the preferred mitigation actions to eliminate or reduce future damage in order to protect the health, safety and welfare of the residents in the community; and

WHEREAS, the Floyd County Hazard Mitigation Plan Update 2020 - 2025 has been prepared in accordance with FEMA requirements at 44 CFR 201.6; and

WHEREAS, the Plan will be updated every five years;

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and City Council of Cave Spring, Georgia, that:

- 1) The City of Cave Spring, Georgia, has adopted the Floyd County Hazard Mitigation Plan Update 2020 - 2025; and
- 2) It is intended that the Plan be a working document and is the first of many steps toward improving rational, long-range mitigation planning and budgeting for Floyd County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and Council of the City of Cave Spring, Georgia, in regular session this ___ day of _____, 20__.

Mayor

City Clerk

Preface

Mitigation Vision for the Future

Emergency Managers succeed or fail based on how well they follow the following fundamental principles of emergency management, mitigation, preparedness, response and recovery. Purposefully, our emergency management forefathers put the word mitigation first as a “means” to prevent or minimize the effects of disasters.

Mitigation is commonly defined as sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. Hazard mitigation focuses attention and resources on community policies and actions that will produce successive benefits over time. A mitigation plan states the aspirations and specific courses of action that a community intends to follow to reduce vulnerability and exposure to future hazard events. These plans are formulated through a systematic process centered on the participation of citizens, businesses, public officials, and other community stakeholders.

Mitigation forms, or should form, the very foundation of every emergency management agency. To reduce, minimize, or eliminate hazards in their communities, emergency management agencies adopt and implement mitigation practices. The Federal DMA 2000 sets the benchmark and outlines the criteria for communities with the vision to implement hazard mitigation practices in their communities.

Floyd County and its municipalities realize the benefits achieved by the development and implementation of mitigation plans and strategies in their community. Floyd County’s elected officials, public safety organizations, planners, and many others have proven that by working together towards the development and implementation of this plan, they can reduce the loss of life and property in their communities.

The jurisdictions covered by this plan include the following:

Floyd County
City of Rome
City of Cave Spring

Table of Contents

Resolution – Floyd County	4
Resolution – Floyd County Municipalities	5
Preface	7
<u>CHAPTER ONE - INTRODUCTION</u>	11
Summary Of Updates For Chapter One	12
Introduction	13
Authority	14
Funding	15
Scope	16
Purpose	17
Consistency with Federal and State Mitigation Policies	18
Plan Review	20
Hazard Mitigation Plan Update Committee	22
Public Participation	26
Documentation of Public Meeting Notice	27
Multi-jurisdictional Considerations	28
Incorporation of Existing Plans, Studies, and Resources	29
<u>CHAPTER TWO – FLOYD COUNTY PROFILE</u>	31
Summary of Updates for Chapter Two	32
Past Hazards	33
History	34
Past Events	35
Demographics	40
Economy	41
Government	42
Transportation	43
Climate	44
Utilities	45
NFIP Compliance	45
Municipal Information	46
<u>CHAPTER THREE – HAZARD PROFILES</u>	49
Summary of Updates for Chapter Three	50
Risk Assessment	52

CHAPTER THREE – HAZARD PROFILES (CONTINUED)

Natural Hazards	54
<i>Thunderstorm</i>	54
<i>Winter Storm</i>	66
<i>Flooding</i>	72
<i>Tornado</i>	85
<i>Drought</i>	93
<i>Wildfire</i>	99
<i>Earthquake</i>	108
<i>Tropical Cyclone</i>	114
Technological Hazards	121
<i>Hazardous Materials Incident</i>	121
<i>Dam Failure</i>	123
<i>Transportation Incident</i>	126
<i>Terrorism</i>	128
<i>Critical Infrastructure Failure</i>	130
<i>Emerging Infectious Disease</i>	133

CHAPTER FOUR – HAZARD MITIGATION STRATEGIES 138

Summary of Updates to Chapter Four	139
Goals and Objectives	140
Identification and Analysis of Mitigation Techniques	142
Mitigation Strategies	144
<i>Natural Hazards</i>	144
<i>Technological Hazards</i>	161
<i>Completed Mitigation Strategies</i>	167
<i>Deleted Mitigation Strategies</i>	167

CHAPTER FIVE – PLAN IMPLEMENTATION AND MAINTENANCE 168

Summary of Updates to Chapter Five	169
Maintenance	170
Plan Distribution	172
Implementation	173
Evaluation	176
Peer Review	177
Plan Update	178
Conclusion	179

APPENDICIES

Appendix A – Floyd County Dams Information	180
Appendix B – Hazard Mitigation Plan Update Committee Sign-In Sheets	181
Appendix C – Floyd County Critical Facilities Information	188
Appendix D – Natural Hazard Data Tables	196
Appendix E – Floyd County Worksheet 3As	228
Appendix F – Documentation of Peer Review	237
Appendix G – Floyd County HAZUS Report	243

CHAPTER ONE
-
INTRODUCTION

Summary of Updates for Chapter One

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Floyd County Hazard Mitigation Plan 2016.

Chapter 1 Section	Updates
Introduction	<ul style="list-style-type: none"> • Identification of Mitigation Goals
Authority	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Funding	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Scope	<ul style="list-style-type: none"> • Verbiage updated
Purpose	<ul style="list-style-type: none"> • Verbiage updated
Consistency with Federal Guidelines	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Plan Review	<ul style="list-style-type: none"> • Verbiage updated • Updated mitigation meeting dates for the 2020 planning process
Hazard Mitigation Plan Update Committee	<ul style="list-style-type: none"> • Updated committee list to match the 2020 planning participants • Updated to meet Federal guidelines
Public Participation	<ul style="list-style-type: none"> • Updated to match the 2020 planning process
Multi-Jurisdictional Considerations	<ul style="list-style-type: none"> • Updated with requirement descriptions
Incorporation of Existing Plans, Studies, and Resources	<ul style="list-style-type: none"> • Updated with new plan, study, and resource incorporations

Introduction

The Floyd County Hazard Mitigation Plan Update is the first phase of a multi-hazard mitigation strategy for the entire community. This Plan encourages cooperation among various organizations and crosses political sub-divisions. As written, this Plan fulfills the requirements of the Federal DMA 2000. DMA 2000 provides federal assistance to state and local emergency management agencies and other disaster response organizations to reduce damage from disasters. The Act is administered by GEMA and FEMA.

It is important that state and local government, public-private partnerships, and community citizens can see the results of these mitigation efforts; therefore, the goals and strategies need to be achievable. Floyd County's Hazard Mitigation Plan Update Committee adopted the following goals during plan development:

- GOAL 1 Maximize the use of all resources by promoting intergovernmental coordination and partnerships in the public and private sectors
- GOAL 2 Harden communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective
- GOAL 3 Reduce and, where possible, eliminate repetitive damage, loss of life and property from disasters
- GOAL 4 Bring greater awareness throughout the community about potential hazards and the need for community preparedness

This plan complies with all requirements and scope of work as described in Floyd County's Hazard Mitigation Grant application.

Authority

In the past, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The DMA 2000 is the latest legislation to improve the planning aspect of that process; it reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. The DMA 2000 establishes a pre-disaster hazard mitigation program and designates new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). Section 322 identifies the new requirements for planning activities and increases the amount of HMGP funds available to states that have developed a comprehensive mitigation plan prior to the disaster.

State and local communities must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. Local mitigation plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities. To implement the new DMA 2000 requirements, FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002 at 44 CFR Parts 201 and 206, which establishes planning and funding criteria for states and local communities.

Developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans, Floyd County's Updated Hazard Mitigation Plan will be brought forth to each participating jurisdiction in Floyd County to be formally adopted. The Plan shall be routinely monitored and revised to maintain compliance with the following provisions, rules, and legislation:

Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-390); and

FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, at 44 CFR Part 201.

Funding

Floyd County was awarded a \$34,000 Hazard Mitigation Planning Grant by FEMA through GEMA for the update of Floyd County's 2016 Hazard Mitigation Plan. \$6,000 of that cost has been pre-allocated to the creation of the 2020 Floyd County HAZUS II Report. FEMA contributed 75% and GEMA contributed 10% of the total cost of the Plan Update. The Hazard Mitigation Planning Grant required a 15% match by Floyd County. This match was fulfilled entirely (100%) by In-Kind contributions – time spent by county and municipal employees, local stakeholders, representatives from organizations, and citizen volunteers updating the Plan was provided instead of cash from the County's budget.

Scope

The scope of the Floyd County Hazard Mitigation Plan Update encompasses all areas of Floyd County, including municipalities. The Plan identifies all natural and technological hazards that could threaten life and property in Floyd County. The scope of this Plan includes both short and long-term mitigation strategies with implementation and possible sources of project funding.

The Hazard Mitigation Plan Update is organized to incorporate the requirements of Interim Final Rule 44 CFR 201.4.

Chapter One includes an overview of the Hazard Mitigation Plan Update, the overall goals of the plan, and details of the planning process as required by Interim Final Rule 44 CFR 201.4(c)(1).

Chapter Two of the Plan details the Floyd County profile, including the demographics, municipalities, and history of the county.

Chapter Three identifies the risk assessment process, past natural hazard events with associated losses, and current natural hazard risks. Potential losses are also analyzed as required by Interim Final Rule 44 CFR 201.4(c)(2). Additionally, Chapter Three identifies and analyzes potential technological hazards faced by Floyd County.

Chapter Four identifies Floyd County's hazard mitigation goals and objectives, mitigation strategies and actions, and sources of potential funding for mitigation projects as required by Interim Final Rule 44 CFR 201.4(c)(3).

Chapter Five identifies the maintenance and implementation strategies for the Plan. The process for evaluation of the Hazard Mitigation Plan implementation progress is also detailed as required by Interim Final Rule 44 CFR 201.4(c)(4) and (5).

Purpose

The purpose of the Floyd County Hazard Mitigation Plan Update is to:

- Protect life, promote safety, and preserve property by reducing the potential for future damages and economic losses that result from natural and technological hazards;
- Make communities in Floyd County safer places to live, work, and play;
- Qualify for grant funding in both the pre-disaster and post-disaster environments;
- Speed the recovery and redevelopment process following future disaster events;
- Demonstrate a firm local commitment to hazard mitigation principles; and
- Comply with state and federal legislative requirements for local multi-jurisdictional hazard mitigation plans.

Consistency with Federal and State Mitigation Policies

The Plan is intended to enhance and complement state and federal recommendations for the mitigation of natural and technological hazards in the following ways:

- Substantially reduce the risk of life, injuries and hardship from the destruction of natural and technological disasters on an ongoing basis;
- Create greater public awareness about the need for individual preparedness and about the need to build safer, more disaster resistant communities;
- Develop strategies for long-term community sustainability during community disasters; and,
- Develop governmental and business continuity plans that will continue essential private sector and governmental activities during disasters.

FEMA publishes several guidance documents for local governments on mitigating natural disasters. The updated Floyd County Hazard Mitigation Plan recognizes, adopts, incorporates, and endorses the following principles:

- Develop a strategic mitigation plan for Floyd County;
- Enforce current building codes;
- Develop incentives to promote mitigation;
- Incorporate mitigation of natural hazards into land use plans;
- Promote awareness of mitigation opportunities and programs throughout our community on a continual basis; and,
- Identify potential funding sources for mitigation projects.

The private sector is often an overlooked segment of the community during disasters. It is vital that this sector of a community is included in mitigation efforts that are consistent with state and federal recommendations, such as the following:

- Develop mitigation incentives with insurance agencies and lending institutions;

- Encourage the creation of a business continuity plan for the continuance of commerce during and following a disaster; and,
- Partner with local businesses to educate customers about potential hazards in the community and possible mitigation ideas.

Individual citizens must be made aware of the hazards they may encounter. Additionally, they must be educated on how to protect themselves from the hazards they face. They must be shown that mitigation is an important part of reducing loss of life and property in their community. Their support is critical to the success of any mitigation effort. The updated Floyd County Hazard Mitigation Plan supports the following FEMA recommendations regarding individual citizens:

- Become educated on the hazards that may impact your community;
- Become part of the process by supporting and encouraging mitigation programs that reduce vulnerability to disasters; and,
- An individual's responsibility is to safeguard his/her family, as well as themselves, prior to a disaster event.

Plan Review

Requirement §201.6(c)(1)

The contractor, Lux Mitigation and Planning, had the primary responsibility for collecting updated information and presenting pertinent data to the Plan Update Committee. An online, Dropbox folder was created for Floyd County's Plan Update. The approved 2016 Hazard Mitigation Plan was uploaded to the Dropbox folder, and the link to the folder was emailed to all members of the Hazard Mitigation Plan Update Committee. Each chapter of the 2016 Plan was reviewed. Hazard vulnerability and risk assessment data was updated, as was critical infrastructure information.

Special attention and consideration were given to the review and edit of mitigation strategies listed in the 2016 Plan. The Plan Update Committee examined each strategy and determined whether the strategy had been completed, needed to be modified, was in progress, or no longer applied. The Committee was highly encouraged to create new mitigation strategies to meet the current needs of the county and municipalities. Mitigation strategies from other Georgia counties were reviewed to help with the creation of new strategies. When the Committee agreed a new mitigation action would be beneficial, it was tailored to Floyd County's needs and was included in the 2020 Plan. The contractor sent the Committee, including sporadically attending participants, regular emails which contained a Dropbox link to the most updated version of the Plan and encouraged the Committee to thoroughly critique each version.

Floyd County's Hazard Mitigation Plan Update Meeting Dates:

Thursday, March 5, 2020	Kick-Off Meeting
Thursday, August 13, 2020	Hazard Identification and Prioritization; Update Critical Facilities Information
Thursday, September 10, 2020	Review and Edit 2016 Hazard Mitigation Strategies; Identify New Hazard Mitigation Strategies
Thursday, October 15, 2020	Continue to Review and Edit 2016 Hazard Mitigation Strategies; Identify New Hazard Mitigation Strategies (Public Meeting #1)

Each section of Floyd County's 2016 Hazard Mitigation Plan has been revised in some manner. Therefore, a summary of those changes will be listed in the first section of each chapter. Significant additions/modifications to this Plan include the following:

- Added Tropical Cyclone to Natural Hazards
- Added Transportation Incident to Technological Hazards
- Added Terrorism to Technological Hazards
- Added Infrastructure Failure to Technological Hazards
- Added Emergent Infectious Disease to Technological Hazards

Hazard Mitigation Plan Update Participants

Requirement §201.6(b)(2)

The following 24 participants contributed to the update of Floyd County's 2016 Hazard Mitigation Plan: *(in alphabetical order)*

Richard Argo

Lieutenant

Floyd County Sheriff's Office

Rodney Bailey

Major

City of Rome Police Department

Damian Bellamy

Wildland Firefighter; Ranger II

Georgia Forestry Commission

John Blalock

Director

Floyd County E-911

Clete Bonney

Division Chief

City of Rome Fire Department

Thomas A. Bowen

P25 System Administrator

Floyd County Emergency Management Agency

Troy Brock

Fire Chief

Rome-Floyd Fire Department

Frank Cronan

Deputy Warden

Floyd County Prison

Patrick Eidson

Assistant City Manager

City of Rome

Brandon Elrod

Commercial and Industrial Appraiser
Floyd County Tax Assessor's Office

Rick Flanigen

Chief Safety and Security Officer
Floyd County Schools

Paul Greene

Lieutenant; Assistant Watch Commander
City of Rome Police Department

Scotty W. Hattaway

Deputy Superintendent of Operations
Floyd County Schools

Tim Herrington

Director
Floyd County Emergency Management Agency

Sammy Highfield

Water Department Supervisor
City of Cave Spring

Robby Hill

Assistant Director
Floyd Emergency Medical Services

David Jackson

Maintenance Supervisor
City of Cave Spring

Carl Lively

Major
Floyd County Police Department

Frankie Matthews

Emergency Preparedness Coordinator
Redmond

Donnie R. McCain*Assistant Chief*

City of Cave Spring Fire Department

Brad Roberson*Division Chief*

City of Rome Fire Department

Bryan J. Roberts*Floodplain Manager*

Floyd County; Cities of Rome and Cave Spring

Sommer Robinson*Assistant Director*

Floyd County E-911

Jason G. Self*Director of Safety and Security*

Rome City Schools

Michael Skeen*Director*

Floyd County Public Works Department

Jamie Stone*Chief of Training*

Rome-Floyd Fire Department

Betsy Willis*Office Manager*

Russeu Regional Airport

Douglas Yochum*Lieutenant*

Floyd County Prison

The Plan Update Committee relied on their consultant to guide them through the update process. During meetings, the participants had productive discussions, expanded their professional networks, asked thoughtful questions, made important

decisions, and provided critical input during key stages in the update process. Efforts were made to involve all county and municipal departments, as well as community organizations and local businesses, which may have a role in the implementation of mitigation actions and/or policies. These efforts included sending invitations via email to attend the Kick-off Meeting, sending reminder emails before each upcoming meeting, emailing pertinent information throughout the process, and requesting the review and critique of each chapter in the updated Plan.

All neighboring counties – Chattooga, Walker, Cherokee (AL), Gordon, Bartow, and Polk – were asked to peer review the 2020 Mitigation Plan draft. The Plan was sent to each County EMA office. Additionally, the EMA Directors from surrounding counties were asked to attend Plan Update Committee meetings in hopes they would share mitigation ideas from their own counties.

Public Participation

Requirement §201.6(b)(1)

State Requirement Element F2

Public awareness is a key component of any community's overall mitigation strategy. As citizens become more involved in decisions that affect their safety, they may develop a greater respect for the natural hazards present in their community, and thus, may take the steps necessary to reduce potential impacts of those hazards.

The following local organizations and businesses participated in the update of Floyd County's 2016 Mitigation Plan:

The Plan Update Committee took it upon themselves to ensure the processes undertaken for the development, implementation, and maintenance of the 2020 Hazard Mitigation Plan adequately considered public needs and viewpoints.

A list of public outreach initiatives can be found below:

- Email reminders were sent to all Plan Update Committee members, as well as other stakeholders, prior to every meeting. Recipients were encouraged to share the meeting invitation with anyone they thought would be an asset to the Plan Update process or anyone who may want to learn more about what a Hazard Mitigation Plan is.
- The Emergency Management Director for all neighboring jurisdictions – Bartow, Chattooga, Cherokee (AL), Gordon, Polk, and Walker Counties – were included on all meeting invitations and reminder emails for the Floyd County Hazard Mitigation Plan Update.
- A Public Meeting was held on October 15, 2020 in conjunction with the regularly scheduled Floyd County Hazard Mitigation Plan Update Committee. This meeting was advertised through multiple medium, including the Floyd County Emergency Management Facebook Page. No feedback was provided by the public.

Documentation of Public Meeting Notice

October 14, 2020 Public Meeting Notice (Floyd County EMA Facebook)

**Floyd County Emergency Management**

29m · 🌐



Floyd County EMA is the Agency that is responsible for Hazard Mitigation Planning for Floyd County AG, this included the City of Rome and the City of Cave Spring.

We work with the County and City Agencies to develop a plan that reduces loss of life and property by minimizing the impact of disasters. This begins with identifying natural disaster risks and vulnerabilities that are common in their area. After identifying these risks, they develop long-term strategies for protecting people and property from similar future events. Mitigation plans are key to breaking the cycle of disaster damage, reconstruction and repeated damage.

All citizens are invited and encouraged to attend Floyd County's Hazard Mitigation Plan Update meeting on Thursday, October 15, 2020, from 10:00 am – 12:00 pm. The meeting will be held in Floyd County's Emergency Operations Center located at 409 East 12th Street in Rome.

There will be an additional meeting using video confrencing (Zoom) for attendees the be involved in this process.

Multi-Jurisdictional Considerations

FEMA does not require cities and towns to adopt a local Hazard Mitigation Plan. However, the Federal DMA 2000 requires that all municipalities, wishing to be eligible to receive Hazard Mitigation Grants through FEMA, must adopt a local multi-hazard mitigation plan and must update that plan every five years. Floyd County's most recent Hazard Mitigation Plan was approved by FEMA in 2016. The 2020 Mitigation Plan is the third five-year update. This FEMA-approved 2020 Hazard Mitigation Plan makes Floyd County, City of Rome, and City of Cave Spring eligible for FEMA's Hazard Mitigation Grant Program, Flood Assistance Mitigation Grants, and Pre-Disaster Mitigation Grants.

As set forth by Georgia House Bill 489, the Emergency Management Agency is the implementing agency for projects pertaining to hazard mitigation. Floyd County is dedicated to work in the best interests of the County, as well as, its municipalities. A few mitigation strategies in Floyd County's 2020 Mitigation Plan apply to a specific municipality. Unless noted otherwise, mitigation strategies apply equally to all jurisdictions. During the creation and update of this Plan, Floyd County Emergency Management Agency solicited and received participation from the following Floyd County municipalities: City of Rome and City of Cave Spring.

Incorporation of Existing Plans, Studies, and Resources

Requirement §201.6(b)(3)

State Requirement Element F3

Existing Plans

2016 Floyd County Pre-Disaster Hazard Mitigation Plan
2014 State of Georgia Hazard Mitigation Plan
2019 State of Georgia Hazard Mitigation Plan
Floyd County Local Emergency Operations Plan
Georgia Forestry Commission's Floyd Co. Community Wildfire Protection Plan
Floyd County Joint Comprehensive Plan
Floyd County Growth Management Plan

Studies

2021 Floyd County Hazard Risk Analyses (HAZUS Report)
2017 United States Department of Agriculture Ag Census
2010 United States Census and 2016/2017 Census Estimates
2009 Floyd County Flood Insurance Study
Radeloff, V. C., R. B. Hammer, S. I Stewart, J. S. Fried, S. S. Holcomb, and J. F. McKeefry. 2005. *The Wildland Urban Interface in the United States*. Ecological Applications 15:799-805.

Resources

2014 City of Boston Natural Hazard Mitigation Plan Update
2010 Camden County Joint Hazard Mitigation Plan Update
2010 Northern Virginia Hazard Mitigation Plan Update
National Climactic Data Center
National Weather Service
Floyd County Tax Assessor's Data
Floyd County Website
Georgia Mitigation Information System Database
Colorado State University (Hurricane mapping)
United States Geological Survey
FEMA Flood Insurance Rate Maps
National Flood Insurance Program
United States Coast Guard National Response Center Data
Georgia Department of Transportation
Georgia Safe Dams Program
Southern Group of State Foresters Wildfire Risk Assessment

Application of Existing Plans and Studies

Existing Planning Mechanism	Reviewed? Yes/No	Incorporation into 2020 Mitigation Plan
2016 Floyd County Hazard Mitigation Plan	Yes	Baseline for the 2020 Plan; updated mitigation strategies; updated hazards; updated Floyd County information
2014 State of Georgia Hazard Mitigation Plan	Yes	Hazard descriptions; potential hazards; mapping mechanisms; potential mitigation strategies that could be adopted on a local level
Floyd County Local Emergency Operations Plan (LEOP)	Yes	Identification of current resources; identification of current capabilities
Georgia Forestry’s Floyd County Community Wildfire Protection Plan (CWPP)	Yes	Mitigation strategies for wildfire and drought; historical data
2017 USDA Agriculture Census	Yes	Agricultural data regarding potential losses for drought and wildfire
2010 United State Census	Yes	To update Floyd County’s profile information
2009 Floyd County Flood Insurance Study	Yes	Identify potential flood prone areas; prioritization of flood-related mitigation strategies
Floyd County Comprehensive Plan	Yes	To identify future development trends; identify mitigation strategies to curb trends in a direction that considers the hazards of the area
Floyd County Growth Management Plan	Yes	To identify future development trends; identify mitigation strategies to curb trends in a direction that considers the area’s hazards
Floyd County Flood Mitigation Assistance Plan	No	No such plan exists
2021 Floyd County HAZUS Report	Yes	Hazard Analysis

CHAPTER TWO
-
FLOYD COUNTY PROFILE

Summary of Updates for Chapter Two

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Floyd County Hazard Mitigation Plan 2016.

Chapter 2 Section	Updates
Past Hazards	<ul style="list-style-type: none"> • This information involved a review of the hazards listed in the previous plan. • Information was updated for the last 50 years
History	<ul style="list-style-type: none"> • Expanded and updated from previous plan
Past Events	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan • Identification of major hazard events in Floyd County for the last 50 years • Focus on Federal Declarations and events since the last Hazard Mitigation Plan Update
Demographics	<ul style="list-style-type: none"> • Updated data to the 2017 Census estimate information
Economy	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Government	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Municipalities	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Transportation	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Climate	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Utilities	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan •
NFIP Compliance	<ul style="list-style-type: none"> • New Section – Not a standalone section in 2016 Plan



Past Hazards

Floyd County, Georgia, has faced many natural hazards in its long history. Severe thunderstorms have been the most prevalent of these hazards. In the last 50 years, Floyd County has been subjected to 242 documented severe thunderstorm events. These events include torrential rainfall, hail, thunderstorm-force winds, and lightning.

Tornadoes, which can sometimes spawn from severe thunderstorms, have also occurred, although with much less frequency. In Floyd County, there have been 12 documented tornadoes in the last 50 years.

Because of heavy rainfall, either within Floyd County or upstream, flooding has also occurred. In the National Climactic Data Center (NCDC) databases of the National Weather Service, there is documentation of 29 flooding events for Floyd County.

Winter storms and heavy snowfall have affected Floyd County over the last 50 years. Because these natural events are barely an annual occurrence, the pre-planning and preparedness component of emergency management is not as robust as northern or western states that routinely see this type of weather. The NCDC recorded 39 winter storms or heavy snow events for Floyd County with two of those events occurring in the last five years.

Floyd County has been impacted by other less severe or less frequent hazards in the past. These hazards include, but are not limited to, the following: drought, excessive heat, tropical cyclones, earthquakes, and wildfires.

Floyd County has had fifteen Presidential Disaster Declarations (FEMA-declared major disasters) – two of which have occurred since the adoption of the 2016 Hazard Mitigation Plan (both related to Hurricane Irma in 2017).

History

Floyd County was created from Cherokee County on Dec. 3, 1832 by an act of the General Assembly (Ga. Laws 1832, p. 56). According to that act, Floyd County was to consist of the 22nd, 23rd, and 24th districts of the 3rd Section, and the 3rd, 4th, 5th, 14th, 15th, and 16th districts of the 4th Section of the original Cherokee County.

In way of background, by 1830, the Cherokee Nation consisted of most of northwest Georgia, plus adjoining areas in Alabama, Tennessee, and North Carolina. Even while Cherokee Indians remained on their homeland in Georgia, the General Assembly on Dec. 21, 1830 enacted legislation claiming “all the Territory within the limits of Georgia, and now in the occupancy of the Cherokee tribe of Indians; and all other unlocated lands within the limits of this State, claimed as Creek land” (Ga. Laws 1830, p. 127). The act also provided for surveying the Cherokee lands in Georgia; dividing them into sections, districts, and land lots; and authorizing a lottery to distribute the land. On Dec. 26, 1831, the legislature designated all land in Georgia that lay west of the Chattahoochee River and north of Carroll county as “Cherokee County” and provided for its organization (Ga. Laws 1831, p. 74). However, the new county was not able to function as a county because of its size and the fact that Cherokee Indians still occupied portions of the land. On Dec. 3, 1832, the legislature added areas of Habersham and Hall counties to Cherokee County, and then divided the entire area into nine new counties—Cass (later renamed Bartow), Cobb, Floyd, Forsyth, Gilmer, Lumpkin, Murray, Paulding, and Union—plus a reconstituted and much smaller Cherokee County. Cherokee lands were distributed to whites in a land lottery, but the legislature temporarily prohibited whites from taking possession of lots on which Cherokees still lived. By 1833, however, whites began occupying areas of Floyd County.

The official basis for Georgia claiming possession of all Cherokee lands in Georgia was the Treaty of New Echota of Dec. 29, 1835. In this treaty, a faction of the Cherokees agreed to give up all Cherokee claims to land in Georgia, Alabama, Tennessee, and North Carolina and move west in return for \$5 million. Though most Cherokees opposed the treaty and refused to leave, the U.S. and Georgia considered it binding. In 1838, U.S. Army troops rounded up the last of 15,000 Cherokees in Georgia and forced them to march west in what came to be known as the “Trail of Tears.”

Georgia’s 88th county was named for Gen. John Floyd, who was involved in various campaigns against the Creek Indians in the early 1800s and later served in the Georgia General Assembly and U.S. Congress.

Portions of Floyd County were used to create Chattooga County (1838), Gordon County (1850), and Polk County (1851).

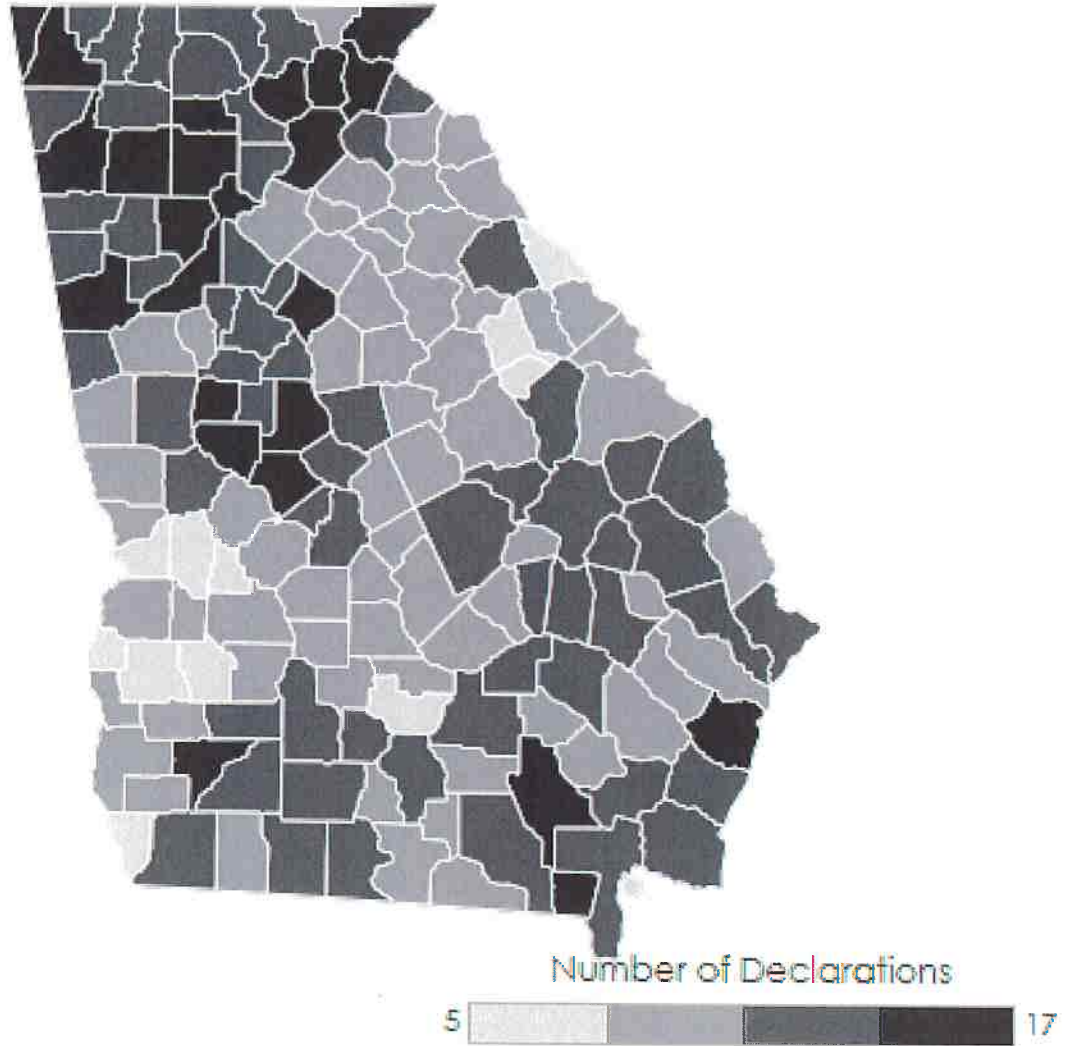


Notable Past Events

- **2020, COVID-19 Pandemic (Federal Declaration x2)**
- 2019, Tornado (EF0)
- **2017, Hurricane Irma (Federal Declaration x2)**
- **2014, Winter Storm (Federal Declaration)**
- 2013, Thunderstorm Wind Event
- 2012, Tornado (EF1)
- 2012, Thunderstorm Hail Event
- 2011, Tornado (EF0)
- 2011, Tornado (EF2)
- **2011, Severe Storms/Tornado (EF2) (Federal Declaration)**
- 2011, Thunderstorm Wind Event
- 2010, Thunderstorm Wind Event
- 2010, Thunderstorm Wind Event
- 2010, Thunderstorm Wind Event
- 2009, Thunderstorm Wind Event
- 2009, Thunderstorm Hail Event
- **2008, Tornado (EF3) (Federal Declaration)**
- 2007, Thunderstorm Hail Event
- 2006, Thunderstorm Hail Event
- 2006, Thunderstorm Wind Event
- 2005, Thunderstorm Hail Event
- 2003, Flash Flood Event
- **2000, Ice Storm (Federal Declaration)**
- **1998, Severe Storms/Flooding (Federal Declaration)**
- **1995, Hurricane Opal (Federal Declaration)**

- **1994, Tornadoes/Severe Storms/Flooding (Federal Declaration)**
- **1993, Blizzard (Federal Declaration)**
- 1992, Tornado (F1)
- **1990, Severe Storms/ Flooding (Federal Declaration)**
- 1989, Tornado (F2)
- 1989, Tornado (F2)
- 1984, Tornado (F1)
- **1979, Flooding/Mudslide (Federal Declaration)**
- 1977, Tornado (F3)
- **1977, Drought (Federal Declaration)**
- 1975, Tornado (F1)
- 1971, Tornado (F0)
- **1966, Flooding (Federal Declaration)**

Federal Disaster Declarations



☁️ 5 Severe Storm(s)

🌀 4 Hurricane

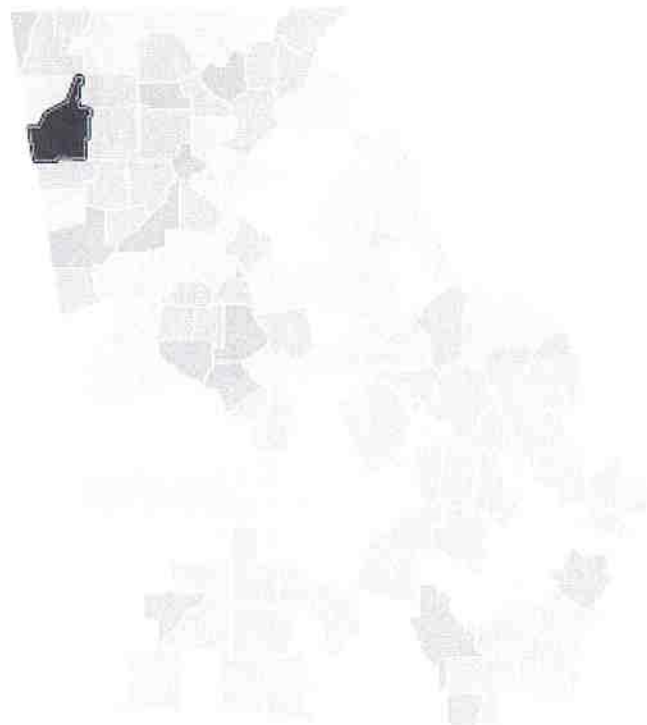
🏠 2 Flood

💧 1 Drought

❄️ 1 Severe Ice Storm

❄️ 1 Snow

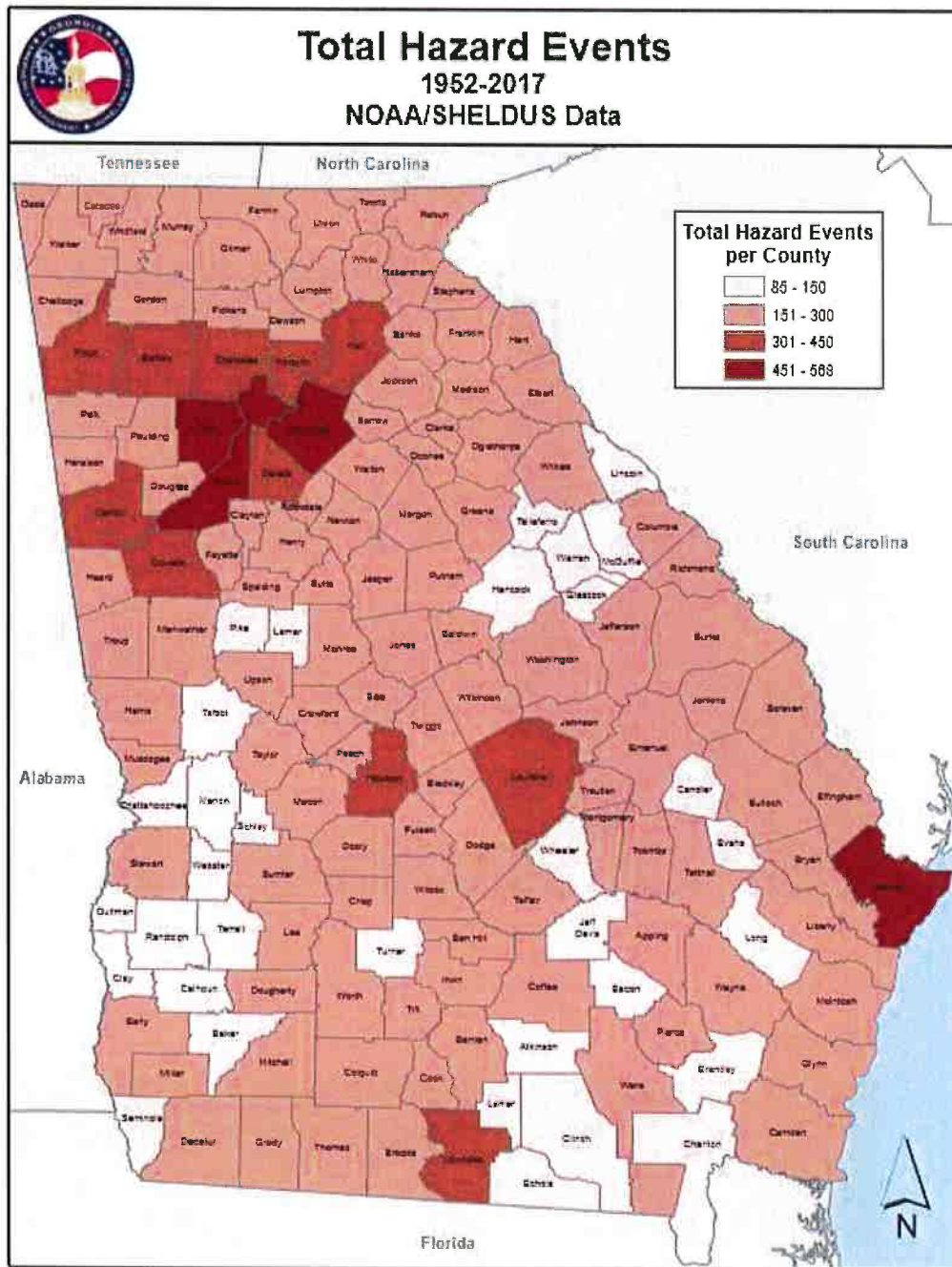
🌪️ 1 Tornado



OpenStreetMap



Source: Federal Emergency Management Agency (FEMA)



Source: 2019 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Demographics

County

	2000 Census	2010 Census	2017 Census Estimates
Population	91,263	96,317	96,471
White	81.3%	76.9%	78.4%
African American	13.3%	14.2%	14.5%
Hispanic/Latino	5.5%	9.3%	10.6%
Asian	0.9%	1.3%	1.5%
American Indian	0.3%	0.4%	0.1%
Two or More Races	1.1%	1.9%	1.7%
Median Age	35.7	37.6	38.3
Median Household Income	\$35,615	-----	\$46,096
Persons in Poverty	14.4%	-----	18.1%
Homeowners	66.8%	63.3%	60.2%

Municipalities

	2000 Census	2010 Census	2017 Census Estimates
Rome	34,980	36,303	36,029
Cave Spring	975	1,200	1,161

Economy

Floyd County’s economy is primarily agricultural with some light industry. Floyd County’s cost of living is 16.9% above the national average. The unemployment rate in Floyd County is 3.7%, which is below the State average of 4.1% and the National average of 4.0%. Floyd County has a median household income of \$46,096, which is well below the national average of \$51,914.

The ten largest private employers in Floyd County are:

Company	Product/Service
Berry College, Inc.	Institute of Higher Education
F&P Georgia	Manufacturing
Floyd Healthcare Management, Inc.	Healthcare
Harbin Clinic, LLC	Healthcare
International Paper Company	Paper Products
Keebler Company	Food Products
Lowes Home Centers, Inc.	Hardware Retail Store
Neaton Rome, Inc.	Auto Products Manufacturing
Redmond Regional Medical Center, Inc.	Healthcare
Walmart	Department Store/Retail

The above list is in alphabetical order, not in order of company size. This data is according to the Georgia Department of Labor, 2019.

Government

The form of government specified in the County Charter is known as Commission-Administrator form of government, which provides for an elected body of five Commissioners, who are elected in staggered four-year terms and a County Administrator to oversee the day to day management of the County. The five county commissioners include two representing the City of Rome and three representing areas outside the City of Rome. Although each County Commissioner is elected as a representative from their respective districts, they represent the interests of the entire county and all its citizens.

The main duties of the Board of Commissioners is to pass local laws, known as ordinances, that regulate a variety of things that promote the health, safety and welfare of the citizens covered by them; to pass a balanced budget each year that funds its own operations as well as to allocate funds to the four Constitutional Officers, other elected officials, the courts and a variety of programs put in place by the State but funded locally; to ensure that necessary services are funded and provided; to set the millage rate for the County government and many other secondary duties.

The Board of Commissioners sets the County millage rate each year to fund a portion of the County budget. They also receive the millage rate that is set by the Board of Education and an assessment by the State which is submitted to the Georgia Department of Revenue each year.

The Board receives, deliberates and passes local ordinances each year and amends many others to reflect the changing times. Both require that a public hearing be held, and these are normally held during the regular Commission meetings. They also pass several resolutions and proclamations throughout the year. Generally, with some exceptions, the Board can pass any local law and ordinance they feel is needed for the County so long as it does not violate the laws of the State or Federal government or the Constitutional rights of any individual. These are researched thoroughly by legal staff before ever being brought to a hearing.

The Board of Commissioners provide many services that citizens expect through the revenues that are raised annually. These include Fire and Ambulance protection; E-911 dispatch services; Zoning and Planning; Inspections; Code Enforcement; Animal Control; Public Library; Public Works; and agencies that service all of these such as Building Maintenance, Vehicle Maintenance, and Emergency Management Services. The budget also funds state mandated services such as Law Enforcement and Detention; Superior, Probate, Magistrate and Juvenile courts; Tax Assessment and Tax Collection services; Elections management; District Attorney (shared with other counties) and some smaller funding for local agencies under the State of Georgia.

Transportation

Floyd County's transportation system consists primarily of state highways and county-maintained roads. US Highways 27 and 411 and Georgia highways 1, 20, 53, 100, 101, 140, 156, and 293 are major transportation routes that carry the majority of passenger and commercial traffic in and out of Floyd County. Congestion in these transportation corridors create traffic problems, primarily because of population growth. There are no interstate, federal highway, or mass transit systems servicing Floyd County.

Norfolk Southern owns and operates freight rail lines that crisscross Floyd County. Additionally, the Chattooga and Chickamauga Railway also operates rail lines in western areas of Floyd County.

Richard B. Russell Regional Airport, near Rome, has two paved runways – one 6,000 feet and one 4,500 feet – that services charter and private aircraft. There are no commercial flights into or out of Richard B. Russell Regional Airport.

Climate

Floyd County, like much of Georgia, enjoys a temperate climate with four well-defined seasons: warm to hot summers; brisk fall temperatures; relatively brief, cool winters; and a warm spring season. As a result, there exists a long growing season in Georgia, perfect for ornamental and economic-boosting agricultural plants.

AVERAGE MONTHLY TEMPERATURES IN GEORGIA (FAHRENHEIT)

Month	Average Georgia Temperature	Average Floyd County Temperature
January	46	42
February	49	44
March	56	53
April	63	62
May	70	69
June	77	77
July	80	79
August	79	79
September	74	73
October	64	61
November	56	50
December	48	45

Utilities

Floyd County’s utility needs are met by a variety of public and private entities.

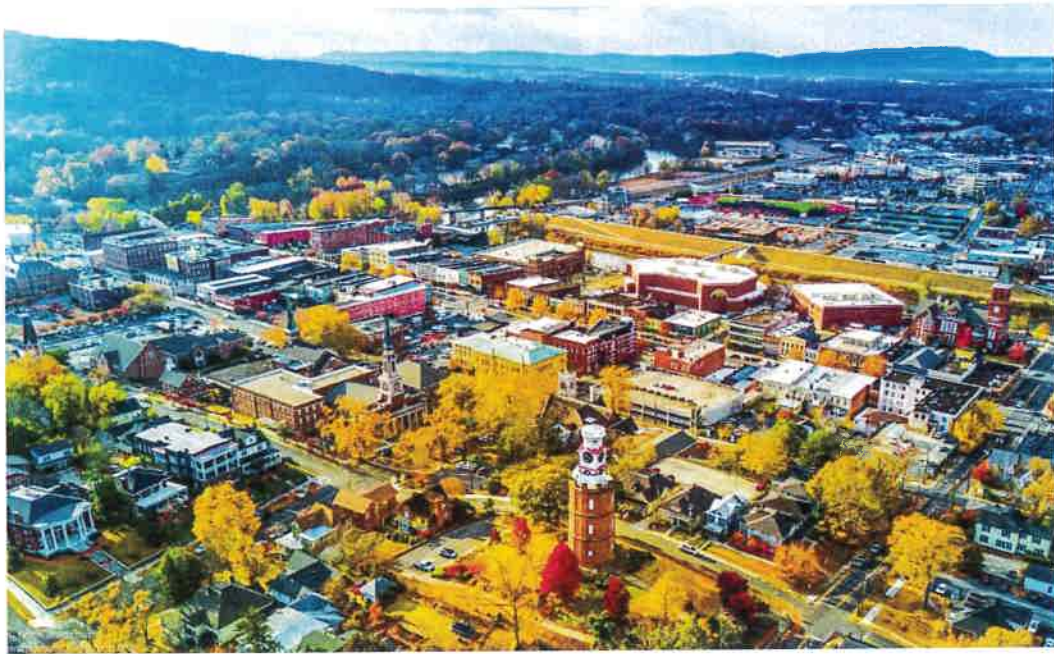
Electrical power in Floyd County is provided by the North Georgia Electric Membership Corporate and Georgia Power.

Atlanta Gas Light is the primary natural gas provider in Floyd County.

NFIP Compliance

JURISDICTION	PARTICIPATING?	PARTICIPATION DATE
FLOYD COUNTY	YES	5/19/1987
ROME	YES	9/15/1978
CAVE SPRING	YES	5/1/1985

Municipalities



City of Rome

The City of Rome was founded in 1834 on the site of a previous Cherokee village and was incorporated as a city in 1847. Rome was built upon seven hills, just like its namesake in Italy, in a valley where the Etowah and Oostanaula Rivers combine to form the Coosa River. Rome became a central hub of activity, particularly as a place of exchange for cotton and local farm produce. During the Civil War, Rome was occupied for several months by Union forces who burned the local industries as the departed the city.

After a disastrous flood in 1886, Rome was rebuilt on foundation of the textile industry. Today, manufacturing remains a key cog of Rome's diversified local economy, which produces a local GDP of over \$4 million annually. Rome is home to two colleges – Shorter and Georgia Highlands. Additionally, Berry College sits just outside the City of Rome. A bronze replica of the Etruscan statue of Romulus and Remus stands in front of Rome's City Hall and was a gift from their Italian counterparts. The city also serves as the home to the Atlanta Braves Class A minor league baseball affiliate – the Rome Braves.

The City of Rome provides a significant number of services to its citizens. This includes administrative, public information, building inspections, sanitation, fire protection, GIS, planning and zoning, community development, downtown development, engineering services, historic preservation, garbage and solid waste

collection, street construction and maintenance, stormwater, public housing, public transportation, parks and recreation, parking, air quality control, law enforcement, transit, water & sewer, and public works.

The City of Rome is governed by a nine-person city commission, who represent three wards within the City of Rome. However, all commission elections are citywide elections. Commissioners are elected to 4-year, staggered terms. The City Commission elect a Mayor and Mayor Pro Tem from amongst themselves. Day-to-day activities, meeting agendas, and direct supervision of city employees is provided by a City Manager.

The City of Rome serves as the economic and commercial base for a significant portion of northwest Georgia. Rome has a large chemical/hazardous materials industrial base. The City of Rome is also particularly susceptible to flooding and sits at the confluence of three waterways.

City of Cave Spring



Cave Spring was established in 1832 by English and Scotch-Irish settlers in Vann's Valley. The town was named for the limestone spring which produces 2 million gallons of water daily inside a cave in the center of the city. Cave Spring became the home to the first public school in Floyd County. The Georgia School for the Deaf was founded in Cave Spring in 1846 by O.P. Fannin with four deaf students meeting in a one-room log cabin. The school is still in operation today and sits on a 480-acre campus. As a result, many citizens of Cave Spring have adopted a second language – American Sign Language – to be able to properly communicate with the students from the school when they are off campus.

The City was incorporated in 1852 and Cave Spring saw population growth associated with the new railway that ran from Atlanta to Chattanooga. Soon, additional rail lines were established to connect Selma, Alabama to Rome and

Dalton. It was around this time in the late 1800s that the railroad depot was built in Cave Spring.

The City of Cave Spring provides several services to its citizens. These include Administrative, water, wastewater, public works, sanitation, fire protection, and law enforcement.

Cave Spring is governed by a mayor and five councilmembers who are elected to one of five “posts” by the citizens of Cave Spring. Councilmembers are elected to staggered four-year terms.

CHAPTER THREE
-
HAZARD PROFILES

Summary of Updates for Chapter Three

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Floyd County Hazard Mitigation Plan 2016.

Chapter 3 Section	Updates
Risk Assessment	<ul style="list-style-type: none"> • Expanded the explanation of the Risk Assessment • Added an explanation of each part of the Hazard Information
Natural Hazard Thunderstorms	<ul style="list-style-type: none"> • Content Revised • Data Updated
Natural Hazard Winter Storms	<ul style="list-style-type: none"> • Content Revised • Data Updated
Natural Hazard Flooding	<ul style="list-style-type: none"> • Incorporated 2020 HAZUS Report Information • Content Revised • Data Updated
Natural Hazard Tornado	<ul style="list-style-type: none"> • Incorporated 2020 HAZUS Report Information • Content Revised • Data Updated
Natural Hazard Drought	<ul style="list-style-type: none"> • Content Revised • Data Updated
Natural Hazard Wildfire	<ul style="list-style-type: none"> • Content Revised • Data Updated
Natural Hazard Earthquake	<ul style="list-style-type: none"> • Content Revised • Data Updated
Natural Hazard Tropical Cyclone	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Technological Hazard Hazardous Materials	<ul style="list-style-type: none"> • Content Revised

	<ul style="list-style-type: none"> • Incorporated Groundwater Contamination Section • Data Updated
Technological Hazard Dam Failure	<ul style="list-style-type: none"> • Content Revised • Data Updated
Technological Hazard Transportation	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Technological Hazard Terrorism	<ul style="list-style-type: none"> • New Section – Not in 2016 Plan
Technological Hazard Infrastructure Failure	<ul style="list-style-type: none"> • New Section – Not In 2016 Plan
Technological Hazard Emerging Infectious Disease	<ul style="list-style-type: none"> • New Section – Not In 2016 Plan

Risk Assessment

Requirement §201.6(c)(2)(i and ii)

Requirement §201.6(d)(3)

The Floyd County Hazard Mitigation Planning Committee conducted a comprehensive Threat and Hazard Identification and Risk Assessment (THIRA) for Floyd County and all municipalities. This assessment developed the hazard basis for this plan. The assessment includes the following components for each hazard:

1. *Hazard Identification*: The Floyd County Hazard Mitigation Planning Committee identified nine natural hazards and six technological hazards for this Hazard Mitigation Plan. This is an increase of one natural hazards and four technological hazard from the previous iteration of the plan. Each hazard was identified using statistical data and records from a variety of sources. The list of hazards is based upon frequency, severity of impact, probability, potential losses, and vulnerability.
2. *Hazard Description*: Each hazard was described in detail. Many hazard descriptions came from the Georgia Hazard Mitigation Plan since many of the hazards that could impact the state could also potentially impact Floyd County.
3. *Profile of Hazards*: Each hazard was profiled as to how it could potentially impact Floyd County.
4. *Assets Exposed to the Hazard*: The plan considers critical facilities and infrastructure as part of the vulnerability assessment. This assessment determines the vulnerability of the municipalities and attempts to identify the populations most vulnerable to each hazard, although many have potential countywide impacts.
5. *Estimated Potential Losses*: Using critical facility and past history data, an estimation of potential losses due to a particular hazard event were determined.
6. *Land Use and Development Trends*: Land use trends were considered when determining the potential future impacts of each hazard. This is of particular importance regarding flooding and dam failure events.
7. *Multi-Jurisdictional Concerns*: Each jurisdiction was considered when determining the potential hazard impact.

At the second meeting of the Floyd County Hazard Mitigation Plan Update Committee, the attendees participated in a risk assessment of hazard for Floyd County. This risk assessment was based upon two primary factors: 1. How likely is a hazard to occur; 2. How prepared the committee meeting participants felt the community was for each hazard. This risk assessment relied on the committee meeting attendees to identify the hazards and then rank them by those two factors. As a result, the risk assessment could be skewed by the meeting participants, recency bias, and/or how the hazard would directly impact the organizations represented at this meeting. After additional discussion with the Floyd County Hazard Mitigation Plan Update committee at future meetings, the hazards in this chapter were the agreed upon list. Several of the hazards identified by the committee members were consolidated into expanded hazard descriptions. Those incorporations are notated in the below hazard ranking.

Hazard	Likelihood Score	Preparedness Score	Total Score
Flood	33	13	46
Severe Thunderstorm	38	2	40
Terrorism	2	25	27
Severe Winter Weather	8	11	19
Tornado	9	8	17
Civil Unrest*	0	14	14
Utility Incident/Failure**	5	6	11
Wildfire	2	6	8
Pandemic	6	2	8
Transportation Incident	4	2	6
Dam Failure	0	6	6
Earthquake	0	6	6
Hazardous Materials Incident	0	4	4
Recreational Incident***	3	0	3
Drought	0	3	3
Tropical Cyclone	0	0	0
Paper Mills/Lumber Yard Incident****	0	0	0

* Civil Unrest is combined with Terrorism

** Utility Incident/Failure expanded to Infrastructure Failure

*** Recreational Incident is covered under Transportation Incident

**** Paper Mills/Lumber Yard Incident is covered under Hazardous Materials Incident

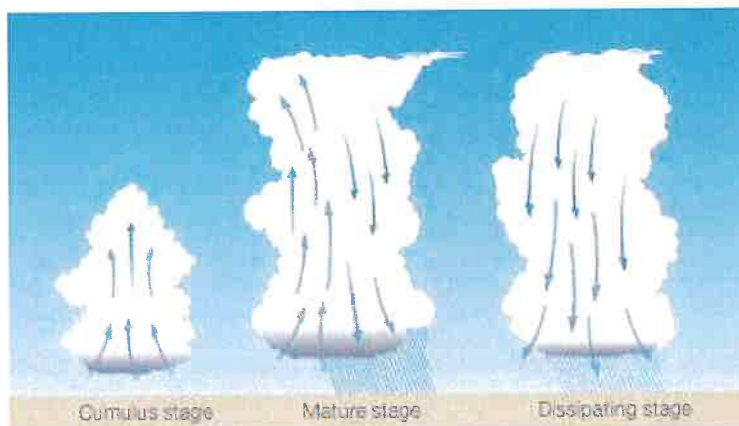
Natural Hazard: Severe Thunderstorm

Hazard Description

This section provides general and historical information about thunderstorms, including high wind, lightning, and hail. Other elements of thunderstorms, such as tornadoes and flooding, are addressed in their own sections.

Thunderstorms are formed when moist air near the earth's surface is forced upward through some catalyst (convection or frontal system). As the moist air rises, the air condenses to form clouds. Because condensation is a warming process, the cloud continues to expand upward. When the initial updraft is halted by the upper troposphere, both the anvil shape and a downdraft form. This system of up-drafting and down-drafting air columns is termed a "cell."

As the process of updrafts and downdrafts feeds the cell, the interior particulates of the cloud collide and combine to form rain and hail, which falls when the formations are heavy enough to push through the updraft. The collision of water and ice particles within the cloud creates a large electrical field that must discharge to reduce charge separation. This discharge is the lightning that occurs from cloud to ground or cloud to cloud in the thunderstorm cell. In the final stage of development, the updraft weakens as the downdraft-driven precipitation continues until the cell dies.



Each thunderstorm cell can extend several miles across its base and to reach 40,000 feet in altitude. Thunderstorm cells may compound and move abreast to form a squall line of cells, extending farther than any individual cell's potential.

In terms of temporal characteristics, thunderstorms exhibit no true seasonality in that occurrences happen throughout the year. Convectively, driven systems dominate the summer while frontal driven systems dominate during the other seasons. The rate of onset is rapid in that a single cell endures only 20 minutes.

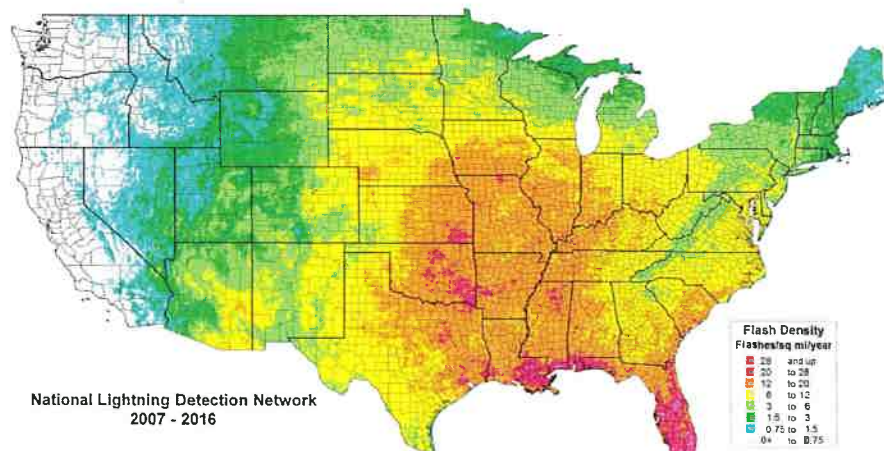
Natural Hazard: Severe Thunderstorm

However, various cells in different stages of development may form a thunderstorm that lasts up to a few hours as it moves across the surface.

In terms of magnitude, the National Weather Service defines thunderstorms in terms of severity as a severe thunderstorm that produces winds greater than 57 mph and/or hail of at least 1 inch in diameter and/or a tornado. The National Weather Service chose these measures of severity as parameters more capable of producing considerable damage. Therefore, these are measures of magnitude that may project intensity.

Lightning

Lightning occurs when the difference between the positive and negative charges of the upper layers of the cloud and the earth's surface becomes great enough to overcome the resistance of the insulating air. The current flows along the forced conductive path to the surface (in cloud to ground lightning) and reaches up to 100 million volts of electrical potential. In Georgia, lightning strikes peak in July, with June and August being second highest in occurrence.



Hail

Hail is a form of precipitation that forms during the updraft and downdraft-driven turbulence within the cloud. The hailstones are formed by layers of accumulated ice (with more layers creating larger hailstones) that can range from the size of a pea to the size of a grapefruit. Hailstones span a variety of shapes but usually take a spherical form. Hailstorms mostly endanger cars but have been known to damage aircraft and structures.

Natural Hazard: Severe Thunderstorm

Halfstone size	Measurement		Updraft Speed	
	in.	cm.	mph	km/h
bb	< 1/4	< 0.64	< 24	< 39
pea	1/4	0.64	24	39
marble	1/2	1.3	35	56
dime	7/10	1.8	38	61
penny	3/4	1.9	40	64
nickel	7/8	2.2	46	74
quarter	1	2.5	49	79
half dollar	1 1/4	3.2	54	87
walnut	1 1/2	3.8	60	97
golf ball	1 3/4	4.4	64	103
hen egg	2	5.1	69	111
tennis ball	2 1/2	6.4	77	124
baseball	2 3/4	7.0	81	130
tea cup	3	7.6	84	135
grapefruit	4	10.1	98	158
softball	4 1/2	11.4	103	166

Hazard Profile

Severe thunderstorms, including high winds, hail and lightning, are a serious threat to the residents and infrastructure of Floyd County. Severe thunderstorms are one of the most frequently occurring natural hazards in Floyd County. Many of these storms include high winds, lightning, and hail. Hail up to 3 inches was recorded in Floyd County on several occasions, most recently in 1973. Thunderstorm winds of 100 mph have been reported in Floyd County, most recently in 2013. While there have been dozens of documented thunderstorm events affecting Floyd County over the last 50 years, it is likely that the official number is a low estimate due to poor record keeping in decades past. For example, only 22 thunderstorms events were recorded between 1970 and 1990, likely a vast underestimation of actual events.

Most of the available information relating to severe thunderstorm events in Floyd County fails to describe damage estimates in any detail. With each thunderstorm event, there are likely unreported costs related to infrastructure costs, public safety response costs, utility repair costs, and personal home and business repair costs.

Natural Hazard: Severe Thunderstorm

Thunderstorms have occurred during all parts of the day and night and in every month in Floyd County.

The Floyd County Hazard Mitigation Plan Update Committee utilized data from the National Climatic Data Center, the National Weather Service, numerous weather-related news articles, and the Floyd County LEOP in researching severe thunderstorms and their potential impacts on the county. All information has been gathered on a countywide basis. All thunderstorm hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

During the last 50 years, 245 thunderstorm events were recorded in Floyd County, with 223 of those occurring in the last 30 years. According to these records, Floyd County has a 2.04% chance daily of a thunderstorm event based upon data from the last 30 years. Over the last 10 years, Floyd County has averaged 7.3 thunderstorm events per year (73 events). Due to improved record keeping protocols, the Floyd County Hazard Mitigation Plan Update Committee believes the data from the last ten years provides a more accurate representation of the thunderstorm threat to the county. The Floyd County Hazard Mitigation Plan Update Committee has also determined that the lightning threat is severely under-reported, as shown in the NCDC data numbers. For additional historical data, please see Appendix D.

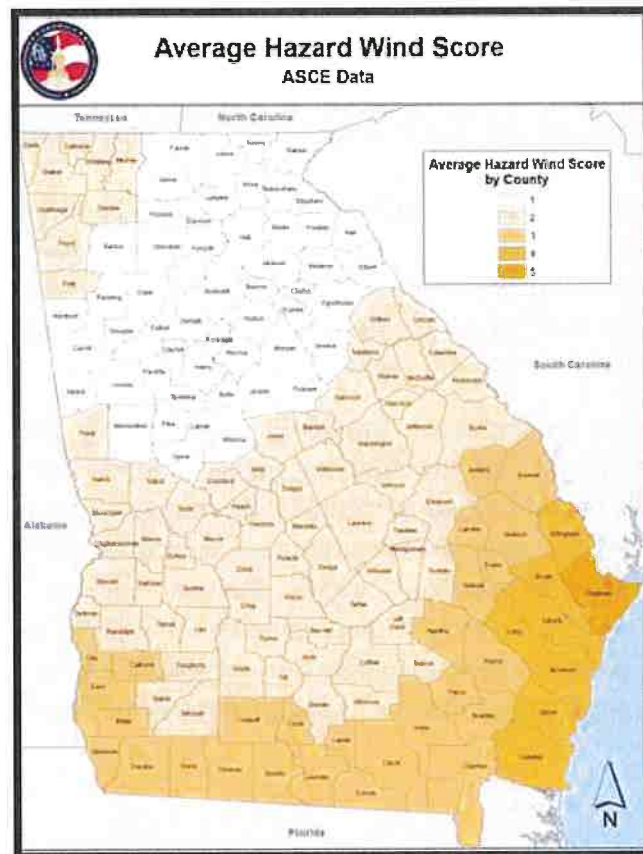
The City of Cave Spring suffered a significant Thunderstorm wind event in 2011. This event had reported winds of 60 mph, damaged 137 residences and 13 commercial buildings. Overall, 32 roads were closed due to down trees and 15,000 homes were without power. In total, \$20 million in damages was reported related to this thunderstorm wind event.

As indicated by the below graphics, Floyd County averages between 6 and 12 flashes of cloud to ground lightning per square mile per year. That equals a 1.6% to 3.3% chance of a cloud-to-ground lightning strike on any given day. This shows a much higher indication of lightning occurrences than has been reported to the National Weather Service and the National Climatic Data Center. It is the determination of the Floyd County Hazard Mitigation Plan Update Committee that this data shows a more accurate representation of the scope of the threat that lightning poses to the citizens and infrastructure of Floyd County.

Natural Hazard: Severe Thunderstorm

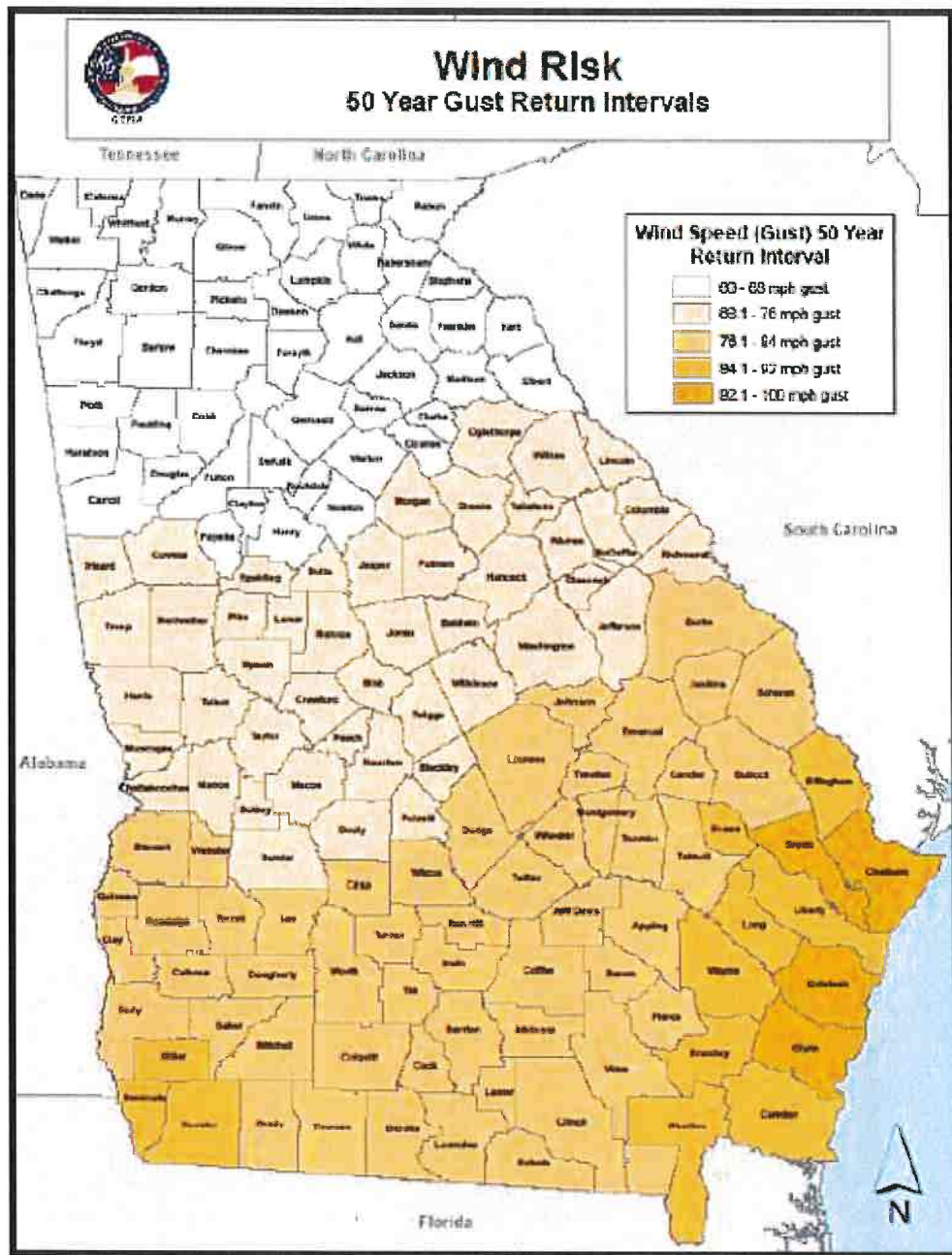
Severe thunderstorm winds, which are defined as winds of at least 58 mph in conjunction with a convective event, have occurred with many thunderstorms that have affected Floyd County. These winds can exceed 100 mph and cause damage comparable to weak tornadoes. Below are two maps that identify the wind risk and the hazard wind score for the State of Georgia, including Floyd County. The Hazard Wind Score maps use the following scale:

Hazard Score	Wind Speeds
1	<90 mph gust
2	91 – 100 mph gust
3	101 – 110 mph gust
4	111 – 120 mph gust
5	>120 mph gust



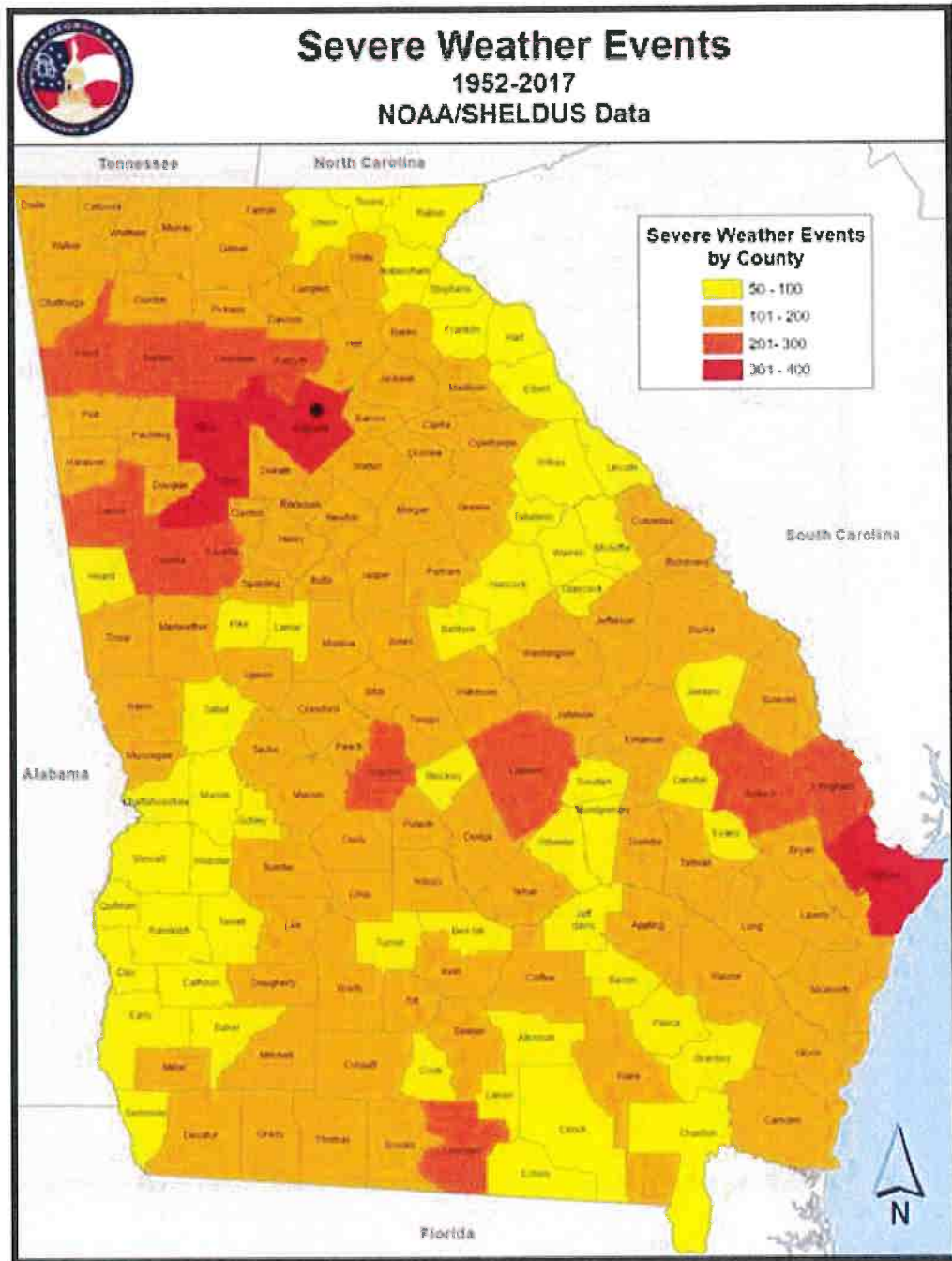
Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm

Assets Exposed to the Hazard

In evaluating assets that are susceptible to severe thunderstorms, the Floyd County HMPC determined that all public and private property is at threat by severe thunderstorms, including all critical facilities. This is due to the lack of spatially prejudice of severe thunderstorm events.

Thunderstorms by Jurisdiction

Jurisdiction	# of Thunderstorms	Annual Risk
Cave Spring	23	92%
Rome	72	100%
Unincorporated Floyd County	35	100%

Source: National Climactic Data Center (NCDC)

Note: Data is for the last 25 years

Estimated Potential Losses

Estimates of damage for the past events of the last 50 years are over \$31.1 million, or 623,320 annually. When only the last 30 years are considered, annual estimated damage increases significantly to \$1,224,440. These numbers are thought to be a gross underestimation of actual past damages.

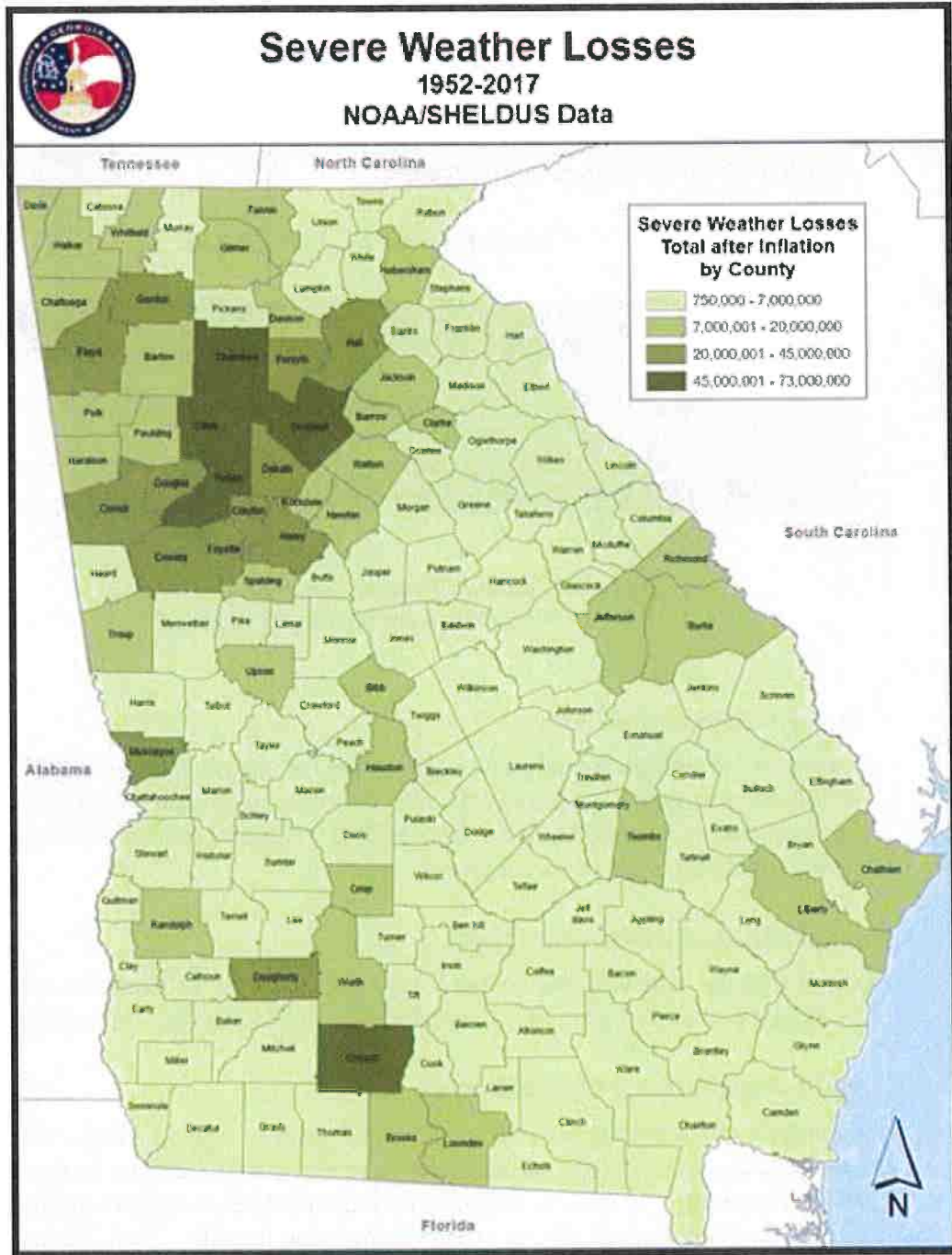
Land Use & Development Trends

Floyd County currently has no land use trends related to Thunderstorms beyond continued population growth – particularly in and around the City of Rome.

Multi-Jurisdictional Considerations

Thunderstorm events have occurred across all areas of Floyd County. Crop damage from thunderstorm events would likely have the greatest impact in the rural areas of Floyd County. However, property damage numbers would be highest in more heavily populated areas due to greater population density. This is especially true for areas in and around the City of Rome Floyd County. Additionally, Floyd County's tourism industry could be significantly impacted by thunderstorm events and any widespread damage associated with those events. Thunderstorms have the potential to impact all areas of Floyd County.

Natural Hazard: Severe Thunderstorm



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Severe Thunderstorm**

Hazard Summary

Thunderstorm events pose one of the greatest threats of property damage, injuries, and loss of life in Floyd County. Thunderstorm events are the most frequently occurring weather event that threatens Floyd County. As a result, the Floyd County HMPC recommends that the mitigation measures identified in this plan for thunderstorms should be aggressively pursued due to the frequency of this hazard and the ability for this hazard to affect any part of Floyd County.

Severe Thunderstorm Events in Floyd County Since 2016

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								0	1	374.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	04/06/2016	20:21	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
<u>CRYSTAL SPGS</u>	FLOYD CO.	GA	06/01/2016	14:42	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	06/12/2016	14:35	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/12/2016	14:35	EST-5	Thunderstorm Wind	55 kts. EG	0	0	8.00K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	06/15/2016	20:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>FORRESTVILLE</u>	FLOYD CO.	GA	06/17/2016	12:45	EST-5	Thunderstorm Wind	45 kts. EG	0	0	2.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	09/12/2016	18:32	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	03/21/2017	19:00	EST-5	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	04/05/2017	19:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
<u>FOSTERS MILLS</u>	FLOYD CO.	GA	05/23/2017	19:05	EST-5	Lightning		0	0	1.00K	0.00K

SILVER CREEK	FLOYD CO.	GA	05/23/2017	19:05	EST-5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
ROME	FLOYD CO.	GA	05/23/2017	19:05	EST-5	Lightning		0	0	25.00K	0.00K
FORRESTVILLE	FLOYD CO.	GA	05/23/2017	19:05	EST-5	Lightning		0	0	2.00K	0.00K
LINDALE	FLOYD CO.	GA	05/23/2017	19:10	EST-5	Lightning		0	0	1.00K	0.00K
LAVENDER	FLOYD CO.	GA	05/23/2017	19:10	EST-5	Lightning		0	0	10.00K	0.00K
LIVINGSTON	FLOYD CO.	GA	05/28/2017	03:40	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
GARDEN LAKES	FLOYD CO.	GA	06/15/2017	15:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
RELAY	FLOYD CO.	GA	06/15/2017	16:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
VANS VLY	FLOYD CO.	GA	06/23/2017	16:30	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	07/15/2017	13:27	EST-5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
ROSEMONT PARK	FLOYD CO.	GA	04/04/2018	00:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
ROSEMONT PARK	FLOYD CO.	GA	06/01/2018	13:54	EST-5	Thunderstorm Wind	45 kts. EG	0	0	10.00K	0.00K
(RMG)RUSSELL FLD ROM	FLOYD CO.	GA	06/28/2018	12:18	EST-5	Lightning		0	0	1.00K	0.00K
GARDEN LAKES	FLOYD CO.	GA	06/28/2018	12:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
LIVINGSTON	FLOYD CO.	GA	06/28/2018	12:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
ROSEDALE	FLOYD CO.	GA	07/04/2018	00:45	EST-5	Thunderstorm Wind	50 kts. EG	0	1	10.00K	0.00K

PINSON	FLOYD CO.	GA	07/21/2018	04:45	EST-5	Thunderstorm Wind	55 kts. EG	0	0	4.00K	0.00K
GARDEN LAKES	FLOYD CO.	GA	05/09/2019	14:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
HANEY	FLOYD CO.	GA	06/20/2019	04:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
LAVENDER	FLOYD CO.	GA	07/31/2019	14:55	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
GARDEN LAKES	FLOYD CO.	GA	08/19/2019	15:10	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
HERMITAGE	FLOYD CO.	GA	01/11/2020	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
COOSA	FLOYD CO.	GA	04/09/2020	02:37	EST-5	Thunderstorm Wind	40 kts. EG	0	0	5.00K	0.00K
FORRESTVILLE	FLOYD CO.	GA	04/09/2020	02:39	EST-5	Thunderstorm Wind	40 kts. EG	0	0	10.00K	0.00K
FORRESTVILLE	FLOYD CO.	GA	04/09/2020	02:40	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
RELAY	FLOYD CO.	GA	04/12/2020	23:32	EST-5	Thunderstorm Wind	40 kts. EG	0	0	2.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	04/12/2020	23:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
MT BERRY	FLOYD CO.	GA	04/12/2020	23:35	EST-5	Thunderstorm Wind	40 kts. EG	0	0	2.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	04/12/2020	23:43	EST-5	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K

Natural Hazard: Winter Storm*Hazard Description*

Severe winter storms bring the threat of ice and snow. There are many types of frozen precipitation that could create a severe winter weather event. Freezing rain consists of super cooled falling liquid precipitation freezing on contact with the surface when temperatures are below freezing. This results in an ice glazing on exposed surfaces including buildings, roads, and power lines. Sleet is easily discernable from freezing rain in that the precipitation freezes before hitting the surface. Often this sleet bounces when hitting a surface and does not adhere to the surface. However, sleet can compound into sufficient depths to pose some threat to motorists and pedestrians.

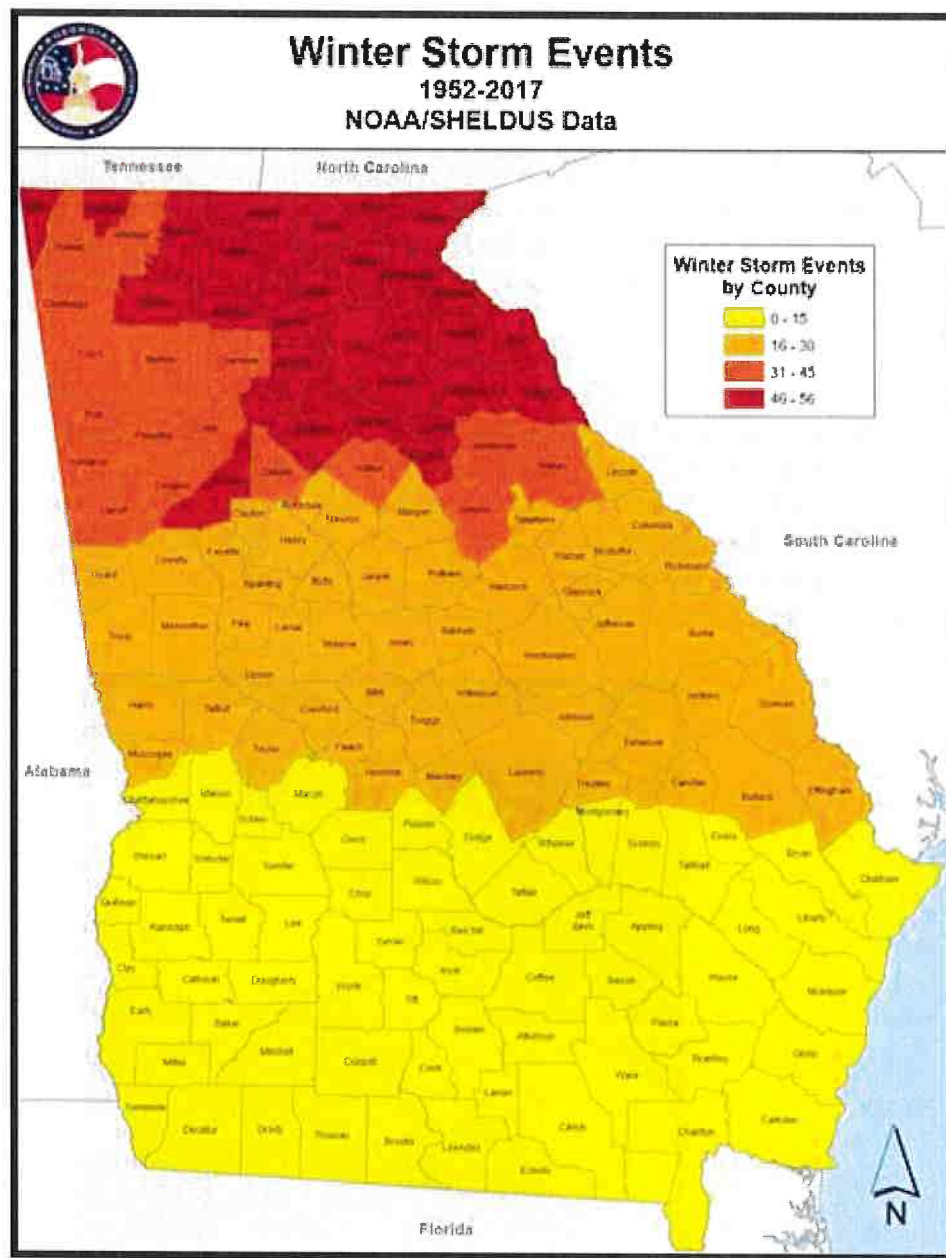
A heavy accumulation of ice, which is often accompanied by high winds, can devastate infrastructure and vegetation. Destructiveness in the southern states is often amplified due to the lack of preparedness and response measures. Also, the infrastructure was not designed to withstand certain severe weather conditions such as weight build-up from snow and ice. Often, sidewalks and streets become extremely dangerous to pedestrians and motorists. Primary industries, such as farming and fishing, suffer losses through winter seasons that produce extreme temperatures and precipitation.

Severe winter weather exhibits seasonal qualities in that most occur within the months of January to March, with the highest probability of occurrence in February. The rate of onset and duration varies from storm to storm, depending on the weather system driving the storm. Severe winter weather rarely frequents the State of Georgia. However, the impacts of the storms substantiate severe winter weather's inclusion in the risk assessment.

Hazard Profile

While winter storms are not as frequent of an occurrence in Floyd County as they are in areas in the Northern US, they still have the potential to wreak havoc on the community when they do occur. Winter storms in Floyd County typically cause drastic damage to infrastructure, such as roads, power lines, and bridges. They also can cause damage to private property, businesses, and trees throughout the county. The large number of trees in Floyd County can also become a hazard when the tree limbs become weighed down with snow and ice and begin to break and fall to the ground, potentially damaging private property, public property, or injuring people and animals.

Natural Hazard: Winter Storm

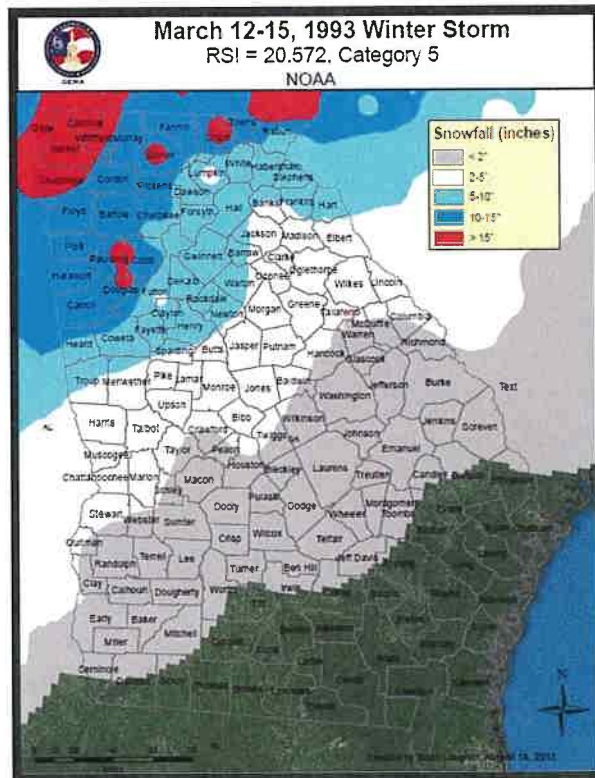


Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Winter Storm**

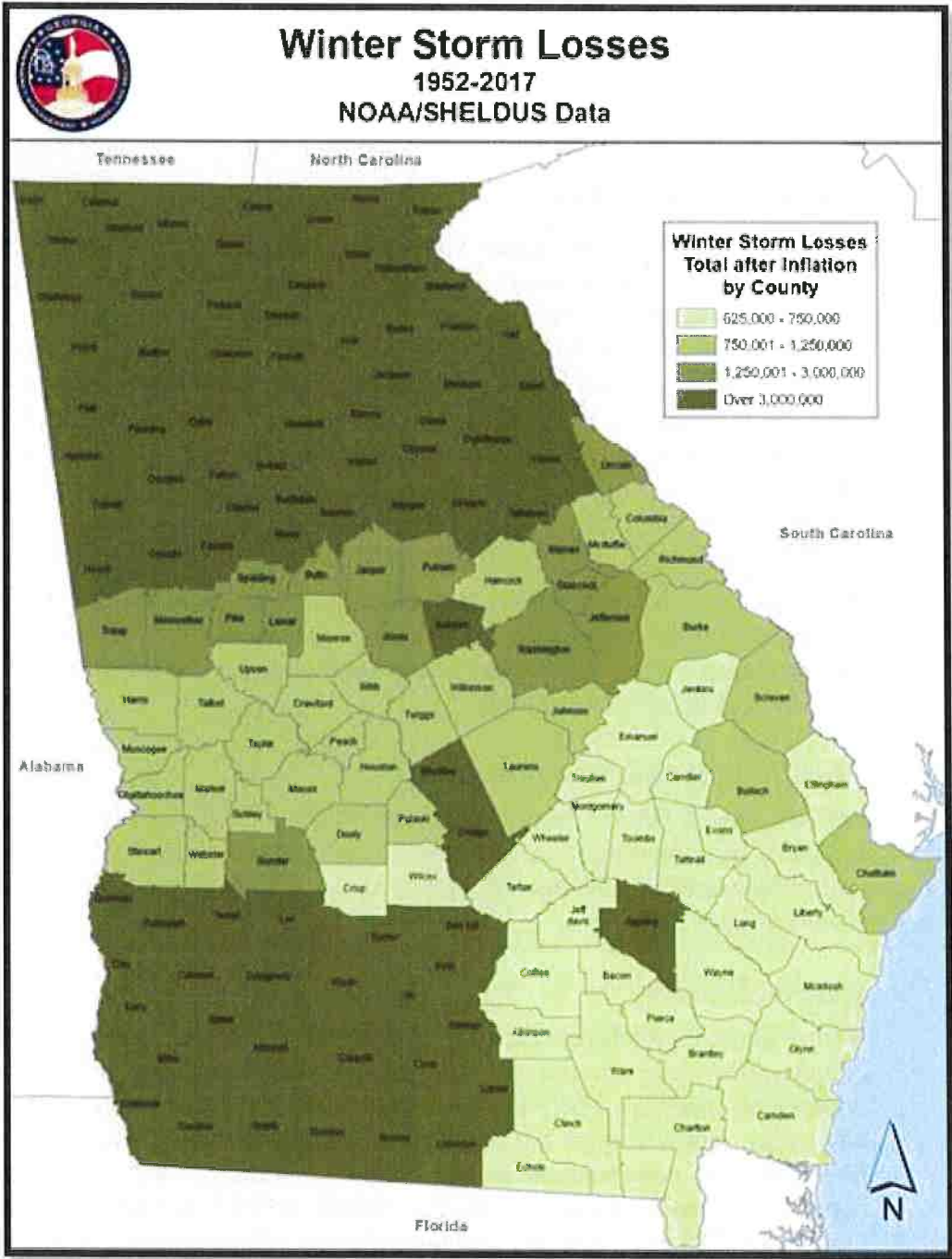
During the past 25 years, documentation exists for 40 winter storm events in Floyd County. No comprehensive data can be located prior to this timeframe. On average, Floyd County averages 1.6 winter storms per year. Due to improved record keeping techniques, the HMPC believes that looking at the record for the last 25-year period provides a more accurate representation of the threat of winter storms for Floyd County. All winter storm data has been gathered on a countywide basis. For additional historical data, please see Appendix D. All winter storm hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

Individual events of Winter Weather can be drastically different depending on many factors, including the duration of the event, the type of precipitation involved, and the depth of the precipitation. Winter Storm events can be a light dusting of snow, ¼ inch of ice, or over a foot of snow. Other factors, such as wind, can influence the strength of these events. In the 1993 Winter Storm events, snow accumulations in excess of 15 inches were reported in areas of Floyd County with almost all areas receiving over 10 inches of snow.



Source: 2014 State of Georgia Hazard Mitigation Strategy (most up-to-date version)

Natural Hazard: Winter Storm



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Winter Storm**

Assets Exposed to the Hazard

Since winter storms are indiscriminate regarding location, the Floyd County HMPC determined that all public and private property, including all critical infrastructure, are susceptible to impacts from winter storms.

Estimated Potential Losses

Total estimated losses for winter storm events of the last 50 years indicate a total of over \$1.05 million in losses. Extrapolated over 50 years, this averages out to \$21,060 per year. However, all the documented winter storms with loss information have occurred over the last 25 years. As such, the average loss per year for the last 25 years is \$42,120 per year. It is estimated that these numbers are a gross underestimation of the impact of past winter storms and caution is expressed when using these figures to make loss determinations for winter storms in Floyd County.

Land Use & Development Trends

Floyd County currently has no land use trends related to Winter Storms beyond continued population growth – particularly around the City of Rome. The large forested areas within Floyd County increase the likelihood of major travel impacts as a result of winter storm events.

Multi-Jurisdictional Considerations

All portions of Floyd County could potentially be impacted by a winter storm, including freezing rain, sleet, and snow. Therefore, all mitigation actions identified regarding winter storms should be pursued on a countywide basis and including all municipalities.

Hazard Summary

Winter storms, which can include freezing rain, sleet, or snow, typically afford communities some advance warning, which is different from many other severe weather phenomena. The National Weather Service issues winter storm watches, advisories, and warnings as much as a day before the storm's impacts begin. Unfortunately, communities in the Southern United States are oftentimes not equipped to handle winter storms due to their relative infrequent nature. Floyd County HMPC recognizes the potential threats winter storms could have on the community and have identified specific mitigation actions as a result.

Natural Hazard: **Winter Storm**

Winter Storm Events since 2015 in Floyd County

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/20/2016	04:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/22/2016	16:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/08/2016	20:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/06/2017	15:30	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/08/2017	09:00	EST-5	Winter Storm	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/08/2018	04:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/16/2018	15:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/08/2020	06:00	EST-5	Winter Weather	0	0	0	0.00K	0.00K

Natural Hazard: Flooding

Requirement §201.6(c)(2)(ii)

Requirement §201.6(c)(3)(ii)

Hazard Description

Flooding is a temporary overflow of water on normally dry lands adjacent to the source of water, such as a river, stream, or lake. The causes of flooding include mass sources of precipitation, such as tropical cyclones, frontal systems, and isolated thunderstorms combined with other environmental variables, such as changes to the physical environment, topography, ground saturation, soil types, basin size, drainage patterns, and vegetative cover. Adverse impacts may include structural damages, temporary backwater effects in sewers and drainage systems, death of livestock, agricultural crop loss, loss of egress and access to critical facilities due to roads being washed-out or over-topped and unsanitary conditions by deposition of materials during recession of the floodwaters.

Floods are loosely classified as either coastal or riverine. Coastal flooding occurs when normally dry, low-lying land is flooded by sea water. Coastal flooding is usually associated with tropical cyclones in Georgia. Riverine flooding occurs from inland water bodies such as streams and rivers. Riverine flooding is often classified based on rate of onset. The first is slow to build, peak, and recede, often allowing sufficient time for evacuations. The other type of riverine flood is referred to as a “flash” flood, which rapidly peaks and recedes, thus giving insufficient time for evacuations. Flash floods are typically considered the most dangerous.

On a broad scale, flooding can occur around any body of water or low-lying surface given enough precipitation or snowmelt. The spatial extent of the flooding event depends on the amount of water overflow but can usually be mapped because of existing floodplains (areas already prone to flooding).

Flooding in Georgia is highly dependent on precipitation amounts and is highly variable. Certain seasons are more prone to flooding to a greater likelihood of excessive precipitation. Typically, the wet seasons are during the winter, early spring, and midsummer. Late spring and fall are usually drier seasons.

Hazard Profile

The Floyd County HMPC researched flooding information for the last fifty years. The main sources of information used by the Floyd County HMPC came from the National Climatic Data Center, the Floyd County Emergency Operations Plan, and news media sources. It was determined that flooding has caused significant damage on many occasions over the last 20 years. One significant flooding event that affected Floyd County was a flash flood event in 2003. Nearly 30 roads were closed due to flooding and \$1 million in damages was reported.

Natural Hazard: Flooding

Flood events within Floyd County are typically associated with areas of special flood hazard as identified on Flood Rate Insurance Maps (FIRMs) published by FEMA. Relatively little information is available regarding flooding damage estimates. However, with each flooding event, it is likely that significant costs arose related to road repair, infrastructure repair, and public safety response operations. Most of the flood damage in Floyd County's history appears to be related to roads and culverts washing out as a result of flood waters.

The Oostanaula River gage in Rome provides adequate data to show how a flood near that area would impact the City of Rome. The gage is located near the confluence of the Oostanaula and Etowah Rivers. When Oostanaula River reached 25 feet, flood stage begins and the flood gate on the Rome levee must be closed. At 28 feet, water begins to enter the basements of buildings on the lower two blocks near the flood gage as moderate flood stage is reached. At 30 feet, water enters the Georgia Power Maintenance Yard at the Etowah River. At 32 feet, major flood stage is reached and the Fifth Avenue bridge must be closed. Water also begins to inundate the Rome Sewage Treatment Plant at 32 feet. At 36 feet, water will overflow the lowest point of Summerville Road and six city blocks of basements will be flooded near the Oostanaula River. At 42 feet, the water level of the Oostanaula would reach the top of the Rome levee and flood waters would begin to enter the Floyd Medical Center and Law Enforcement Center. The record level of 40.3 occurred in 1886.

The gage located on the Coosa River at the Rome Mayo Bar Lock and Dam also provides impact information for unincorporated areas of Floyd County. At this location, flood stage is reached at 24 feet, which would lead to flooding of woodlands, fields, and pastures upstream and downstream from the gage. The boat ram at Lock and Dam Park would be mostly under water at this stage. At 29 feet, water will reach the top of the old Lock and Dam structure. At 31 feet, moderate flood stage is reached as water reaches low portions of the parking lot near the picnic table pavilion and the side yard of a home on Blacks Bluff Road begins to flood. At 33 feet, the home on Blacks Bluff Road would be surrounded by water. At 35 feet, water covers the picnic pavilion, the parking lot, campground areas in the park, and Lock and Dam Road begins to flood. The home on Blacks Bluff Road also begins to flood. Major flood stage is reached at 37 feet. At this level, the home on Blacks Bluff Road would be inundated by up to two feet of water.

There are 30 documented flood events over the last 50 years. Based on the 50-year record, it can be inferred that such an event is likely to occur every 1.67 years in Floyd County. This relates to a 60% chance of a flood event occurring in a given

Natural Hazard: Flooding

year. However, all flooding events have occurred over the last 20 years. This would increase the documented likelihood of a flooding event to 100%.

The City of Rome and the City of Cave Spring are both at high risk for riverine flood events. The City of Rome is situated at the confluence of the Etowah and Oostanaula Rivers, which form the Coosa River. All three rivers pose a significant threat to downtown Rome and the surrounding areas. This is particularly true of the areas along the Oostanaula River north of the confluence and the Coosa River south of the confluence. Potential impacts are described in greater detail above.

For the City of Cave Spring, the main flood threat comes from Little Cedar Creek, which dissects the heart of the jurisdiction. A 100-year flood event would cause significant flooding in homes and businesses in the eastern half of Cave Spring. Many homes and businesses along Rome Road, Alabama Street, Georgia Avenue, Cedarwood Road, School Circle, Love Street, Fanning Street, Craven Street, Mill Street, Park Street, Hughes Street, Fincher Street, River Street, and Broad Street could see impacts. Areas along Rome Road, Cedarwood Road, Georgia Avenue, and Hughes Street could see inundation of up to 6 feet of water in some areas.

Unincorporated areas in western Floyd County and northern Floyd County also face a significant risk of flood events.

For additional historical data, please see Appendix D.

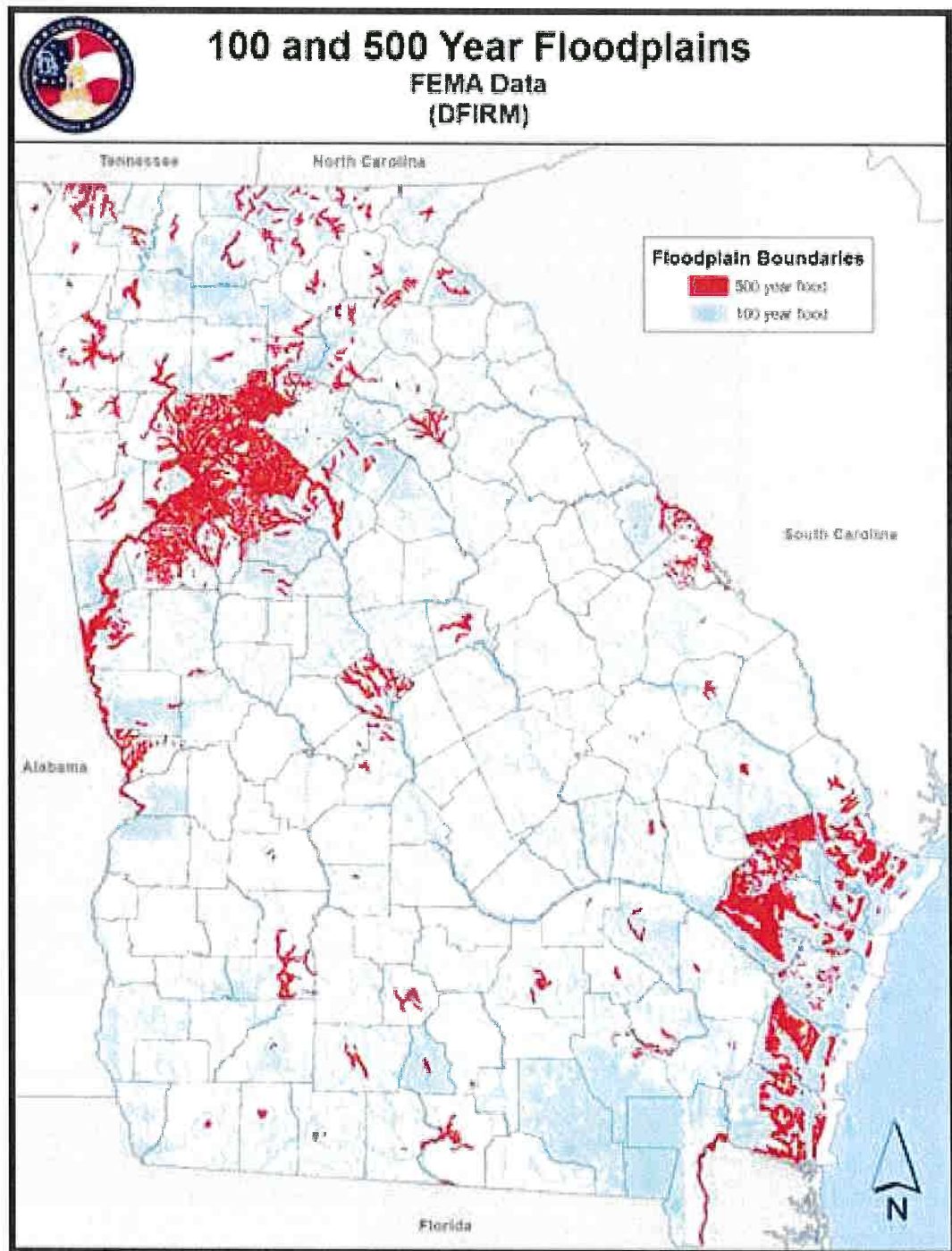
Assets Exposed to the Hazard

To evaluate the assets that would potentially be impacted by flooding, the Floyd County HMPC attempted to identify known structures within, or close to, the 100-year floodplain.

Estimated Potential Losses

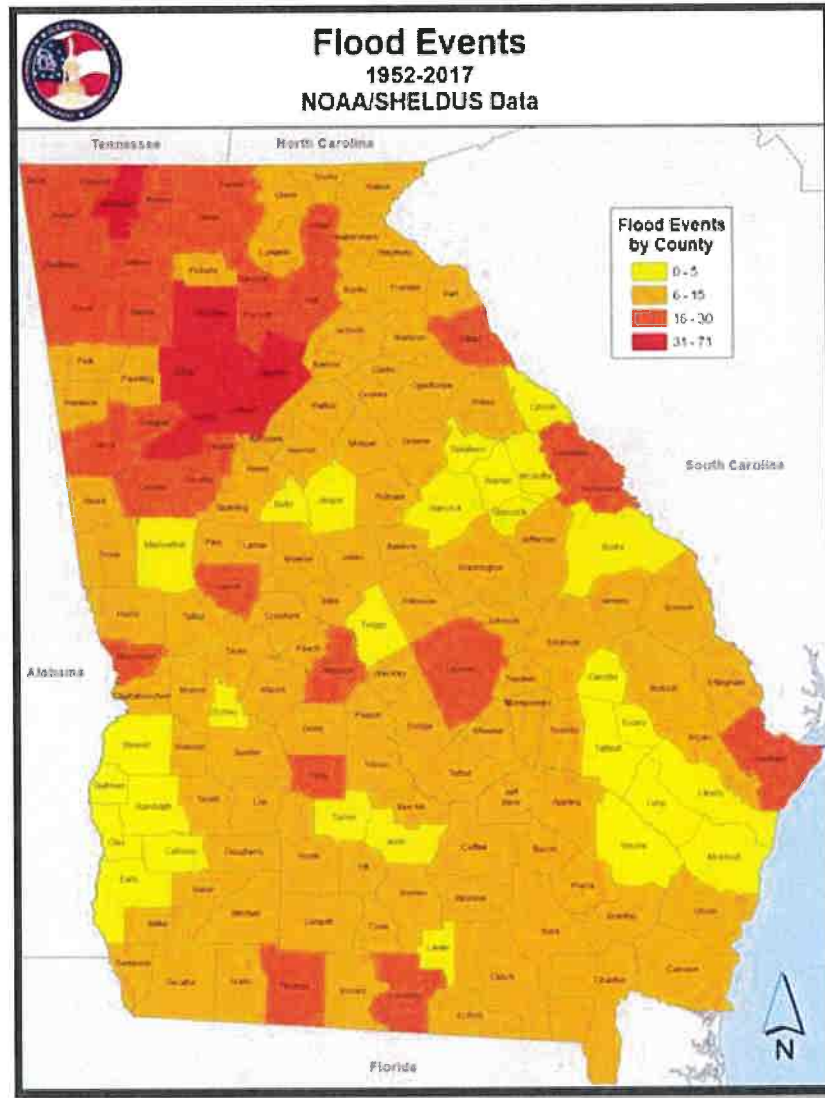
The flooding events in Floyd County over the last 50 years have led to over \$1.2 million in reported damages. Extrapolated over 50 years, this results in an annual average of \$24,140 per year. However, all reported damages have occurred in the last 25 years. As a result, the average over the last 25 years increases significantly to \$48,280 annually. These estimations are believed to be a gross underestimation of both prior and potential damages from flood events.

Natural Hazard: **Flooding**



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Flooding**

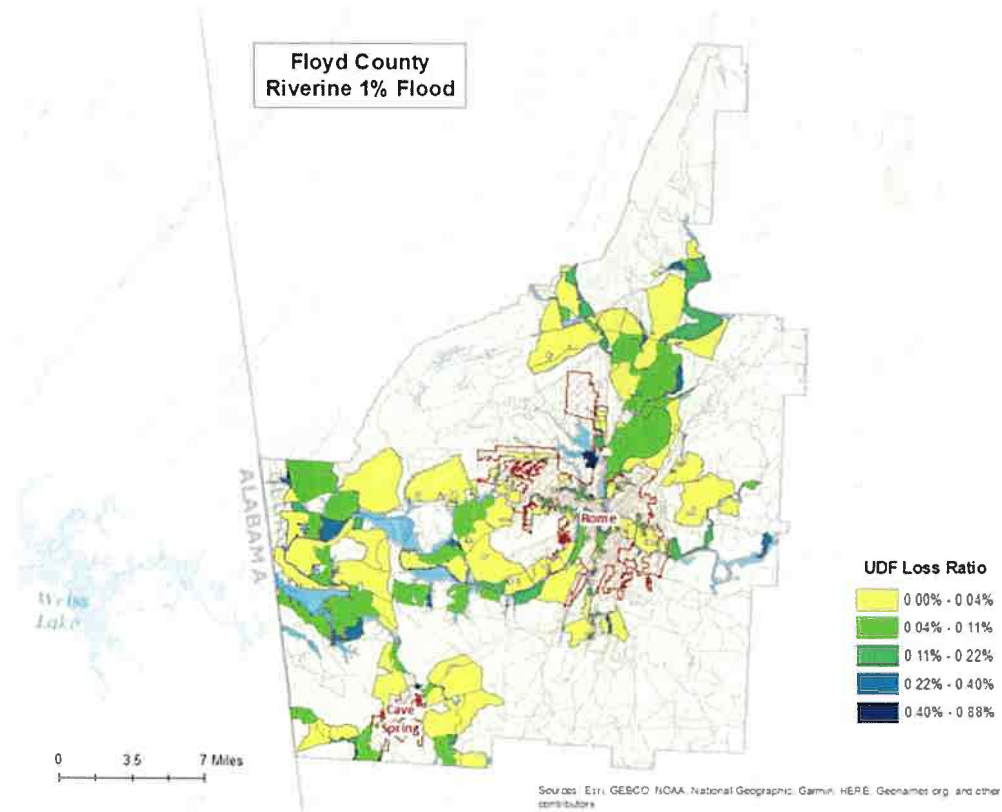


Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Jurisdiction	Number of Flood incidents since 1995	Probability
Unincorporated Floyd County	16	64%
Cave Spring	7	28%
Rome	14	56%

Natural Hazard: **Flooding**

Based upon the 2021 Floyd County HAZUS report, a flood equivalent to the 1% riverine flood levels could result in losses in excess of \$72 million. However, it is possible that some areas may not experience total losses while others may be inundated with flood water who are not designated in the 1% riverine flood areas. Additionally, there are no critical facilities located in the 1% riverine flood areas.

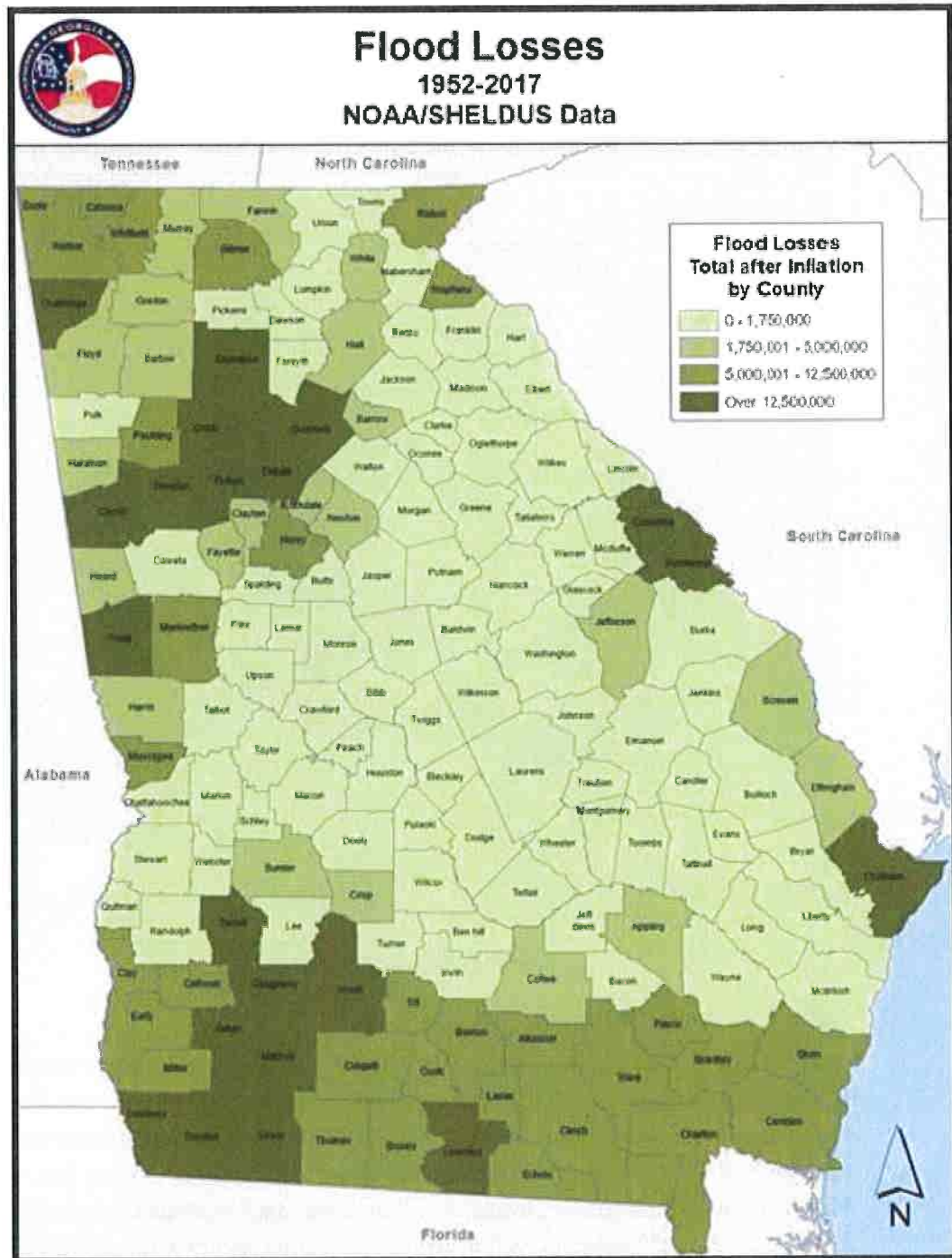


Source: 2021 Floyd County HAZUS Report

Land Use & Development Trends

Floyd County participates in the National Flood Insurance Program (NFIP) and follows the program’s guidelines to ensure future development is carried out in the best interests of the public. The County (CID No. 103079B) first entered the NFIP on May 19, 1987. According to the NFIP guidelines, the County has executed a Flood Damage Prevention Ordinance. This ordinance attempts to minimize the loss of human life and health as well as minimize public and private property losses due to flooding. The ordinance requires any potential flood damage be evaluated at the time of initial construction and that certain uses be restricted or prohibited based on this evaluation. The ordinance also requires that potential homebuyers be notified

Natural Hazard: **Flooding**



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Flooding**

that a property is located in a flood area. In addition, all construction must adhere to the Georgia State Minimum Standard Codes and the International Building Codes. Currently, the Floyd County municipalities of Cave Spring and Rome also participate in NFIP through the application of appropriate NFIP-compliant ordinances and regulations. These ordinances and regulations are enforced through the local Planning/Zoning agencies having jurisdiction for Floyd County, Rome, and Cave Spring.

There are 39 residential repetitive loss properties identified in Floyd County. These properties have a total loss value of \$1,215,551. There are 7 residential loss properties in unincorporated Floyd County with a total loss value of \$180,594. The other 32 repetitive loss properties are within the jurisdiction of the City of Rome and have a total loss value of \$1,034,957.

Multi-Jurisdictional Considerations

During a large-scale flood event, many portions of Floyd County would potentially be impacted by flooding. However, the area's most prone to flooding have historically been those areas located within the 100-year floodplain – particularly those areas along the Coosa and Oostanaula Rivers and their tributaries and distributaries. All of Floyd County, including all municipalities, could potentially be impacted. There is a significant portion of the downtown area of the City of Rome in the 100-year floodplain.

Hazard Summary

Flooding has the potential to inflict significant damage within Floyd County, particularly along the Coosa and Oostanaula Rivers and their tributaries and distributaries. However, the Floyd County HMPC recognizes the significant threat that flash flooding poses to Floyd County due to the local topography. Mitigation of flood damage requires the community to be aware of flood-prone areas, including roads, bridges, and critical facilities. The Floyd County HMPC identified flooding as a hazard requiring mitigation measures and identified specific goals, objectives, and action items they deemed necessary to lessen the impact of flooding for their communities. These maps were updated since the previous plan.

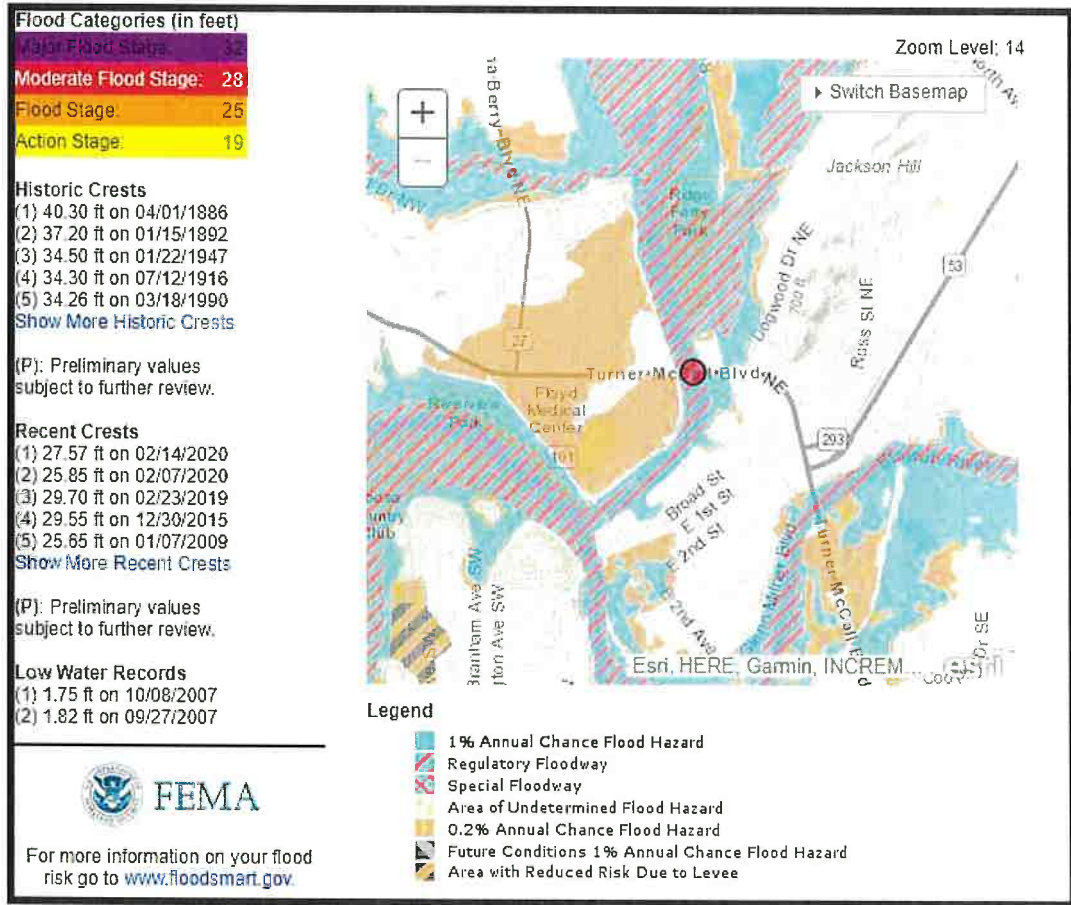
Natural Hazard: **Flooding**

Flood Events since 2016 in Floyd County

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0		40.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	01/22/2017	20:20	EST-5	Flash Flood	0	0		40.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	05/23/2017	19:21	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	05/18/2018	23:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/26/2018	01:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	08/02/2018	10:15	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0		0.00K	0.00K
<u>HERMITAGE</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0		0.00K	0.00K

Natural Hazard: **Flooding**

Oostanaula River at Rome



Natural Hazard: **Flooding**

Note:

All “blue” shaded areas indicate the extent of the 100-year (or 1% annual) flood risk.

All Flood Maps are from the Georgia DFIRM maps

Floyd County



Natural Hazard: **Flooding**

Cave Spring



Natural Hazard: **Flooding**

Rome



Natural Hazard: Tornado*Hazard Description*

A tornado is a violently rotating column of air (seen only when containing condensation, dust, or debris) that is in contact with the surface of the ground. Exceptionally large tornadoes may not exhibit the classic “funnel” shape, but may appear as a large, turbulent cloud near the ground or a large rain shaft. Destructive because of strong winds and windborne debris, tornadoes can topple buildings, roll mobile homes, uproot vegetation and launch objects hundreds of yards.

Most significant tornadoes (excluding some weak tornadoes and waterspouts) stem from the right rear quadrant of large thunderstorm systems where the circulation develops between 15,000 and 30,000 feet. As circulation develops, a funnel cloud, a rotating air column aloft, or tornado descends to the surface. These tornadoes are typically stronger and longer-lived. The weaker, shorter-lived tornadoes can develop along the leading edge of a singular thunderstorm. Although tornadoes can occur in most locations, most of the tornado activity in the United States in the Midwest and Southeast. Tornadoes can occur anywhere within the State of Georgia.

In terms of the continuum of area of impact for hazard events, tornadoes are fairly isolated. Typically ranging from a few hundred to one or two miles across, tornadoes affect far less area than larger meteorological events such as tropical cyclones, winter storms and severe weather events. An exact season does not exist for tornadoes. However, most occur between early spring to mid-summer (February-June). The rate of onset of tornado events is rapid. Typically, the appearance of the first signs of the tornado is the descending funnel cloud. This sign may be only minutes from the peak of the event, giving those in danger minimal sheltering time. However, meteorological warning systems attempt to afford those in danger more time to shelter. The frequency of specific tornado intensities is undetermined because no pattern seems to exist in occurrence. Finally, the duration of tornado events ranges from the few minutes of impact on a certain location to the actual tornado lasting up to a few hours.

Tornadoes are measured after the occurrence using the subjective intensity measures. The Enhanced Fujita Scale describes the damage and then gives estimates of magnitude of peak 3-second gusts in miles per hour.

Natural Hazard: **Tornado**

EF Number	3 Second Gust (mph)	Damage
0	65–85	Light damage. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over.
1	86–110	Moderate damage. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
2	111–135	Considerable damage. Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
3	136–165	Severe damage. Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
4	166–200	Devastating damage. Well-constructed houses and whole frame houses completely leveled; cars thrown, and small missiles generated.
5	More than 200	Incredible damage. Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 m (109 yd); high-rise buildings have significant structural deformation; incredible phenomena occur.

Hazard Profile

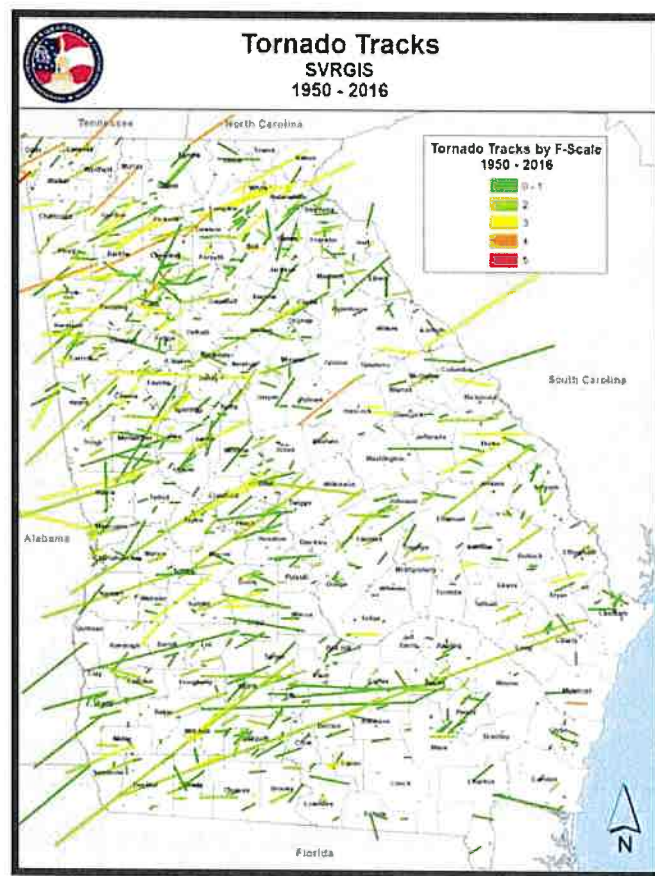
All areas within Floyd County are vulnerable to the threat of a tornado. Due to the indiscriminate and unpredictable nature of tornadoes, there is no reliable method to determine where or when a tornado will strike. There have been 13 documented tornadoes in the last 50 years in Floyd County. It is likely that other tornadoes have occurred within this timeframe, but available records are limited in nature.

Natural Hazard: Tornado

Based on the 50-year information available for Floyd County, a tornado occurs every 3.33 years. On an annual basis, Floyd County has a 26% chance of being impacted from a tornado event.

Individual tornado events can cause extreme damage to an area. This holds true for Floyd County, as well. The strongest documented tornado to impact Floyd County was F3 in 1977. This storm traveled 8.8 miles through Floyd County and caused damages in excess of \$2.5 million and injured 15 people. The costliest tornado to ever impact Floyd County occurred as part of the April 2011 tornado outbreak. This EF2 tornado was on the ground for nearly 19 miles through southeast Floyd County. Damages for this tornado exceeded \$5 million and injured 4 people. This storm destroyed 105 homes and damaged an additional 104 homes.

For additional historical data, please see Appendix D. All tornado hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Tornado**

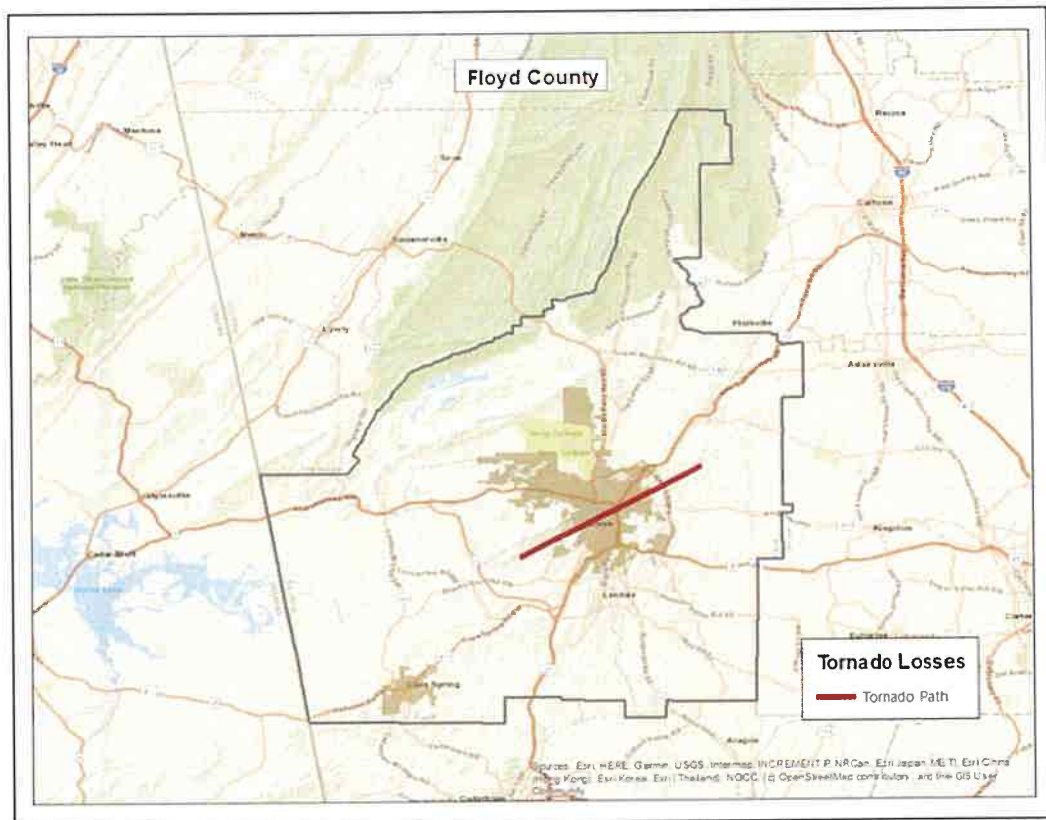
Assets Exposed to the Hazard

In evaluating assets that are susceptible to tornadoes, the Floyd County HMPC determined that all public and private property is threatened by tornadoes, including all critical facilities. This is due to the lack of spatial prejudice of tornadoes.

Estimated Potential Losses

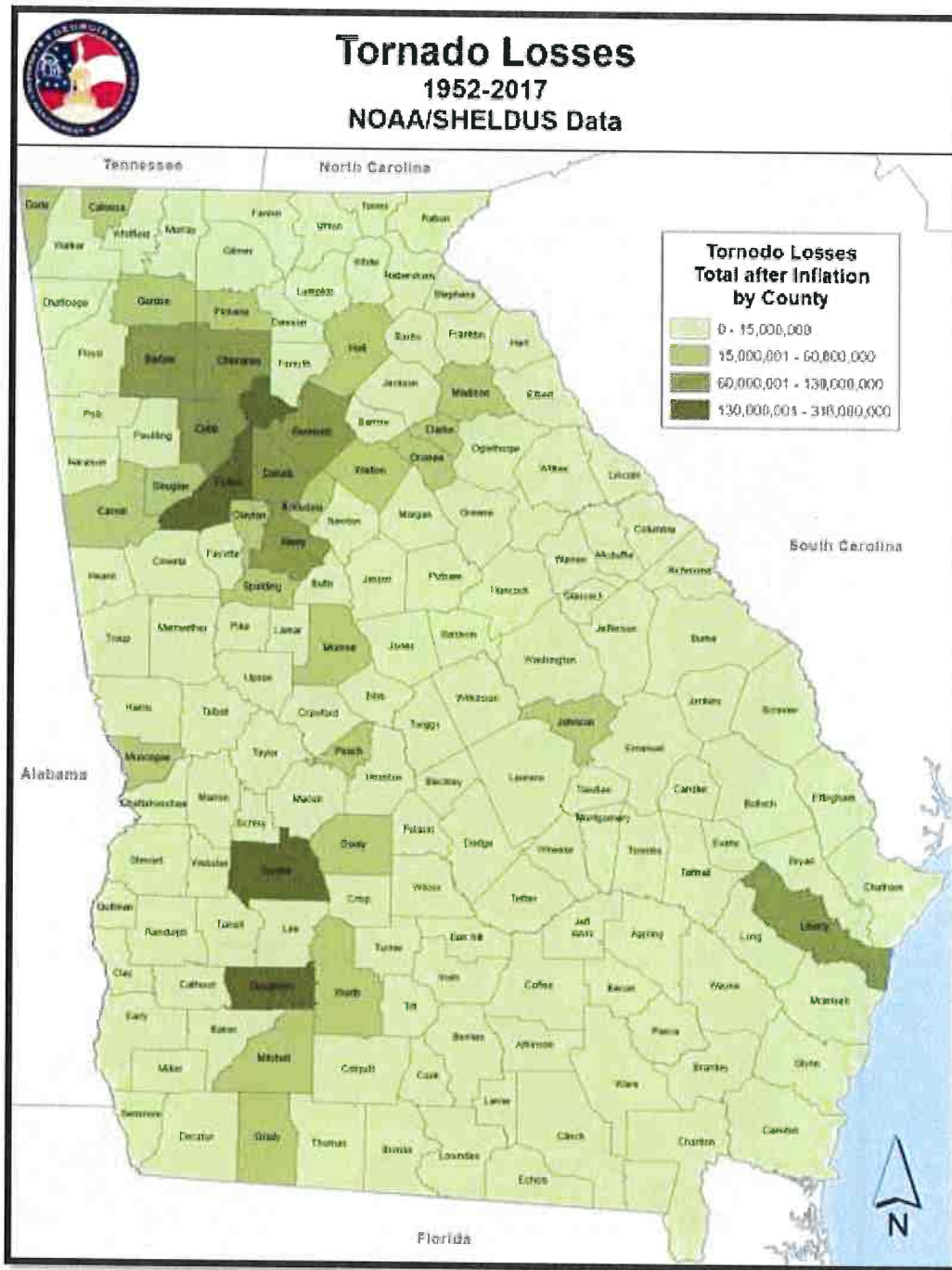
Estimates of damage for the past events of the last 50 years are over 15.7 million, or \$314,000 annually.

Within the 2021 Floyd County HAZUS report, a theoretical tornado path for an EF3 was identified that would inflict maximum damage. HAZUS estimated that this theoretical tornado would cause damage to approximately 1,750 buildings and result in losses in excess of \$89 million with the City of Rome suffering the greatest economic impacts.



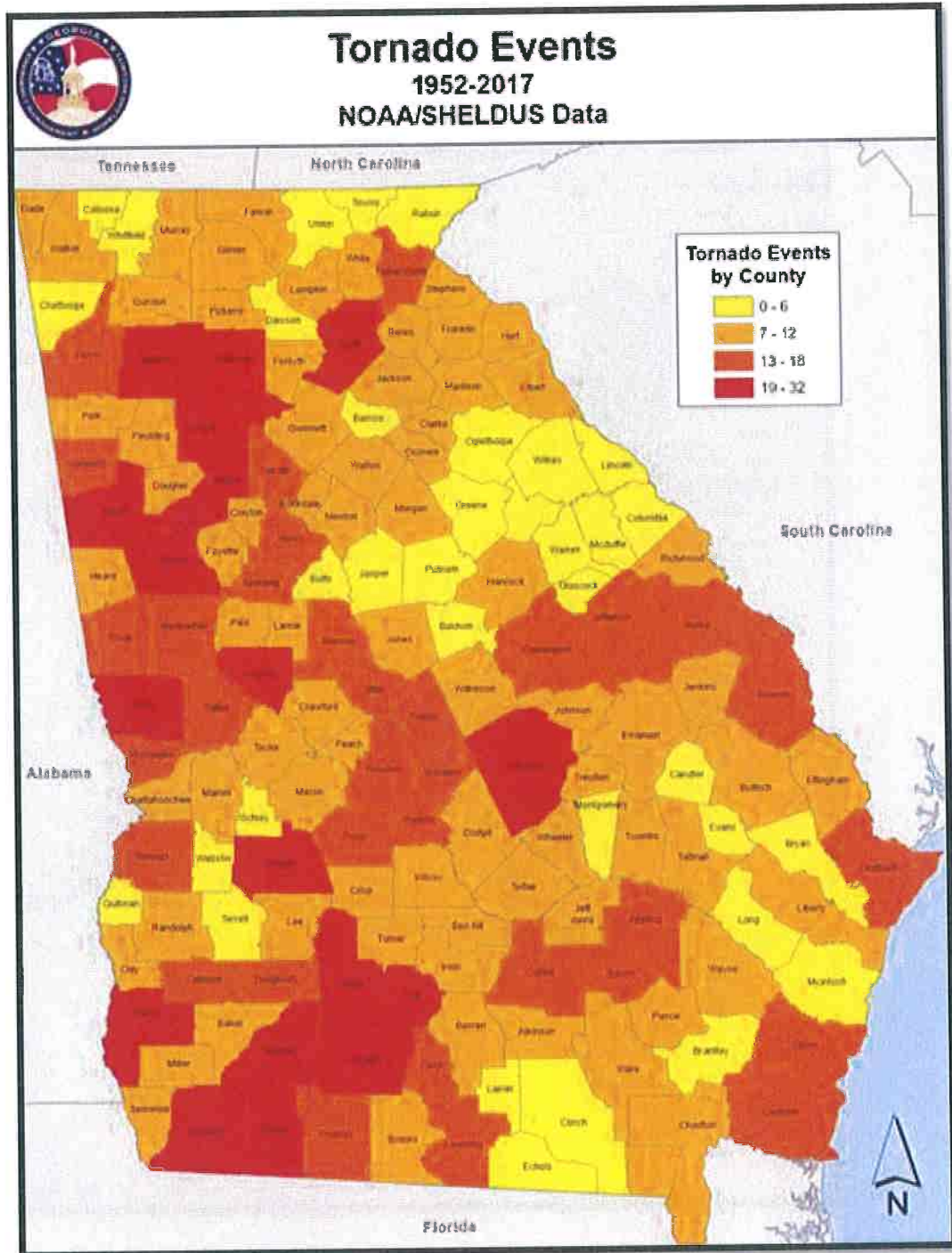
Source: 2021 Floyd County HAZUS Report

Natural Hazard: **Tornado**



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Tornado

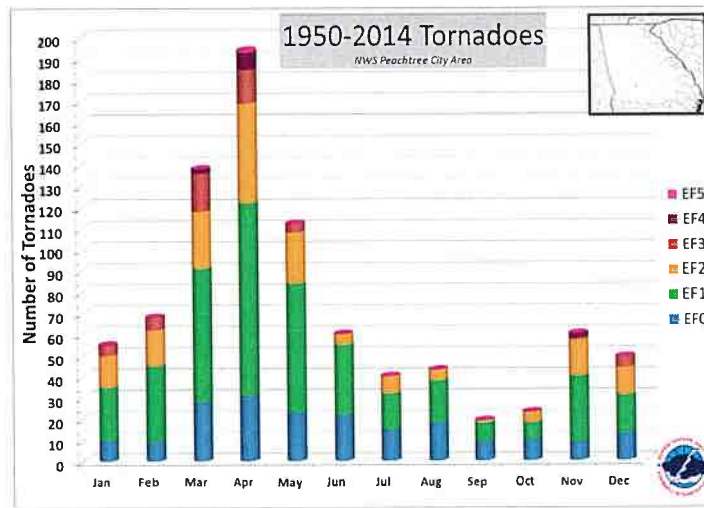


Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Tornado**

Land Use & Development Trends

Floyd County currently has no land use trends related to Tornadoes beyond continued population growth – particularly around the City of Rome. Additionally, tourist areas throughout Floyd County would see significant impact from a direct tornado strike or damage in infrastructure from a tornado strike elsewhere in Floyd County.



Multi-Jurisdictional Considerations

All portions of Floyd County could potentially be impacted by a tornado due to the indiscriminate nature of tornadic events. Therefore, all mitigation actions identified regarding tornadoes should be pursued on a countywide basis and included all municipalities.

Hazard Summary

Floyd County remains at risk to potential damage from tornadoes, especially considering the average of one tornado every 3.33 years over the last 50 years. Should a tornado strike in densely populated areas of the county, significant damage or loss of life could occur. Due to the destructive power of tornadoes, it is essential that the mitigation measures identified in this plan regarding tornado activity.

Natural Hazard: **Tornado**

Tornadoes in Floyd County since 2016

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth/Inj</u>	<u>PrD</u>	<u>CrD</u>	
<u>VANS VLY</u>	FLOYD CO.	GA	03/14/2019	19:06	EST-5	Tornado	EF0	0	0	50.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	04/12/2020	23:31	EST-5	Tornado	EF0	0	0	10.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	04/12/2020	23:42	EST-5	Tornado	EF0	0	0	10.00K	0.00K

Natural Hazard: **Drought**

Hazard Description

Drought is a normal, recurrent feature of climate consisting of a deficiency of precipitation over an extended period (usually a season or more). This deficiency results in a water shortage for some social or environmental sector. Drought should be judged relative to some long-term average condition of balance between precipitation and evapotranspiration in a particular area that is considered “normal.” Drought should not be viewed as only a natural hazard because the demand people place on water supply affects perceptions of drought conditions. From limited water supplies in urban areas to insufficient water for farmland, the impacts of drought are vast.

Droughts occur in virtually every climatic zone and on every continent. Because the impacts of drought conditions are largely dependent on the human activity in the area, the spatial extent of droughts can span a few counties to an entire country.

Temporal characteristics of droughts are drastically different from other hazards due to the possibility of extremely lengthy durations as well as a sluggish rate of onset. Drought conditions may endure for years or even decades. This factor implicates drought as having a high potential to cause devastation on a given area. The duration characteristic of droughts is so important that droughts are classified in terms of length of impact. Droughts lasting 1 to 3 months are considered short term, while droughts lasting 4 to 6 months are considered intermediate and droughts lasting longer than 6 months are long term. With the slow rate of onset, most populations have some inkling that drought conditions are increasingly present. However, barring drastic response measures, most only must adapt to the changing environment.

Seasonality has no general impact on droughts in terms of calendar seasons. However, “wet” and “dry” seasons obviously determine the severity of drought conditions. In other words, areas are less susceptible to drought conditions if the area is experiencing a wet season. The frequency of droughts is undetermined, since the hazard spans such a long period of time. However, climatologists track periods of high and low moisture content similarly to the tracking of cooling and warming periods.

Hazard Profile

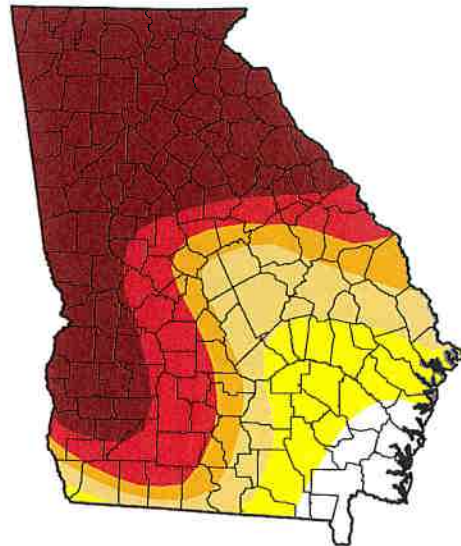
The Floyd County HMPC reviewed data for the last 50 years regarding drought conditions. Historically, agricultural losses have accounted for the vast amount of losses related to drought conditions.

Natural Hazard: **Drought**

Due to poor record keeping and the unpredictable nature of drought conditions, reliability of historical data for the last 50 years is low. Floyd County has been impacted by 7 drought events in the last 20 years, according to data from the National Climatic Data Center. This amounts to a 35% chance of a drought for a given year over the last 20 years. The economic impact of these droughts, including crop damage, is not available for most of these droughts. However, documentation does show over \$9.6 million in crop losses due to the 2000 drought. This is the only drought with documented economic loss estimations. All drought hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

There have been two recent examples of “exceptional” drought events affecting Floyd County. These events occurred in 2007 and 2016. Both events reached the D4 (Exceptional Drought) designation, according to data from the United States Drought Monitor. Below are maps of these two events.

**U.S. Drought Monitor
Georgia**



December 4, 2007

(Released Thursday, Dec. 6, 2007)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	5.97	12.57	13.45	9.28	15.43	43.40
Last Week 11/27/2007	7.87	15.23	13.48	10.13	15.32	38.96
3 Months Ago 9/4/2007	14.52	13.31	12.28	19.24	27.71	19.01
Start of Calendar Year 1/2/2007	12.15	14.18	3.56	6.10	6.00	6.00
Start of Water Year 3/25/2007	24.19	11.60	11.62	13.23	42.36	37.00
One Year Ago 12/5/2006	73.86	22.88	3.97	0.08	0.00	0.00

Intensity

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brad Rippey
U.S. Department of Agriculture

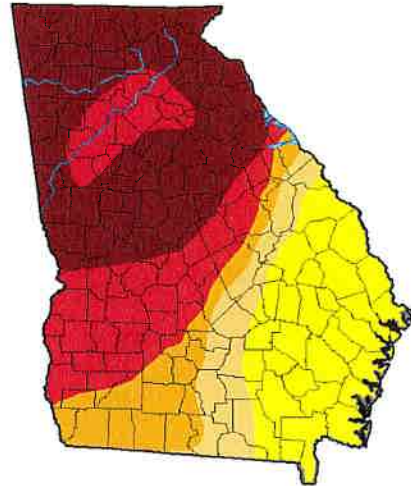


<http://droughtmonitor.unl.edu/>

Source: USDA Drought Monitor – University of Nebraska-Lincoln

Natural Hazard: Drought

U.S. Drought Monitor
Georgia



November 22, 2016
(Released Wednesday, Nov. 23, 2016)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	0.00	100.00	76.64	67.76	55.60	33.78
Last Week 11-15-2016	15.69	84.31	59.19	58.03	52.39	22.25
3 Months Ago 08-23-2016	26.02	73.98	48.97	28.09	5.92	0.00
Start of Calendar Year 12-31-2015	97.59	12.64	0.00	0.00	0.00	0.00
Start of Water Year 09-27-2016	35.37	64.63	45.84	24.50	14.67	1.58
One Year Ago 11-24-2015	89.41	11.59	0.00	0.00	0.00	0.00

Intensity
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author
Richard Heim
NCEI/NDAA



<http://droughtmonitor.unl.edu/>

Source: USDA Drought Monitor – University of Nebraska-Lincoln

Events of this extent can cause water shortages for residential and corporate needs, as well as affecting the ability for firefighting operations to be properly effective. Drought conditions of this extent can have devastating effects on the local agricultural industries, which has occurred in previous D4 level droughts.

Assets Exposed to the Hazard

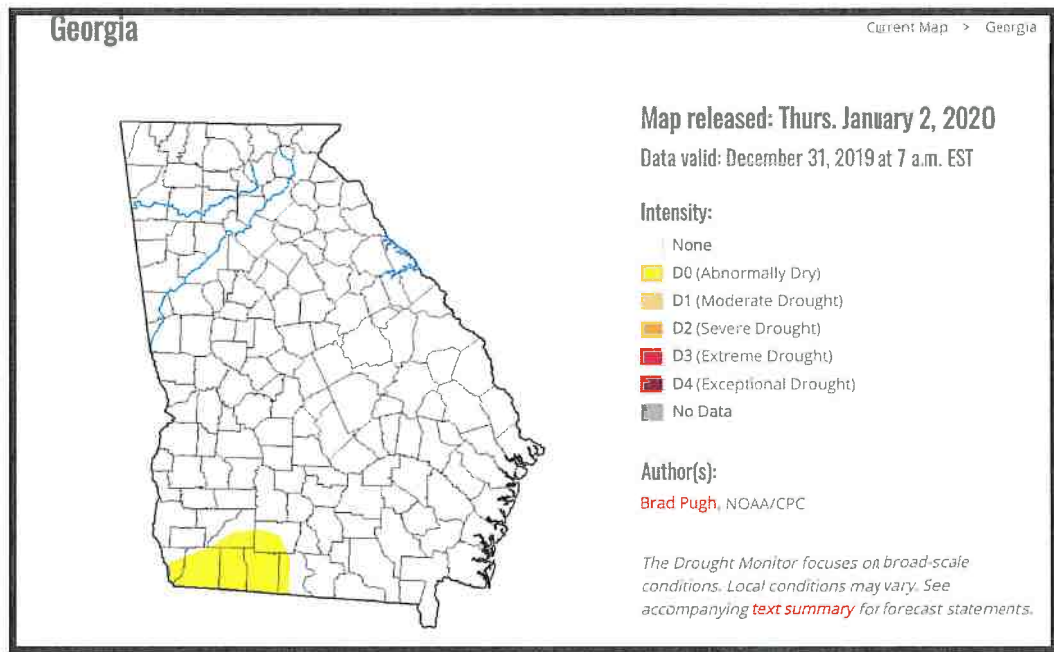
While drought conditions do not typically pose a direct threat to structures, secondary hazards from drought such as increased wildfire threat, does pose a significant threat to all public and private property in Floyd County, including all critical facilities. Water resources could also become scarce during a drought, a condition that would potentially affect all Floyd County residences and critical facilities.

Estimated Potential Losses

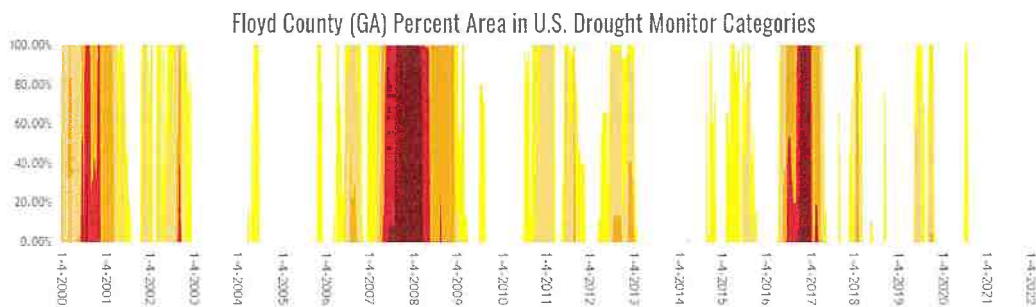
No damage to structures or critical facilities is expected as a direct result of drought conditions. However, crop damage and subsequent losses can be expected to occur as a result of drought conditions. The degree of losses would depend on the duration of the drought, severity of the drought, temperatures during the drought, season in which the drought occurs, and the specific needs of the involved crops. Water system shortages and need for supply assistance for those systems could also lead to economic losses associated with the drought.

Natural Hazard: **Drought**

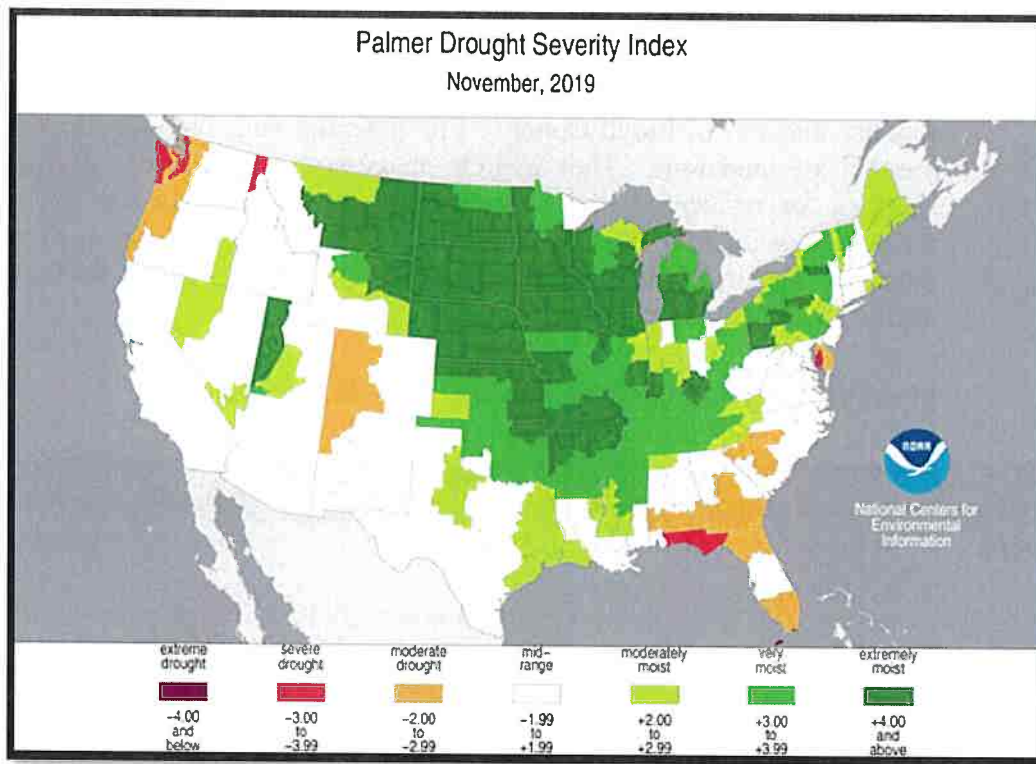
According to the 2017 Agriculture Census data, Floyd County’s market value of products sold was \$53,441,000. \$5,463,000 of that total represented crop sales, accounting for 10.2% of the total. Livestock sales accounted for 89.8%, or \$47,979,000, of the total value.



Source: United States Drought Monitor (University of Nebraska-Lincoln)



Source : United States Drought Monitor (University of Nebraska-Lincoln)

Natural Hazard: **Drought**

Source: National Integrated Drought Information System

Land Use & Development Trends

As growth continues, drought can become a larger threat for Floyd County due to the increased reliance on water infrastructure and wells countywide. This increased pull on these resources in Floyd County could quicken or deepen the impacts of a drought for residential, commercial, and industrial areas. Additionally, the local crop industry could see particularly significant impacts from a drought. With over \$53 million in annual sales, crop damage as a result of a prolonged drought could prove to be particularly crippling to the Floyd County economy.

Multi-Jurisdictional Considerations

All portions of Floyd County could potentially be impacted by a drought, but agricultural areas of the county are potentially more at risk. Therefore, all mitigation actions identified regarding drought should be pursued on a countywide basis and include all municipalities.

Natural Hazard: **Drought**

Hazard Summary

Drought conditions can cause significant economic stress on the agriculture and forestry interests of Floyd County. The potential negative secondary impacts of drought are numerous. They include increased wildfire threat, decreased water supplies for residential and industrial needs, stream-water quality, and water recreation facilities. The Floyd County HMPC recognizes the potential threats drought conditions could have on the community and have identified specific mitigation actions as a result.

Drought Events since 2016 in Floyd County

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Ini</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	05/31/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	06/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	08/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	09/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	11/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	03/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K	
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/08/2019	00:00	EST-5	Drought	0	0	0.00K	0.00K	

Natural Hazard: Wildfire*Hazard Description*

A wildfire is an uncontained fire that spreads through the environment. Wildfires can consume large areas, including infrastructure, property, and resources. When massive fires, or conflagrations, develop near populated areas, evacuations could possibly ensue. Not only do the flames impact the environment, but the massive volumes of smoke spread by certain atmospheric conditions also impact the health of nearby populations.

Wildfires result from the interaction of three crucial elements: fuel, ignition (heat), and oxygen. Natural and manmade forces cause the three crucial elements to coincide in a manner that produces wildfire events. Typically, fuel consists of natural vegetation. However, as the urban and suburban footprint expands, wildfires may utilize other means of fuel, such as buildings. In terms of ignition or source of heat, the primary source is lightning. However, humans are more responsible for wildfires than lightning. Manmade sources vary from the unintentional, such as fireworks, campfires or machinery, to intentional arson. With these two elements provided, the wildfires may spread as long as oxygen is present.

Weather is the most variable factor affecting wildfire behavior. Strong winds propel wildfires quickly across most landscapes unless firebreaks are present. Shifting winds create erratic wildfires, which can complicate fire management efforts. Dry conditions provide faster-burning fuels, either making the area more vulnerable to wildfire or increasing the mobility of preexisting wildfires.

Wildfires are notorious for spawning secondary hazards, such as flash flooding and landslides, long after the original fire is extinguished. Both flash flooding and landslides result from fire consuming the natural vegetation that provides precipitation interception and infiltration as well as slope stability.

All of Georgia is prone to wildfire due to the presence of wildland fuels associated with wildfires. Land cover associated with wildland fuels includes coniferous, deciduous, and mixed forest; shrubland; grassland and herbaceous; transitional; and woody and emergent herbaceous wetlands. The spatial extent of wildfire events greatly depends on both the factors driving the fire as well as the efforts of fire management and containment operations.

Natural Hazard: Wildfire

In terms of seasonality, wildfires can occur during any season of the year. However, drier seasons, which vary within the State of Georgia, are more vulnerable to severe wildfires because of weather patterns and the abundant quick-burning fuels. In terms of rate of onset and duration, wildfires vary depending on the available fuels and weather patterns. Some wildfires can engulf an area in a matter of minutes from the first signs whereas others may be slower burning and moving. The frequency of wildfires is not typically measured because of the high probability of human ignition being statistically unpredictable. Magnitude and intensity are typically only measured by size of the wildfire and locations of burning.

Three classes of fires include understory, crown, and ground fires. Naturally-induced wildfires burn at relatively low intensities, consuming grasses, woody shrubs, and dead trees. These understory fires often play an important role in plant reproduction and wildlife habitat renewal and self-extinguish due to low fuel loads or precipitation. Crown fires, which consist of fires consuming entire living trees, are low probability but high consequence events due to the creation of embers that can be spread by the wind. Crown fires typically match perceptions of wildfires. In areas with high concentrations of organic materials in the soil, ground fires may burn, sometimes persisting undetected for long periods until the surface is ignited.

Hazard Profile

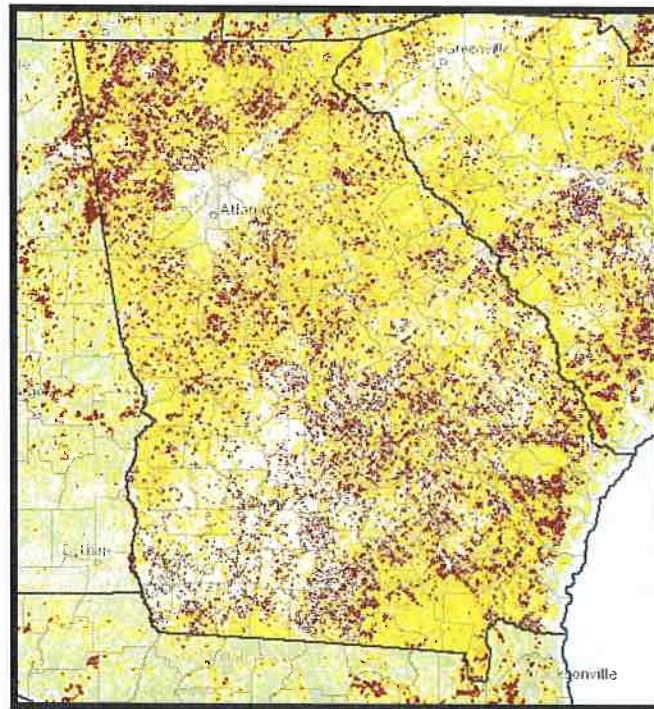
Wildfires pose a serious threat to Floyd County. This is a result of the high amount of forestland and vegetation available to fuel potential wildfires. Also, there is an increasing amount of wildland-urban interface (WUI) in Floyd County, which is defined as areas where structures and other human development meets undeveloped wildland properties. 99.3% of Floyd County’s population lives within the WUI. All wildfire hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

Jurisdiction	% of Population in WUI
Floyd County	93.2%
Cave Spring	86.7%
Rome	99.6%

Natural Hazard: Wildfire

Wildfire statistics were not available for the 50-year timeframe at the time of this profile. However, according to the Georgia Forestry Commission's Historical Wildfire Dashboard, Floyd County had 330 wildfires from Fiscal Year 2012 to Fiscal Year 2021 – an average of 33 fire per year. This equates to a 9.0% chance of a wildfire on any given day in Floyd County. These 330 wildfires burned a total of 2,588 acres – or 258.8 acres per year. In April of 2014, a fire consumed approximately 30 acres near Crackerneck Road in unincorporated Floyd County. This fire caused major damage to one home and destroyed two other structures. A few months late in November of 2014, another 20-30 acre fire occurred off Freeman Ferry Road in unincorporated Floyd County. This fire required response from four engines, one brush truck, one tanker truck, and three Georgia Forestry Commission tractors to be contained. No physical property was damaged by the fire.

SouthWRAP and the CWPP do not breakdown wildfire events by jurisdiction. Record keeping at the USFS does not lend itself to breakdown by jurisdiction and local rangers do not have a way to distill the data. Currently, the county is investigating alternative methods to for future wildfire data collection.

Georgia Wildfire Ignition Density

Source: Southern Group of State Foresters Wildfire Risk Assessment Portal

Natural Hazard: **Wildfire**

Assets Exposed to the Hazard

All public and private property located within the Wildland-Urban Interface, including critical infrastructures, are susceptible to impacts from wildfires. Due to the large area of wildland area in Floyd County and the large amount of WIU, all public and private property, including critical infrastructures, could be directly or indirectly impacted by the threat of wildfire.

Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, for wildfire losses in Floyd County. According to the 2017 Ag Census by the USDA, Floyd County has \$5,463,000 in annual crop sales. These areas would potentially be impacted by a wildfire event.

Land Use & Development Trends

With the continued increase in population, Wildland-Urban Interface (WUI) is increasing in Floyd County. The WUI creates areas where fire can easily move from wildland areas into developed areas and threaten structures and human life. The expansion of the WUI in Floyd County complicated wildland fire management operations and planning initiatives. This development trend is expected to continue in the future.

Multi-Jurisdictional Considerations

All portions of Floyd County, including all municipalities, could potentially be impacted by a wildfire due to the large amount of Wildland-Urban Interface, but the less developed areas of the county are more vulnerable. Therefore, all mitigation actions identified regarding wildfires should be pursued on a countywide basis and include all municipalities.

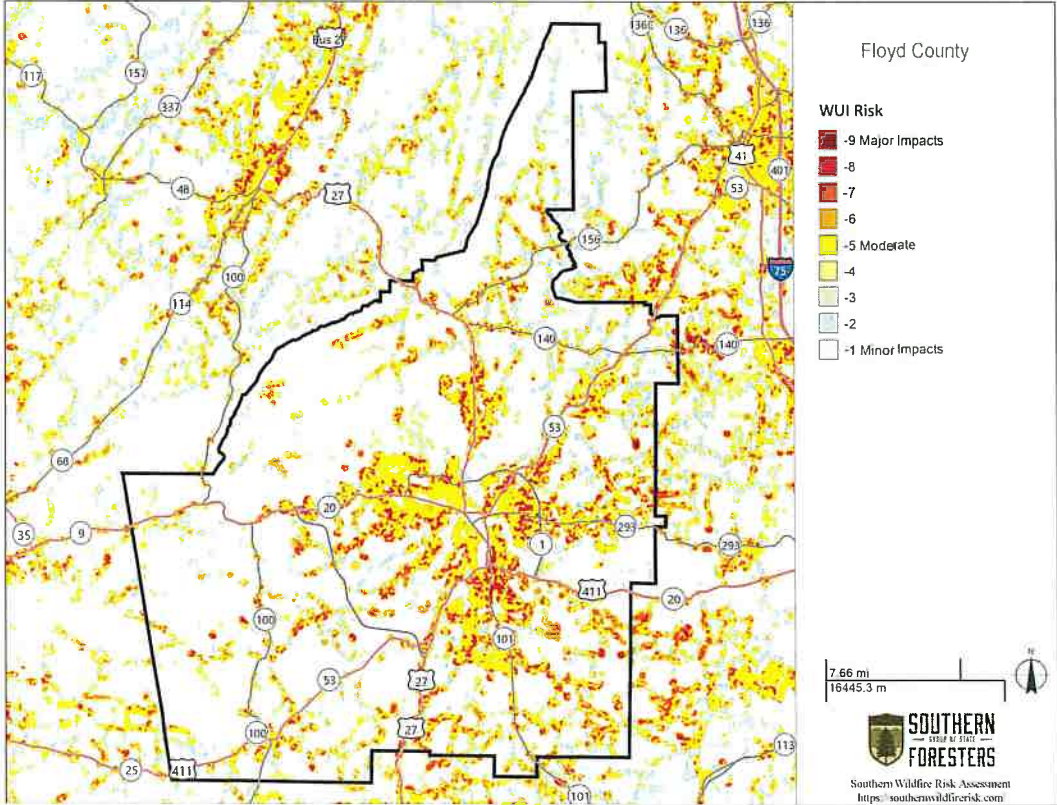
Hazard Summary

Wildfire is a significant threat to Floyd County due to the increased amount of Wildland-Urban Interface. The increasing amount of area where structures and other human development meets undeveloped, wildland property is where 93.2% of Floyd County's population lives. The mitigation measures identified in this plan should be aggressively pursued based on the high frequency of this hazard and the ability for wildfires to inflict devastation anywhere in Floyd County.

Since the adoption of the 2016 Floyd County Hazard Mitigation Plan, there have been 154 wildfires in Floyd County that have consumed a total of 1,486 acres.

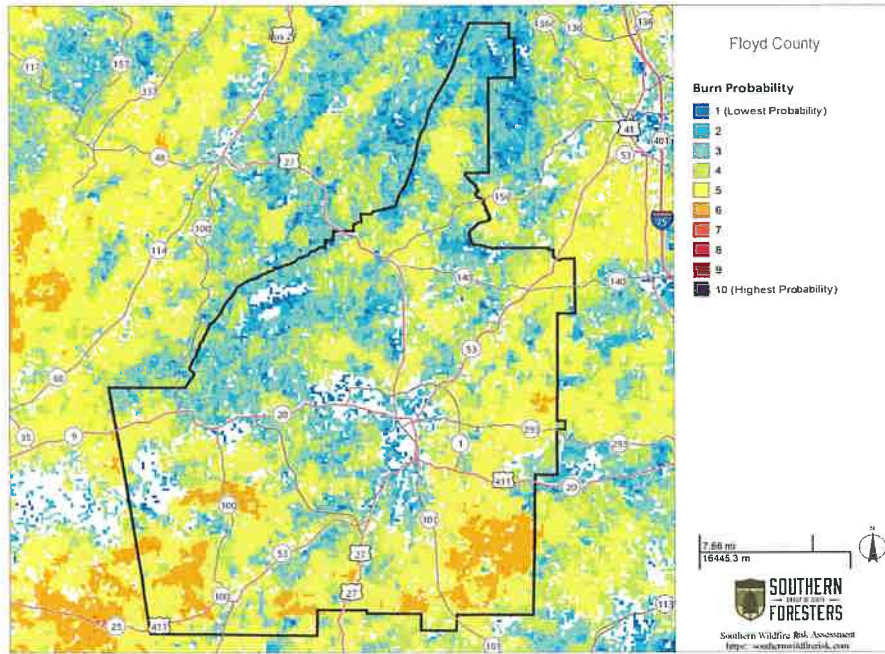
Natural Hazard: **Wildfire**

Floyd County WUI Risk

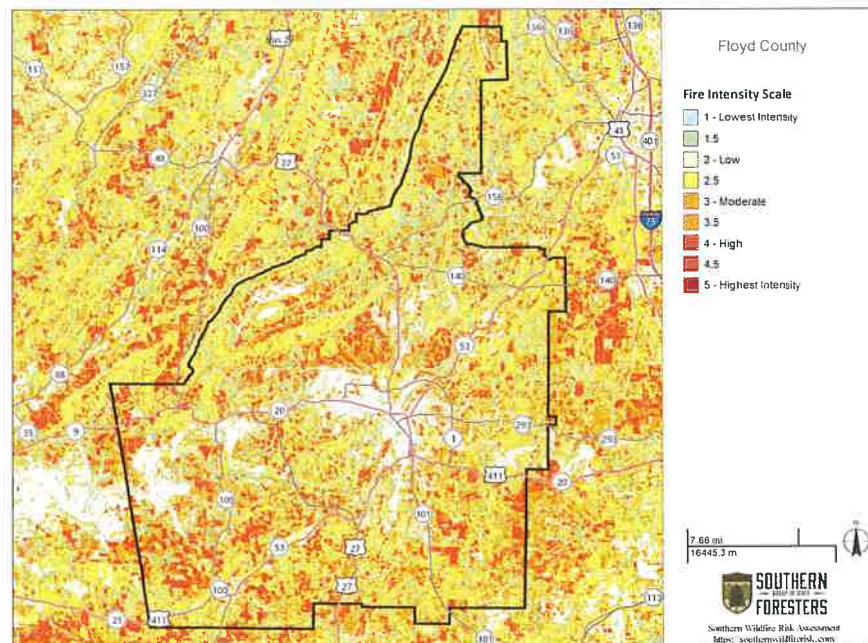


Natural Hazard: **Wildfire**

Floyd County Burn Probability

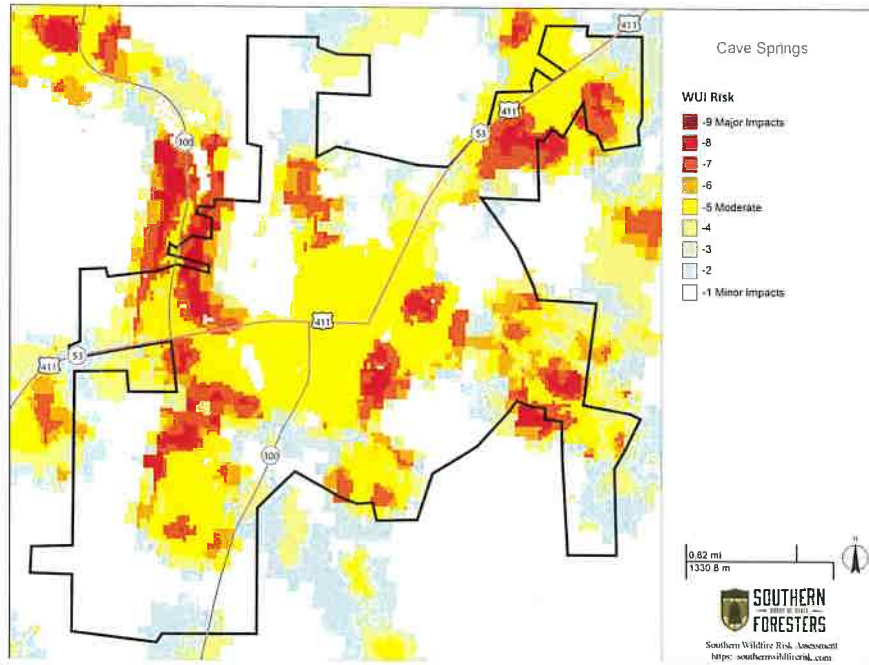


Floyd County Fire Intensity Scale

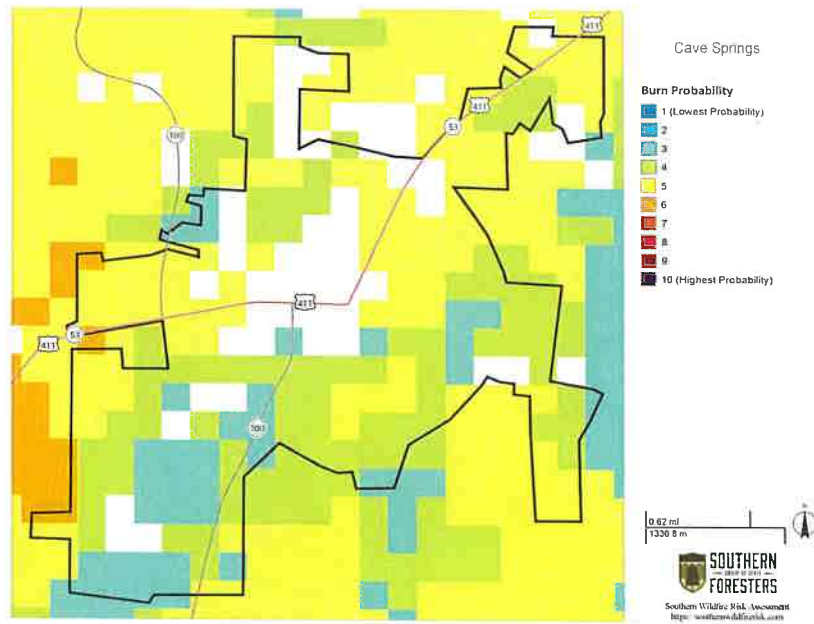


Natural Hazard: **Wildfire**

Cave Spring WUI Risk

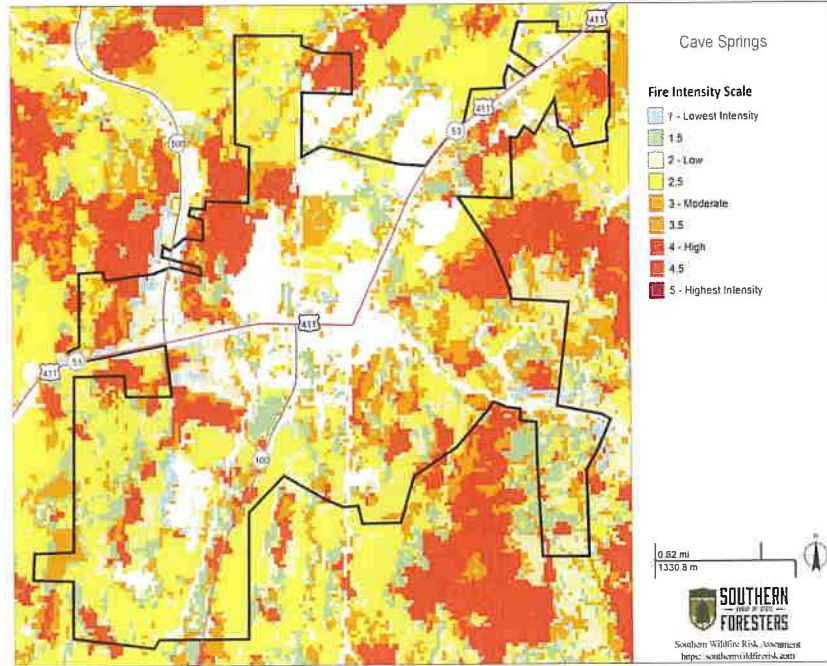


Cave Spring Burn Probability

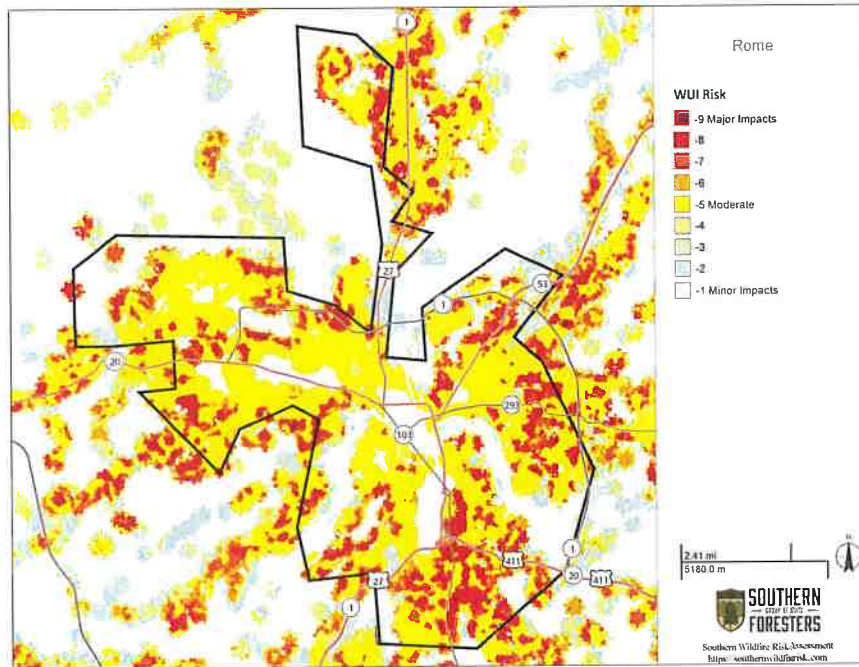


Natural Hazard: **Wildfire**

Cave Spring Fire Intensity Scale

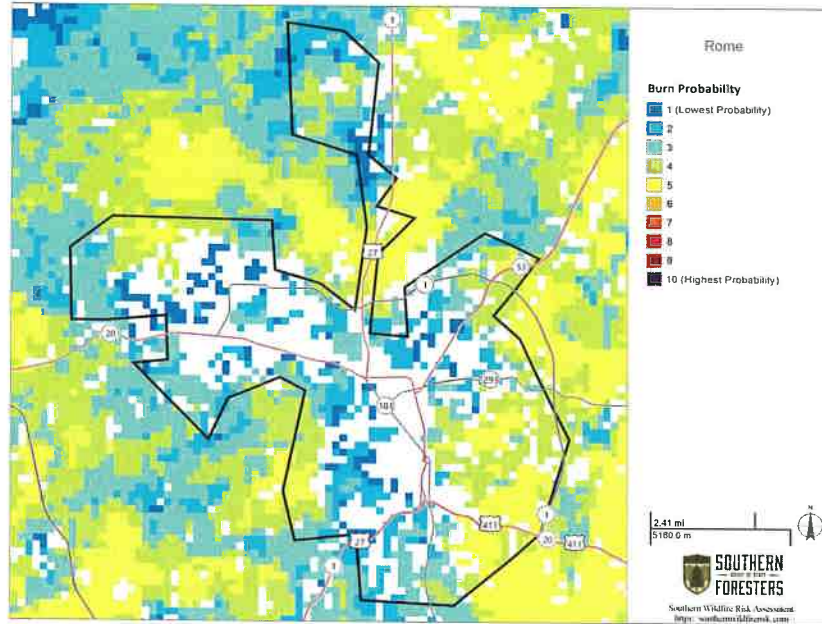


Rome WUI Risk

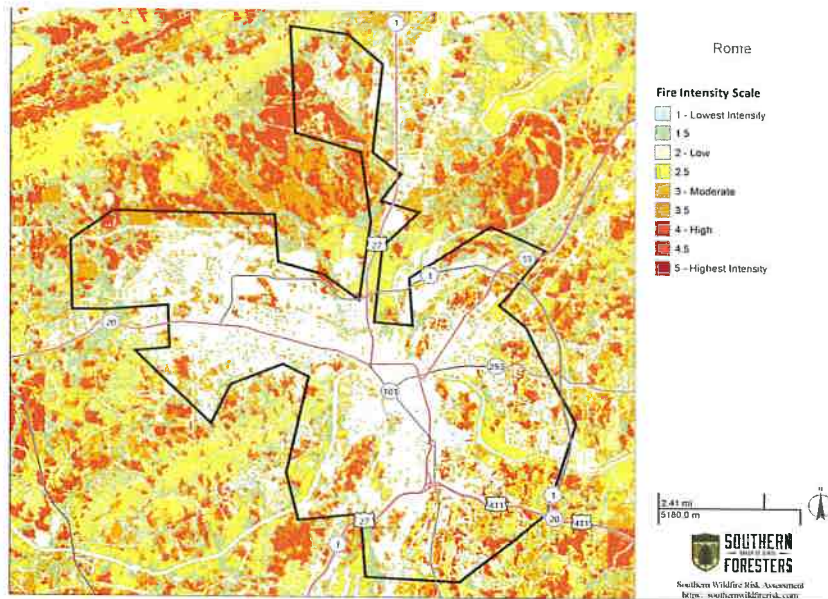


Natural Hazard: **Wildfire**

Rome Burn Probability



Rome Fire Intensity Scale



Note: All maps in this section are from the Southern Group of State Foresters Wildfire Risk Assessment Portal

Natural Hazard: Earthquake*Hazard Description*

Earthquakes are generally defined as the sudden motion or trembling of the Earth's surface caused by an abrupt release of slowly accumulated strain. This release typically manifests on the surface as ground shaking, surface faulting, tectonic uplifting and subsidence, or ground failures, and tsunamis. In the United States, earthquake activity east of the Rocky Mountains is relatively low compared to the Western states because it is away from active plate boundaries and the plate interior strain rates are known to be very low.

The physical property of earthquakes which cause most of the damage within the United States is ground shaking. The vibrations from the seismic waves that propagate outward from the epicenter may cause failure in structures not adequately designed to withstand earthquakes. Because the seismic waves have different frequencies of vibration, the waves disseminate differently through sub-surface materials. For example, high frequency compression and shear waves arrive first, whereas lower frequency Rayleigh and love waves arrive later. Not only are the speeds varied between seismic waves, but also the types of movement. The surface vibration may be horizontal, vertical, or a combination of the two, which causes a wider array of structures to collapse.

Another manifestation of earthquakes is surface faulting. This phenomenon is defined as the offset or tearing of the earth's surface by a differential movement across a fault. Structures built across active faults tend to sustain damage regularly. There are no active faults within or near Georgia. Distinct inactive faults are known within the state north of the Columbus to Macon to Augusta fall line and running generally northeast-southwest.

The third earthquake phenomenon that causes damage is tectonic uplift and subsidence. Tectonic uplift can cause shallowing of the harbors and waterways while tectonic subsidence can cause permanent or intermittent inundation. Due to the association of tectonic uplift and subsidence with active faults, Georgia is not at risk to these phenomena.

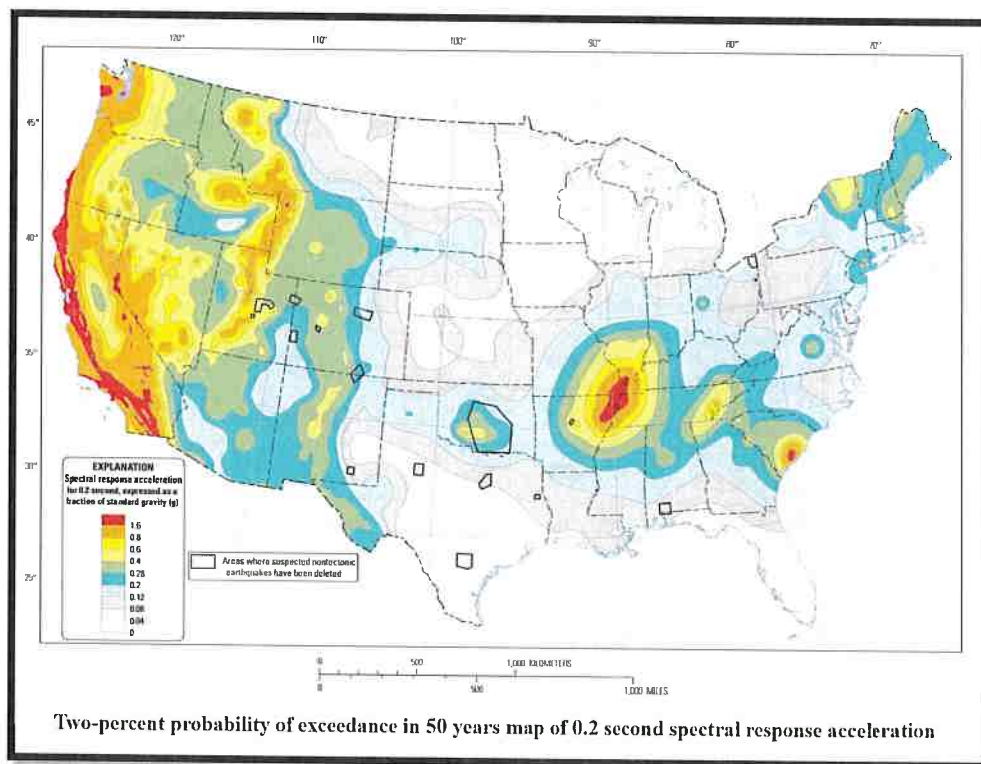
The fourth earthquake damage-causing phenomena are earthquake-induced ground failures, including liquefaction and landslides. During an earthquake, the areas that are rich in sand and silt have groundwater within 30 feet of the surface temporarily behave as viscous fluids during strong ground shaking. Structures built on these materials can settle, topple, or collapse as the ground "liquefies" beneath it. Landslides can also form when earthquake shaking or seismic activity dislodges rock and debris on steep slopes, triggering rock falls, avalanches, and slides.

Natural Hazard: **Earthquake**

Also, unstable, or nearly unstable slopes, consisting of clay soils, may lose shear strength when disturbed by ground shaking and fail, resulting in a landslide. Georgia is at very low risk of seismic induced liquefaction or landslides.

The last of the earthquake-induced phenomena are tsunamis, which are large, gravity-driven waves triggered by the sudden displacement of a large volume of water. The waves produced travel in all directions from the origin at speeds of up to 600 miles per hour. In deep water, tsunamis normally have small wave heights. However, as the waves reach shallower water near land, the wave speed diminishes, and the amplitude drastically increases. Upon impact with a shoreline, the waves can inundate land rapidly, engulfing everything in its path. Successive wave crests follow, typically arriving minutes to hours later, frequently with later arrivals being more dominant. Frequently, the first tsunami waves are downward, causing dramatic exposure of the beach. Because of this, people are often killed trying to collect newly exposed seashells when the positive waves then arrive.

Although large tsunamis are rare in the eastern coast of the US, the possibility of such events occurring anywhere along the Atlantic and Gulf coast exists.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

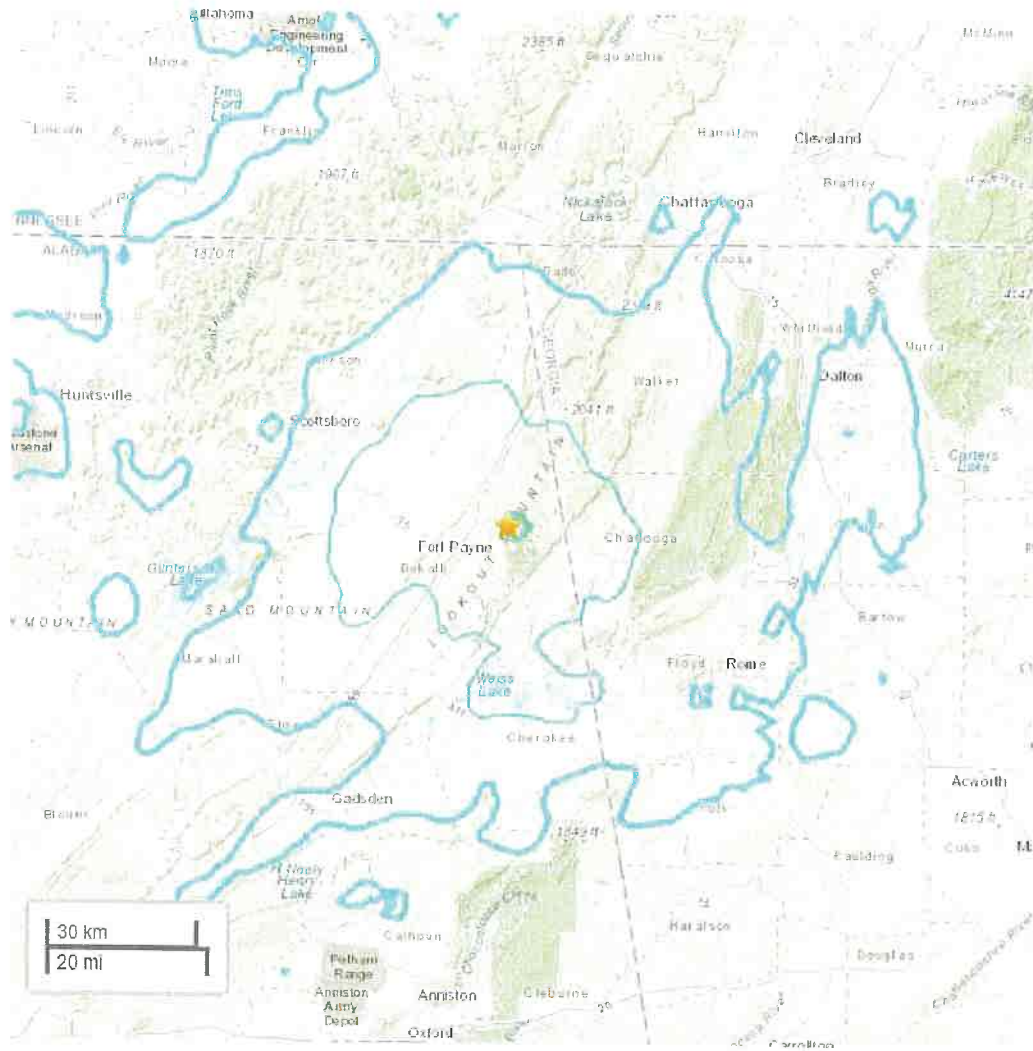
Natural Hazard: **Earthquake**

Hazard Profile

Floyd County is one of the 37 Georgia counties with the highest earthquake risk, according to GEMA and Georgia Tech School of Earth and Atmospheric Sciences. In reviewing data of the last 50 years, no earthquakes have originated from within Floyd County. However, earthquakes with a magnitude of 2.0 or greater have occurred as close as 9 km west of Calhoun GA (2007). 139 earthquakes have originated within 50 miles of Rome, GA in the last 50 years. The strongest earthquake to occur within this radius was a 6.6 that occurred near Fort Payne, Alabama in 2003. Floyd County averages 2.7 earthquakes with 50 miles of Rome, GA each year. Historically, the 1886 Charleston, SC earthquake, estimated to be between 6.6 and 7.3 on the modern Richter Scale, likely caused impacts to Floyd County. Although no historical records exist exhibiting any damages, Floyd County was estimated to be in a level VI area of the Modified Mercalli Intensity scale for this event. This would indicate strong shaking felt by everyone inside and outside at the time of the event and characterized by broken windows, movement of heavy furniture, and slight to moderate damage for poorly built buildings. Even with this low number of occurrences, it was determined that if earthquakes occur within or close to the jurisdiction of Floyd County, significant damage could occur. Therefore, the Floyd County HMPC has determined the threat of earthquakes to be higher than the statistics would indicate. All earthquake hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

Instrumental Intensity	Acceleration (%g)	Velocity (cm/s)	Perceived Shaking	Potential Damage
I	< 0.17	< 0.1	Not Felt	None
II-III	0.17 - 1.4	0.1 - 1.1	Weak	None
IV	1.4 - 3.9	1.1 - 3.4	Light	None
V	3.9 - 9.2	3.4 - 8.1	Moderate	Very light
VI	9.2 - 18	8.1 - 16	Strong	Light
VII	18 - 34	16 - 31	Very Strong	Moderate
VIII	34 - 65	31 - 60	Severe	Moderate to Heavy
IX	65 - 124	60 - 116	Violent	Heavy
X+	> 124	> 116	Extreme	Very Heavy

Natural Hazard: **Earthquake**



SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
PGA(%g)	<0.0066	0.0795	0.954	4.99	8.76	15.4	27	47.4	>83.2
PGV(cm/s)	<0.0028	0.0383	0.524	3.03	6.48	13.9	29.6	63.4	>136
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

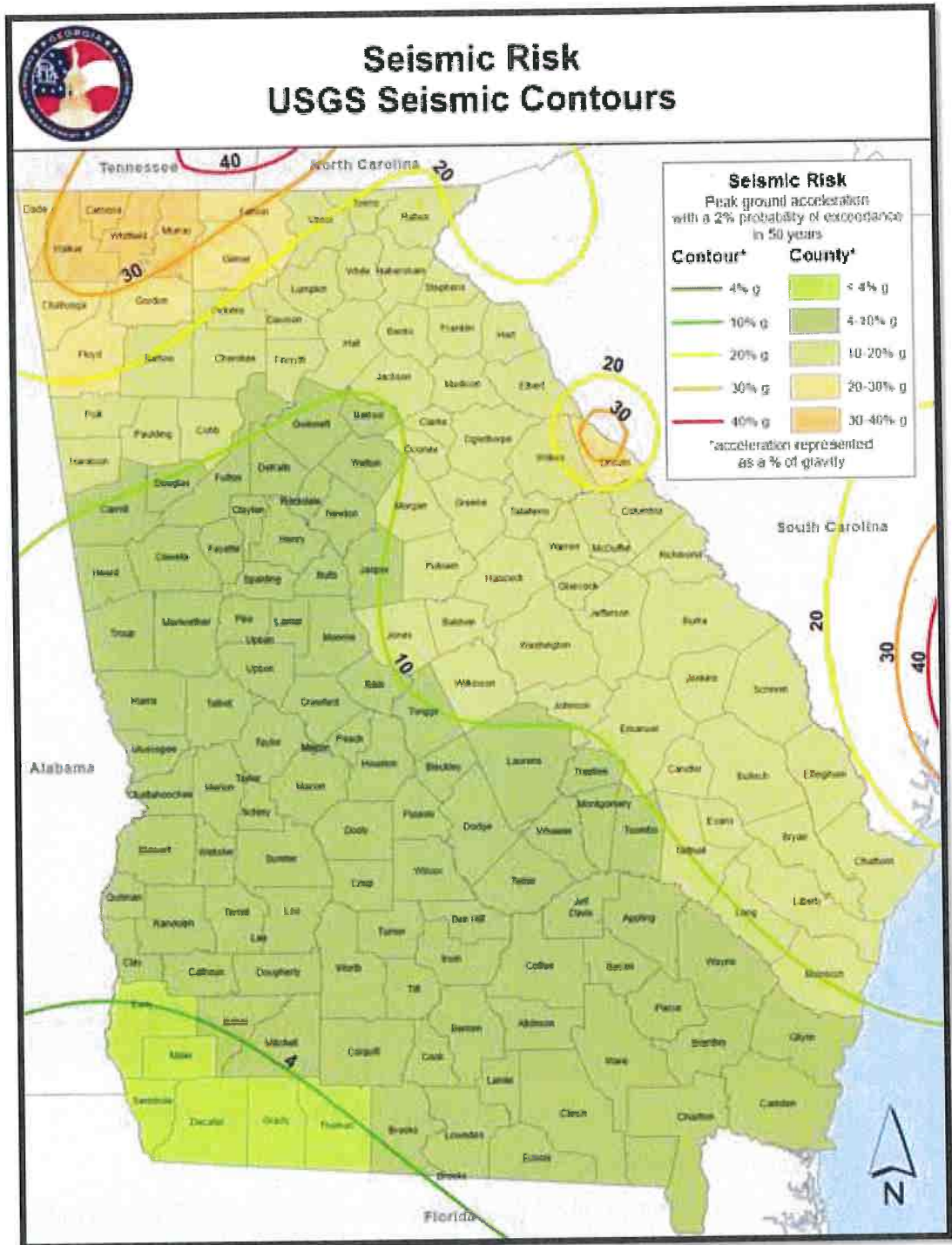
Scale based on Atkinson and Kaka (2007) Version 1: Processed 2020-06-06T04:43:33Z
 Δ Seismic Instrument ○ Reported Intensity ★ Epicenter

Source: United States Geologic Survey (USGS)

Assets Exposed to the Hazard

The Floyd County HMPC determined that all critical facilities and all public and private property within Floyd County are susceptible to the impacts of an earthquake due to the lower building codes with regards to earthquakes when compared to other parts of the country. This includes all municipalities.

Natural Hazard: Earthquake



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Earthquake

Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, for earthquake losses in Floyd County.

Land Use and Development Trends

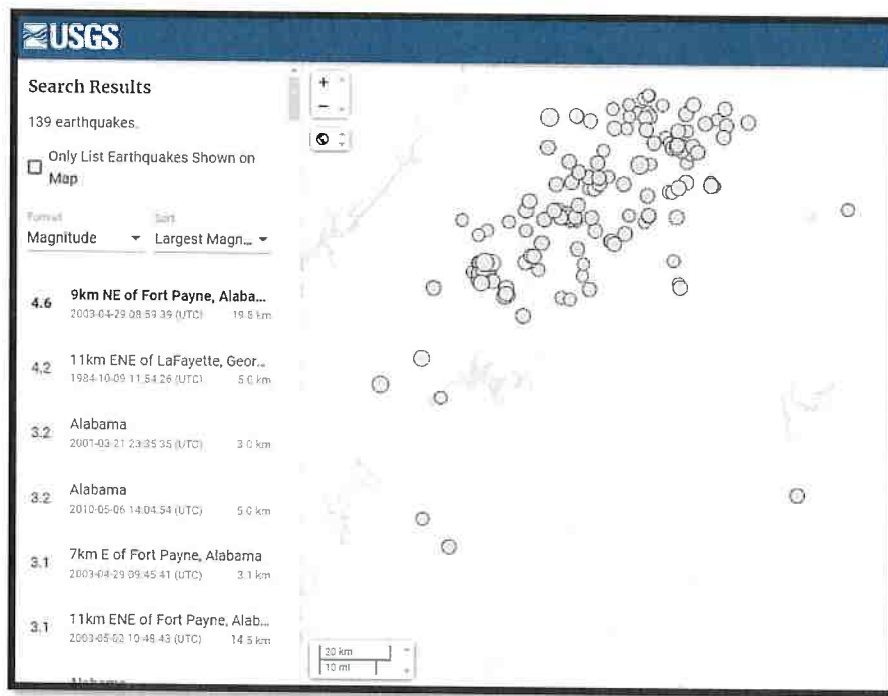
Floyd County currently has no land use trends related to Earthquakes.

Multi-Jurisdictional Considerations

All of Floyd County, including all municipalities, potentially could be threatened by earthquakes. As such, all earthquake mitigation actions should be pursued on a countywide basis and include all municipalities.

Hazard Summary

Even with the relative infrequency of major earthquake impacts in Floyd County, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of the County and all municipalities. The mitigation measures identified in this plan should be pursued based on the high impact potential of this hazard and the ability for earthquakes to inflict widespread devastation anywhere in Floyd County.



Source: United States Geological Survey (USGS) Earthquake Hazards Program

Natural Hazard: **Tropical Cyclone**

Hazard Description

The National Weather Service describes tropical cyclones systems in the Atlantic Basin, including the Gulf of Mexico and Caribbean Sea, into four types based on strength.

Tropical Disturbance: A discrete tropical weather system of apparently organized thunderstorms – generally 100 to 300 nautical miles in diameter – originating in the tropics or subtropics, and maintaining its identity for 24 hours or more.

Tropical Depression: An organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph (33 knots) or less.

Tropical Storm: An organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 mph to 73 mph (34-63 knots).

Hurricane: An intense tropical weather system with a well-defined circulation, producing maximum sustained winds of 74 mph (64 knots) or greater. Hurricane intensity is classified into five categories using the Saffir-Simpson Hurricane scale. Winds in a hurricane range from 74-95 mph for a Category 1 hurricane to greater than 156 mph for a Category 5 hurricane.

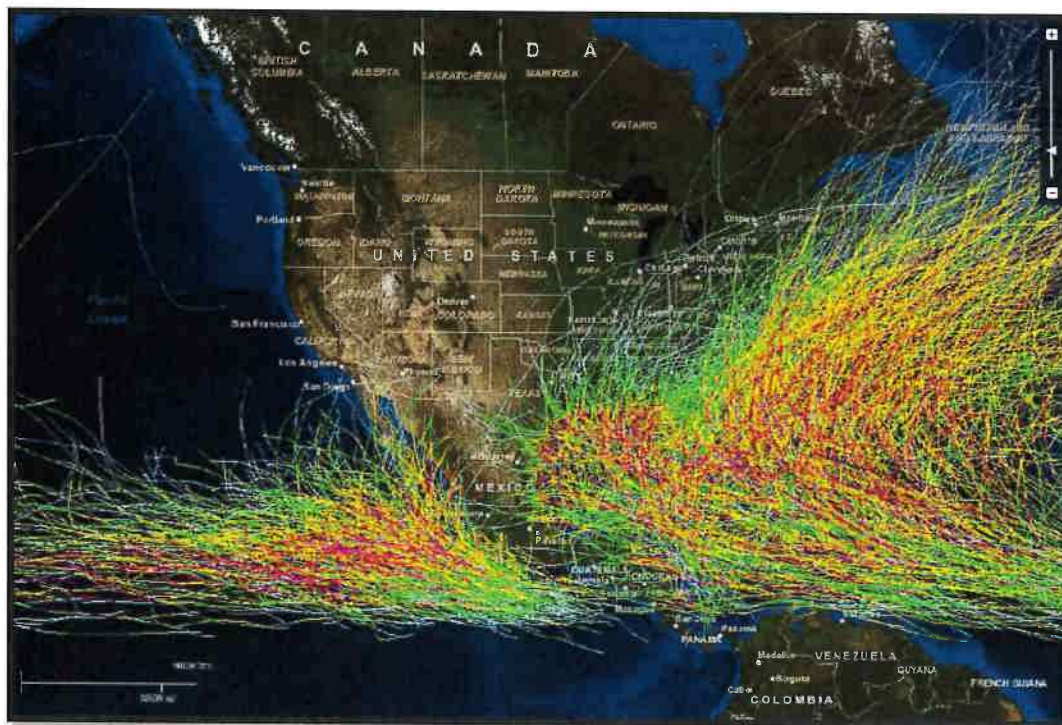
Saffir-Simpson Scale for Hurricane Classification				
Strength	Wind Speed (Kts)	Wind Speed (MPH)	Pressure (Millibars)	Pressure
Category 1	64- 82 kts	74- 95 mph	>980 mb	28.94 "Hg
Category 2	83- 95 kts	96-110 mph	965-979 mb	28.50-28.91 "Hg
Category 3	96-113 kts	111-130 mph	945-964 mb	27.91-28.47 "Hg
Category 4	114-135 kts	131-155 mph	920-944 mb	27.17-27.88 "Hg
Category 5	>135 kts	>155 mph	919 mb	27.16 "Hg
Tropical Cyclone Classification				
Tropical Depression		20-34kts		
Tropical Storm		35-63kts		
Hurricane		64+kts or 74+mph		

Natural Hazard: Tropical Cyclone

Tropical cyclones can cause catastrophic damage to coastlines and areas several hundred miles inland. Tropical cyclones can produce sustained high winds and spawn tornadoes and microbursts. Additionally, tropical cyclones can create storm surges along the coast and cause extensive damage from heavy rainfall. Floods and flying debris from the excessive winds are often the deadly and destructive results of these weather events.

Slow moving tropical cyclones traveling into mountainous regions tend to produce especially heavy rain. Excessive rain can trigger landslides or mudslides. Flash flooding can also occur due to intense rainfall.

Each of these hazards present unique characteristics and challenges; therefore, the following have been separated and analyzed as individual hazards: Tropical cyclones, Thunderstorms, Tornadoes, and Flooding. This section will focus on the direct effects of tropical cyclones.



Natural Hazard: **Tropical Cyclone**

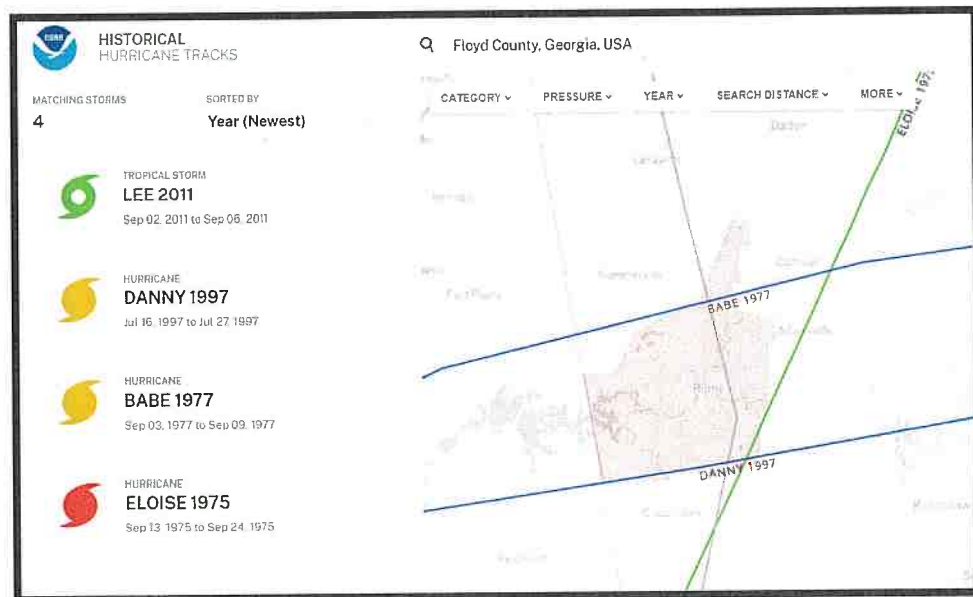
Hazard Profile

Tropical cyclones have directly impacted Floyd County on an infrequent basis over the last 50 years. However, the possibility of a hurricane or tropical storm retaining their wind strength as far inland as Floyd County is possible. There have been 15 documented impacts from Topical Cyclones in Floyd County. This equates to a 30% chance of a tropical cyclone impacting Floyd County in any given year. The Floyd County Hazard Mitigation Update Committee believes this percentage is more representative of the potential impact.

Four tropical cyclones – Hurricane Eloise in 1975, Hurricane Babe in 1977, Hurricane Danny in 1997, and Tropical Storm Lee in 2011 – have had a track that directly dissected Floyd County in the last 50 years. All tropical cyclone hazard data included for Floyd County is limited to countywide data and is not broken down by jurisdiction.

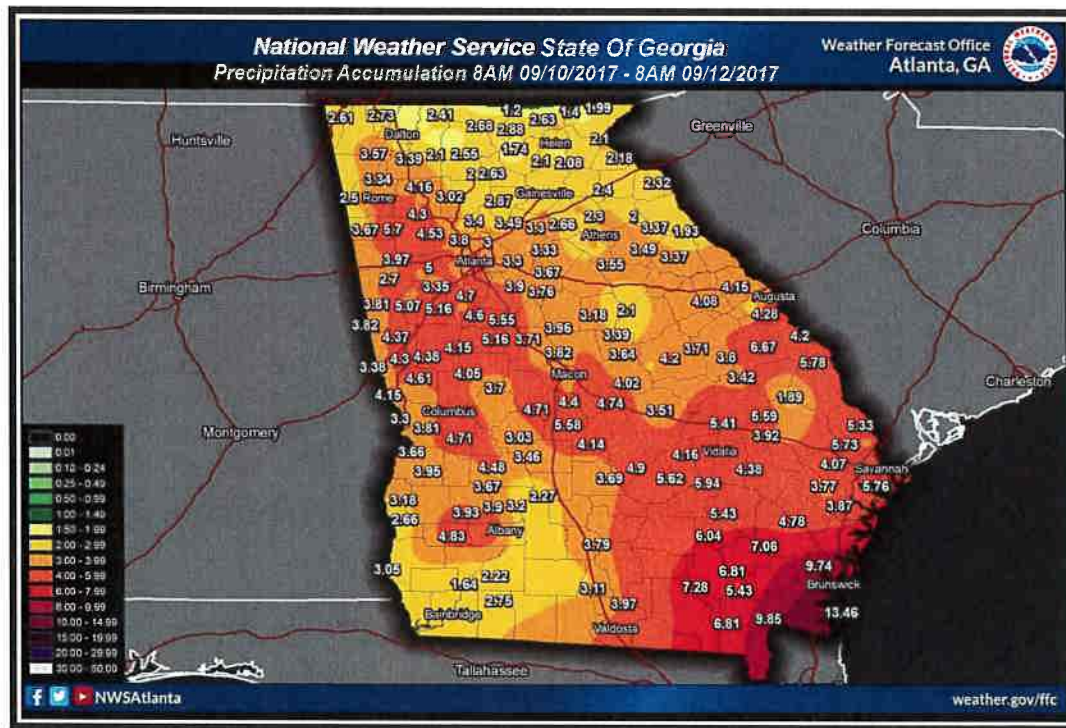
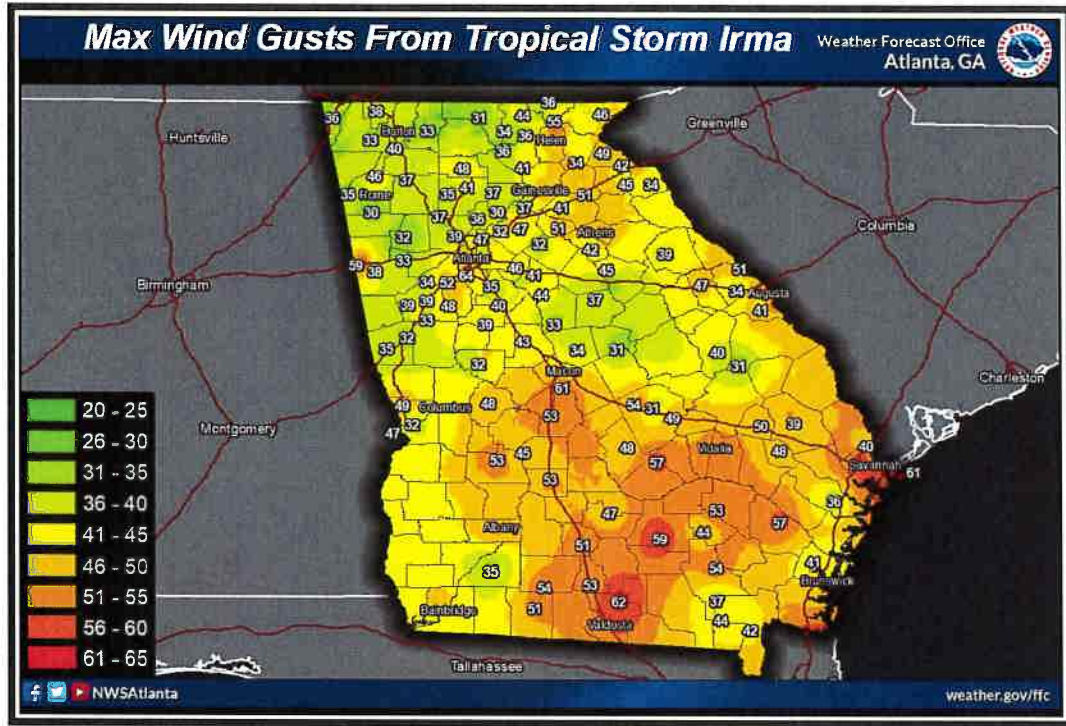
Even with the infrequent occurrences, the impacts that would result from hurricane or tropical storm forces on the citizens, infrastructure, and critical facilities of Floyd County could be potentially catastrophic in nature.

Floyd County has seen significant impacts from Tropical Cyclones in the past. Recently, Hurricane Irma (2017) impacted Floyd County. This storm produced wind gusts over 45 mph in Rome and the storm dropped around 3.5 inches of rain in Floyd County.

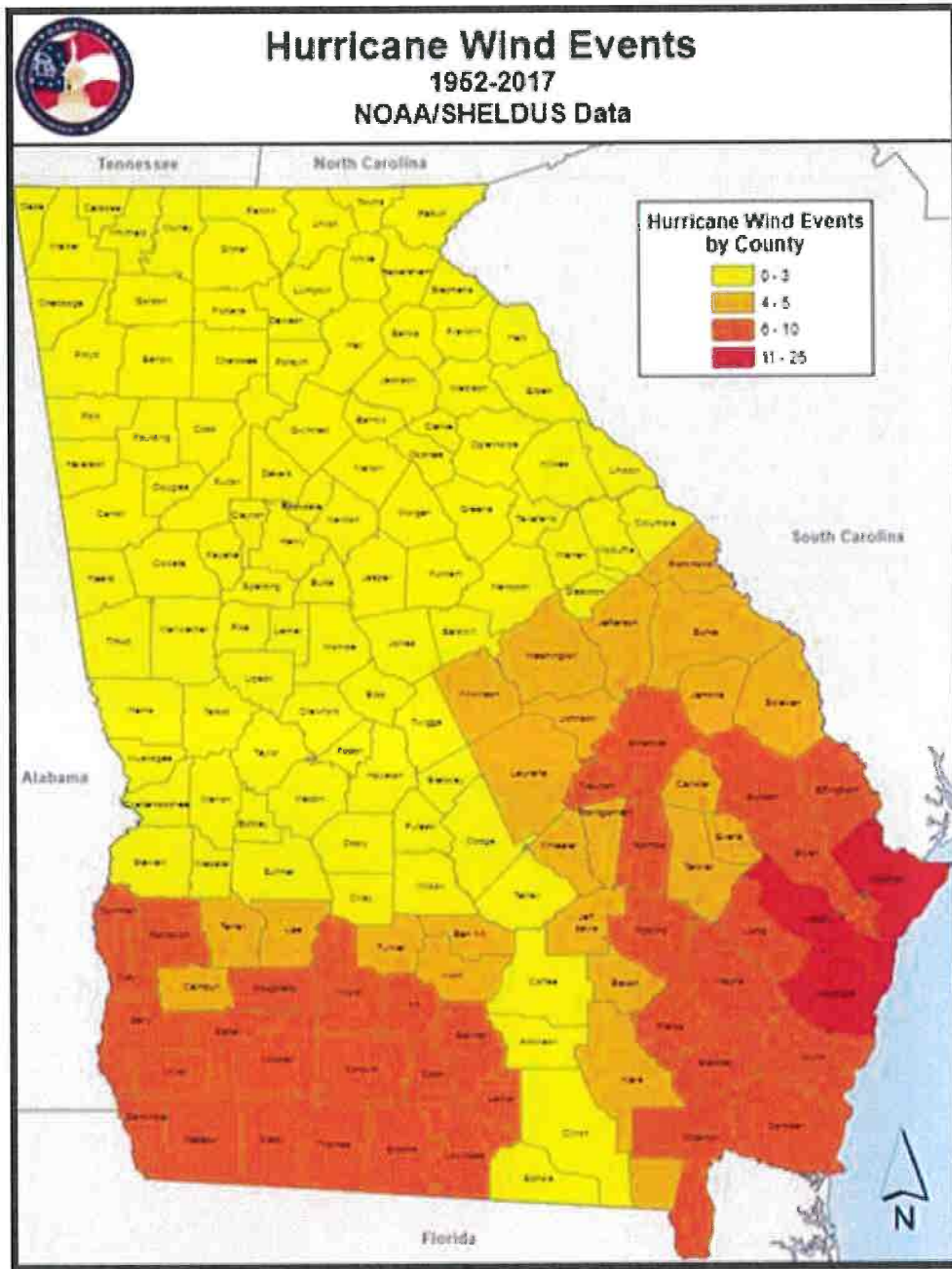


Source: Office of Coastal Management (NOAA)

Natural Hazard: Tropical Cyclone



Natural Hazard: Tropical Cyclone

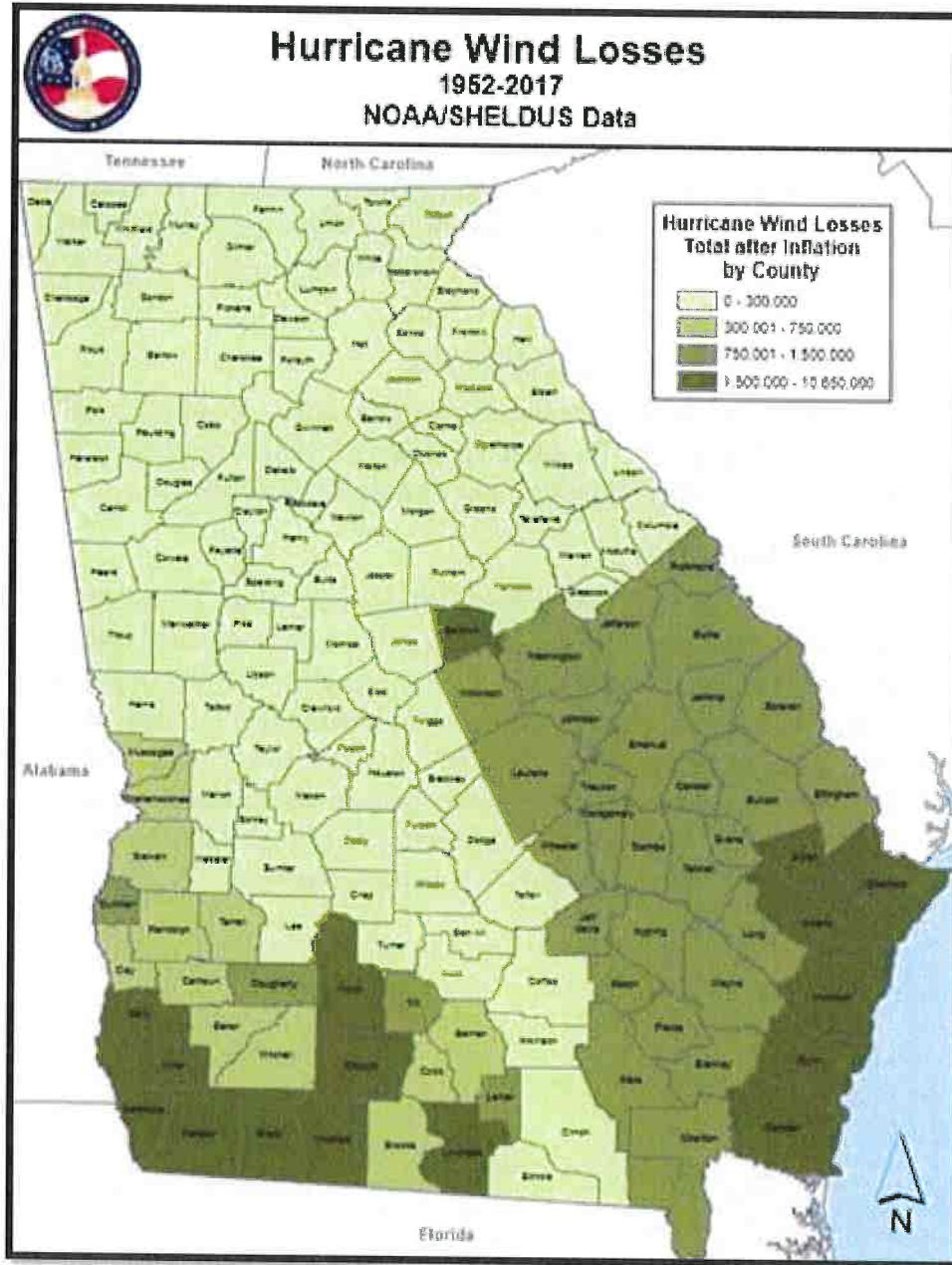


Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Tropical Cyclone

Assets Exposed to the Hazard

The Floyd County HMPC determined that all critical facilities and all public and private property within Floyd County are susceptible to the direct and indirect impacts of a tropical cyclone. This includes all municipalities.



Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Tropical Cyclone

Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, is available for tropical cyclone losses in Floyd County. Most losses for these events have been labeled under other impacts, such as tornadoes and flooding. However, the 2021 Floyd County HAZUS Report projected a loss ratio of 0.02% and a total loss of \$1.7 million (67 buildings) for a 100-year (1% annual risk) Tropical Cyclone Event. A 100-year (1% annual risk) Tropical Cyclone event in Floyd County includes winds up to 67 mph, which is a strong Tropical Storm.

Land Use and Development Trends

Floyd County currently has no land use trends related to Tropical Cyclones beyond continued population growth. Due to past tropical cyclone events many land use planning ordinances have been put in place to minimize impacts where possible.

Multi-Jurisdictional Considerations

All of Floyd County, including all municipalities, could potentially be threatened by tropical cyclones. As such, all tropical cyclone mitigation actions should be pursued on a countywide basis and include all municipalities.

Hazard Summary

Even with the relative infrequency of tropical cyclone impacts in Floyd County in the recent past, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of Floyd County and all municipalities. The mitigation measures identified in this plan for tropical cyclones should be pursued based on the high impact potential of this hazard and the ability for tropical cyclones to inflict widespread devastation anywhere in Floyd County. Floyd County has had four Federally Declared Disaster related to Tropical Cyclones, most recently in 2017 (Hurricane Irma).

Technological Hazard: Hazardous Material Incident*Hazard Description*

Hazardous materials, or hazmat, refers to any materials that may pose a real hazard to human health and/or the environment because of its quantity, concentration, and/or physical or chemical characteristics. Hazardous materials include explosives, flammables, combustibles, oxidizers, toxic materials, radioactive substances, and corrosives. Specific federal and state regulations exist regarding the transport and storage of hazardous materials.

A hazardous materials spill or release occurs when a hazardous material gets into the environment in an uncontrolled fashion. Response to a hazmat spill or release depends greatly on the type of material involved and the subsequent physical and chemical characteristics. Major sources of hazardous materials spills include transportation accidents on roadways and railways, pipeline breaches, and spills into rivers and creeks. Jurisdictions with facilities that produce, process, or store hazardous materials are at risk, as are facilities that treat or dispose of hazardous materials.

Hazard Profile

Data from the United States Coast Guard National Response Center was reviewed regarding hazardous materials spill history in Floyd County. Data is available from 1990 to 2019 and all available data was reviewed. There were 130 NRC reported hazardous materials spills or releases in Floyd County over a 29-year period. It is anticipated that many more hazardous materials incidents have occurred over the last 29 years but have not been reported. According to the NRC data, Floyd County averages 4.1 hazardous materials incidents of a reportable amount every year. The greatest threat for a hazardous materials spill comes from the transportation of materials through Floyd County. This is particularly true for the US Highway 27 and 411 corridors that run through the center of the county.

Hazardous materials releases can also be the result of railway or fixed facility incidents. Fixed facilities continue to be an increasing concern due to Floyd County's growing industrial footprint.

Of particular concern to the Floyd County Hazard Mitigation Committee is the exposure of water sources to potential hazardous materials incidents. A spill affecting water sources could have significant impacts on Floyd County.

Technological Hazard: Hazardous Material Incident*Assets Exposed to Hazard*

The environment is particularly vulnerable to the threat posed by hazardous materials. Waterways are at a high risk for contamination from hazardous materials. Water contamination is of particular concern to the Floyd County HMPC. Public and private property located near fixed hazardous materials facilities are also a greater risk than the general population of Floyd County.

Estimated Potential Losses

Estimation of potential losses is difficult regarding hazardous materials due to the vast array of potential types of hazardous materials that could be involved in the incident and unknown costs regarding environmental damages. No recorded information was found regarding the losses associated with hazardous materials incidents in Floyd County. However, a hazardous materials release, whether in transport or at a fixed facility, would incur significant costs regarding emergency response, potential road closures, evacuations, watershed protection measures, expended man-hours, and cleanup materials, equipment, and personnel.

Land Use and Development Trends

Floyd County currently has no land use trends related to Hazardous Materials beyond continued population growth – particularly in and around the City of Rome.

Multi-Jurisdictional Considerations

All of Floyd County, including all municipalities, are vulnerable to both fixed facility and transportation-related hazardous materials releases. However, areas along the US Highway 27 and 411 corridors, including the City of Rome, are at the greatest risk.

Hazard Summary

Hazardous materials incidents pose a significant threat to the citizens, infrastructure, and critical facilities of Floyd County. Unknown quantities of hazardous materials are transported daily through Floyd County and all municipalities. These materials are transported via highways, with US Highways 27 and 411 being of greatest concern. Water contamination as a result of a hazardous materials spill is of significant concern to the Floyd County HMPC. As a result of the threat posed by hazardous materials, the Floyd County HMPC has identified mitigation actions directly related to this threat.

Technological Hazard: **Dam Failure**

Hazard Description

Georgia law defines a dam as any artificial barrier, which impounds or diverts water, is 25 feet or more in height from the natural bed of a stream or has an impounding capacity at maximum water storage evaluation of 100 acre-feet or more. Dams are generally constructed to provide a ready supply of water for drinking, irrigation, recreation, and other purposes. Dams can be constructed from earth, rock, masonry, concrete or any combination of these materials.

Dam failure is a term used to describe a significant breach of a dam and the subsequent loss of contained water. Dam failure can cause significant damages downstream to structures, roads, utilities, and crops. Dam failure can also put human and animal lives at risk. National statistics indicate that one-third of all dam failures in the United States are caused by overtopping due to inadequate spillway design, debris blocking spillways, or settlement of the dam crest. Another third of all US dam failures are the result of foundation defects, including settlement and slope instability.

Hazard Profile

There are 3 category I and 14 category II dams located within Floyd County. Category I dams are those that would pose a possible threat to human life if a failure were to occur. All category I dams must be inspected annually according to Georgia's Safe Dams Act.

The threat of a dam failure in Floyd County could potentially lead to downstream flooding. This downstream flooding would have many of the same hazards as a flood event, but with the onset of such an event being much quicker than in a typical flood event.

Assets Exposed to Hazard

To evaluate the assets that would potentially be impacted by a dam failure, the Floyd County HMPC attempted to identify known structures within, or close to, the 100-year floodplain. All municipalities could be exposed to the hazards of other dams or face secondary hazards from the category I dams.

Estimated Potential Losses

Loss estimations are not applicable since it is not known which dam will fail and how significant of failure will occur.

Technological Hazard: Dam Failure*Land Use and Development Trends*

Floyd County participates in the National Flood Insurance Program (NFIP) and follows the program's guidelines to ensure future development is carried out in the best interests of the public. The County (CID No. 103079B) first entered the NFIP on May 19, 1987. According to the NFIP guidelines, the County has executed a Flood Damage Prevention Ordinance. This ordinance attempts to minimize the loss of human life and health as well as minimize public and private property losses due to flooding. The ordinance requires any potential flood damage be evaluated at the time of initial construction and that certain uses be restricted or prohibited based on this evaluation. The ordinance also requires that potential homebuyers be notified that a property is located in a flood area. In addition, all construction must adhere to the Georgia State Minimum Standard Codes and the International Building Codes.

Multi-Jurisdictional Considerations

During a dam failure event, many portions of Floyd County would potentially be impacted by flooding. However, the area's most prone to flooding have historically been those areas located within the 100-year floodplain and downstream from dams.

Hazard Summary

Dam failure poses a threat to Floyd County and its citizens, infrastructure, and critical facilities. A dam failure could prove catastrophic for areas downstream of the dam, particularly if the failure were to occur at any of the 3 Category I or 14 Category II dams located in Floyd County. As a result, mitigation efforts for dam failure should be focused in this potentially affected area.

Technological Hazard: **Transportation Incident**

Hazard Description

There are many secondary hazards that could be associated with transportation incidents. Injuries or deaths can occur as a result of the impact of a transportation accident, by a hazardous materials release as a result of a transportation incident, or by other related transportation hazards. Transportation can occur via roadways, highways, interstates, railways, air or navigable waterways. Each transportation type poses their own unique hazard issues and consequences.

Roadway hazards are most likely to be caused by a motor vehicle accident involving one or more cars, trucks, vans, or transport vehicles. These incidents can have injuries as a result of the impact of the MVA or a hazardous materials release into the local environment, including waterways. Railway incidents pose many of the same dangers as motor vehicle accidents. However, the threat of a hazardous materials release is greatly increased when railway transportation incidents are considered.

Air accidents can include commercial airplanes, private airplanes, hot air balloons, helicopters, or other forms of air travel. Each of these incidents can cause a significant threat to human life as well as posing a hazardous material threat due to the cargo being transported or the fuel being used. Navigable waterway incidents can create formidable incidents for response organizations. Because of the waterway, technical expertise is needed to carry out rescue operations, especially in swift-moving waterways. Also, any incident in a waterway is likely to have environmental impacts.

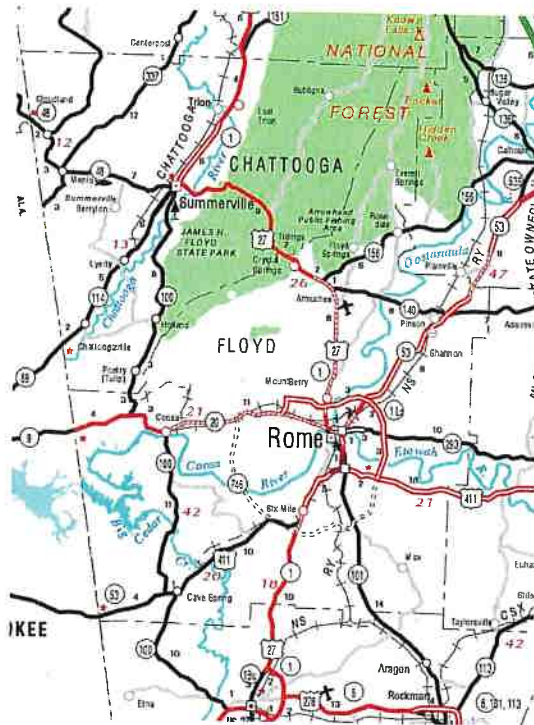
Hazard Profile

Transportation incidents are of a significant concern in Floyd County. Passing through Floyd County are US Highways 27 and 411, and Georgia Highways 1, 20, 53, 100, 101, 140, 156, and 293. The Richard B. Russell Regional Airport is located approximately seven miles north of downtown Rome. This airport serves as the primary airport in northwest Georgia and has approximately 100 flights per day. This airport has two asphalt runways – one 4,500 feet and one 6,000 feet. There are no navigable waterways in Floyd County.

Assets Exposed to Hazard

All assets and critical facilities located along or near any transportation route could potentially be impacted by a transportation incident. Areas within Floyd County that are not located along or near a transportation route could still face residual impacts.

Technological Hazard: Transportation Incident



Estimated Potential Losses

Estimated potential losses cannot be anticipated with this event due to the vast number of differing scenarios regarding transportation incidents.

Land Use and Development Trends

Floyd County currently has no land use trends related to Transportation Incidents beyond an increase in overall population which, in turn, increases the likelihood and potential impact of a transportation incident. The primary areas of growth have been in and around the City of Rome.

Multi-Jurisdictional Considerations

Floyd County as well as all municipalities could potentially be impacted by a transportation incident. However, areas along US Highway 27 and 411 are the greatest at risk, including the Cities of Rome and Cave Spring.

Hazard Summary

The Floyd County HMPC has determined that transportation incidents pose a high risk to their jurisdictions due to the unpredictable nature and likelihood of the incident. As a result, the Floyd County HMPC has developed mitigation strategies and actions with transportation incidents in mind.

Technological Hazard: **Terrorism**

Hazard Description

The Federal Bureau of Investigation (FBI) defines terrorism as violent acts or acts dangerous to human life that violate federal or state law, appear to be intended to intimidate or coerce a civilian population, affect the conduct of a government by mass destruction, assassination or kidnapping, and is calculated to influence or affect the conduct of a government by intimidation or retaliate against government conduct. Terrorism is usually referenced as being premeditated and politically motivated.

Terrorist acts are, by their very nature, designed and carried out with the intention of inflicting mass casualties and extensive property damage. When an act of terrorism is carried out in a jurisdiction, it will likely be necessary to implement multiple aspects of the emergency management system and summon additional resources from local, state, and federal partners.

Terrorism is generally divided into two types: domestic terrorism and international terrorism. Domestic terrorism is defined as terroristic acts focused on facilities and populations without foreign direction. International terrorism involves activities that are foreign-based and/or sponsored by organizations outside of the United States.

Terrorists often use threats to create fear among the public, to convince citizens that government is powerless to prevent terrorism and to get immediate publicity for their causes. Weapons of Mass Destruction (WMDs), including incendiary, explosive, chemical, biological, radiological and nuclear agents, have the capability to cause death or serious bodily injury to a significant number of people, thus posing the threat of a catastrophic incident. Terrorism can also include arson, agro-terrorism, armed attack, intentional hazardous materials release, water or food contamination, and attacks on infrastructure and electronic information systems.

Hazard Profile

Terrorism targets have historically been facilities that make a large economic or social impact on the targeted government or jurisdiction. In Floyd County, all critical facilities could be seen as potential targets. Terrorism includes a multitude of potential approaches, including agro-terrorism, which is terrorism targeted toward agriculture. Due to the high economic impact (over \$60 million in annual agriculture-related sales) of agriculture in Floyd County, agro-terrorism could be of particular concern.

Technological Hazard: **Terrorism**

While active shooter situations are not always classified as terrorism, for this plan, the Floyd County HMPC has chosen to classify them as such. Active shooter situations can occur in any location, including businesses, schools, government buildings, and public spaces. Schools are seen as particularly vulnerable to these types of situations due to the high publicity of recent active shooter events. While active shooter events and other acts of terrorism occur worldwide, they have low probability for Floyd County but would have devastating impacts if they were to occur. To help mitigate some of these impacts, Floyd County has exercised an active shooter response in the past to better prepare for any such event.

Civil unrest is another particular act that is of concern to the Floyd County Hazard Mitigation Planning Committee. While not generally associated with terrorism, this hazard is encompassed here due to the high economic and social impact civil unrest could have on Floyd County.

Assets Exposed to the Hazard

Due to the unpredictable nature of terrorism, all public and private structures are threatened by the terrorism hazard. This includes all critical facilities.

Estimated Potential Losses

Losses due to terrorism are difficult to estimate due to the unpredictable nature of terrorism. The type of terrorist act carried out, location of the act, and the impact of the act would all affect the potential losses. Please see the critical facilities information for estimated potential losses for each critical facility.

Land Use and Development Trends

Floyd County currently has no land use trends related to Terrorism.

Multi-Jurisdictional Considerations

All of Floyd County, including all municipalities, are vulnerable to potential acts of terrorism. However, critical facilities and their surrounding areas are considered to be at the greatest risk.

Hazard Summary

Terrorism, while a low-probability hazard, would have devastating effects on Floyd County and all municipalities. These impacts would be immediate and long-lasting and could be potentially economically crippling.

Technological Hazard: Critical Infrastructure Failure*Hazard Description*

Infrastructures, such as utilities and communication infrastructures, are particularly vulnerable to both natural and manmade hazards. While a communications or utility failure would most likely be a secondary hazard of one of the other hazards identified in this plan, an infrastructure failure could be a solo incident itself.

A lack of communication with outside sources or a long-duration lack of utility service could lead to public panic, poor emergency response capabilities, and other domino hazards. These events pose a significant threat to many jurisdictions.

Hazard Profile

In case of any failure of a utility or communication infrastructure, general difficulties would be exacerbated for both emergency responders and for the general public. The reliance on wireless communications, particularly for the public safety sector, increases the vulnerability of Floyd County's emergency response agencies to a utility failure.

Assets Exposed to Hazard

All assets and critical facilities within Floyd County could potentially be impacted by an infrastructure failure or could be the source for the infrastructure failure.

Estimated Potential Losses

Estimated potential losses cannot be anticipated with this event due to the vast number of differing scenarios regarding infrastructure failures.

Land Use and Development Trends

Floyd County currently has no land use trends related to infrastructure failures beyond continued population growth.

Multi-Jurisdictional Considerations

Floyd County as well as all municipalities could potentially be impacted by an infrastructure failure. However, the City of Rome is particularly vulnerable due to population density and higher reliability on technology.

Hazard Summary

The Floyd County HMPC has determined that infrastructure failures pose a high risk to their jurisdictions due to the unpredictable nature of the incident. As a result, the Floyd County HMPC has developed mitigation strategies and actions.

Technological Hazard: **Critical Infrastructure Failure**

Hazard Description

Infrastructures are particularly vulnerable to both natural and technological hazards. These include electrical utilities, water utilities, gas pipelines, fuel supplies, and other infrastructures that supply vital supplies and services to the community. While an infrastructure failure would most likely be a secondary hazard of one of the other hazards identified in this plan, an infrastructure failure could be a solo incident itself.

A lack of connection with outside sources could lead to public panic, poor emergency response capabilities, and other domino hazards. These events pose a significant threat to many jurisdictions.

Hazard Profile

In case of any failure of a utility infrastructure, general difficulties would be exacerbated for both emergency responders and for the public. The reliance on wireless communications, particularly for the public safety sector, increases the vulnerability of Floyd County's emergency response agencies to a utility failure.

Natural gas pipelines and gas pipelines crisscross the eastern section of Floyd County. While these pipelines stay east of the City of Rome, they do impact the unincorporated areas of Armuchee and Woodcliffe Estates. Both types of pipeline could cause a significant hazardous materials incident if breached or could cause significant gas and natural gas outages across the region if supply were interrupted for an extended period.

Assets Exposed to Hazard

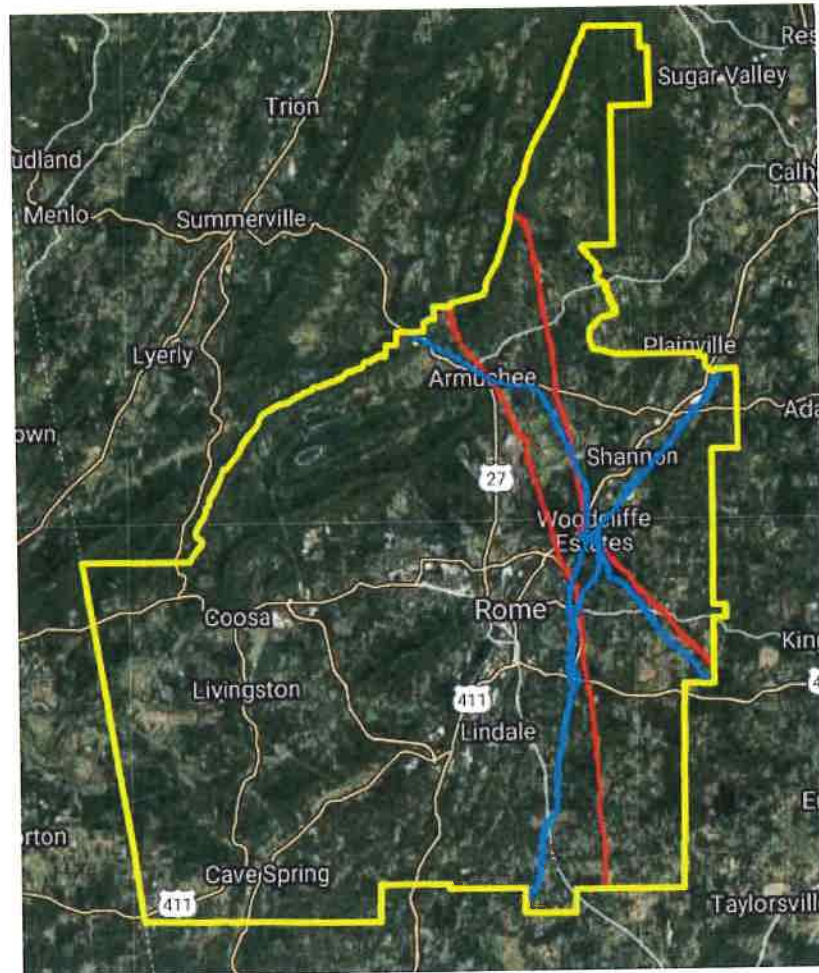
All assets and critical facilities within Floyd County could potentially be impacted by an infrastructure failure.

Estimated Potential Losses

Estimated potential losses cannot be anticipated with this event due to the vast number of differing scenarios regarding utility failure.

Land Use and Development Trends

Floyd County currently has no land use trends related to infrastructure failures beyond continued population growth and an ever-increasing industrial footprint.

Technological Hazard: Critical Infrastructure Failure

Source: National Pipeline Mapping System

Multi-Jurisdictional Considerations

All areas of Floyd County could potentially be impacted by an infrastructure failure.

Hazard Summary

The Floyd County HMPC has determined that utility failures pose a high risk to their jurisdictions due to the unpredictable nature of the incident. As a result, the Floyd County HMPC has developed mitigation strategies and actions with infrastructure failures in mind.

Technological Hazard: Emerging Infectious Disease*Hazard Description*

Microorganisms, such as bacteria, viruses, parasites, fungi, or prions, surround us within the environment. They can even be found within our own bodies. Most microorganisms are completely harmless, and many are actually beneficial. However, some of these organisms are pathogenic, meaning they cause or can cause disease. Infectious diseases are caused by these pathogenic organisms and are communicable – meaning they can be spread from person to person either directly or indirectly. Direct transmission of the disease occurs through actual physical contact with an infected person or their bodily fluids. Indirect transmission of a disease occurs when an infected person contaminates a surface by sneezing, coughing, etc., and a non-infected person comes into contact with that infected surface. Another means of indirect transmission includes vectors, such as mosquitos, flies, mites, ticks, fleas, rodents, or dogs, which may carry the pathogenic microorganism and transmit it to people via a bite. Infectious diseases can also impact animal populations, particularly livestock and other farm animals. Even though these diseases may not directly affect humans, the economic impact of these diseases can be just as harmful, if not more so, to the community.

Infectious diseases can occur as primary events or they may occur as a cascading result of another disaster, such as a tornado, flood, or winter weather. Infectious diseases can vary greatly in severity and magnitude. According to the World Health Organization, infectious diseases account for three of the ten leading causes of death worldwide – HIV/AIDS, lower respiratory infections, and diarrheal disease. These three events, combined with tuberculosis and malaria, account for 20% of deaths globally.

In Western countries, the impact of infectious diseases has diminished greatly over the last 75 years due to improved sanitation, personal hygiene, vaccinations, and the use of antibiotics. In the United States, only two infectious diseases – seasonal influenza and pneumonia – rank in the top ten leading causes of death. Annually, there are 1,500 deaths in the United States from seasonal influenza and another 52,000 from pneumonia. Children and older adults are the greatest at risk for both.

Emerging infectious diseases are those that are appearing in a population for the first time. Re-Emerging infectious diseases are those that may have previously existed in a population, but levels had dropped to the point where it was no longer considered a public health problem until levels once again began increasing.

Technological Hazard: Emerging Infectious Disease

During the last 25 years, Emerging and re-emerging infectious diseases have been on the rise. The below table outlines some of the contributing factors to this rise:

Contributing Factors to Increasing Occurrence of Emerging Diseases	
Agent-Related Factors	
<ul style="list-style-type: none"> • Evolution of pathogenic infectious agents • Development of resistance to drugs • Resistance of disease carriers to pesticides 	
Host-Related Factors	
<ul style="list-style-type: none"> • Human demographic changes (humans inhabiting new areas) • Human behavior (sexual practices and drug use) • Human susceptibility to infection 	
Environment-Related Factors	
<ul style="list-style-type: none"> • Economic development and land use patterns • International travel and commerce • Deterioration of surveillance systems 	

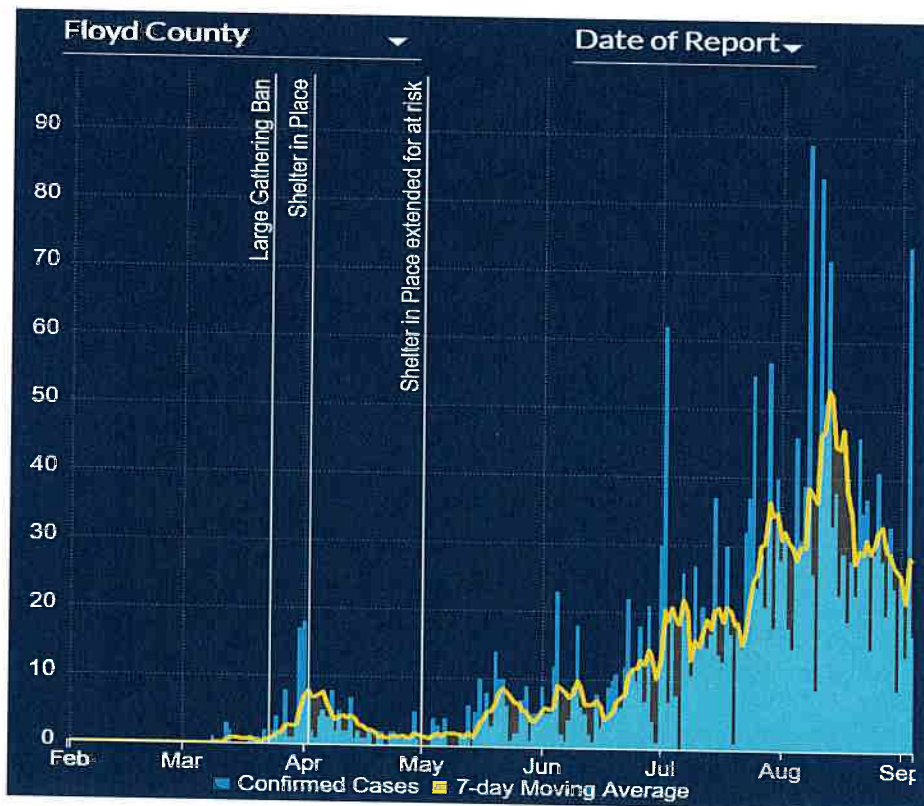
Due to a lack of ready-made vaccines for these diseases and a lack of immunity in the population, emerging and re-emerging infectious diseases are much more likely to escalate to pandemic levels rapidly.

CDC-Identified Emerging and Re-Emerging Infectious Diseases	
Drug-resistant Infections	Mad Cow/Variant Creutzfeldt-Jakob Diseases
Campylobacteriosis	Chagas Disease
Cholera	Cryptococcosis
Cryptosporidiosis (Crypto)	Cyclosporiasis
Cysticercosis	Dengue Fever
Diphtheria	Ebola Hemorrhagic Fever
Group B Streptococcal Infection	Hantavirus Pulmonary Syndrome
Hepatitis C	Hendra Virus Infection
Histoplasmosis	HIV/AIDS
Influenza	Lassa Fever
Legionnaires' Disease and Pontiac Fever	Leptospirosis
Listeriosis	Lyme Disease
Malaria	Marburg Hemorrhagic Fever
Measles	Meningitis
Monkeypox	MRSA
Nipah Virus Infection	Norovirus Infection
Pertussis	Plague
Polio	Rabies
Rift Valley Fever	Rotavirus Infection
Salmonellosis	SARS
Shigellosis	Smallpox
Sleeping Sickness (Trypanosomiasis)	Tuberculosis
Tularemia	Valley Fever (Coccidioidomycosis)
VISA/VRSA	Staphylococcus Aureus
West Nile Virus Infection	Yellow Fever

Technological Hazard: **Emerging Infectious Disease**

Hazard Profile

Emerging Infectious diseases are of significant concern to the Floyd County HMPC, particularly those that would have an impact on the human population or animal population of Floyd County. Floyd County would likely see significant economic impacts from an outbreak involving animal populations, such as an Avian Flu, due to the large economic base agriculture provides (over \$25 million in annual sales). The lack of current vaccines and preparatory activities for these diseases has created a situation where the potential impact to Floyd County of a pandemic or epidemic could be catastrophic. The most recent pandemic scare in the Central Georgia area was the 2009-2010 H1N1 Swine Flu. There were 1,286 cases of H1N1 in Georgia in 2009-2010 and 33 deaths. The majority of registered cases occurred with people between the ages of 5 and 29. This equates to a mortality rate of just over 2.5% - which is slightly lower than the 3% rate of the 1918-1919 Spanish Flu Pandemic. In 2020, the COVID-19 Pandemic, caused by the SARS-CoV2 Virus, impacted communities worldwide, including Floyd County. As of June 23, 2020, there were over 26.4 million cases reported worldwide with over 870,000 deaths. In Floyd County, 346 cases had been reported with 25 deaths.



Technological Hazard: **Emerging Infectious Disease**

Over the last 25 years, emerging infectious disease outbreaks have occurred in other parts of the country. These include:

- 1993 Cryptosporidium Outbreak (Milwaukee, Wisconsin – 403,000 people ill and 100 deaths)
- 2010 Whooping Cough Outbreak (California – 9,500 people ill and 10 infant deaths)
- 2014 Measles (Nationwide – 334 cases from January to May 2014 – most in 20 years)
- 2015 H5N2 Avian Flu Outbreak (Midwest – over 25 million chickens and turkeys destroyed as a precautionary measure at 83 locations)

Assets Exposed to the Hazard

Due to the unpredictable nature of emerging infectious diseases, all public and private structures are threatened by the hazard. This includes all critical facilities. Additionally, Floyd County has over \$60 million in annual agricultural sales, which could see significant impacts from any agriculture-related Emerging Infectious Diseases.

Estimated Potential Losses

Losses due to emerging infectious diseases are difficult to estimate due to the unpredictable nature of the hazard. The type of emerging infectious disease, location of the outbreak, and the impact of the outbreak would all affect the potential losses. Please see the critical facilities information for estimated potential losses for each critical facility.

Land Use and Development Trends

Floyd County currently has no land use trends directly related to emerging infectious diseases.

Multi-Jurisdictional Considerations

All of Floyd County, including all municipalities, are vulnerable to emerging infectious diseases. However, livestock and other farm animals are considered to be the greatest at risk, along with areas with large, concentrated human populations, such as schools.

Hazard Summary

An emerging infectious disease would have devastating effects on Floyd County and all municipalities. These impacts would be immediate and long-lasting and

Technological Hazard: Emerging Infectious Disease

could be potentially economically crippling. Of particular concern to the Floyd County HMPC is impacts to Floyd County's large agricultural business population (over \$60 million in annual sales). Because of these considerations, the Floyd County HMPC has developed mitigation actions with emerging infectious diseases in mind.

CHAPTER FOUR
-
HAZARD MITIGATION STRATEGIES

Summary of Updates to Chapter Four

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Floyd County Hazard Mitigation Plan 2016.

Chapter 4 Section	Updates
Goals and Objectives	<ul style="list-style-type: none">• Updated goals to match the needs of Floyd County and all municipalities
Identification and Analysis of Mitigation Techniques	<ul style="list-style-type: none">• Content Revised• Reviewed mitigation strategies identified in the 2016 plan and made updates• Identified mitigation strategies that were completed• Identified mitigation strategies to be removed

Goals and Objectives

Requirement §201.6(c)(3)

Requirement §201.6(c)(3)(i)

It is important that State and local government, public-private partnerships, and the average citizen can see the results of these mitigation efforts, therefore, the goals and strategies need to be achievable. The mitigation goals and objectives form the basis for the development of specific mitigation actions. County and municipal officials should consider the listed goals before making community policies, public investment programs, economic development programs, or community development decisions for their communities. The goals of Floyd County have changed slightly in the last five years (since 2015) due to specific threat events, such as Hurricane Irma in 2017. Because of the recentness of the impacts of these hazards and the devastation that occurred, these types of events have taken a greater priority, particularly in the increased priority of mitigation strategies directly related to these events and the development of new mitigation strategies related to these hazards.

Each jurisdiction covered by the Floyd County Hazard Mitigation plan update – Floyd County and the Municipalities of Rome and Cave Spring – has limited ability to fully implement the mitigation actions described in this plan. These jurisdictions are severely hampered by their small population and tax base when attempting to raise enough revenue to pursue many of these actions. All jurisdictions lack the needed financial strength and staffing to implement all the actions described in this plan. Many of the actions will be pursued through grant programs and by partnering with public and private organizations who can supplement the needed resources to accomplish the goals outlined in this plan. For actions where grant funding or partnerships are not available, Floyd County or municipality revenue streams may be supplemented through Special Purpose Local Option Sales Tax (SPLOST) funds, which are voted on by the electorate.

- GOAL 1 Maximize the use of all resources by promoting intergovernmental coordination and partnerships in the public and private sectors

- GOAL 2 Harden communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective

- GOAL 3 Reduce and, where possible, eliminate repetitive damage, loss of life and property from disasters

- GOAL 4 Bring greater awareness throughout the community about potential hazards and the need for community preparedness

These objectives state a more specific outcome that Floyd County strives to accomplish over the next five years. Action steps are the specific steps necessary to achieve these objectives. Objectives are not listed in order of importance.

- OBJECTIVE 1 Reduce damage to property and loss of life through the utilization of preventative activities
- OBJECTIVE 2 Minimize the damage to property and loss of life through property protection measures
- OBJECTIVE 3 Minimize the damage to property and loss of life through natural resource protection activities
- OBJECTIVE 4 Reduce damage to property and loss of life through the utilization of structural mitigation projects
- OBJECTIVE 5 Increase the ability of Floyd County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures
- OBJECTIVE 6 Increase public education and awareness of natural hazards
- OBJECTIVE 7 Implement additional protective measures and capabilities in response to manmade incidents
- OBJECTIVE 8 Increase public awareness of local manmade hazards and proper response to those hazards

Identification and Analysis of Mitigation Techniques

Requirement §201.6(c)(3)(iv)

Requirement §201.6(c)(3)(iii)

In updating Floyd County's mitigation strategy, a wide range of activities were considered to help achieve the mitigation goals and objectives. This includes the following activities as by the Emergency Management Accreditation Program (EMAP):

- 1) The use of applicable building construction standards;
- 2) Hazard avoidance through appropriate land-use practices;
- 3) Relocation, retrofitting, or removal of structures at risk;
- 4) Removal or elimination of the hazard;
- 5) Reduction or limitation of the amount or size of the hazard;
- 6) Segregation of the hazard from that which is to be protected;
- 7) Modification of the basic characteristics of the hazard;
- 8) Control of the rate of release of the hazard;
- 9) Provision of protective systems or equipment for both cyber and/or physical risks;
- 10) Establishment of hazard warning and communication procedures; and
- 11) Redundancy or duplication of essential personnel, critical systems, equipment, and information materials.

Part of the prioritization includes a general assessment according to the STAPLEE criteria, which stands for Social, Technical, Administrative, Political, Legal, Economic and Environmental. This process led to three designated priorities: High, Medium, and Low. Most items that require grant funding must undergo a full Benefit Cost Analysis to determine the action's actual cost effectiveness prior to funding. This process will be completed as part of the grant opportunity application process.

Strategy Priority	Priority Description	Strategies within this priority
LOW	Low priority strategies are those strategies that will have less direct impact on mitigating Floyd County’s hazards, are in the early stages of strategy development, or score poorly on a preliminary cost-benefit analysis	1.a; 2.f; 3.c; 5.a; 5.p; 7.n
MEDIUM	Medium priority strategies are those strategies that will have a direct impact on mitigation Floyd County’s hazards, but will not have as large of an anticipated impact as High Priority strategies or may be focused on hazards that are not as potentially impactful or prevalent for Floyd County. These strategies may be in the earlier stages of development or score mediocre on a preliminary cost-benefit analysis	2.b; 2.c; 2.h; 3.a; 4.b; 4.c; 4.d; 5.b; 5.c; 5.h; 5.j; 5.l; 5.m; 5.n; 5.o; 5.q; 5.r; 5.s; 5.t; 5.u; 5.y; 5.z; 5.aa; 5.bb; 5.dd; 7.a; 7.b; 7.c; 7.d; 7.e; 7.f; 7.l; 7.m; 7.o
HIGH	High priority strategies are those strategies that would have a direct, large impact on mitigation Floyd County’s hazards. These strategies are oftentimes well-established needs of Floyd County and/or all municipalities and have score high on a preliminary cost-benefit analysis	1.b; 1.c; 1.d; 2.a; 2.d; 2.e; 2.g; 3.b; 4.a; 5.d; 5.e; 5.f; 5.g; 5.i; 5.k; 5.v; 5.w; 5.x; 5.cc; 5.ee; 5.fff; 5.gg; 5.hh; 6.a; 6.b; 6.c; 7.g; 7.h; 7.i; 7.j; 7.k; 7.p; 8.a

The lead agency listed in the Mitigation Strategy charts will be responsible for the jurisdictional administration and implementation of the mitigation strategy prioritization. Prioritization was determined based on many factors. These include the likelihood of the event, the potential impact of the event, the current readiness posture of Floyd County for the event, the all-hazard impact of the mitigation strategy, and a cost-benefit analysis for the mitigation action. For example, mitigation actions that address high-likelihood, high-impact events with a low cost would rate higher than low-likelihood, high-impact events with a high cost.

The following Mitigation Charts meet:

Requirement §201.6(c)(3)(ii)

Requirement §201.6(d)(3)

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
OBJECTIVE 1: Reduce damage to property and loss of life through the utilization of preventative activities																	
1.a	Purchase lightning resistant equipment at all county and city schools, private schools, and universities	County, City, and private schools and Universities <i>Floyd County and all municipalities</i>			X		X					Public and private grants and/or local budgets	\$500,000	60 months	NEW	Low	NEW
1.b	Maintain NFIP Compliance	County and municipal Planning/Zoning, Board of Commissioners and Municipal Councils <i>Floyd County and all municipalities</i>	X									Local budgets	Staff time	12 months	NEW	High	NEW

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
1.c	Utilize a Floodplain Management Program that includes: 1. Verify lowest floor levels 2. Check base flood elevations in remote areas of the county 3. verify outlet elevations of drainage structures 4. Measure new high water lines in Flood Zone A	<i>Jurisdiction</i> Floyd County Planning and Zoning <i>Floyd County and all municipalities</i>	X				X					Public and private grants and/or local budgets	\$145,000	48 months	NEW	High	NEW
1.d	Perform acquisition and/or relocation of structures that are located in a floodplain	Floyd County EMA <i>Floyd County and all municipalities</i>	X									Public and private grants and/or local budgets	\$2 million	60 months	NEW	High	NEW

OBJECTIVE 2: Minimize the damage to property and loss of life through property protection measures

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
2.a	Purchase and install generators at all schools and school administration buildings	<i>Jurisdiction</i> Floyd County and Rome Schools <i>Floyd County and all municipalities</i>		X	X	X	X			X		Public and private grants and/or local budgets	\$10 million	60 months	NEW	High	NEW
2.b	Perform Load testing on all county and municipal generators	Floyd County Public Works <i>Floyd County and all municipalities</i>										Local budgets	Staff time	36 months	Some testing completed	Medium	4
2.c	Solicit State Legislature to require generators in nursing homes and assisted living facilities	Floyd County Board of Commissioners and Municipal Councils <i>Floyd County and all municipalities</i>		X	X	X	X			X		Local budget	Staff time	12 months	Generators installed at some facilities	Medium	7 (modified)

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
2.d	Purchase and install backup generators at critical facilities	<i>Jurisdiction</i> Floyd County Public Works and EMA <i>Floyd County and all municipalities</i>		X	X	X	X			X		Public and private grants and/or local budgets	\$15 million	60 months	New facilities have been equipped with generators; many still need them	High	8
2.e	Purchase generators for school system fuel tanks (3 of them)	Floyd County and Rome Schools <i>Floyd County and all municipalities</i>		X	X	X	X			X		Public and private grants and/or local budgets	\$250,000	36 months	NEW	High	NEW
2.f	Purchase storm shutters for the Rome/Floyd County Law Enforcement Building's large windows	Floyd County EMA <i>Floyd County and all municipalities</i>		X	X	X	X					Public and private grants and/or local budgets	\$500,000	36 months	Original plan scrapped for new, more aesthetically pleasing design	Low	17
2.g	Purchase generators for all Floyd County Schools facilities	Floyd County Schools <i>Floyd County and Cave Spring</i>		X	X	X	X			X		Public and private grants and/or	\$70,000 per facility	36 months	NEW	High	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
		<i>Jurisdiction</i>										local budgets					
2.h	Purchase lightning resistant equipment for Floyd County Schools	Floyd County Schools <i>Floyd County and Cave Spring</i>			X		X					Public and private grants and/or local budgets	\$500,000	36 months	NEW	Medium	NEW
OBJECTIVE 3: Minimize the damage to property and loss of life through natural resource protection activities																	
3.a	Review ways to reduce flooding and decrease draining on several bus routes which limits access to over 100 students for school transportation	G-DOT and Floyd County Public Works <i>Floyd County and all municipalities</i>	X									Public and private grants and/or local budgets	\$1 million	60 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
3.b	Continue improvements to roadside to decrease flooding	<i>Jurisdiction</i> Floyd County Public Works <i>Floyd County and all municipalities</i>	X		X		X					Local budgets	\$185,000 annually	12 months	Ongoing annual work	High	11
3.c	Perform Kudzu eradication utilizing safe herbicides in areas of wildfire spread concern	Floyd County Public Works <i>Floyd County and all municipalities</i>		X					X			Public and private grants and/or local budgets	\$25,000	36 months	NEW	Low	NEW
OBJECTIVE 4: Reduce damage to property and loss of life through the utilization of structural mitigation projects																	
4.a	Build dual-use tornado shelters throughout the community	Floyd County EMA <i>Floyd County and all municipalities</i>				X						Public and private grants and/or local budgets	\$1 million	48 months	Discussions ongoing regarding partnering with Rec Department	High	5

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
4.b	Create ditches to divert water to culverts	<i>Jurisdiction</i> Floyd County Public Works <i>Floyd County and all municipalities</i>	X		X	X	X					Local budgets	\$150,000 annually	36 months	Ongoing; annual project	Medium	11
4.c	Build a safe room at the Police department/911 Center or retrofit building with a safe room	Floyd County EMA <i>Floyd County and all municipalities</i>				X						Public and private grants and/or local budgets	\$250,000	48 months	NEW	Medium	NEW
4.d	Build building for emergency supplies	Rome Schools <i>City of Rome</i>	X	X	X	X	X	X	X	X	X	Public and private grants and/or local budgets	\$100,000	42 months	NEW	Medium	NEW

OBJECTIVE 5: Increase the ability of Floyd County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
5.a	Purchase foam sticks for fire suppression and prevention	<i>Jurisdiction</i> Georgia Forestry Commission <i>Floyd County and all municipalities</i>							X			Public and private grants and/or local budgets	\$20,000	30 months	NEW	Low	NEW
5.b	Purchase Snow Plows	Floyd County Public Works <i>Floyd County and all municipalities</i>		X								Public and private grants and/or local budgets	\$50,000	30 months	NEW	Medium	NEW
5.c	Purchase 4-wheel drive vehicle for Rome Police	Rome Police <i>City of Rome</i>	X	X					X	X		Public and private grants and/or local budgets	\$45,000	30 months	NEW	Medium	NEW
5.d	Purchase winter weather equipment: 2 brine trucks with scrapes and 2 salt trucks with scrapes	Floyd County Public Works <i>Floyd County and all municipalities</i>										Public and private grants and/or local budgets	\$300,000	36 months	Two brine trucks created with existing trucks; new vehicles needed	High	2

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
5.e	Provide lightning protection for critical facilities	<i>Jurisdiction</i> Floyd County EMA <i>Floyd County and all municipalities</i>			X		X					Public and private grants and/or local budgets	\$500,000	12 months	In place at some softball and baseball facilities; needed at other CFs	High	4
5.f	Install additional fire hydrants	Floyd County Fire Department <i>Floyd County and all municipalities</i>	X						X	X	X	Public and private grants and/or local budgets	\$5,000 each hydrant	60 months	None; other projects taking priority	High	6
5.g	Inspect critical facilities for vulnerabilities using custom inspection form	Floyd County EMA <i>Floyd County and all municipalities</i>	X	X	X	X	X	X	X	X	X	Local budgets	Staff time	24 months	In place for schools, nursing homes, and daycares	High	9
5.h	Purchase 3 portable electronic info signs	Floyd County EMA <i>Floyd County and all municipalities</i>	X									Public and private grants and/or local budgets	\$50,000	12 months	None; Other projects took priority	Medium	10

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
5.i	Determined a supplemental fuel supply for school system's transportation fleet	<i>Jurisdiction</i> Floyd County and Rome Schools <i>Floyd County and all municipalities</i>	X	X	X	X	X		X	X	X	Local budgets	Staff time	12 months	NEW	High	NEW
5.j	Purchase backup radios for all public safety departments Increase citizen enrollment in hazard mass alert system (Code Red) from current level to 18,000 subscribers	Floyd County 911 <i>Floyd County and all municipalities</i> Floyd County EMA <i>Floyd County and all municipalities</i>	X	X	X	X	X		X	X	X	Public and private grants and/or local budgets	\$200,000	36 months	NEW	Medium	NEW
5.k	Install Outdoor warning sirens at 14 recreation centers, schools, and stadiums	Floyd County EMA <i>Floyd County and all municipalities</i>		X		X	X					Local budgets	Staff time	48 months	Increase has occurred, but goal currently unmet	High	13
5.l		<i>Floyd County and all municipalities</i>				X						Public and private grants and/or local budgets	\$750,000	60 months	None; Other projects took priority	Medium	14

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
5.m	Install additional river monitor gauges	<i>Jurisdiction</i> USGS <i>Floyd County and all municipalities</i>	X			X	X					Federal budgets	\$30,000 per year	60 months	In discussion for Highway 100 bridge; need USGS fee covered	Medium	15
5.n	Purchase debris removal equipment	Floyd County Public Works <i>Floyd County and all municipalities</i>			X	X	X	X		X		Public and private grants and/or local budgets		36 months	None; Other projects took priority	Medium	18
5.o	Perform countywide GPS survey for radio connection capability	Floyd County 911 <i>Floyd County and all municipalities</i>		X	X	X	X		X	X	X	Public and private grants and/or local budgets	\$50,000	48 months	NEW	Medium	NEW
5.p	Purchase a lightning detector for use at each fire station	Floyd County Fire Department <i>Floyd County and all municipalities</i>										Public and private grants and/or local budgets	\$20,000	30 months	NEW	Low	NEW

Floyd County Hazard Mitigation Plan Update

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Jurisdiction	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
5.q	Purchase additional Self-Contained Breathing Apparatus (SCBA)	Rome-Floyd Fire Department Floyd County and all municipalities					X	X	X	X	X	X	Public and private grants and/or local budgets	\$1 million	60 months	NEW	Medium	NEW
5.r	Purchase Outdoor Warning Siren for downtown Rome area	Floyd County EMA Floyd County and City of Rome											Public and private grants and/or local budgets	\$25,000	18 months	NEW	Medium	NEW
5.s	Purchase outdoor warning sirens to be placed at Berry College and other colleges/universities in Floyd County	Floyd County EMA, Berry College, other colleges/universities Floyd County and City of Rome					X						Public and private grants and/or local and private budgets	\$75,000	60 months	NEW	Medium	NEW
5.t	Purchase Safety and Security vehicle with 4x4 capabilities	Rome City Schools City of Rome		X	X	X	X	X	X	X	X	X	Public and private grants and/or	\$40,000	48 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
		<i>Jurisdiction</i>										local budgets					
5.u	Purchase additional radio equipment and/or update current radio equipment	Rome City Schools <i>City of Rome</i>			X	X	X	X	X	X	X	Public and private grants and/or local budgets	\$200,000	60 months	NEW	Medium	NEW
5.v	Purchase portable message boards	Rome City Schools <i>City of Rome</i>	X	X	X	X	X	X	X	X	X	Public and private grants and/or local budgets	\$25,000	36 months	NEW	High	NEW
5.w	Purchase lightning detection/protection equipment for outdoor facilities	Rome City Schools <i>City of Rome</i>			X		X					Public and private grants and/or local budgets	\$20,000	24 months	NEW	High	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
5.x	Purchase trailer to move supplies, as needed (reunification)	Rome City Schools <i>City of Rome</i>			X	X	X	X	X	X	X	Public and private grants and/or local budgets	\$10,000	12 months	NEW	High	NEW
5.y	Purchase outdoor warning sirens for schools and sports facilities	Rome City Schools <i>City of Rome</i>				X						Public and private grants and/or local budgets	\$75,000	30 months	NEW	Medium	NEW
5.z	Purchase emergency vests for school response teams	Rome City Schools <i>City of Rome</i>				X	X	X	X	X	X	Public and private grants and/or local budgets	\$5,000	12 months	NEW	Medium	NEW
5.aa	Purchase Fire Pumper Apparatus	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>			X	X	X	X	X	X	X	Public and private grants and/or local budgets	\$750,000 each	48 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
5.bb	Purchase Fire Aerial Apparatus	<i>Jurisdiction</i> Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>				X	X		X	X	X	Public and private grants and/or local budgets	\$1.5 million	60 months	NEW	Medium	NEW
5.cc	Purchase Fire Mitigation equipment	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>						X	X	X	X	Public and private grants and/or local budgets	\$35,000 annually	36 months	NEW	High	NEW
5.dd	Purchase backup, portable radios	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>	X	X	X	X	X		X	X	X	Public and private grants and/or local budgets	\$175,000	48 months	NEW	Medium	NEW
5.ee	Replace outdated fire department personal protective equipment	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>		X		X	X	X	X	X	X	Public and private grants and/or local budgets	\$60,000 annually	24 months	NEW	High	NEW

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
5.ff	Purchase swift water rescue equipment	<i>Jurisdiction</i> Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>	X				X					Public and private grants and/or local budgets	\$15,000	24 months	NEW	High	NEW
5.gg	Provide swift water rescue training	Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>	X				X					Local budgets	\$3,000	18 months	NEW	High	NEW
5.hh	Host Advanced Rescue Training Course	Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>	X									Local budgets	\$5,000	24 months	NEW	High	NEW
OBJECTIVE 6: Increase public education and awareness of natural hazards																	

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Sinkholes/Caves	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
6.a	Provide public education and awareness on what to do when a tornado siren goes off	<i>Jurisdiction</i> Floyd County EMA Floyd County and all municipalities				X						Public and private grants and/or local budgets	\$7,500	24 months	NEW	High	NEW
6.b	Continue to do presentations throughout the community and on the radio/news shows, social media, and newspapers to talk about Code Red, cell phone app, and emergency preparedness	Floyd County EMA Floyd County and all municipalities	X	X	X	X	X	X	X	X	X	Local budgets	Staff time	12 months	Ongoing; NEW	High	NEW
6.c	Hold a media campaign for all hazards, including printed and electronic media	Floyd County EMA Floyd County and all municipalities	X	X	X	X	X	X	X	X	X	Local budgets	\$24,000 annually	18 months	Ongoing; In Place	High	16

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
OBJECTIVE 7: Implement additional protective measures and capabilities in response to manmade incidents														
7.a	Purchase Hazardous Materials Mitigation Equipment	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>		X	X	X	X		Public and private grants and/or local budgets	\$4,000 annually	24 months	NEW	Medium	NEW
7.b	Purchase a minimum of four gas monitors	Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>		X	X	X	X		Public and private grants and/or local budgets	\$8,000	24 months	None	Medium	12
7.c	Purchase cameras for security of existing facilities	Rome City Schools <i>City of Rome</i>			X				Public and private grants and/or local budgets	\$100,000	36 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
7.d	Purchase Active Shooter Kits with rifles	Rome Police Department and Floyd County Sheriff's Office <i>Floyd County and all municipalities</i>			X				Public and private grants and/or local budgets	\$500,000	60 months	NEW	Medium	NEW
7.e	Perform study for the need of a Cyber Terrorism Unit	Rome Police Department and Floyd County Sheriff's Office <i>Floyd County and all municipalities</i>			X				Public and private grants and/or local budgets	\$50,000	60 months	NEW	Medium	NEW
7.f	Perform study for the need for an Anti-Terrorism Unit	Rome Police Department and Floyd County Sheriff's Office <i>Floyd County and all municipalities</i>			X				Public and private grants and/or local budgets	\$50,000	60 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
7.g	Purchase HazMat Suits for all levels (A, B, C, and D)	Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>		X	X	X	X	X	Public and private grants and/or local budgets	\$50,000	24 months	NEW	High	NEW
7.h	Replace HazMat Monitors	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>	X	X	X	X	X	X	Public and private grants and/or local budgets	\$15,000	24 months	NEW	High	NEW
7.i	Replace HazMat equipment that has reached the end of its shelf life	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>		X	X	X	X	X	Public and private grants and/or local budgets	\$15,000	24 months	NEW	High	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
7.j	Replace supplies and equipment on Rome-Floyd Fire Department's HazMat Truck	Rome-Floyd Fire Department <i>Floyd County and all municipalities</i>		X	X	X	X	X	Public and private grants and/or local budgets	\$3,000 annually	12 months	Some parts have been replaced	High	1
7.k	Purchase hand sanitizer, masks, thermometers, foggers, and other infectious disease equipment/ supplies for schools	Rome and Floyd County Schools <i>Floyd County and all municipalities</i>			X			X	Public and private grants and/or local budgets	\$500,000	18 months	NEW	High	NEW
7.l	Build warehouse to store infectious disease supplies	Floyd County Board of Commissioners <i>Floyd County and all municipalities</i>			X			X	Public and private grants and/or local budgets	\$300,000	30 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update 2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Previous Strategy #
7.m	Purchase technology to assist with infectious disease monitoring	Floyd County Board of Commissioners <i>Floyd County and all municipalities</i>			X			X	Public and private grants and/or local budgets	\$100,000	30 months	NEW	Medium	NEW
7.n	Purchase surveillance system with audio to detect gunshots	Floyd County Sheriff's Office and Rome Police <i>Floyd County and all municipalities</i>			X				Public and private grants and/or local budgets	\$150,000	60 months	NEW	Low	NEW
7.o	Upgrade facility communication at all Floyd County Schools facility	Floyd County Schools <i>Floyd County and Cave Spring</i>			X		X		Public and private grants and/or local budgets	\$200,000 per facility	36 months	NEW	Medium	NEW

Floyd County Hazard Mitigation Plan Update

2020

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Infrastructure Failure	Emer. Disease	Funding Source	Estimated Cost	Completion Timeframe	Progress/Status	Priority	Previous Strategy #
7.p	Purchase PPE for Floyd County Schools	Floyd County Schools <i>Floyd County and Cave Spring</i>			X			X	Public and private grants and/or local budgets	\$2 million	18 months	NEW	High	NEW
OBJECTIVE 8: Increase public awareness of local manmade hazards and proper response to those hazards														
8.a	Provide Hazardous Materials Training to first responders	Rome-Floyd Fire Department and EMA <i>Floyd County and all municipalities</i>		X	X	X	X		Public and private grants and/or local budgets	\$3,000	24 months	NEW	High	NEW

Completed Mitigation Strategies

Previous Strategy #	Strategy	Status
19	Build one brush truck for Cave Spring	COMPLETE
21	Execute flood damage prevention ordinance	COMPLETE; in place May 2019

Deleted Mitigation Strategies

Previous Strategy #	Strategy	Reason for Deletion
20	Purchase one Type III Brush Truck	No longer a priority

CHAPTER FIVE
-
MAINTENANCE AND
IMPLEMENTATION

Summary of Updates for Chapter Five

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Floyd County Hazard Mitigation Plan 2016.

Chapter 5 Section	Updates
Maintenance	<ul style="list-style-type: none">• Content Revised
Plan Distribution	<ul style="list-style-type: none">• Content Revised
Implementation	<ul style="list-style-type: none">• Content Revised
Evaluation	<ul style="list-style-type: none">• Content Revised
Peer Review	<ul style="list-style-type: none">• Content Revised
Plan Update	<ul style="list-style-type: none">• Content Revised
Conclusion	<ul style="list-style-type: none">• Content Revised

Maintenance

Requirement §201.6(c)(4)(iii)

To adhere to best practices, state and federal guidelines, and lessons learned, the Floyd County Hazard Mitigation Plan Update Committee has developed a method to ensure the regular review and update of the Plan occurs. Plan maintenance protocols identified during the 2016 Floyd County Hazard Mitigation Plan was followed, to the best abilities of Floyd County. This most importantly included an increased attempt for public participation and inclusion in the planning process. The Floyd County Hazard Mitigation Plan Update Committee will reconvene annually in February to monitor and evaluate the progress of the mitigation strategies in the Plan. Floyd County's Emergency Management Director, Tim Herrington, will be responsible for implementing this meeting. The Committee will discuss the following questions annually:

- Do the goals address current and expected hazards and conditions?
- Are the goals and objectives still relevant to the County?
- Has the nature or magnitude of risks changed?
- Does the risk assessment portion of the Plan need to be updated or modified?
- Are the goals and objectives meeting changes in state and federal policy?
- Are the current resources appropriate for implementing the Plan?
- Are there local implementation problems, such as technical, political, legal, or coordination issues with other agencies?
- Did the jurisdictions, agencies, and other partners participate in the plan implementation process as proposed?

The responsible parties for various mitigation strategies will provide a report during this annual meeting regarding the following:

- How well did the implementation processes work?
- Were any difficulties encountered during implementation?
- Are there any suggestions for revision of any strategies?

Floyd County's Emergency Management Director will send the minutes from this annual meeting to Floyd County Board of Commissioners and the municipalities of Cave Spring and Rome for review.

If there are any updates or modifications to the Floyd County Hazard Mitigation Plan, the Emergency Management Director will forward the changes to the Georgia Emergency Management Agency's Hazard Mitigation Officer. All annual reviews of the Floyd County Hazard Mitigation Plan will be open to the public. These meetings will be advertised both in the local newspapers, but also on signage in the publicly used facility hosting the meeting.

Maintenance Log

Revision Date	Revised Section	Reason for Revision	Revised By
2019-2020	Five Year Hazard Mitigation Plan Update	FEMA Requirement	Floyd County Hazard Mitigation Planning Committee with assistance from Lux Mitigation and Planning

Plan Distribution

This Plan will be distributed, but not limited, to the following departments and organizations within Floyd County:

Floyd County Board of Commissioners
Floyd County Fire Department
Floyd County Emergency Management Agency
Floyd County Sheriff's Office
Floyd County Public Works
Floyd County Planning and Zoning
Floyd County Board of Education
City of Cave Spring
City of Rome

A printed copy of the approved Plan will be available for viewing at the Floyd County Commissioner's Office located at 12 East 4th Avenue in Rome. A printed copy of the approved Plan will also be available for viewing at the Rome-Floyd County Library located at 205 Riverside Parkway NE in Rome. The existence and location of these copies will be publicized in the County's local newspaper, The Rome News-Tribune.

All comments, questions, concerns, and opinions about the Plan will be directed to Director Tim Herrington of the Floyd County Emergency Management Agency for follow-up.

Implementation

Requirement §201.6(c)(4)(ii)

Each jurisdiction participating in the Floyd County Hazard Mitigation Plan is responsible for implementing specific mitigation actions as prescribed in this plan. In the Mitigation Strategies section, every proposed strategy is assigned to a specific local department or agency to assign responsibility and accountability and increase the likelihood of subsequent implementation.

In addition to the designation of a local lead department or agency, some strategies have secondary or assisting department or agencies listed as well. This allows for a sharing of responsibility and coordination of effort for some of the identified strategies that cross lines of departmental responsibility. The completion date has been assigned to assess whether identified mitigation strategies are being implemented in a timely fashion.

Floyd County and all municipalities will seek outside funding sources to implement mitigation projects in both the pre-disaster and post-disaster environments. When applicable, potential funding sources have been identified and targeted for the proposed actions listed in the mitigation strategies. It will be the responsibility of each participating jurisdiction to determine additional implementation procedures beyond those listed within the Floyd County Hazard Mitigation Plan.

This plan, as a joint effort between Floyd County and the Municipalities of Cave Spring and Rome will serve as a comprehensive mitigation plan. The mitigation strategies, hazard identification, and other information identified in this plan will be integrated into all comprehensive Floyd County plans, as well as all municipality plans in the future. Incorporation of these strategies will occur, as necessary, throughout this planning cycle covered by this Hazard Mitigation Plan Update. Aspects of this plan will be integrated into the Floyd County Comprehensive Plan during the next planning cycle.

Identified hazards and mitigation strategies of the 2015 Floyd County Hazard Mitigation plan were integrated into the Local Emergency Operations Plan, multiple County and City SOPs and SOGs, and future planning and zoning plans. Floyd County will integrate mitigation strategies identified in this plan into the Floyd County Comprehensive Plan, Community Wildfire Protection Plan, Continuity of Operations Plan, and other future plans. Strategies identified in the previous plan were applied to grant applications, building and zoning requirements, and development planning considerations for Floyd County and all municipalities.

Many of these strategies will be applied using previously identified policies and ordinances, including the NFIP compliance ordinances and water-use ordinances, which have now been applied countywide. All jurisdictions have the authority to

adopt locally binding ordinances and policies to enhance the mitigation strategies in their jurisdiction.

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local jurisdictions to implement hazard mitigation activities.

Opportunities to integrate the requirements of this Plan into other local planning mechanisms shall continue to be identified. Although it is recognized that there are many possible benefits to integrating components of this Plan into other local planning mechanisms, the development and maintenance of this stand-alone Hazard Mitigation Plan is deemed by the Floyd County Hazard Mitigation Planning Committee to be the most effective and appropriate method to implement local hazard mitigation actions at this time.

<i>Regulatory Tools/Plans</i>	<i>Regulatory Type: Ordinance, Resolution, Codes, Plans, Etc.</i>	<i>Local Authority</i>	<i>State Prohibited</i>	<i>Higher Authority</i>
Building Codes	County/Municipal Code	Yes	No	No
Capital Improvements Plan	Floyd County Comprehensive Plan	Yes	No	No
Comprehensive Plan	Floyd County Comprehensive Plan	Yes	No	No
Economic Development Plan	Floyd County Comprehensive Plan	Yes	No	Yes
Emergency Management Accreditation Program		No	No	Yes
Emergency Response Plan	Floyd County Local Emergency Operations Plan (LEOP)	Yes	No	Yes
Flood Management Plan		Yes	No	No

Historic Preservation		Yes	No	No
National Flood Insurance Program Participation		Yes	No	Yes
Continuity of Government/ Operations Plan		No	No	No
Post-Disaster Ordinance		Yes	No	No
Zoning Ordinances	County and Municipal Codes	Yes	No	No

Evaluation

Requirement §201.6(c)(4)(i)

Periodic revisions and updates of the Floyd County Hazard Mitigation Plan may be required to ensure that the goals of this plan are kept current with federal, state, and local regulations. These revisions should also consider any potential changes in the hazard vulnerability and mitigation priorities of Floyd County.

The Floyd County Hazard Mitigation Plan Update Committee will meet annually to review the Floyd County Hazard Mitigation Plan. During this annual review, mitigation strategies will be reviewed to evaluate the progress that has occurred for each identified mitigation strategy. The Floyd County Hazard Mitigation Plan Update Committee will also meet following any disaster event to review the identified mitigation strategies for that hazard and determine if timelines should be adjusted or additional mitigation strategies should be identified and added to the plan. These steps will ensure that the Floyd County Hazard Mitigation Plan is continuously updated to allow for changes in hazard vulnerabilities and identified mitigation strategies.

The Floyd County Hazard Mitigation Plan Update Committee will complete all evaluations of the Floyd County Hazard Mitigation Plan.

Peer Review

State Requirement Element F1

To maintain standards of quality, improve performance, and provide credibility to the Floyd County Hazard Mitigation Plan Update, representatives of local emergency management agencies bordering Floyd County conducted a peer review of the Plan. The peer review of this Plan constitutes a form of self-regulation, accountability, and new insights offered by qualified professionals in neighboring communities, which face many of the same natural and man-made hazards.

Floyd County Hazard Mitigation Plan Update was peer reviewed by:

Dwayne Jamison	Date
Director	
Bartow County Emergency Management Agency	

Pamela Vaughn	Date
Director	
Chattooga County Emergency Management Agency	

Courtney Taylor	Date
Director	
Gordon County Emergency Management Agency	

Randy Lacey	Date
Director	
Polk County Emergency Management Agency	

Plan Update

Requirement §201.6(c)(4)(i)

The Federal Disaster Mitigation Act of 2000 requires that the Hazard Mitigation Plan be updated at least once every five years. The Floyd County Emergency Management Agency is the department responsible with ensuring this requirement is met. The Floyd County Hazard Mitigation Plan Update Committee will be involved in this future process and will aid the Floyd County Emergency Management Agency in ensuring that all jurisdictions provide input into the planning process. The public will be invited to participate in the planning process through public hearings to be held whenever major updates to this plan are needed and during annual review meetings. This plan will expire in the fourth quarter of 2025; therefore, the approval and adoption of the next plan update must be completed before that time.

In the first quarter of 2023, Floyd County plans to begin the Hazard Mitigation Plan Update process for the fourth time. This planning process will include bi-monthly meetings to accomplish the identified goals of the Floyd County Hazard Mitigation Plan Update. This process will be headed up by the Floyd County Emergency Management Agency. The Floyd County Hazard Mitigation Planning Committee will follow a similar process as was undertaken during this planning cycle to complete all FEMA and GEMA requirements for the Hazard Mitigation Plan Update. This process will be completed by the third quarter of 2024 to meet all identified planning deadlines.

Conclusion

As a result of the hazard mitigation planning process, Floyd County, and all municipalities therein, as well as additional participating organizations have obtained a great deal of information and knowledge regarding Floyd County's disaster history, natural and technological hazards, vulnerabilities, and potential strategies to lessen the impacts of the identified hazards.

One consistent theme identified by the Floyd County Hazard Mitigation Planning Committee was the inability to consistently identify geographic locations that were more vulnerable to most hazards due to the widespread potential effects and random impact areas each hazard could have. This was exceedingly true for most natural hazards. Recognizing this challenge, the Floyd County Hazard Mitigation Plan Update Committee determined it was best to identify many mitigation goals, objectives, and strategies that were both general and specific in nature. These strategies allow the Floyd County Hazard Mitigation Plan Update Committee to adopt strategies that will have the greatest positive effect on the greatest amount of the population.

Appendix A – Floyd County Dams Information

Category I Dams

Name	Latitude	Longitude	Height (feet)	Storage (acres)
Berry College Reservoir Dam	33.817910	-83.716260	38.00	1300.00
Conasauga Lake Dam	33.681667	-83.632222	97.00	76420.00
Stonebridge Lake Dam	34.339444	-85.189444	23.00	458.00

Category II Dams

Name	Latitude	Longitude	Height (feet)	Storage (acres)
Effluent Equalization Basin Dam	34.247222	-85.330278	31.00	405.00
Georgia Kraft Ash Pond Number 2 Dam	34.245556	-85.324833	36.20	475.00
Georgia Power Company Plant Hammond Ash Pond #2 Dam	34.249472	-85.353444	37.40	469.00
Georgia Power Plant Hammond Ash Pond #1 Dam	34.251556	-85.341278	25.30	417.00
Georgia Power Plant Hammond Ash Pond Dam #3	34.259444	-85.338056	28.80	485.00
Hall Lake Dam	34.270278	-85.074167	13.60	109.00
Johnston Lake Dam	34.378750	-85.115500	11.80	192.00
Lake Marvin Dam	34.572500	-85.088889	31.20	1392.00
Lane Lake Dam	34.226417	-85.361389	18.00	395.00
Lower Powers Lake Dam	34.158889	-85.208611	24.60	141.00
Mountain End Lake Dam	34.208972	-85.284167	17.50	145.00
Paris Lake Dam	34.173861	-85.202833	25.80	789.00
Simpson Lake Dam	34.239444	-85.324722	24.30	220.00
Swan Lake Dam	34.332417	-85.148417	21.60	214.00
Wax Lake Dam	34.143111	-85.091083	15.50	540.00

Appendix B – Floyd County Hazard Mitigation Plan Update
Committee Sign-In Sheets

Floyd County Hazard Mitigation Plan Update
Committee Kick-off Meeting

Sign-In Sheet (24)

Thursday, March 5, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ Thomas A. Brown		tbrown@floydcountyga.gov	Floyd County GA Eng.
✓ Robby Hill		rhill@floydga.org	Floyd EMS
✓ Frankie Matthews		charles.mathias@hickok.kingston.pa.edmond	
✓ Richard Argo		argo@floydcountyga.org	FC SO
✓ Frank Conan		conan@floydcountyga.org	Floyd County Connectors
✓ Douglas Yochum		yochumd@floydcountyga.org	Floyd County Connectors
✓ Donnie McCain		dmccain@cityofaxsprings.com	Axle Spring Fire Dept.
✓ MICHAEL SKIEN		SKIENM@FLOYDCOUNTYGA.GOV	FLOYD PUBLIC WORKS
✓ Carl Lively / Major		LivelyC@floydcountyga.org	Floyd Co. Biller
✓ Brandon Elrod		elrod@floydcountyga.org	Tax Assessor
✓ John Blalock		blalockj@floydcountyga.org	911

Also attended: Damian Bellamy, Georgia Forestry Commission; Labor Match Form available upon request to prove attendance.
Troy Brock, Keme - Floyd Fire Dept; Labor Match Form available.

Floyd County Hazard Mitigation Plan Update
Committee Kick-off Meeting

Sign-In Sheet

Thursday, March 5, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ Doakmy Barley		rbarley@romeppd.com	Rome Police Dept
✓ Bryan Roberts		broberts@omega.co	Porter / Porter Co. / Omega

Floyd County Hazard Mitigation Plan Update
Committee Kick-off Meeting

Sign-In Sheet

Thursday, March 5, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ Clete Beasley		cbasney@verizon.net	Rome Fire
✓ Jamie Stone		jstone@romega.ga	Rome Fire
✓ Brad Seif - Director		jseif@rcs.rome.ga.us	Rome City Schools
✓ Peter Willis - Office Manager		willisp@floydcountyga.org	Airport
✓ Scotty W. Hartman		scott.hartman@floydga.net	Floyd Co. Schools
✓ Rick Flanagan		rflanagan@floydga.net	Floyd County Schools
✓ Lucy Herring		lucy.herring@roma.ga.us	GMA
✓ Tim Harrington		tim.harrington@floydcountyga.org	Floyd EMA
✓ Parise Eden		Parise.eden@roma.ga.us	City of Rome, GA

Floyd County Hazard Mitigation Plan Update
Committee Meeting #2

Sign-In Sheet

Thursday, August 13, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
David Jackson		esmin@terradocs.com	Cave Spring Mat
Sonny Highfield		Shirley.Held@Dorville.com	Dorville Cave Spring water Dept
Summer Robinson		Robinsons@floydcountyga.org	911
JASON SELF		jsel@rcs.rome.ga.us	Rome City Schools
Paul Moore		plmoore@rambler.com	Rome PD
Frankie Mathews		charles.m@HHSinHealthcare.com	Rodman
Davian Bellamy		D.Bellamy@FifeStateGA.us	Planning Forestry Commission
Byrd Roberson		broberson@rome.ga.us	Rome Fire
Tom Brown		tbrown@floydcountyga.org	Floyd EMA
Tim Herrington		herringt@floydcountyga.org	Floyd EMA
MICHAEL SPEER		mspeer@floydcountyga.org	Floyd PW

Floyd County Hazard Mitigation Plan Update
Committee Meeting #3

Sign-In Sheet ②

Thursday, September 10, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ Carl Lively / Major	<i>Carl Lively</i>	LivelyC@floydcountygov.org	Floyd Co. Police
✓ Nathan Blanton / Lt.	<i>Nathan Blanton</i>	Blanton@floydcountygov.org	Floyd Co. Sheriff
✓ Scotty W. Hartman	<i>Scotty W. Hartman</i>	scottyh@hwy@floydcountygov.net	Floyd Co. Schools
✓ Rick Flanigan	<i>Rick Flanigan</i>	rflanigan@floydboe.net	Floyd County School
✓ Paul Greene / LT.	<i>Paul Greene</i>	plgreene@rome-police.com	ROME POLICE
✓ Brad Roberson	<i>Brad Roberson</i>	brober@romegov.us	Rome Fire Dept
✓ Jamie Stone	<i>Jamie Stone</i>	jstone@romegov.us	Rome Fire Dept
✓ Thomas A. Bower	<i>Thomas A. Bower</i>	bower@floydcountygov.org	Floyd EMA
✓ Tim Harrington	<i>Tim Harrington</i>	tharrington@romegov.us	Rome Fire Dept
✓ Brian Roberts	<i>Brian Roberts</i>	brob@romegov.us	Rome Fire Dept
✓ JASON SELF / Director Security	<i>Jason Self</i>	jself@romegov.us	Rome City Schools

Floyd County Hazard Mitigation Plan Update
Committee Meeting #4



Sign-In Sheet (12)
Thursday, October 15, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ Tim Herrington Director		herrington@floydcountyga.gov	Floyd Co EMA
✓ Jason SELF / Director of Security		jsell@floydcountyga.gov	Rome City Schools
✓ Nathan Blanton / Floyd Sheriff		Blanton@floydcountyga.gov	FCSO
✓ Brad Roberson / Fire		brober@floydcountyga.gov	Fire
✓ Clate Bowrey		cbowrey@floydcountyga.gov	Fire
✓ Scotty W. Anthony		scotty@floydcountyga.gov	Floyd Co. Schools
✓ Rick Flainger		rflainger@floydcountyga.gov	Floyd County Schools
✓ Carl Uwey		liveyc@floydcountyga.gov	Floyd County Police
✓ Tom Bowen		bowent@floydcountyga.gov	Floyd County EMA
✓ Paul G. White		plwhite@floydcountyga.gov	Rome Police Dept

Floyd County Hazard Mitigation Plan Update
Committee Meeting #4

Sign-In Sheet

Thursday, October 15, 2020

Name/Title	Signature	E-mail Address	Agency/Organization
✓ MICHAEL SKEEN/DPW		SKREENM@FLOYDCOUNTYGA.GOV	FLOYD
✓ BRYAN ROBERTS		broberts@omega.us	Bayer/Floyd Co./GWS SP404

Appendix C – Floyd County Critical Facilities

Name	Jurisdiction	Address
Blossom Hill Water Storage Tank (old)	Rome city	Dogwood Dr
Water Tank - Anderson-S 411	Floyd County	Anderson Rd
Water Tank - Highway 53 N	Rome city	Hwy 53 N
Water Tank - Huffaker Rd	Rome city	Huffaker Rd
Water Tank - East 411	Floyd County	East 411
Water Tank - Watson St	Rome city	Watson St
Water Tank - Whippoorwill Ln	Floyd County	Whippoorwill Ln
Pump Station - Etowah	Rome city	Spyder Webb Dr
Pumping Station - Kingston Rd	Rome city	Kingston Rd
Pumping Station - Horseleg Ck Rd	Rome city	Horseleg Ck Rd
Pumping Station - East 7th St	Rome city	East 7th St
Pumping Station - East 11th St	Rome city	East 11th St
Pumping Station - Billy Pyle Rd	Rome city	Billy Pyle Rd
Pumping Station - Darlington Dr	Rome city	Darlington Dr
Pumping Station - Marine Armory	Rome city	1 Shorter Ave
Water Pump Station - Wilson St	Rome city	Wilson St
Water Pump Station - Cotton St	Rome city	Cotton St
Water Pump Station - Ave A	Rome city	Ave A
Water Pump Station - N 2nd Ave	Rome city	N 2nd Ave
Pumping Station - North Ave	Rome city	North Ave
Pumping Station - Maple St	Floyd County	Maple St
Pumping Station - Linden St	Floyd County	Linden St
Lift Station - Big Dry Creek	Rome city	Hwy 27 North
Lift Station - Horseleg Creek	Rome city	Horseleg Ck Rd
Lift Station - Avenue A	Rome city	Avenue A
Lift Sta - N Second Ave	Rome city	N Second Av
Hycliff Rd Standpipe	Rome city	
Saddle Mountain Standpipe	Rome city	
Sherwood Forest Standpipe	Floyd County	
Shorter College Standpipe	Rome city	
Turnbull Hill Standpipe	Rome city	
Old Trend Complex Fire Protection	Rome city	
Norfolk Southern RR Bridge	Rome city	Hwy 293 milepost 8.1
Rome/Floyd Law Enforcement Center	Rome city	200 W 5th Ave (5 Govt Plaza)
Glenwood Primary School	Floyd County	75 Glenwood School Rd NE
Norfolk Southern RR Bridge	Rome city	SR 53 milepost 23.5

Norfolk Southern RR Bridge	Floyd County	SR 53 milepost 28.9
Norfolk Southern RR Bridge	Floyd County	Hwy 140 milepost 7.1
Norfolk Southern RR Bridge	Rome city	Turner McCall Blvd milepost 12.0
Norfolk Southern RR Bridge	Rome city	SR 1 Loop E Rome Bypass milepost 4.8
Oostanaula River Bridge	Rome city	SR 101 milepost 12.0 2nd Ave
Etowah River Bridge	Rome city	SR 101 milepost 11.2 2nd Ave
Etowah River Bridge	Rome city	SR 1 Loop E Rome Bypass milepost 1.0
Floyd County Courthouse (Historic)	Rome city	4 Government Plaza
Forum Civic Center	Rome city	2 Government Plaza
Water Tank- N. Lindale	Floyd County	Cliffbrink Ave
Water Tank - Doyle 1 mil	Floyd County	Doyle St - 1 mil
Water Tank - Walker Mtn	Floyd County	Walker Mtn Rd - 150
Water Tank - Coosa 500	Floyd County	6100 AL Road
Water Tank - Coosa 1 mil	Floyd County	6100 AL Road
Water Tank - Crystal Springs	Floyd County	Hwy 27 @ Sike Storey Rd
Water Tank - Wax 188	Floyd County	177 Hardin Dr
Water Tank- Wax -1 mil	Floyd County	177 Hardin Dr
Water Tank #1- Old Dalton Rd	Floyd County	3285 Old Dalton RD
Water Tank #2 - Old Dalton Rd	Floyd County	3285 Old Dalton Rd
Water Tank - Cunningham 1 mil	Floyd County	410 Cunningham Rd
Water Tank 2 mil - Cunningham	Floyd County	410 Cunningham Rd
Water Tank -Twickenham	Floyd County	Wellington Way
Water Tank - Big Texas Valley	Floyd County	4133 Big Texas Valley Rd
Pump Station - Hwy 27 N / Bypass	Rome city	s/e corner of Hwy 27 & bypass
Pump Station - Texas Valley	Floyd County	644 Texas Valley RD
Pump Station - Burnett Ferry Rd	Floyd County	2308 Burnett Ferry Rd
Water Tank - 2 mil Shannon	Floyd County	end of White Oak Trl # 330
Pump Station - Bells Ferry Rd	Rome city	213 Bells Ferry Rd
Well Facility - Fulton	Floyd County	315 Fulton Rd
Water Tank - Ind Park	Floyd County	106 The Trail
Water Tank - Leonard Rd	Floyd County	450 Leonard Rd
Pump Station - Moran Lk Rd	Floyd County	1055 Moran Lake Rd
Water Tank - Doyle 150	Floyd County	Doyle St - 150
Water Treatment Building - Brighton	Floyd County	21 White Oak Trl (former Brighton Mill)
Water Tank - Brighton-750	Floyd County	3 White Oak Trl (former Brighton Mill)

Water Tank - Brighton -770	Floyd County	3 White Oak Trl (former Brighton Mill)
Shorter College (dorm buildings only)	Rome city	315 Shorter Ave
Big Cedar Creek Bridge	Floyd County	Hwy 140 milepost 7.2
Little Cedar Creek Bridge	Floyd County	SR 53 milepost 5.6
Big Cedar Creek Bridge	Floyd County	SR 53 milepost 7.9
N/Southern RR Bridge	Rome city	US 27 milepost 9.8
Cabin Creek Bridge	Floyd County	SR 20 milepost 7.7
Silver Creek Bridge	Rome city	US 27 milepost 8.8
Spring Creek Bridge	Floyd County	Hwy 411 milepost 25.5
N/Southern RR Bridge	Rome city	US 27 milepost 8.7
Oostanaula River Bridge - T. McCall	Rome city	Turner McCall Blvd milepost 13.1
Etowah River Bridge	Rome city	Turner McCall Blvd milepost 12.4
Dykes Creek Bridge	Floyd County	Hwy 293 milepost 3.3
Woodward Creek Bridge	Floyd County	Hwy 140 milepost 6.8
Oostanaula River Bridge - 140	Floyd County	Hwy 140 milepost 3.2
Coosa River Bridge	Floyd County	Hwy 100 milepost 13.3
Dry Creek Bridge	Rome city	US 27 milepost 14.3
Three Mile Creek Bridge	Floyd County	US 27 milepost 16.3
Creek Bridge	Floyd County	US 27 milepost 21
Armuchee Creek Bridge	Floyd County	US 27 milepost 23.7
N/Southern RR Bridge	Floyd County	US 27 milepost 5.8
Etowah River Overflow Bridge	Floyd County	SR 1 Loop E Rome Bypass milepost 1.3
Pump Station - Cave Spring Rd	Floyd County	Cave Spring Rd @ Polk/Floyd Co. line
Georgia Power Plant Hammond	Floyd County	5963 Alabama Hwy
Pepperall Elementary School	Floyd County	270 Hughes Dairy Road
Floyd County Education Center	Floyd County	1910 Morrison Campground Road
Model Middle School	Floyd County	164 Barron Rd
Armuchee Middle School	Floyd County	471 Floyd Springs Rd NE
Rome / Floyd Recycling Center	Rome city	405 Watters Street
McHenry Primary	Floyd County	100 McHenry Drive, SW
Model Elementary School	Floyd County	3200 Calhoun Highway, NE
Armuchee Elementary School	Floyd County	5075 Martha Berry Highway, NW
Pepperell Middle School	Floyd County	200 Hughes Dairy Road, SE
Alto Park Elementary School	Floyd County	528 Burnett Ferry Road, SW
Garden Lakes Elementary School	Floyd County	2903 Garden Lakes Boulevard, NW
Cave Spring Elementary School	Cave Spring city	13 Rome Road
West Central Elementary School	Rome city	402 Lavender Drive

East Central Elementary School	Rome city	1502 Dean Avenue
Elm Street Elementary School	Rome city	8 Elm Street
Anna K. Davie Elementary School	Rome city	24 E Main Street SW
West End Elementary School	Rome city	5 Brown Fox Drive
Main Elementary School	Rome city	3 Watters Street
North Heights Elementary School	Rome city	26 Atteiram Drive
Rome High School and College Career Academy	Rome city	1000 Veterans Memorial Hwy
Rome Middle School	Rome city	1020 Veterans Memorial Hwy
High-Rise Apartment Building #1	Rome city	906 N 5th Av
High-Rise Apartment Building # 2	Rome city	807 Ave B
High-Rise Apartment Building #3	Rome city	800 N 5th Ave
Evergreen Health & Rehab Center	Floyd County	6 Moran Lake Rd
Chulio Hills Health & Rehab	Floyd County	1170 Chulio Rd
Golden Healthcare (nursing)	Rome city	1345 Redmond Cir
Summit Heath/Rehab at Mt Berry	Rome city	2 Three Mile Rd
SunBridge Retire & Rehab	Rome city	809 South Broad St
Renaissance Marquis (retirement)	Floyd County	3126 Cedartown Hwy
Winthrop Manor (nursing)	Rome city	12 Chateau Dr
Fifth Av Healthcare	Rome city	505 N 5th Av
Riverwood Retirement Center	Rome city	511 W 10th St
Cave Spring Control Building - sewer	Cave Spring city	100 Mill St
City of Cave Spring Pump Sta - Padlock	Cave Spring city	Padlock Mtn Rd
3602 ASST SUPT HOME	Floyd County	NW GA BRANCH STATION
3604 AN SCIENTIST HOME	Floyd County	NW GA BRANCH STATION
3634 MACHINERY SHOP	Floyd County	NW GA BRANCH STATION
3640 LOAFING BARN 1	Floyd County	NW GA BRANCH STATION
3641 STORAGE	Floyd County	NW GA BRANCH STATION
Darlington School	Rome city	1014 Cave Spring Rd
Trinity United Methodist Church	Rome city	606 Turner McCall
New Armuchee Baptist Church	Floyd County	5385 Martha Berry Hwy
Berry College	Floyd County	Martha Berry Blvd (US Hwy 27)
St. Mary's School	Rome city	401 E. 7th St
Hollywood Baptist Church	Rome city	112 Lombardy Way
Rocky Mountain. Power Plant	Floyd County	Big Texas Valley RD
First Assembly of God	Rome city	105 Broadus Rd NE
New Antioch Baptist Church	Floyd County	4553 Calhoun Rd
GA Forestry Unit	Floyd County	Wilshire Rd NE

GA Forestry District Office	Floyd County	3086 Martha Berry Hwy
3658 MACHINE SHED	Floyd County	BELLS FERRY RD
3659 WELL HOUSE	Floyd County	BELLS FERRY RD
3660 GARAGE	Floyd County	BELLS FERRY RD
3663 HAY BARN 3	Floyd County	NW GA BRANCH STATION
No. Broad Baptist Church	Rome city	13 09 North Broad St
Calvary Baptist Church	Rome city	101 Broadus Rd
Russell Regional Airport	Floyd County	304 Russell Field Rd
First Baptist Church	Rome city	100 E 4th Av
N. Rome Christian Learn Ctr	Rome city	1929 N. Broad St, NE
Kids Stop Learning Ctr	Rome city	2 Mathis Dr
Kids Stop Learning Center	Rome city	1700 Dean Av
Floyd Co. Public Works	Floyd County	337 Blacks Bluff Rd
Rome Fire Training Center	Rome city	168 North Avenue
Toddlers Inn	Rome city	203 North Division St
Kids World Learning Center	Rome city	108 John Maddox Dr
Kids World Learning Center	Floyd County	3700 Martha Berry Hwy
Marine Corps Armory	Rome city	1 Shorter Av
West Rome Baptist Church	Rome city	610 Shorter Av
Floyd County Health Department	Rome city	East 12th Street
Just Kids (Fairy) Learning Ctr	Rome city	1010 N. 5th Av
Wiggles & Giggles Daycare Ctr	Rome city	16 Oneill St SW
Winthrop Academy (daycare)	Rome city	10 Hwy 411 East
Blaylock Child Development Ctr	Rome city	608 Graham St
Floyd EMS Location - N Broad	Rome city	1933 North Broad St
Grace's Home Two	Floyd County	5 Raintree Dr SE
Hospice Care	Rome city	540 Broad St, Suite B
Hwy 411 South - pump station	Floyd County	Anderson
Alto Park	Floyd County	1014 Burnett Ferry Rd
Merrill Gardens	Rome city	180 W. Wilson Way
Children's Academy	Rome city	4 Colonial Dr
Lil Miracles Day Care	Rome city	202 Lavender Dr
Super Kids Learning Center	Rome city	100 Huffaker Rd
Tender Loving Care Day Care	Floyd County	9 South 4th St
Redmond EMS Dispatch	Rome city	100 John Maddox Dr
Redmond EMS Station 1	Rome city	18 Redmond Rd
Montessori School	Rome city	Dodd Blvd
GA Power - Rome	Rome city	224 Holmes Rd
Pump Station - Rockdale Dr	Floyd County	4A Rockdale Dr

Pump Station - Parrish Dr	Floyd County	1932 Parrish Dr
Pump Station - Hwy 411 So.	Rome city	3631 cave Spring Rd
Pump Station - Armuchee Trl	Floyd County	1 Armuchee Trl
Pump Sta. - Morgan Dairy Rd	Floyd County	15 Morgan Dairy Rd
Pump Sta. - Shorter Ind. Blvd	Floyd County	Shorter Ind. Blvd.
Pump Sta. - Wildwood Ln	Floyd County	
Pump Sta. - Ramblewood Dr	Floyd County	74 Ramblewood Dr
Pump Sta. - Kent Dr.	Floyd County	3 Kent Drive
Pump Station - Midway	Floyd County	786 Old Rockmart Rd
Spring - Old Mill	Cave Spring city	100 Mill Sping
Pump Sta - Brighton Whiteoak	Floyd County	3 White Oak Trail
Water Dept - Maintenance Building	Rome city	339 Blacks Bluff Rd
Cave Spring Community Center	Cave Spring city	10 B GA Ave.
Lift Station	Floyd County	336 Bells Ferry Rd
Pump Sta - Riverside Pkwy	Rome city	
Floyd EMS Elliot Dr	Rome city	Elliot Dr
Floyd EMS - Riverside	Rome city	500 Riverside Dr
Floyd EMS 411	Rome city	10 Hwy 411 (in Whinthrop Manor)
Redmond EMS - Airport Station 2	Floyd County	Airport - Armuchee
Redmond EMS - Cave Spring - Station 16	Cave Spring city	Cave Spg Fire
First Baptist Daycare	Rome city	
Clover House LLC	DeKalb County	496 N Avery Rd
Rome Fire Department Station 08 Armuchee	Floyd County	90 Little Texas Valley Rd
Cave Spring City Hall/Police	Cave Spring city	3 Georgia Ave
Cave Spring Treatment Plant	Cave Spring city	Mill St
Cave Spring Library	Cave Spring city	10-B Cedartown Street
City of Cave Spring Pump Station - Rolater	Cave Spring city	23B Rolater Park
Cave Spring Fire Department	Cave Spring city	3 Georgia Ave
First Baptist Church - Cave Spring	Cave Spring city	4 Cedartown St
GA School for the Deaf	Cave Spring city	232 Perry Farm Rd SW

Pepperell High	Floyd County	3 Dragon Dr. SE
Floyd County Technical High	Rome city	100 Vocational Dr.SW
3611 CATTLE FEED BARN	Floyd County	NW GA BRANCH STATION
3653 SCALE BLDG LIVESTO	Floyd County	NW GA BRANCH STATION
3655 FEED MILL FACILITY	Floyd County	NW GA BRANCH STATION
Rome Fire Department Station 06	Floyd County	621 Burnett Ferry Rd
Model High	Floyd County	3252 Calhoun Hwy. NE
Rome Water and Sewer Department (filter plant)	Rome city	Blossom Hill Dr
Rome Fire Department Station 02	Floyd County	1601 Cave Spring Rd
Rome Fire Department Station 03	Rome city	417 East 12th St
Rome Fire Department Station 04	Floyd County	3 Wilshire Rd
Rome Fire Department - HQ	Rome city	617 W 1st St
Floyd County 4th Ave Admin Bldg	Rome city	12 East 4th Ave
GA NW Tech College	Rome city	785 Cedar Avenue
Coosa Treatment Plant - sewer	Floyd County	650 Ausborne Road
Rome WPCP	Rome city	Black's Bluff Rd
Floyd County Correctional Institution	Floyd County	329 Blacks Bluff Rd SW
Floyd County Jail	Rome city	2526 New Calhoun Hwy
Floyd County Courthouse	Rome city	3 Government Plaza
Rome City Hall	Rome city	601 Broad St
Second Ave Baptist Church	Rome city	823 E 2nd Av
Floyd Co. Water Dept.-Billing office	Rome city	217 Calhoun Av
Rome City Public Works	Rome city	Vaughn Rd
Unity Christian School	Rome city	2960 New Calhoun Hwy NE
3675 METAL HAY BARN	Floyd County	NW GA BRANCH STATION
Georgia Highlands College	Floyd County	3175 Cedartown Highway SW
Floyd Medical Center	Rome city	304 Turner-McCall Boulevard
Well - Kingston Rd	Rome city	1699 Kingston Hwy
Shorter College (buildings other than dorms)	Rome city	315 Shorter Ave.
Redmond Regional Medical Center	Rome city	501 Redmond Road
Northwest Georgia Regional Hospital	Rome city	1305 Redmond Circle
Armuchee High	Floyd County	4203 Martha Berry Hwy. NW
Coosa High	Floyd County	4454 Alabama Hwy. NW
Rome Fire Department Station 05	Rome city	750 John Davenport Dr
3603 DUPLEX STAFF RESIDENCE	Floyd County	NW GA BRANCH STATION
3657 FIELD OFFICE 2	Floyd County	BELLS FERRY RD
Rome Fire Department Station 07	Floyd County	85 Woods Rd
Coosa Middle School	Floyd County	212 Eagle Dr.

Rome Fire Department Station 09 Shannon Apple Tree Learning Academy	Floyd County	152 Burlington Dr 62 Wax Rd SE
Rome Fire Department Station 10 Wax Rome Police Department	Floyd County Rome city	1522 Wax Rd 5 Government Plaza Suite 300
Floyd County Police Department	Floyd County	5 Government Plaza Suite 200
Rome City Schools Administration Building Rome Transitional Academy	Rome city	508 E 2 nd Street 1162 Spider Webb Drive
Northwest Georgia GNETS	Rome city	301 Nixon Avenue
Rome City Schools Maintenance	Rome city	172 North Avenue NE
Floyd County Schools College and Career Academy	Floyd County	100 Tom Poe Drive
Johnson Elementary School Pepperell Primary School	Floyd County	1839 Morrison Campground Road 1 Dragon Drive SE
Rome Fire Administration Building	Rome city	409 E 12 th Street
Floyd County EOC	Floyd County	407 E 12 th Street
Rome City Schools Transportation Facility	Rome city	200 Three Rivers Dr
Rome City Schools Technology Department	Rome city	1162 Spider Webb Dr

Appendix D – Floyd County Hazard Data Tables

Thunderstorms

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								1	20	31.166M	0.00K
FLOYD CO.	FLOYD CO.	GA	05/19/1973	17:15	CST	Hail	1.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/27/1973	18:00	CST	Hail	3.00 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/27/1973	18:00	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	08/20/1973	18:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/03/1974	14:40	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	03/24/1975	06:16	CST	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	02/18/1976	12:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/04/1977	15:12	CST	Hail	1.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/04/1977	15:15	CST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/18/1978	21:15	CST	Hail	2.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/12/1979	07:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	06/30/1982	15:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/07/1984	22:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/05/1985	18:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

FLOYD CO.	FLOYD CO.	GA	08/24/1985	17:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	08/16/1986	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	08/16/1986	17:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/29/1987	17:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	06/21/1987	18:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	01/19/1988	20:41	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/04/1989	12:50	CST	Hail	0.75 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	06/28/1989	12:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/04/1989	12:35	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/12/1989	13:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	11/15/1989	19:25	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/01/1990	15:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/01/1990	16:40	CST	Hail	0.88 in.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/12/1990	23:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/20/1990	12:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/20/1990	12:33	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

FLOYD CO.	FLOYD CO.	GA	05/20/1990	20:58	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	05/27/1990	14:14	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/07/1990	17:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/11/1990	17:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/21/1990	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	08/21/1990	16:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	03/29/1991	05:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/27/1991	16:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	04/27/1991	17:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	12/23/1991	17:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	01/13/1992	21:22	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	06/18/1992	17:30	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/05/1992	14:50	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	07/17/1992	17:35	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
FLOYD CO.	FLOYD CO.	GA	08/12/1992	20:00	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

<u>FLOYD CO.</u>	FLOYD CO.	GA	08/27/1992	16:50	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
<u>Rome</u>	FLOYD CO.	GA	04/15/1993	17:35	EST	Thunderstorm Wind	0 kts.	1	0	50.00K	0.00K
<u>Rome</u>	FLOYD CO.	GA	06/29/1994	08:15	EST	Thunderstorm Wind	0 kts.	0	0	500.00K	0.00K
<u>Rome</u>	FLOYD CO.	GA	06/29/1994	08:25	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
<u>Armuchee</u>	FLOYD CO.	GA	06/17/1995	15:50	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>Lindale</u>	FLOYD CO.	GA	06/17/1995	16:00	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>Rome</u>	FLOYD CO.	GA	07/03/1995	18:48	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>Rome</u>	FLOYD CO.	GA	07/03/1995	18:48	EST	Thunderstorm Wind	0 kts.	0	0	0.50K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/15/1996	14:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>CAVE SPRING</u>	FLOYD CO.	GA	05/06/1996	16:50	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/27/1996	19:30	EST	Thunderstorm Wind		0	0	20.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/27/1996	19:30	EST	Thunderstorm Wind		0	0	75.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	08/24/1996	17:00	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	01/24/1997	22:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/05/1997	17:10	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1997	01:15	EST	Hail	1.25 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1997	01:50	EST	Hail	1.00 in.	0	0	0.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	05/03/1997	01:55	EST	Thunderstorm Wind		0	0	3.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	06/13/1997	22:20	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/13/1997	22:30	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	07/28/1997	13:20	EST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	09/10/1997	15:00	EST	Lightning		0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	09/10/1997	18:50	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	04/08/1998	17:05	EST	Hail	1.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/08/1998	20:57	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/08/1998	21:50	EST	Hail	2.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/16/1998	23:00	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/18/1998	21:25	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1998	14:35	EST	Hail	1.75 in.	0	0	10.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1998	16:15	EST	Hail	0.88 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1998	16:48	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/03/1998	17:00	EST	Hail	0.88 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	05/07/1998	18:55	EST	Hail	2.00 in.	0	0	2.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	05/07/1998	22:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/04/1998	14:35	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/04/1998	17:15	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/04/1998	17:15	EST	Hail	0.75 in.	0	0	0.00K	0.00K

ROME	FLOYD CO.	GA	06/05/1998	06:45	EST	Thunderstorm Wind		0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	06/05/1998	17:45	EST	Thunderstorm Wind		0	0	200.00K	0.00K
ROME	FLOYD CO.	GA	06/09/1998	18:45	EST	Thunderstorm Wind		0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	01/18/1999	05:06	EST	Hail	0.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	02/27/1999	21:40	EST	Thunderstorm Wind		0	0	30.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	05/13/1999	13:10	EST	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
COOSA	FLOYD CO.	GA	05/13/1999	13:10	EST	Hail	0.88 in.	0	0	0.00K	0.00K
CAVE SPG	FLOYD CO.	GA	05/13/1999	13:40	EST	Hail	1.25 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	05/13/1999	18:26	EST	Hail	1.75 in.	0	0	0.00K	0.00K
COOSA	FLOYD CO.	GA	06/02/1999	14:30	EST	Thunderstorm Wind		0	0	1.50K	0.00K
ARMUCHEE	FLOYD CO.	GA	06/04/1999	12:04	EST	Hail	1.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	06/04/1999	12:24	EST	Hail	1.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	06/04/1999	12:49	EST	Hail	1.75 in.	0	0	0.00K	0.00K
COOSA	FLOYD CO.	GA	06/04/1999	13:26	EST	Hail	1.00 in.	0	0	0.00K	0.00K
LINDALE	FLOYD CO.	GA	06/04/1999	14:10	EST	Hail	1.00 in.	0	0	0.00K	0.00K
COOSA	FLOYD CO.	GA	06/04/1999	15:01	EST	Hail	0.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	06/05/1999	18:44	EST	Thunderstorm Wind		0	0	1.00K	0.00K
ROME	FLOYD CO.	GA	07/06/1999	17:12	EST	Thunderstorm Wind		0	0	2.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	07/06/1999	17:12	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	03/10/2000	07:05	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	03/10/2000	23:35	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/10/2000	23:58	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	07/20/2000	18:55	EST	Thunderstorm Wind	50 kts. EG	0	0	75.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	07/29/2000	16:00	EST	Thunderstorm Wind		0	0	30.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	07/29/2000	16:00	EST	Thunderstorm Wind		0	0	3.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	08/04/2000	12:25	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	08/10/2000	18:20	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	08/10/2000	18:20	EST	Thunderstorm Wind		0	0	15.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	02/16/2001	17:30	EST	Thunderstorm Wind		0	0	3.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/03/2001	07:55	EST	Lightning		0	0	5.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/19/2001	13:52	EST	Hail	1.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/24/2001	16:10	EST	Lightning		0	1	0.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	05/24/2001	16:15	EST	Thunderstorm Wind		0	0	5.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	05/24/2001	16:25	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/24/2001	16:40	EST	Thunderstorm Wind		0	0	5.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	05/27/2001	22:10	EST	Hail	0.75 in.	0	0	0.00K	0.00K

ROME	FLOYD CO.	GA	05/31/2001	20:00	EST	Thunderstorm Wind		0	0	7.00K	0.00K
MT BERRY	FLOYD CO.	GA	06/03/2001	14:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/03/2001	15:15	EST	Hail	0.75 in.	0	0	0.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/03/2001	15:25	EST	Thunderstorm Wind	52 kts. E	0	0	7.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/03/2001	15:30	EST	Lightning		0	0	2.00K	0.00K
ROME	FLOYD CO.	GA	06/04/2001	19:10	EST	Thunderstorm Wind		0	0	2.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/21/2001	19:00	EST	Thunderstorm Wind		0	0	0.50K	0.00K
ROME	FLOYD CO.	GA	07/05/2001	15:30	EST	Thunderstorm Wind		0	0	0.50K	0.00K
COUNTYWIDE	FLOYD CO.	GA	07/09/2001	18:30	EST	Thunderstorm Wind		0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	03/30/2002	02:15	EST	Hail	1.00 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	03/30/2002	02:15	EST	Thunderstorm Wind		0	0	0.50K	0.00K
ROME	FLOYD CO.	GA	04/28/2002	21:58	EST	Thunderstorm Wind		0	0	2.00K	0.00K
ROME	FLOYD CO.	GA	04/28/2002	22:03	EST	Lightning		0	0	1.00K	0.00K
ROME	FLOYD CO.	GA	04/28/2002	22:04	EST	Hail	1.00 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	05/01/2002	03:05	EST	Thunderstorm Wind		0	0	30.00K	0.00K
CAVE SPG	FLOYD CO.	GA	05/27/2002	17:59	EST	Hail	0.75 in.	0	0	0.00K	0.00K
COOSA	FLOYD CO.	GA	05/27/2002	18:27	EST	Hail	0.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	06/05/2002	18:00	EST	Lightning		0	2	10.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	06/05/2002	18:00	EST	Thunderstorm Wind		0	0	15.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	07/01/2002	19:10	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>MT BERRY</u>	FLOYD CO.	GA	07/02/2002	20:00	EST	Lightning		0	0	4.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	07/02/2002	20:00	EST	Thunderstorm Wind		0	1	55.00K	0.00K
<u>MT BERRY</u>	FLOYD CO.	GA	07/30/2002	17:44	EST	Thunderstorm Wind		0	0	1.50K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/30/2002	18:39	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/30/2002	20:25	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/30/2002	20:25	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	07/31/2002	13:39	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>WAX</u>	FLOYD CO.	GA	08/20/2002	16:05	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>WAX</u>	FLOYD CO.	GA	08/20/2002	16:05	EST	Thunderstorm Wind		0	0	1.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	11/11/2002	00:56	EST	Thunderstorm Wind		0	0	17.00K	0.00K
<u>CRYSTAL SPGS</u>	FLOYD CO.	GA	05/02/2003	16:00	EST	Hail	1.75 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	05/02/2003	16:05	EST	Hail	1.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/06/2003	10:48	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/06/2003	10:55	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	05/06/2003	11:25	EST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K

<u>ARMUCHEE</u>	FLOYD CO.	GA	05/11/2003	09:00	EST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	06/04/2003	19:50	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/13/2003	19:00	EST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	07/22/2003	11:40	EST	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/09/2004	17:20	EST	Hail	1.75 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/09/2004	17:20	EST	Thunderstorm Wind	61 kts. EG	0	0	15.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/09/2004	17:30	EST	Lightning		0	0	125.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/31/2004	03:45	EST	Thunderstorm Wind	52 kts. EG	0	0	35.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/13/2004	09:45	EST	Lightning		0	1	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	06/16/2004	18:30	EST	Thunderstorm Wind	25 kts. EG	0	0	0.50K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/12/2004	13:00	EST	Lightning		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/12/2004	13:00	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	07/25/2004	17:00	EST	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	08/20/2004	17:45	EST	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	12/09/2004	22:18	EST	Thunderstorm Wind	35 kts. EG	0	0	0.25K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	12/10/2004	14:57	EST	Hail	0.88 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	02/21/2005	17:40	EST	Hail	1.75 in.	0	0	450.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	02/21/2005	17:45	EST	Hail	1.25 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	02/21/2005	17:45	EST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	04/07/2005	16:30	EST	Thunderstorm Wind	35 kts. EG	0	0	0.25K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/22/2005	19:45	EST	Hail	1.75 in.	0	0	50.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	04/22/2005	20:21	EST	Hail	0.88 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/30/2005	06:00	EST	Thunderstorm Wind	39 kts. EG	0	0	0.25K	0.00K
<u>WAX</u>	FLOYD CO.	GA	06/06/2005	17:50	EST	Thunderstorm Wind	31 kts. EG	0	0	0.50K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	06/20/2005	17:07	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	06/20/2005	17:07	EST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	07/21/2005	14:00	EST	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	08/29/2005	16:45	EST	Thunderstorm Wind	32 kts. EG	0	0	0.50K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	11/16/2005	00:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	11/28/2005	21:30	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/09/2006	20:12	EST	Thunderstorm Wind	39 kts. EG	0	0	2.50K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	04/03/2006	04:50	EST	Thunderstorm Wind	39 kts. EG	0	0	50.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	04/03/2006	04:50	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	04/07/2006	01:20	EST	Hail	1.00 in.	0	0	0.00K	0.00K

<u>SHANNON</u>	FLOYD CO.	GA	04/08/2006	02:15	EST	Thunderstorm Wind	52 kts. EG	0	0	150.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	04/19/2006	12:31	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>MT BERRY</u>	FLOYD CO.	GA	04/19/2006	12:45	EST	Lightning		0	0	5.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	04/20/2006	17:11	EST	Hail	1.75 in.	0	0	300.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	04/21/2006	20:15	EST	Hail	0.88 in.	0	0	0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	04/26/2006	18:53	EST	Hail	2.50 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/10/2006	15:00	EST	Lightning		0	0	5.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	05/26/2006	17:28	EST	Hail	1.75 in.	0	0	65.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	05/27/2006	19:20	EST	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	05/27/2006	19:23	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	06/04/2006	15:17	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/22/2006	15:45	EST	Lightning		0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/24/2006	18:00	EST	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/26/2006	16:33	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	06/30/2006	17:52	EST	Hail	1.00 in.	0	0	0.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	07/09/2006	15:29	EST	Thunderstorm Wind	39 kts. EG	0	0	0.25K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	07/21/2006	18:50	EST	Thunderstorm Wind	45 kts. EG	0	0	7.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	07/21/2006	21:15	EST	Thunderstorm Wind	50 kts. EG	0	0	1.25K	0.00K
<u>ROME</u>	FLOYD CO.	GA	08/01/2006	17:20	EST	Lightning		0	0	50.00K	0.00K

ROME	FLOYD CO.	GA	08/01/2006	18:24	EST	Thunderstorm Wind	39 kts. EG	0	0	25.00K	0.00K
ROME	FLOYD CO.	GA	08/20/2006	14:57	EST	Lightning		0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	08/20/2006	14:59	EST	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
COOSA	FLOYD CO.	GA	08/20/2006	17:25	EST	Lightning		0	0	0.25K	0.00K
ROME	FLOYD CO.	GA	09/07/2006	19:00	EST	Lightning		0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	09/07/2006	19:14	EST	Thunderstorm Wind	50 kts. EG	0	0	6.00K	0.00K
CAVE SPG	FLOYD CO.	GA	04/03/2007	15:55	EST- 5	Hail	1.75 in.	0	0	325.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/14/2007	18:28	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
CAVE SPG	FLOYD CO.	GA	06/14/2007	18:28	EST- 5	Hail	0.88 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	07/01/2007	14:40	EST- 5	Hail	0.75 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	07/01/2007	14:40	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	07/10/2007	13:07	EST- 5	Thunderstorm Wind	35 kts. EG	0	0	25.00K	0.00K
ROME	FLOYD CO.	GA	08/17/2007	16:10	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
EVERETT SPGS	FLOYD CO.	GA	08/23/2007	16:45	EST- 5	Thunderstorm Wind	51 kts. EG	0	0	0.50K	0.00K
EVERETT SPGS	FLOYD CO.	GA	08/23/2007	17:50	EST- 5	Lightning		0	1	75.00K	0.00K
COOSA	FLOYD CO.	GA	08/24/2007	18:35	EST- 5	Hail	0.88 in.	0	0	0.00K	0.00K

SILVER CREEK	FLOYD CO.	GA	08/24/2007	18:55	EST-5	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	08/31/2007	15:44	EST-5	Lightning		0	0	5.00K	0.00K
CAVE SPG	FLOYD CO.	GA	02/26/2008	05:30	EST-5	Lightning		0	0	10.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	03/04/2008	06:15	EST-5	Thunderstorm Wind	38 kts. EG	0	0	10.00K	0.00K
CAVE SPG	FLOYD CO.	GA	03/04/2008	12:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
WAX	FLOYD CO.	GA	03/15/2008	04:38	EST-5	Lightning		0	0	150.00K	0.00K
CAVE SPG	FLOYD CO.	GA	03/15/2008	11:05	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	03/15/2008	11:50	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
LINDALE	FLOYD CO.	GA	03/15/2008	12:39	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
CAVE SPG	FLOYD CO.	GA	03/15/2008	16:37	EST-5	Thunderstorm Wind	45 kts. EG	0	0	2.00K	0.00K
ROME	FLOYD CO.	GA	04/04/2008	14:30	EST-5	Hail	1.75 in.	0	0	70.00K	0.00K
ROME	FLOYD CO.	GA	05/20/2008	17:10	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	06/11/2008	19:05	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
ROME	FLOYD CO.	GA	06/26/2008	15:56	EST-5	Lightning		0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	06/29/2008	15:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

COOSA	FLOYD CO.	GA	07/13/2008	12:25	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
COOSA	FLOYD CO.	GA	07/13/2008	12:33	EST- 5	Lightning		0	0	50.00K	0.00K
ROME	FLOYD CO.	GA	07/22/2008	14:55	EST- 5	Lightning		0	0	50.00K	0.00K
ROME	FLOYD CO.	GA	07/22/2008	14:59	EST- 5	Thunderstorm Wind	35 kts. EG	0	0	10.00K	0.00K
COOSA	FLOYD CO.	GA	07/22/2008	16:16	EST- 5	Thunderstorm Wind	52 kts. EG	0	0	35.00K	0.00K
ROME	FLOYD CO.	GA	07/22/2008	16:37	EST- 5	Hail	0.75 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	07/23/2008	17:30	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
ANNIEDELL	FLOYD CO.	GA	08/07/2008	11:53	EST- 5	Thunderstorm Wind	39 kts. EG	0	0	0.50K	0.00K
FOSTERS MILLS	FLOYD CO.	GA	09/08/2008	16:44	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	75.00K	0.00K
COOSA	FLOYD CO.	GA	01/06/2009	17:15	EST- 5	Thunderstorm Wind	53 kts. EG	0	0	2.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	02/11/2009	16:03	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	7.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	02/18/2009	16:11	EST- 5	Hail	1.75 in.	0	0	300.00K	0.00K
CAVE SPG	FLOYD CO.	GA	04/02/2009	23:15	EST- 5	Thunderstorm Wind	52 kts. EG	0	0	500.00K	0.00K
ROME	FLOYD CO.	GA	04/10/2009	06:59	EST- 5	Thunderstorm Wind	39 kts. EG	0	0	10.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	04/10/2009	16:15	EST- 5	Hail	2.75 in.	0	0	300.00K	0.00K

ROME	FLOYD CO.	GA	04/10/2009	16:45	EST-5	Hail	1.75 in.	0	0	300.00K	0.00K
COOSA	FLOYD CO.	GA	04/10/2009	16:45	EST-5	Hail	2.75 in.	0	0	1.000M	0.00K
ARMUCHEE	FLOYD CO.	GA	05/01/2009	19:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LAVENDER	FLOYD CO.	GA	05/03/2009	17:00	EST-5	Lightning		0	0	5.00K	0.00K
LAVENDER	FLOYD CO.	GA	07/12/2009	18:30	EST-5	Lightning		0	0	150.00K	0.00K
SIX MILE	FLOYD CO.	GA	07/12/2009	18:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LINDALE	FLOYD CO.	GA	07/12/2009	23:24	EST-5	Lightning		0	0	250.00K	0.00K
ROME	FLOYD CO.	GA	08/21/2009	19:01	EST-5	Thunderstorm Wind	54 kts. EG	0	0	225.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	09/08/2009	16:01	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	09/08/2009	16:01	EST-5	Thunderstorm Wind	36 kts. EG	0	0	1.00K	0.00K
EVERETT SPGS	FLOYD CO.	GA	12/09/2009	01:18	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
ROME	FLOYD CO.	GA	12/09/2009	02:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
LINDALE	FLOYD CO.	GA	04/24/2010	15:59	EST-5	Thunderstorm Wind	35 kts. EG	0	0	1.00K	0.00K
COOSA	FLOYD CO.	GA	04/27/2010	15:28	EST-5	Thunderstorm Wind	50 kts. EG	0	0	100.00K	0.00K
LINDALE	FLOYD CO.	GA	05/21/2010	12:23	EST-5	Thunderstorm Wind	50 kts. EG	0	0	100.00K	0.00K

<u>EVERETT SPGS</u>	FLOYD CO.	GA	05/24/2010	17:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
<u>PINSON</u>	FLOYD CO.	GA	06/17/2010	15:45	EST-5	Thunderstorm Wind	52 kts. EG	0	0	200.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/17/2010	15:55	EST-5	Lightning		0	0	30.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/17/2010	15:58	EST-5	Lightning		0	0	75.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	07/25/2010	17:02	EST-5	Thunderstorm Wind	39 kts. EG	0	0	2.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	07/26/2010	16:00	EST-5	Thunderstorm Wind	37 kts. EG	0	0	2.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	08/27/2010	16:50	EST-5	Thunderstorm Wind	39 kts. EG	0	0	25.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	10/25/2010	04:51	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
<u>RIVERSIDE</u>	FLOYD CO.	GA	11/30/2010	12:18	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
<u>PINSON</u>	FLOYD CO.	GA	02/28/2011	15:53	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	03/26/2011	20:37	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/26/2011	22:17	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>EVERETT SPGS</u>	FLOYD CO.	GA	04/04/2011	20:05	EST-5	Thunderstorm Wind	61 kts. EG	0	0	500.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/04/2011	20:44	EST-5	Lightning		0	0	5.00K	0.00K
<u>EVERETT SPGS</u>	FLOYD CO.	GA	04/11/2011	20:47	EST-5	Lightning		0	0	25.00K	0.00K

LINDALE	FLOYD CO.	GA	04/11/2011	21:01	EST-5	Thunderstorm Wind	35 kts. EG	0	0	5.00K	0.00K
ROME	FLOYD CO.	GA	04/15/2011	15:33	EST-5	Thunderstorm Wind	70 kts. EG	0	0	1.000M	0.00K
ROME	FLOYD CO.	GA	04/15/2011	15:34	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
CAVE SPG	FLOYD CO.	GA	04/21/2011	01:06	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
CAVE SPG	FLOYD CO.	GA	04/27/2011	07:17	EST-5	Thunderstorm Wind	56 kts. EG	0	4	20.000M	0.00K
COOSA	FLOYD CO.	GA	04/27/2011	19:45	EST-5	Hail	1.75 in.	0	0	345.00K	0.00K
COOSA	FLOYD CO.	GA	04/27/2011	19:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
ROME	FLOYD CO.	GA	05/13/2011	13:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	35.00K	0.00K
EVERETT SPGS	FLOYD CO.	GA	05/26/2011	00:50	EST-5	Thunderstorm Wind	35 kts. EG	0	0	1.00K	0.00K
ROME	FLOYD CO.	GA	06/18/2011	16:22	EST-5	Thunderstorm Wind	37 kts. EG	0	1	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	06/24/2011	16:07	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LINDALE	FLOYD CO.	GA	06/24/2011	16:51	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	06/26/2011	16:29	EST-5	Thunderstorm Wind	56 kts. EG	0	0	15.00K	0.00K
ARMUCHEE	FLOYD CO.	GA	07/13/2011	15:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
HERMITAGE	FLOYD CO.	GA	02/29/2012	19:55	EST-5	Lightning		0	0	20.00K	0.00K

<u>VANS VLY</u>	FLOYD CO.	GA	03/02/2012	21:05	EST- 5	Hail	1.75 in.	0	0	496.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	03/02/2012	21:25	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>BRICE</u>	FLOYD CO.	GA	03/15/2012	18:25	EST- 5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>MT BERRY</u>	FLOYD CO.	GA	04/05/2012	21:10	EST- 5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	05/29/2012	21:35	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/29/2012	21:44	EST- 5	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	07/05/2012	18:40	EST- 5	Hail	1.75 in.	0	0	496.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	07/06/2012	19:30	EST- 5	Thunderstorm Wind	55 kts. EG	0	0	4.00K	0.00K
<u>SHANNON</u>	FLOYD CO.	GA	07/10/2012	19:25	EST- 5	Thunderstorm Wind	60 kts. EG	0	0	10.00K	0.00K
<u>RIVERSIDE</u>	FLOYD CO.	GA	01/30/2013	10:59	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	01/30/2013	10:59	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
<u>CRYSTAL SPGS</u>	FLOYD CO.	GA	03/05/2013	15:33	EST- 5	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	03/18/2013	16:30	EST- 5	Thunderstorm Wind	55 kts. EG	0	0	5.00K	0.00K
<u>BRICE</u>	FLOYD CO.	GA	03/18/2013	16:40	EST- 5	Thunderstorm Wind	87 kts. EG	0	7	300.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	03/18/2013	16:44	EST- 5	Thunderstorm Wind	55 kts. EG	0	0	35.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	04/11/2013	17:54	EST-5	Thunderstorm Wind	40 kts. EG	0	0	30.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	02/21/2014	02:50	EST-5	Thunderstorm Wind	55 kts. EG	0	0	2.50K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	05/31/2014	17:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	06/05/2014	18:00	EST-5	Thunderstorm Wind	60 kts. EG	0	0	2.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/09/2014	23:45	EST-5	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/20/2014	13:16	EST-5	Thunderstorm Wind	55 kts. EG	0	1	12.00K	0.00K
<u>VANS VLY</u>	FLOYD CO.	GA	08/18/2014	16:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	09/01/2014	17:30	EST-5	Thunderstorm Wind	55 kts. EG	0	0	2.00K	0.00K
<u>EVERETT SPGS</u>	FLOYD CO.	GA	12/23/2014	13:25	EST-5	Thunderstorm Wind	55 kts. EG	0	0	3.00K	0.00K
<u>FOSTERS MILLS</u>	FLOYD CO.	GA	04/02/2015	16:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>FORRESTVILLE</u>	FLOYD CO.	GA	04/19/2015	09:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	04/19/2015	09:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
<u>LIVINGSTON</u>	FLOYD CO.	GA	06/26/2015	14:42	EST-5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/26/2015	15:08	EST-5	Thunderstorm Wind	50 kts. EG	0	0	7.00K	0.00K
<u>MT BERRY</u>	FLOYD CO.	GA	07/14/2015	19:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K

<u>SHANNON</u>	FLOYD CO.	GA	04/06/2016	20:21	EST- 5	Hail	0.88 in.	0	0	0.00K	0.00K
<u>CRYSTAL SPGS</u>	FLOYD CO.	GA	06/01/2016	14:42	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	06/12/2016	14:35	EST- 5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/12/2016	14:35	EST- 5	Thunderstorm Wind	55 kts. EG	0	0	8.00K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	06/15/2016	20:30	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>FORRESTVILLE</u>	FLOYD CO.	GA	06/17/2016	12:45	EST- 5	Thunderstorm Wind	45 kts. EG	0	0	2.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	09/12/2016	18:32	EST- 5	Hail	1.00 in.	0	0	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	03/21/2017	19:00	EST- 5	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	04/05/2017	19:30	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/23/2017	19:05	EST- 5	Lightning		0	0	25.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	05/23/2017	19:05	EST- 5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
<u>FOSTERS MILLS</u>	FLOYD CO.	GA	05/23/2017	19:05	EST- 5	Lightning		0	0	1.00K	0.00K
<u>FORRESTVILLE</u>	FLOYD CO.	GA	05/23/2017	19:05	EST- 5	Lightning		0	0	2.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	05/23/2017	19:10	EST- 5	Lightning		0	0	1.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	05/23/2017	19:10	EST- 5	Lightning		0	0	10.00K	0.00K

<u>LIVINGSTON</u>	FLOYD CO.	GA	05/28/2017	03:40	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/15/2017	15:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>RELAY</u>	FLOYD CO.	GA	06/15/2017	16:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
<u>VANS VLY</u>	FLOYD CO.	GA	06/23/2017	16:30	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	07/15/2017	13:27	EST-5	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	04/04/2018	00:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	06/01/2018	13:54	EST-5	Thunderstorm Wind	45 kts. EG	0	0	10.00K	0.00K
<u>(RMG)RUSSELL FLD ROM</u>	FLOYD CO.	GA	06/28/2018	12:18	EST-5	Lightning		0	0	1.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	06/28/2018	12:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
<u>LIVINGSTON</u>	FLOYD CO.	GA	06/28/2018	12:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
<u>ROSEDALE</u>	FLOYD CO.	GA	07/04/2018	00:45	EST-5	Thunderstorm Wind	50 kts. EG	0	1	10.00K	0.00K
<u>PINSON</u>	FLOYD CO.	GA	07/21/2018	04:45	EST-5	Thunderstorm Wind	55 kts. EG	0	0	4.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	05/09/2019	14:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
<u>HANEY</u>	FLOYD CO.	GA	06/20/2019	04:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	07/31/2019	14:55	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K

GARDEN LAKES	FLOYD CO.	GA	08/19/2019	15:10	EST-5	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
HERMITAGE	FLOYD CO.	GA	01/11/2020	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
COOSA	FLOYD CO.	GA	04/09/2020	02:37	EST-5	Thunderstorm Wind	40 kts. EG	0	0	5.00K	0.00K
FORRESTVILLE	FLOYD CO.	GA	04/09/2020	02:39	EST-5	Thunderstorm Wind	40 kts. EG	0	0	10.00K	0.00K
FORRESTVILLE	FLOYD CO.	GA	04/09/2020	02:40	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
RELAY	FLOYD CO.	GA	04/12/2020	23:32	EST-5	Thunderstorm Wind	40 kts. EG	0	0	2.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	04/12/2020	23:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
MT BERRY	FLOYD CO.	GA	04/12/2020	23:35	EST-5	Thunderstorm Wind	40 kts. EG	0	0	2.00K	0.00K
SILVER CREEK	FLOYD CO.	GA	04/12/2020	23:43	EST-5	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K

Winter Storms

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0		1.053M	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/06/1996	15:00	EST	Winter Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/02/1996	10:00	EST	Winter Storm	0	0		10.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/16/1996	06:00	EST	Winter Weather	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/23/1998	06:00	EST	Ice Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/23/1999	11:00	EST	Winter Weather	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/22/2000	13:00	EST	Ice Storm	0	0		980.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/28/2000	19:00	EST	Ice Storm	0	0		32.79K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	11/19/2000	08:00	EST	Winter Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/03/2000	05:00	EST	Heavy Snow	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/17/2000	07:30	EST	Winter Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/19/2000	00:00	EST	Winter Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/29/2000	18:30	EST	Winter Weather	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/01/2001	07:58	EST	Winter Weather	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/02/2002	06:00	EST	Heavy Snow	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/23/2003	00:00	EST	Heavy Snow	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/26/2004	00:00	EST	Winter Storm	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/28/2005	20:00	EST	Winter Storm	0	0		5.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/06/2006	04:00	EST	Winter Weather	0	0		0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/01/2007	04:00	EST-5	Winter Storm	0	0		0.00K	0.00K

FLOYD (ZONE)	FLOYD (ZONE)	GA	03/08/2008	06:00	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/07/2010	13:00	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/12/2010	13:30	EST-5	Heavy Snow	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	03/02/2010	04:00	EST-5	Heavy Snow	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/15/2010	18:25	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/25/2010	11:30	EST-5	Heavy Snow	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/09/2011	20:00	EST-5	Heavy Snow	0	0	25.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/03/2011	16:00	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/09/2011	20:00	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/28/2014	12:00	EST-5	Winter Storm	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/11/2014	07:00	EST-5	Heavy Snow	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/20/2015	15:00	EST-5	Winter Storm	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/25/2015	13:00	EST-5	Winter Storm	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/20/2016	04:00	EST-5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/22/2016	16:00	EST-5	Winter Weather	0	0	0.00K	0.00K

FLOYD (ZONE)	FLOYD (ZONE)	GA	02/08/2016	20:00	EST- 5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/06/2017	15:30	EST- 5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/08/2017	09:00	EST- 5	Winter Storm	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/08/2018	04:00	EST- 5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/16/2018	15:00	EST- 5	Winter Weather	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/08/2020	06:00	EST- 5	Winter Weather	0	0	0.00K	0.00K

Tornado

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								2	27	15.700M	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	01/04/1971	12:15	CST	Tornado	F0	0	0	2.50K	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	03/24/1975	06:30	CST	Tornado	F1	0	3	250.00K	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	04/04/1977	15:15	CST	Tornado	F3	1	15	2.500M	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	05/03/1984	21:45	CST	Tornado	F1	0	0	25.00K	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	04/04/1989	12:22	CST	Tornado	F2	0	0	250.00K	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	11/15/1989	18:05	CST	Tornado	F2	0	1	2.500M	0.00K
<u>FLOYD CO.</u>	FLOYD CO.	GA	08/27/1992	16:25	EST	Tornado	F1	0	0	250.00K	0.00K
<u>WAX</u>	FLOYD CO.	GA	03/15/2008	11:28	EST-5	Tornado	EF3	1	1	1.000M	0.00K
<u>HANEY</u>	FLOYD CO.	GA	04/27/2011	19:50	EST-5	Tornado	EF2	0	4	5.000M	0.00K
<u>COOSA</u>	FLOYD CO.	GA	12/22/2011	16:50	EST-5	Tornado	EF2	0	3	2.250M	0.00K
<u>PINSON</u>	FLOYD CO.	GA	12/22/2011	17:03	EST-5	Tornado	EF0	0	0	2.00K	0.00K
<u>FORRESTVILLE</u>	FLOYD CO.	GA	02/22/2012	22:12	EST-5	Tornado	EF1	0	0	1.600M	0.00K
<u>VANS VLY</u>	FLOYD CO.	GA	03/14/2019	19:06	EST-5	Tornado	EF0	0	0	50.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	04/12/2020	23:31	EST-5	Tornado	EF0	0	0	10.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	04/12/2020	23:42	EST-5	Tornado	EF0	0	0	10.00K	0.00K

Flood

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							1	2		1.207M	0.00K
<u>ROME</u>	FLOYD CO.	GA	01/26/1996	16:00	EST	Flash Flood	0	0		0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/28/1997	19:15	EST	Flash Flood	0	0		10.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	02/03/1998	19:00	EST	Flash Flood	0	0		1.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/28/1999	03:00	EST	Flood	0	0		10.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	04/03/2000	01:15	EST	Flash Flood	0	0		10.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	07/29/2000	16:00	EST	Flood	0	0		0.00K	0.00K
<u>LINDALE</u>	FLOYD CO.	GA	07/29/2000	16:00	EST	Flood	0	0		0.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	03/12/2001	16:30	EST	Flash Flood	0	0		0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	06/03/2001	15:15	EST	Flood	0	0		0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	06/05/2002	18:00	EST	Flood	0	0		0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	07/30/2002	20:25	EST	Flood	0	0		0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	10/28/2002	13:00	EST	Flood	0	0		0.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	03/06/2003	03:30	EST	Flash Flood	0	0		0.00K	0.00K
<u>FLOYD (ZONE)</u>	FLOYD (ZONE)	GA	03/06/2003	06:15	EST	Flood	0	0		0.00K	0.00K
<u>COUNTYWIDE</u>	FLOYD CO.	GA	05/06/2003	10:55	EST	Flash Flood	0	0		1.000M	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/18/2003	05:30	EST	Flash Flood	0	0		0.00K	0.00K
<u>NORTH PORTION</u>	FLOYD CO.	GA	06/18/2003	21:00	EST	Flash Flood	0	0		5.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	07/13/2003	03:15	EST	Flash Flood	0	0		5.00K	0.00K
<u>NORTHEAST PORTION</u>	FLOYD CO.	GA	07/13/2003	19:00	EST	Flash Flood	0	0		50.00K	0.00K

<u>ROME</u>	FLOYD CO.	GA	11/24/2004	09:00	EST	Flash Flood	0	0	15.00K	0.00K
<u>CRYSTAL SPGS</u>	FLOYD CO.	GA	01/06/2009	18:15	EST-5	Flood	0	0	5.00K	0.00K
<u>ALTO PARK</u>	FLOYD CO.	GA	09/21/2009	15:00	EST-5	Flood	0	1	15.00K	0.00K
<u>LIVINGSTON</u>	FLOYD CO.	GA	10/13/2009	02:07	EST-5	Flood	0	0	1.00K	0.00K
<u>ARMUCHEE</u>	FLOYD CO.	GA	03/09/2011	11:00	EST-5	Flash Flood	0	0	20.00K	0.00K
<u>PINSON</u>	FLOYD CO.	GA	05/07/2013	21:00	EST-5	Flood	1	1	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	05/19/2013	11:25	EST-5	Flash Flood	0	0	15.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	07/06/2013	19:17	EST-5	Flash Flood	0	0	5.00K	0.00K
<u>COOSA</u>	FLOYD CO.	GA	01/22/2017	20:20	EST-5	Flash Flood	0	0	40.00K	0.00K
<u>ROSEMONT PARK</u>	FLOYD CO.	GA	05/23/2017	19:21	EST-5	Flash Flood	0	0	0.00K	0.00K
<u>SIX MILE</u>	FLOYD CO.	GA	05/18/2018	23:00	EST-5	Flash Flood	0	0	0.00K	0.00K
<u>ROME</u>	FLOYD CO.	GA	05/26/2018	01:00	EST-5	Flash Flood	0	0	0.00K	0.00K
<u>CAVE SPG</u>	FLOYD CO.	GA	08/02/2018	10:15	EST-5	Flash Flood	0	0	0.00K	0.00K
<u>SILVER CREEK</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0	0.00K	0.00K
<u>LAVENDER</u>	FLOYD CO.	GA	04/13/2020	00:00	EST-5	Flash Flood	0	0	0.00K	0.00K

<u>LAVENDER</u>	FLOYD CO.	GA	04/13/2020	00:00	EST- 5	Flash Flood		0	0	0.00K	0.00K
<u>GARDEN LAKES</u>	FLOYD CO.	GA	04/13/2020	00:00	EST- 5	Flash Flood		0	0	0.00K	0.00K
<u>HERMITAGE</u>	FLOYD CO.	GA	04/13/2020	00:00	EST- 5	Flash Flood		0	0	0.00K	0.00K

Drought

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								0	0	0.00K	9.600M
FLOYD (ZONE)	FLOYD (ZONE)	GA	09/01/1997	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	05/01/1999	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	08/01/1999	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	04/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	05/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	06/01/2000	00:00	EST	Drought		0	0	0.00K	9.600M
FLOYD (ZONE)	FLOYD (ZONE)	GA	07/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/01/2001	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/01/2001	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	04/01/2002	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	08/01/2002	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/01/2003	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	03/01/2004	00:00	EST	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	05/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	09/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K

FLOYD (ZONE)	FLOYD (ZONE)	GA	11/01/2007	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/01/2007	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	09/01/2011	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	05/31/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	06/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	08/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	09/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	11/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	12/01/2016	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	01/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	02/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	03/01/2017	00:00	EST-5	Drought	0	0	0.00K	0.00K
FLOYD (ZONE)	FLOYD (ZONE)	GA	10/08/2019	00:00	EST-5	Drought	0	0	0.00K	0.00K

Appendix E – Floyd County Worksheet 3As

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Floyd County

Hazard: Non-Spatially Defined Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	51,248	51,248	100.000%	3,203,367,488	3,203,367,488	100.000%	95,471	95,471	100%
Commercial	6,151	6,151	100.000%	813,771,420	813,771,420	100.000%	0	0	#DIV/0!
Industrial	544	544	100.000%	282,843,398	282,843,398	100.000%	0	0	#DIV/0!
Agricultural	5,578	5,578	100.000%	205,530,088	205,530,088	100.000%	0	0	#DIV/0!
Religious Non-profit	872	872	100.000%	81,579,453	81,579,453	100.000%	0	0	#DIV/0!
Government	1,800	1,800	100.000%	770,999,110	770,999,110	100.000%	0	0	#DIV/0!
Education	203	203	100.000%	141,350,899	141,350,899	100.000%	0	0	#DIV/0!
Utilities	39	39	100.000%	994,827,945	994,827,945	100.000%	0	0	#DIV/0!
Total	76,645	76,645	100.000%	6,454,289,810	6,454,289,810	100.000%	95,471	95,471	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | | N |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | | N |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | | N |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | N |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a
Jurisdiction: Floyd County
Hazard: Wildfire Hazard

Inventory of Assets

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	61,246	56,532	92.300%	3,203,367,488	2,936,713,212	92.300%	99,471	89,043	89%
Commercial	6,161	5,419	87.810%	613,771,420	714,578,305	87.610%	0	0	#DM/0!
Industrial	644	647	84.936%	252,843,396	223,253,852	84.938%	0	0	#DM/0!
Agricultural	5,576	5,222	93.618%	299,530,068	198,348,892	93.618%	0	0	#DM/0!
Religious/Non-profit	872	794	87.815%	61,679,493	53,592,049	87.016%	0	0	#DM/0!
Government	1,800	1,590	88.333%	770,099,110	680,254,214	88.333%	0	0	#DM/0!
Education	203	166	82.011%	141,350,898	130,908,250	92.611%	0	0	#DM/0!
Utilities	35	27	75.231%	994,827,845	698,727,039	69.231%	0	0	#DM/0!
Total	76,545	70,280	91.816%	6,454,369,610	5,641,731,953	87.409%	99,471	89,043	89%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| 1. Do you know where the greatest damages may occur in your area? | Y | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | Y | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | Y | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Floyd County

Hazard: Flood Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	61,245	1,220	2.008%	9,203,367,468	64,330,950	2.008%	96,471	1,937	2%
Commercial	6,161	133	2.240%	813,771,420	19,227,884	2.240%	0	0	#DIV/0!
Industrial	644	66	10.248%	267,843,398	26,937,367	10.248%	0	0	#DIV/0!
Agricultural	5,678	0	0.000%	206,530,888	0	0.000%	0	0	#DIV/0!
Religious/ Non-profit	872	3	0.344%	61,579,483	211,668	0.344%	0	0	#DIV/0!
Government	1,820	91	5.000%	770,099,110	38,932,768	5.000%	0	0	#DIV/0!
Education	203	0	0.000%	141,350,888	0	0.000%	0	0	#DIV/0!
Utilities	39	0	0.000%	994,827,945	0	0.000%	0	0	#DIV/0!
Total	76,545	1,528	1.996%	6,454,389,610	148,640,665	2.303%	96,471	1,937	2%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | Y | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | Y | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | Y | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Rome (Floyd County)

Hazard: Non-Spatially Defined Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	16,829	16,829	100.000%	1,156,432,385	1,156,432,385	100.000%	36,029	36,029	100%
Commercial	4,213	4,213	100.000%	687,706,158	687,706,158	100.000%	0	0	#DIV/0!
Industrial	365	365	100.000%	123,556,055	123,556,055	100.000%	0	0	#DIV/0!
Agricultural	45	45	100.000%	4,425,053	4,425,053	100.000%	0	0	#DIV/0!
Religious/ Non-profit	510	510	100.000%	42,592,728	42,592,728	100.000%	0	0	#DIV/0!
Government	1,020	1,020	100.000%	319,030,660	319,030,660	100.000%	0	0	#DIV/0!
Education	115	115	100.000%	47,321,220	47,321,220	100.000%	0	0	#DIV/0!
Utilities	13	13	100.000%	80,587,563	80,587,563	100.000%	0	0	#DIV/0!
Total	22,994	22,994	100.000%	2,464,051,872	2,464,051,872	100.000%	36,029	36,029	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|----------|----------|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | | N |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | | N |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | | N |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | N |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Rome (Floyd County)

Hazard: Wildfire Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	16,929	14,421	85.22%	1,158,432,385	1,004,615,637	86.72%	36,029	31,245	87%
Commercial	4,213	2,878	68.29%	687,706,158	469,491,582	68.29%	0	0	#DW/OI
Industrial	355	321	90.42%	123,556,055	111,722,517	90.42%	0	0	#DW/OI
Agricultural	49	48	97.96%	4,425,053	4,154,141	93.87%	0	0	#DW/OI
Religious/ Non-profit	510	435	85.29%	42,592,728	36,329,092	85.29%	0	0	#DW/OI
Government	1,020	921	90.29%	219,030,680	208,065,938	90.29%	0	0	#DW/OI
Education	115	921	87.82%	47,321,220	41,580,376	87.82%	0	0	#DW/OI
Utilities	13	9	69.23%	80,587,583	55,086,327	69.23%	0	0	#DW/OI
Total	22,894	19,139	83.58%	2,464,051,872	2,011,971,908	81.65%	36,029	31,245	87%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | | N |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | | N |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | | N |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | N |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Rome (Floyd County)

Hazard: Flood Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	18,828	456	2.422%	1,158,432,385	32,483,136	2.802%	38,029	1,010	3%
Commercial	4,213	88	2.089%	687,706,158	14,364,819	2.089%	0	0	#DIV/0!
Industrial	355	43	12.113%	123,558,055	14,986,945	12.113%	0	0	#DIV/0!
Agricultural	48	0	0.000%	4,425,083	0	0.000%	0	0	#DIV/0!
Religious/ Non-profit	510	3	0.588%	42,552,728	250,545	0.588%	0	0	#DIV/0!
Government	1,028	49	4.804%	319,030,680	15,325,964	4.804%	0	0	#DIV/0!
Education	115	0	0.000%	47,321,220	0	0.000%	0	0	#DIV/0!
Utilities	13	0	0.000%	60,987,582	0	0.000%	0	0	#DIV/0!
Total	22,904	649	2.834%	2,484,051,872	77,370,229	3.140%	38,029	1,010	3%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where the greatest damages may occur in your area? Y N
Y
2. Do you know whether your critical facilities will be operational after a hazard event? N
3. Is there enough data to determine which assets are subject to the greatest potential damages? Y
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? Y
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? Y
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? Y
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? N

GEMA Worksheet #3a Inventory of Assets
Jurisdiction: Cave Springs (Floyd County)
Hazard: Non-Spatially Defined Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	765	765	100.000%	32,847,328	32,847,328	100.000%	1,181	1,181	100%
Commercial	154	154	100.000%	7,705,568	7,705,568	100.000%	0	0	#DIV/0!
Industrial	0	0	0%	0	#VALUE!	#VALUE!	0	#VALUE!	#VALUE!
Agricultural	48	48	100.000%	1,128,208	1,128,208	100.000%	0	0	#DIV/0!
Religious/ Non-profit	17	17	100.000%	929,560	929,560	100.000%	0	0	#DIV/0!
Government	48	48	100.000%	1,894,778	1,894,778	100.000%	0	0	#DIV/0!
Education	8	8	100.000%	1,411,028	1,411,028	100.000%	0	0	#DIV/0!
Utilities	4	4	100.000%	4,141,495	4,141,495	100.000%	0	0	#DIV/0!
Total	1,080	1,080	100.000%	50,058,875	#VALUE!	#VALUE!	1,181	#VALUE!	#VALUE!

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|----------|----------|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | | N |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | | N |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | | N |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | N |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a **Inventory of Assets**
Jurisdiction: Cave Springs (Floyd County)
Hazard: Wildfire Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	785	782	99.618%	32,847,328	32,721,797	99.618%	1,161	1,157	100%
Commercial	154	154	100.000%	7,705,868	7,705,868	100.000%	0	0	#DIV/0!
Industrial	0	0	0%	0	#VALUE!	#VALUE!	0	0	#DIV/0!
Agricultural	48	48	100.000%	1,128,208	1,128,208	100.000%	0	0	#DIV/0!
Religious/ Non-profit	17	17	100.000%	829,850	829,850	100.000%	0	0	#DIV/0!
Government	48	48	100.000%	1,894,778	1,894,778	100.000%	0	0	#DIV/0!
Education	8	8	100.000%	1,411,028	1,411,028	100.000%	0	0	#DIV/0!
Utilities	4	4	100.000%	4,141,495	4,141,495	100.000%	0	0	#DIV/0!
Total	1,060	1,067	99.717%	50,058,675	#VALUE!	#VALUE!	1,161	#VALUE!	#VALUE!

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where the greatest damages may occur in your area? Y N
N
2. Do you know whether your critical facilities will be operational after a hazard event? N
3. Is there enough data to determine which assets are subject to the greatest potential damages? Y
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? Y
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? Y
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? Y
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? N

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Cave Springs (Floyd County)

Hazard: Flood Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	785	57	7.261%	32,847,328	2,388,093	7.261%	1,161	84	7%
Commercial	154	31	20.130%	7,705,988	1,551,206	20.130%	0	0	#DIV/0!
Industrial	0	0	0%	0	#VALUE!	#VALUE!	0	#VALUE!	#VALUE!
Agricultural	45	0	0.000%	1,128,208	0	0.000%	0	0	#DIV/0!
Religious/ Non-profit	17	0	0.000%	929,850	0	0.000%	0	0	#DIV/0!
Government	45	1	2.174%	1,894,278	40,181	2.174%	0	0	#DIV/0!
Education	8	0	0.000%	1,411,028	0	0.000%	0	0	#DIV/0!
Utilities	4	0	0.000%	4,141,485	0	0.000%	0	0	#DIV/0!
Total	1,090	88	8.388%	50,058,675	#VALUE!	#VALUE!	1,161	#VALUE!	#VALUE!



Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | Y | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | Y | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | Y | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

Appendix F – Documentation of Peer Review

Bartow County


Floyd County Hazard Mitigation Plan Update for Review - 10/01/2017


 **Katy Westbrook** - kwb@lpa.com
To: Dwayne Jamison  View: Sep 15 at 2:03 PM

Good Afternoon, Director Jamison,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Bartow County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here: [Floyd County - FINAL Draft - 9.15.21.docx](#)



 **Floyd County - FINAL Draft - 9.15.21.docx**
Download this document

Please let me know if you have any questions, comments, or recommendations.

Thank you,
Katy
Katy Westbrook
LPA Mitigation and Planning Corp.

Chattooga County

Floyd County Hazard Mitigation Plan Update for Review

Webto-Sent



Katy Westbrook k.westbrook@luxplanning.com
To: chattoogacountyema@chattoogaemas911.org

Wed, Aug 19 at 2:14 PM

Good Afternoon, Director,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Chattooga County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here [Floyd County - FINAL Draft - 9.15.21.docx](#)



Floyd County - FINAL Draft - 9.15.21.docx

Share with Groups

Please let me know if you have any questions, comments, or recommendations.

Thank you,

Katy

Katy Westbrook
Lux Mitigation and Planning Corp.

Cherokee County (AL)

Floyd County Hazard Mitigation Plan Update for Review

Yahoo! Sent



Katy Westbrook <lux.planning@atl.net>
To: srogers@cherokeecounty.net

Wed, Sep 15 at 2:22 PM

Good Afternoon, Director Rogers,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Cherokee County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here: [Floyd County - FINAL Draft - 9.15.21.docx](#)



Floyd County - FINAL Draft - 9.15.21.docx

Shared with Dropbox

Please let me know if you have any questions, comments, or recommendations

Thank you!

Katy

Katy Westbrook
Lux Mitigation and Planning Corp.

Gordon County

Floyd County Hazard Mitigation Plan Update for Review

Notifications



Katy Westbrook (floyd.planning@att.net)
To: Courtney Taylor

Wed Jan 15 at 2:12 PM

Good Afternoon, Director Taylor,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Gordon County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here: [Floyd County - FINAL Draft - 9.15.21.docx](#)



Floyd County - FINAL Draft - 9.15.21.docx

Shared with Everyone

Please let me know if you have any questions, comments, or recommendations.

Thank you,

Katy

Katy Westbrook
Haz. Mitigation and Planning Corp.

Polk County

Floyd County Hazard Mitigation Plan Update for Review

9/15/21, 1:44



Katy Westbrook - k.westbrook@atlantia.net
To: chiefdodd@polkga.org

Wed, 9/15/21 @ 1:19 PM

Good Afternoon, Chief Dodd,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Polk County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here: [Floyd County - FINAL Draft - 9.15.21.docx](#)



Floyd County - FINAL Draft - 9.15.21.docx
Downloaded 9/15/21

Please let me know if you have any questions, comments, or recommendations.

Thank you!

Katy

Katy Westbrook
Risk Mitigation and Planning Corp.

Walker County

Floyd County Hazard Mitigation Plan Update for Review

Attachments



Katy Westbrook k.westbrook@artnet.net
To: Blake Hodge

Wed, Sep 15 at 2:21 PM

Good Afternoon, Chief Hodge,

On behalf of Director Tim Harrington, I would like to share with you a copy of the Floyd County Hazard Mitigation Plan update. FEMA requires surrounding jurisdictions be given the opportunity to participate in the planning process. Since Walker County is a contiguous county to Floyd, I am providing you a copy for your review.

You can access the plan here: [Floyd County - FINAL Draft - 9.15.21.docx](#)



Floyd County - FINAL Draft - 9.15.21.docx

Please let me know if you have any questions, comments, or recommendations.

Thank you,

Katy

Katy Westbrook
Hazard Mitigation and Planning Corp.
814 N. ...

Appendix G – Floyd County HAZUS Report



**Hazard Risk Analyses
Supplement to the Floyd County
Joint Hazard Mitigation Plan**



**Carl Vinson
Institute of Government**
UNIVERSITY OF GEORGIA

TABLE OF CONTENTS

TABLE OF CONTENTS 2

Introduction 4

Risk Assessment Process Overview 4

 County Inventory Changes 4

 General Building Stock Updates 5

 Essential Facility Updates 6

 Assumptions and Exceptions 8

Hurricane Risk Assessment 9

 Hazard Definition 9

Probabilistic Hurricane Scenario 11

 Wind Damage Assessment 11

 Wind-Related Building Damages 12

 Essential Facility Losses 13

 Shelter Requirements 14

 Debris Generated from Hurricane Wind 14

Flood Risk Assessment 16

 Hazard Definition 16

 Riverine 1% Flood Scenario 16

 Riverine 1% Flood Building Damages 18

 Riverine 1% Flood Essential Facility Losses 20

 Riverine 1% Flood Shelter Requirements 21

 Riverine 1% Flood Debris 22

Tornado Risk Assessment 23

 Hazard Definition 23

 Hypothetical Tornado Scenario 24

 EF3 Tornado Building Damages 27

 EF3 Tornado Essential Facility Damage 28

Exceptions Report 30

 Statewide Inventory Changes 30

County Inventory Changes30
 General Building Stock Updates30
 User Defined Facilities32

List of Tables

Table 1: GBS Building Exposure Updates by Occupancy Class*5
 Table 2: Updated Essential Facilities7
 Table 3: Saffir-Simpson Hurricane Wind Scale9
 Table 4: Tropical Systems affecting Floyd County.....9
 Table 5: Hurricane Wind Building Damage12
 Table 6: Wind-Damaged Essential Facility Losses14
 Table 7: Displaced Households and People.....14
 Table 8: Wind-Related Debris Weight (Tons).....14
 Table 9: Floyd County Riverine 1% Building Losses.....18
 Table 10: Riverine 1% Flood Damaged Essential Facilities20
 Table 11: Enhanced Fujita Tornado Rating.....23
 Table 12: Tornado Path Widths and Damage Curves.....24
 Table 13: EF3 Tornado Zones and Damage Curves25
 Table 14: Estimated Building Losses by Occupancy Type28
 Table 15: Estimated Essential Facilities Damaged.....28
 Table 16: Essential Facility Updates30
 Table 17: Building Inventory Default Adjustment Rates31
 Table 18: User Defined Facility Exposure32

List of Figures

Figure 1: Floyd County Overview6
 Figure 2: Continental United States Hurricane Strikes: 1950 to 201811
 Figure 3: Wind Speeds by Storm Category12
 Figure 4: Hurricane Wind Building Loss Ratios.....13
 Figure 5: Wind-Related Debris Weight (Tons).....15
 Figure 6: Riverine 1% Flood Inundation17
 Figure 7: Floyd County Potential Loss Ratios of Total Building Exposure to Losses Sustained to Buildings from the 1% Riverine Flood by 2010 Census Block.....19
 Figure 8: Floyd County Damaged Buildings in Riverine Floodplain (1% Flood).....20

Figure 9: Riverine 1% Estimated Flood Shelter Requirements.....21
 Figure 10: Riverine 1% Flood Debris Weight (Tons).....22
 Figure 11: EF Scale Tornado Zones.....25
 Figure 12: Hypothetical EF3 Tornado Path in Floyd County.....26
 Figure 13: Modeled EF3 Tornado Damage Buffers in Floyd County27
 Figure 14: Modeled Essential Facility Damage in Floyd County.....29

Introduction

The Federal Disaster Mitigation Act of 2000 (DMA2K) requires state, local, and tribal governments to develop and maintain a mitigation plan to be eligible for certain federal disaster assistance and hazard mitigation funding programs.

Mitigation seeks to reduce a hazard’s impacts, which may include loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation must be based on a sound risk assessment that quantifies the potential losses of a disaster by assessing the vulnerability of buildings, infrastructure, and people.

In recognition of the importance of planning in mitigation activities, FEMA Hazus-MH, a powerful disaster risk assessment tool based on geographic information systems (GIS). This tool enables communities of all sizes to predict estimated losses from floods, hurricanes, earthquakes, and other related phenomena and to measure the impact of various mitigation practices that might help reduce those losses.

In 2020, the Georgia Department of Emergency Management partnered with the Carl Vinson Institute of Government at the University of Georgia to develop a detailed risk assessment focused on defining hurricane, riverine flood, and tornado risks in Floyd County, Georgia. This assessment identifies the characteristics and potential consequences of the disaster, how much of the community could be affected by the disaster, and the impact on community assets.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Floyd County. The Hazus-MH application includes default data for every county in the US. This Hazus-MH data was derived from a variety of national sources and in some cases the data are also several years old. Whenever possible, using local provided data is preferred. Floyd County provided building inventory information from the county’s property tax assessment system. This section describes the changes made to the default Hazus-MH inventory and the modeling parameters used for each scenario.

County Inventory Changes

The default Hazus-MH site-specific point inventory was updated using data compiled from the Georgia Emergency Management Agency (GEMA). The default Hazus-MH aggregate inventory (General Building Stock) was also updated prior to running the scenarios. Reported losses reflect the updated data sets.

General Building Stock Updates

General Building Stock (GBS) is an inventory category that consists of aggregated data (grouped by census geography — tract or block). Hazus-MH generates a combination of site-specific and aggregated loss estimates based on the given analysis and user input.

The GBS records for Floyd County were replaced with data derived from parcel and property assessment data obtained from Floyd County. The county provided property assessment data was current as of December 2020 and the parcel data current as of December 2020. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary; then, each parcel point was linked to an assessor record based upon matching parcel numbers. The parcel assessor match-rate for Floyd County is 99.7%. The

generated building inventory represents the approximate locations (within a parcel) of structures. The building inventory was aggregated by census block. Both the tract and block tables were updated. Table 1 shows the results of the changes to the GBS tables by occupancy class.

Table 1: GBS Building Exposure Updates by Occupancy Class*

General Occupancy	Default Hazus-MH Count	Updated Count	Default Hazus-MH Exposure	Updated Exposure
Agricultural	112	2	\$30,833,000	\$49,000
Commercial	2,015	2,289	\$1,321,461,000	\$1,444,923,000
Education	69	18	\$184,692,000	\$27,409,000
Government	97	795	\$77,753,000	\$223,796,000
Industrial	561	954	\$527,183,000	\$326,442,000
Religious	290	113	\$228,288,000	\$21,934,000
Residential	35,830	36,447	\$7,540,424,000	\$5,556,274,000
Total	38,974	40,618	\$9,910,634,000	\$7,600,827,000

*The exposure values represent the total number and replacement cost for all Floyd County Buildings

For Floyd County, the updated GBS was used to calculate hurricane wind losses. The flood losses and tornado losses were calculated from building inventory modeled in Hazus-MH as User-Defined Facility

(UDF)³, or site-specific points. Figure 1 shows the distribution of buildings as points based on the county provided data.

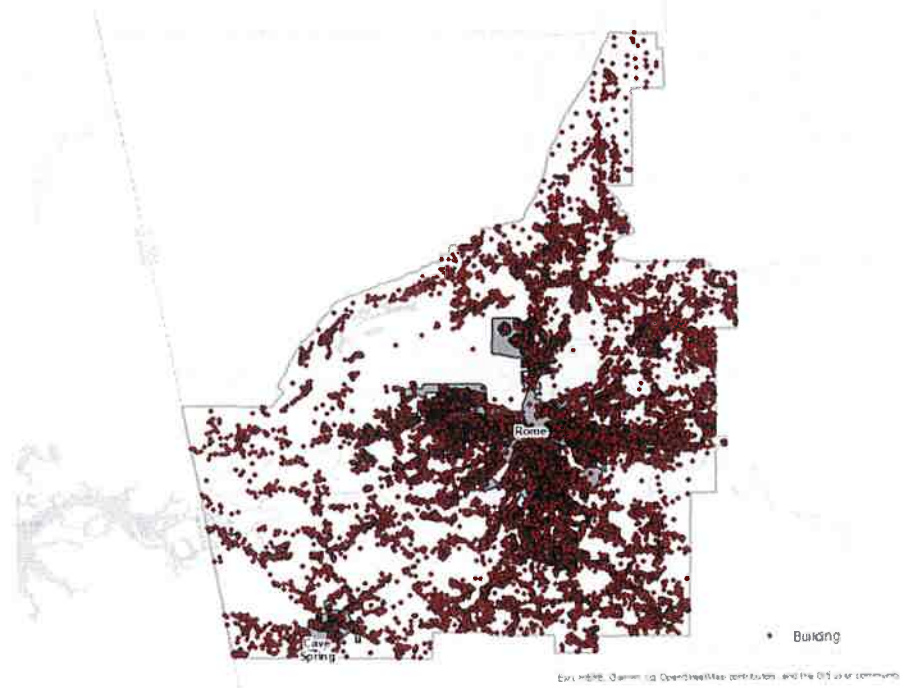


Figure 1: Floyd County Overview

Essential Facility Updates

The default Hazus-MH essential facility data was updated to reflect improved information available in the Georgia Mitigation Information System (GMIS) as of November 2020. For these risk analyses, only GMIS data for buildings that Hazus-MH classified as Essential Facilities was integrated into Hazus-MH because the application provides specialized reports for these five facilities. Essential Facility inventory was updated for the analysis conducted for this report. The following table summarizes the counts and exposures, where available, by Essential Facility classification of the updated data.

Essential facilities include:

- Care facilities
- EOCs
- Fire stations
- Police stations
- Schools

³ The UDF inventory category in Hazus-MH allows the user to enter site-specific data in place of GBS data.

Table 2: Updated Essential Facilities

Classification	Updated Count	Updated Exposure
Cave Springs		
EOC	0	\$0
Care	0	\$0
Fire	2	\$880,000
Police	1	\$825,000
School	2	\$37,940,000
Total	5	\$39,645,000
Rome		
EOC	1	\$884,000
Care	11	\$185,851,000
Fire	10	\$4,136,000
Police	3	\$32,679,000
School	18	\$180,900,000
Total	43	\$404,450,000
Unincorporated Areas of Floyd County		
EOC	0	\$0
Care	3	\$4,983,000
Fire	7	\$2,526,000
Police	1	\$10,089,000
School	32	\$245,486,000
Total	43	\$263,084,000

Assumptions and Exceptions

Hazus-MH loss estimates may be impacted by certain assumptions and process variances made in this risk assessment.

- The Floyd County analysis used Hazus-MH Version 2.2 SP1, which was released by FEMA in May 2015.
- County provided parcel and property assessment data may not fully reflect all buildings in the county. For example, some counties do not report not-for-profit buildings such as government buildings, schools and churches in their property assessment data. This data was used to update the General Building Stock as well as the User Defined Facilities applied in this risk assessment.
- Georgia statute requires that the Assessor's Office assign a code to all of the buildings on a parcel based on the buildings primary use. If there is a residential or a commercial structure on a parcel and there are also agricultural buildings on the same parcel Hazus-MH looks at the residential and commercial "primary" structures first and then combines the value of all secondary structures on that parcel with the value of the primary structure. The values and building counts are still accurate but secondary structures are accounted for under the same classification as the primary structure. Because of this workflow, the only time that a parcel would show a value for an agricultural building is when there are no residential or commercial structures on the parcel thus making the agricultural building the primary structure. This is the reason that agricultural building counts and total values seem low or are nonexistent.
- GBS updates from assessor data will skew loss calculations. The following attributes were defaulted or calculated:
 - Foundation Type was set from Occupancy Class
 - First Floor Height was set from Foundation Type
 - Content Cost was calculated from Replacement Cost
- It is assumed that the buildings are located at the centroid of the parcel.
- The essential facilities extracted from the GMIS were only used in the portion of the analysis designated as essential facility damage. They were not used in the update of the General Building Stock or the User Defined Facility inventory.

The hazard models included in this risk assessment included:

- Hurricane assessment which was comprised of a wind only damage assessment.
- Flood assessment based on the 1% annual chance event that includes riverine assessments.
- Tornado assessment based on GIS modeling.

Hurricane Risk Assessment

Hazard Definition

The National Hurricane Center describes a hurricane as a tropical cyclone in which the maximum sustained wind is, at minimum, 74 miles per hour (mph)². The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline. Hurricanes in the Atlantic Ocean, Gulf of Mexico, and Caribbean form between June and November with the peak of hurricane season occurring in the middle of September. Hurricane intensities are measured using the Saffir-Simpson Hurricane Wind Scale (Table 3). This scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time.

Hurricanes bring a complex set of impacts. The winds from a hurricane produce a rise in the water level at landfall called storm surge. Storm surges produce coastal flooding effects that can be as damaging as the hurricane's winds. Hurricanes bring very intense inland riverine flooding. Hurricanes can also produce tornadoes that can add to the wind damages inland. In this risk assessment, only hurricane winds, and coastal storm surge are considered.

Table 3: Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed (mph)	Damage
1	74 - 95	Very dangerous winds will produce some damage
2	96 - 110	Extremely dangerous winds will cause extensive damage
3	111 - 130	Devastating damage will occur
4	131 - 155	Catastrophic damage will occur
5	> 155	Catastrophic damage will occur

The National Oceanic and Atmospheric Administration's National Hurricane Center created the HURDAT database, which contains all of the tracks of tropical systems since the mid-1800s. This database was used to document the number of tropical systems that have affected Floyd County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Floyd County but impacted the county. Note that the storms listed contain the peak sustained winds, maximum pressure and maximum attained storm strength for the entire storm duration. Since 1898, Floyd County has had 15 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Floyd County³

YEAR	DATE RANGE	NAME	MAX WIND(Knots)	MAX PRESSURE	MAX CAT
1898	September 25 - October 06	UNNAMED	132	977	H4

² National Hurricane Center (2011). "Glossary of NHC Terms." National Oceanic and Atmospheric Administration. <http://www.nhc.noaa.gov/aboutgloss.shtml#h>. Retrieved 2012-23-02.

³ Atlantic Oceanic and Meteorological Laboratory (2012). "Data Center." National Oceanic and Atmospheric Administration. http://www.aoml.noaa.gov/hrd/data_sub/re_anal.html. Retrieved 7-20-2015.

YEAR	DATE RANGE	NAME	MAX WIND(Knots)	MAX PRESSURE	MAX CAT
1901	June 11-15	UNNAMED	40	0	TS
1915	August 31 - September 06	UNNAMED	98	1003	H2
1928	August 07-17	UNNAMED	92	0	H1
1932	October 07-18	UNNAMED	69	0	TS
1940	August 05-14	UNNAMED	98	1008	H2
1959	October 06-09	IRENE	46	1003	TS
1970	July 19-23	BECKY	63	1015	TS
1971	September 05-18	EDITH	161	1010	H5
1975	September 13-24	ELOISE	127	1009	H3
1977	September 03-09	BABE	75	1012	H1
1997	July 16-27	DANNY	81	1013	H1
2003	June 28 - July 03	BILL	58	1009	TS
2005	July 03-11	CINDY	75	1011	H1
2011	September 02-06	LEE	58	1007	SS

Category Definitions:

TS – Tropical storm

TD – Tropical depression

H1 – Category 1 (same format for H2, H3, and H4)

E – Extra-tropical cyclone

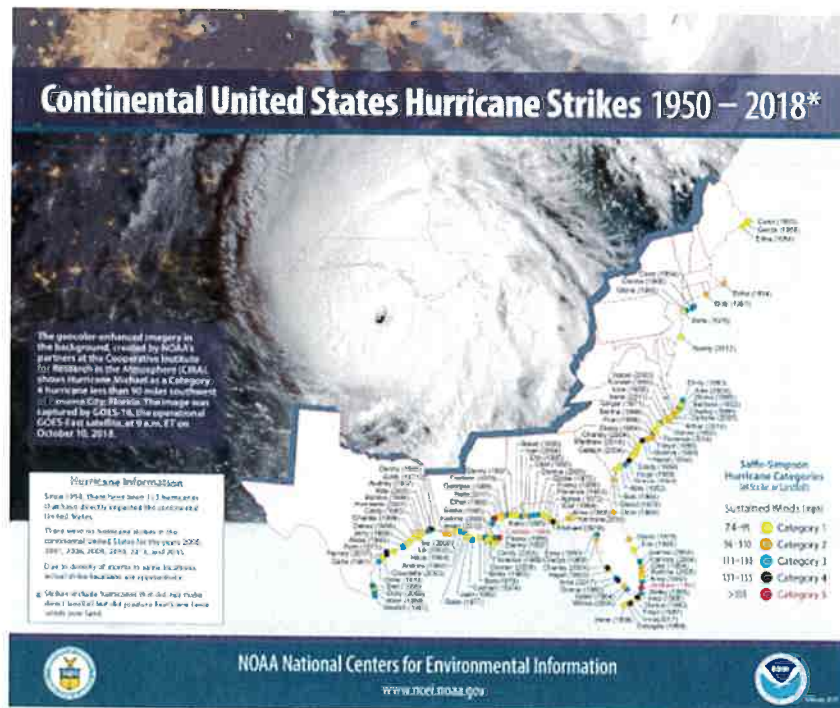


Figure 2: Continental United States Hurricane Strikes: 1950 to 2018⁴

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Tropical Storm with maximum winds of 64 mph.

Wind Damage Assessment

Separate analyses were performed to determine wind and hurricane storm surge related flood losses. This section describes the wind-based losses to Floyd County. Wind losses were determined from probabilistic models run for the Tropical Storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled Tropical Storm.

⁴ Source: NOAA National Centers for Environmental Information

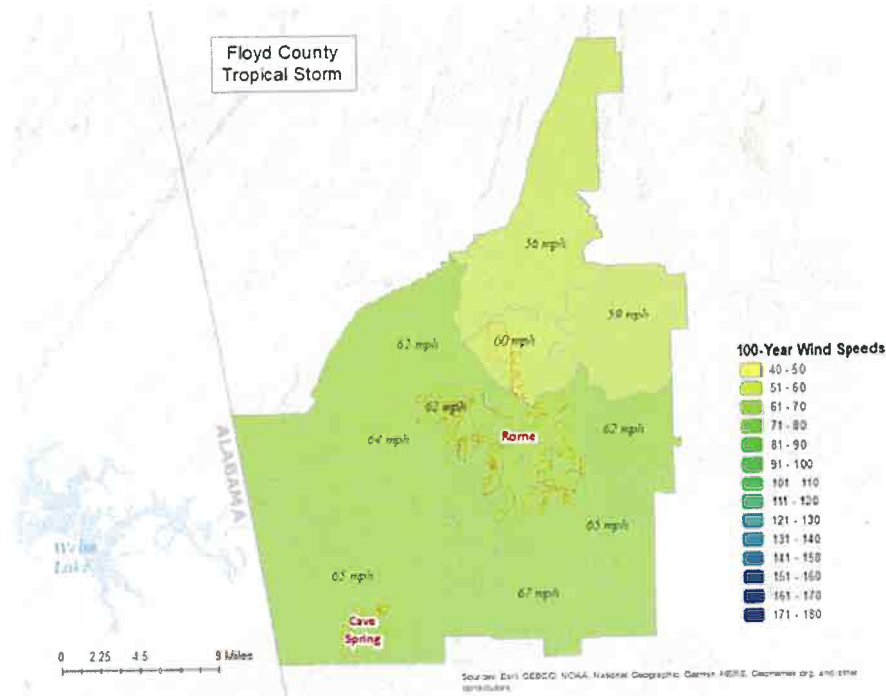


Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Floyd County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. The following table shows a summary of the results of wind-related building damage in Floyd County for the Tropical Storm (100 Year Event). The loss ratio expresses building losses as a percentage of total building replacement cost in the county. Figure 4 illustrates the building loss ratios of the modeled Tropical Storm.

Table 5: Hurricane Wind Building Damage

Classification	Number of Buildings Damaged	Total Building Damage	Total Economic Loss ⁵	Loss Ratio
Tropical Storm	67	\$1,742,540	\$2,202,010	0.02%

⁵ Includes property damage (infrastructure, contents, and inventory) as well as business interruption losses.

Note that wind damaged buildings are not reported by jurisdiction. This is due to the fact that census tract boundaries – upon which hurricane building losses are based – do not closely coincide with jurisdiction boundaries.

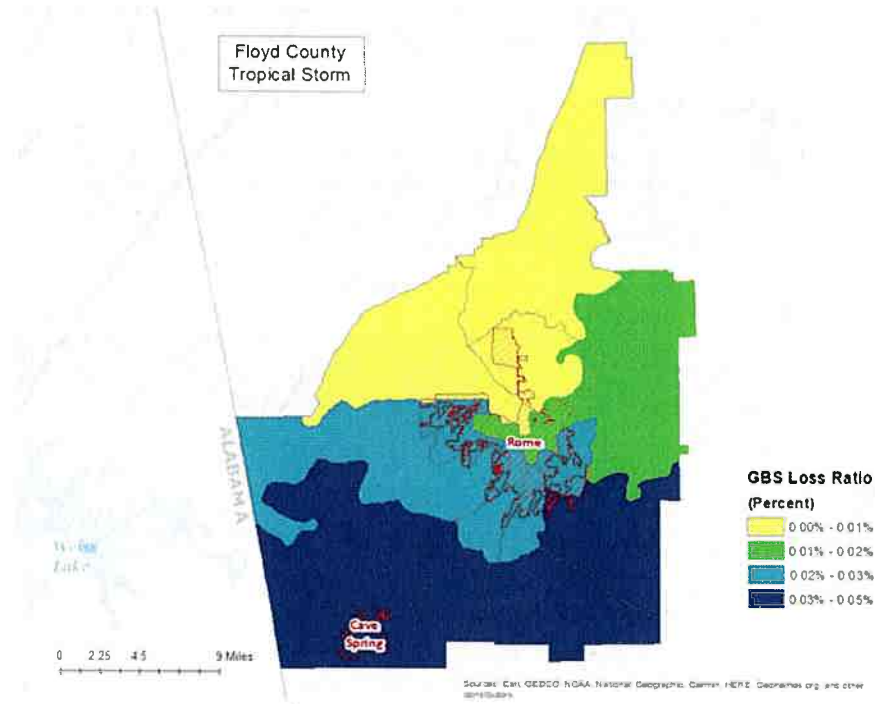


Figure 4: Hurricane Wind Building Loss Ratios

Essential Facility Losses

Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds. The results are compiled in Table 6.

There are 91 essential facilities in Floyd County.

Classification	Number
EOCs	1
Fire Stations	19
Care Facilities	14
Police Stations	5
Schools	52

Table 6: Wind-Damaged Essential Facility Losses

Classification	Facilities At Least Moderately Damaged > 50%	Facilities Completely Damaged > 50%	Facilities with Expected Loss of Use (< 1 day)
Tropical Storm	0	0	91

Shelter Requirements

Hazus-MH estimates the number of households evacuated from buildings with severe damage from high velocity winds as well as the number of people who will require short-term sheltering. Since the 1% chance storm event for Floyd County is a Tropical Storm, the resulting damage is not enough to displace Households or require temporary shelters as shown in the results listed in Table 7.

Table 7: Displaced Households and People

Classification	# of Displaced Households	# of People Needing Short-Term Shelter
Tropical Storm	0	0

Debris Generated from Hurricane Wind

Hazus-MH estimates the amount of debris that will be generated by high velocity hurricane winds and quantifies it into three broad categories to determine the material handling equipment needed:

- Reinforced Concrete and Steel Debris
- Brick and Wood and Other Building Debris
- Tree Debris

Different material handling equipment is required for each category of debris. The estimates of debris for this scenario are listed in Table 8. The amount of hurricane wind related tree debris that is estimated to require pick up at the public's expense is listed in the eligible tree debris column.

Table 8: Wind-Related Debris Weight (Tons)

Classification	Brick, Wood, and Other	Reinforced Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total
Tropical Storm	119	0	1,448	12,749	14,316

Figure 5 shows the distribution of all wind related debris resulting from a Tropical Storm. Each dot represents 20 tons of debris within the census tract in which it is located. The dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

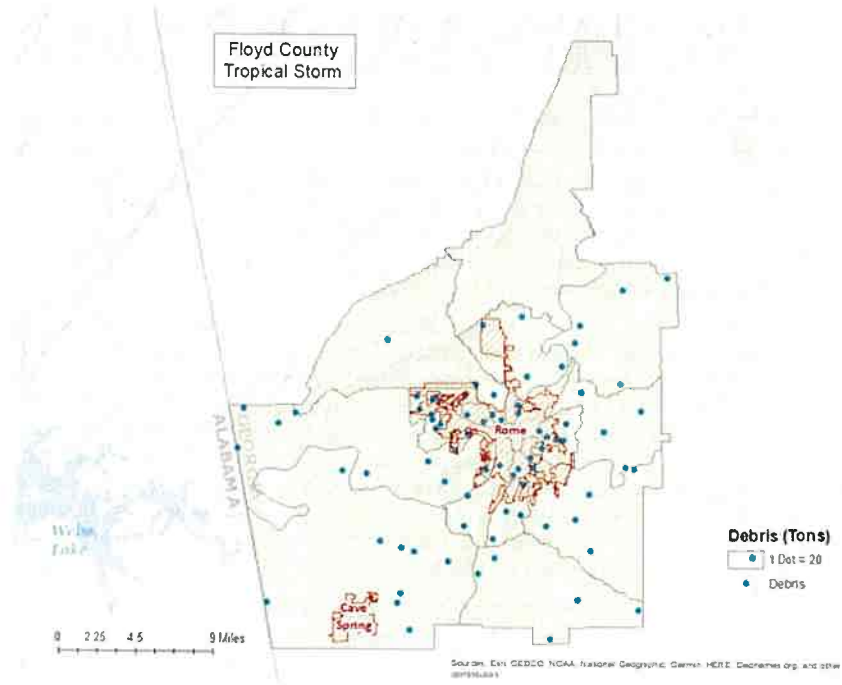


Figure 5: Wind-Related Debris Weight (Tons)

Flood Risk Assessment

Hazard Definition

Flooding is a significant natural hazard throughout the United States. The type, magnitude, and severity of flooding are functions of the amount and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Floods can be classified as one of three types: upstream floods, downstream floods, or coastal floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause damage over relatively localized areas, but they can be quite severe in the local areas in which they occur. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Georgia, but they are most common in the spring and summer months.

Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage.

Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings, leading to challenges in the determination of the base (1-percent-annual-chance) flood for hazard mapping purposes. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The Floyd County flood risk assessment analyzed at risk structures in the SFHA.

The SFHA is the area where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The owner of a structure in a high-risk area must carry flood insurance, if the owner carries a mortgage from a federally regulated or insured lender or servicer.

The following probabilistic risk assessment involves an analysis of a 1% annual chance riverine flood event (100-Year Flood) and a 1% annual chance coastal flood.

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in December 2020. The flood boundaries were overlaid with the USGS 10 meter DEM using

the Hazus-MH Enhanced Quick Look tool to generate riverine depth grids. The riverine flood depth grid was then imported into Hazus-MH to calculate the riverine flood loss estimates. Figure 6 illustrates the riverine inundation boundary associated with the 1% annual chance.

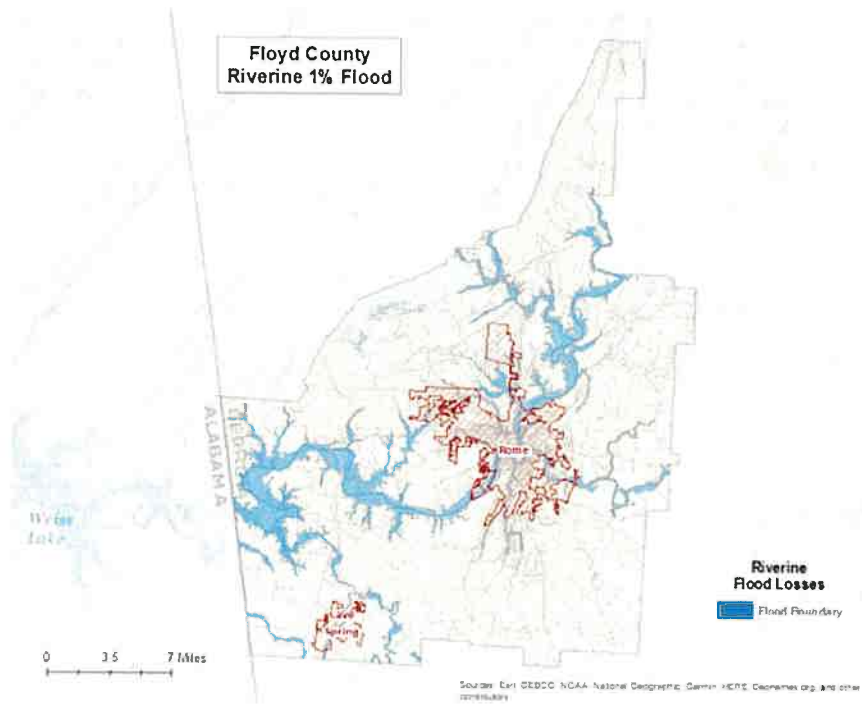


Figure 6: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Floyd County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 9 provides a summary of the potential flood-related building damage in Floyd County by jurisdiction that might be experienced from the 1% flood. Figure 7 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 8 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 9: Floyd County Riverine 1% Building Losses

Occupancy	Total Buildings in the Jurisdiction	Total Buildings Damaged in the Jurisdiction	Total Building Exposure in the Jurisdiction	Total Losses to Buildings in the Jurisdiction	Loss Ratio of Exposed Buildings to Damaged Buildings in the Jurisdiction
Cave Springs					
Industrial	7	3	\$309,289	\$10,232	3.31%
Government	17	1	\$1,312,567	\$14,180	1.08%
Residential	430	57	\$66,998,675	\$1,750,762	2.61%
Commercial	62	31	\$3,997,088	\$131,515	3.29%
Rome					
Religious	51	3	\$14,507,606	\$69,936	0.48%
Government	438	49	\$135,069,743	\$4,622,592	3.42%
Commercial	1,589	88	\$1,313,894,655	\$2,477,659	0.19%
Residential	11,413	466	\$1,997,436,677	\$26,532,808	1.33%
Industrial	582	43	\$171,450,846	\$5,975,483	3.49%
Unincorporated					
Commercial	638	19	\$127,088,334	\$132,114	0.10%
Government	340	41	\$87,424,220	\$610,212	0.70%
Industrial	365	20	\$154,688,925	\$1,585,067	1.02%
Residential	24,604	707	\$3,491,896,859	\$29,041,295	0.83%
County Total					
	40,536	1,528	\$7,566,075,483	\$72,953,855	

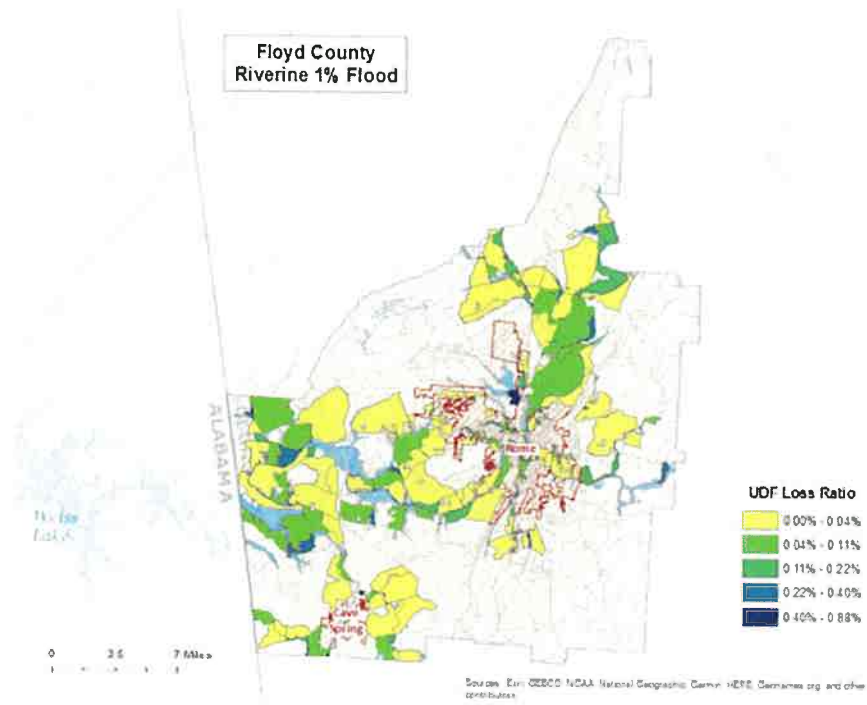


Figure 7: Floyd County Potential Loss Ratios of Total Building Exposure to Losses Sustained to Buildings from the 1% Riverine Flood by 2010 Census Block

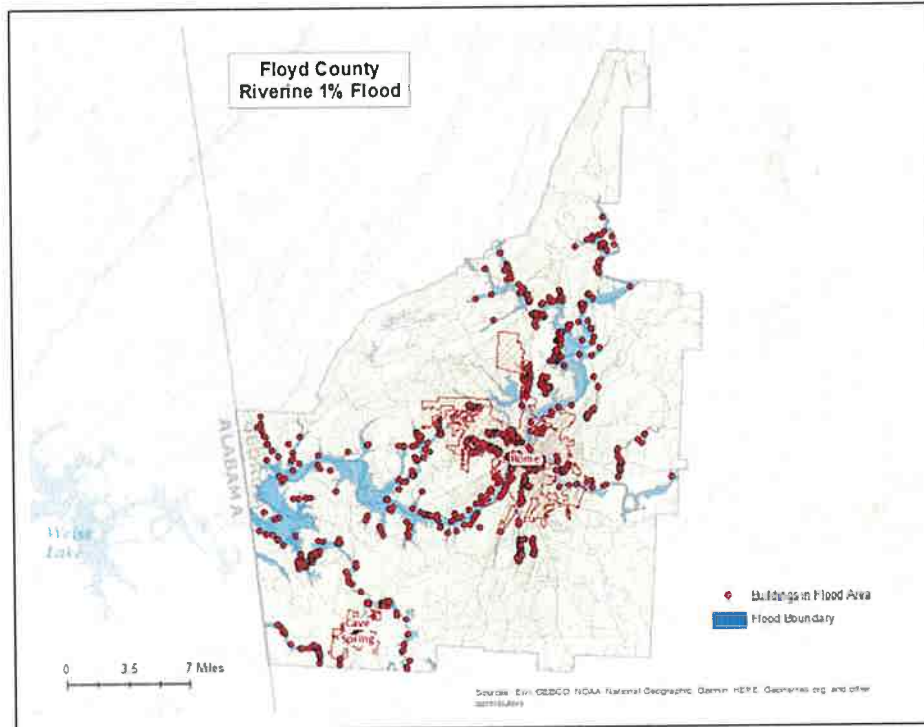


Figure 8: Floyd County Damaged Buildings in Riverine Floodplain (1% Flood)

Riverine 1% Flood Essential Facility Losses

An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis identified one essential facility that was subject to damage in the Floyd County riverine 1% probability floodplain.

Table 10: Riverine 1% Flood Damaged Essential Facilities

Name	Category	City
Rome Fire Department Station 07	Fire Station	Rome

Riverine 1% Flood Shelter Requirements

Haz-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 2,062 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 6,186 individuals, of which 4,201 may require short term publicly provided shelter. The results are mapped in Figure 9.

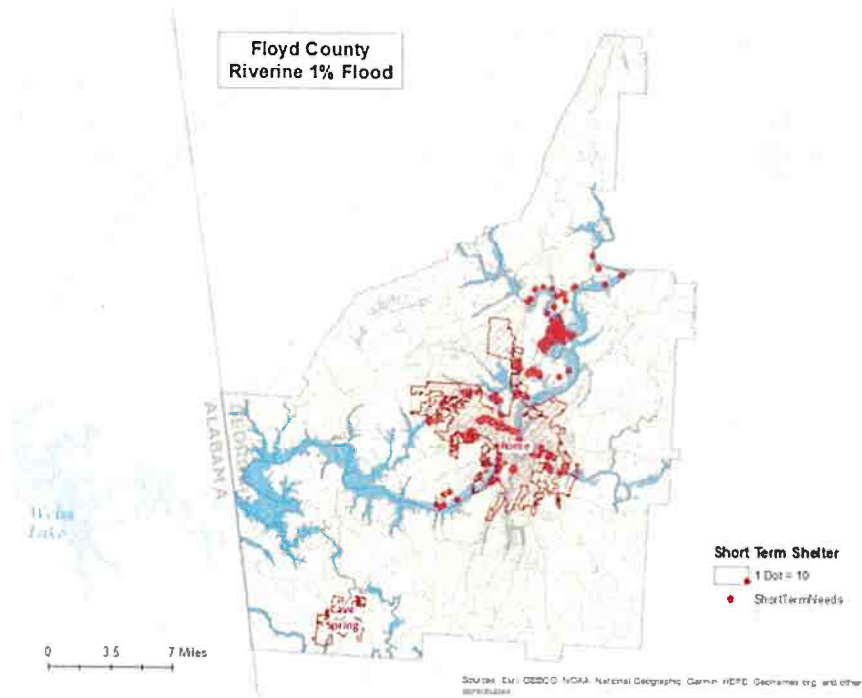


Figure 9: Riverine 1% Estimated Flood Shelter Requirements

Riverine 1% Flood Debris

Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 31,024 tons of debris might be generated: 1) Finishes- 10,901 tons; 2) Structural – 9,985 tons; and 3) Foundations- 10,138 tons. The results are mapped in Figure 10.

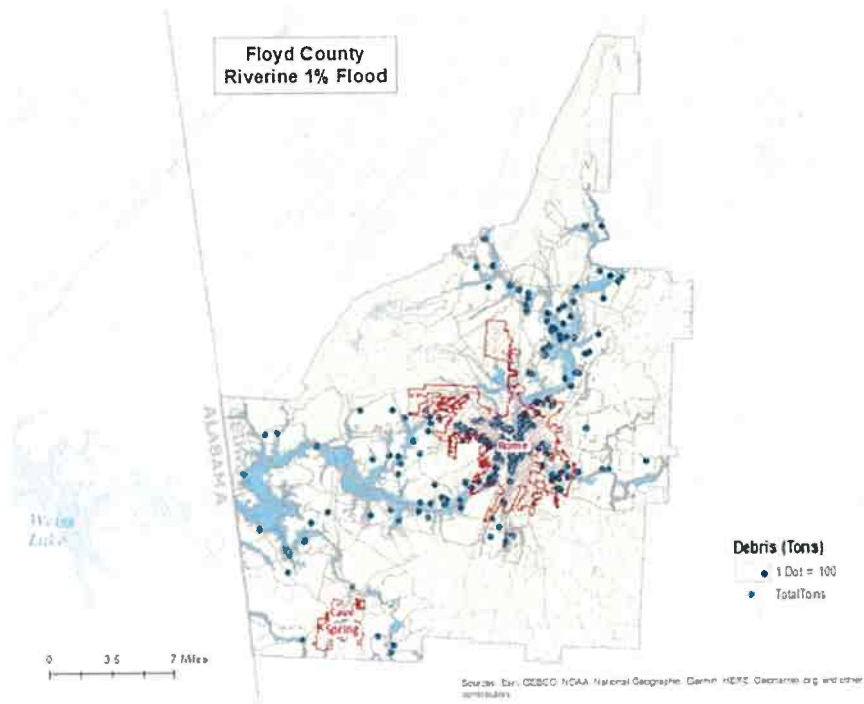


Figure 10: Riverine 1% Flood Debris Weight (Tons)

Tornado Risk Assessment

Hazard Definition

Tornadoes pose a great risk to the state of Georgia and its citizens. Tornadoes can occur at any time during the day or night. They can also happen during any month of the year. The unpredictability of tornadoes makes them one of Georgia’s most dangerous hazards. Their extreme winds are violently destructive when they touch down in the region’s developed and populated areas. Current estimates place the maximum velocity at about 300 miles per hour, but higher and lower values can occur. A wind velocity of 200 miles per hour will result in a wind pressure of 102.4 pounds per square foot of surface area—a load that exceeds the tolerance limits of most buildings. Considering these factors, it is easy to understand why tornadoes can be so devastating for the communities they hit.

Tornadoes are defined as violently-rotating columns of air extending from thunderstorms and cyclonic events. Funnel clouds are rotating columns of air not in contact with the ground; however, the violently-rotating column of air can reach the ground very quickly and become a tornado. If the funnel cloud picks up and blows debris, it has reached the ground and is a tornado.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 11.

Table 11: Enhanced Fujita Tornado Rating

Fujita Number	Estimated Wind Speed	Path Width	Path Length	Description of Destruction
EF0 Gale	65-85 mph	6-17 yards	0.3-0.9 miles	Light damage, some damage to chimneys, branches broken, sign boards damaged, shallow-rooted trees blown over.
EF1 Moderate	86-110 mph	18-55 yards	1.0-3.1 miles	Moderate damage, roof surfaces peeled off, mobile homes pushed off foundations, attached garages damaged.
EF2 Significant	111-135 mph	56-175 yards	3.2-9.9 miles	Considerable damage, entire roofs torn from frame houses, mobile homes demolished, boxcars pushed over, large trees snapped or uprooted.
EF3 Severe	136-165 mph	176-566 yards	10-31 miles	Severe damage, walls torn from well-constructed houses, trains overturned, most trees in forests uprooted, heavy cars thrown about.
EF4 Devastating	166-200 mph	0.3-0.9 miles	32-99 miles	Complete damage, well-constructed houses leveled, structures with weak foundations blown off for some distance, large missiles generated.
EF5 Incredible	> 200 mph	1.0-3.1 miles	100-315 miles	Foundations swept clean, automobiles become missiles and thrown for 100 yards or more, steel-reinforced concrete structures badly damaged.

Source: <http://www.srh.noaa.gov>

Hypothetical Tornado Scenario

For this report, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados (southeast to northwest). The tornado path was placed to travel through Rome. The selected widths were modeled after a re-creation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths. There is no guarantee that every tornado will fit exactly into one of these categories. Table 12 depicts tornado path widths and expected damage.

Table 12: Tornado Path Widths and Damage Curves

Fujita Scale	Path Width (feet)	Maximum Expected Damage
EF-5	2,400	100%
EF-4	1,800	100%
EF-3	1,200	80%
EF-2	600	50%
EF-1	300	10%
EF-0	300	0%

Within any given tornado path there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. After the hypothetical path is digitized on a map, the process is modeled in GIS by adding buffers (damage zones) around the tornado path. Figure 11 describes the zone analysis.

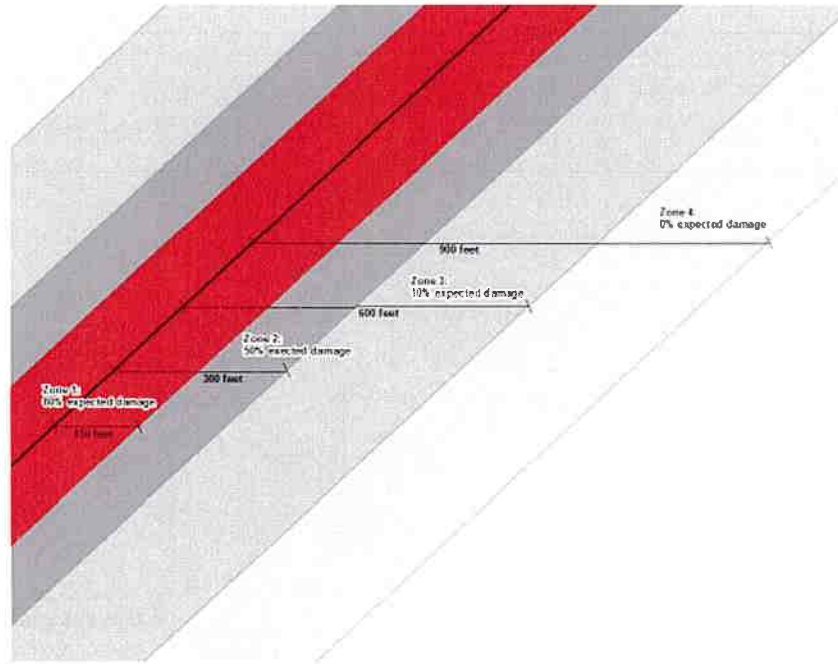


Figure 11: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 13. Major damage is estimated within 150 feet of the tornado path. The outer buffer is 900 feet from the tornado path, within which buildings will not experience any damage. The selected hypothetical tornado path is depicted in Figure 12 and the damage curve buffer zones are shown in Figure 13.

Table 13: EF3 Tornado Zones and Damage Curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%
4	600-900	0%

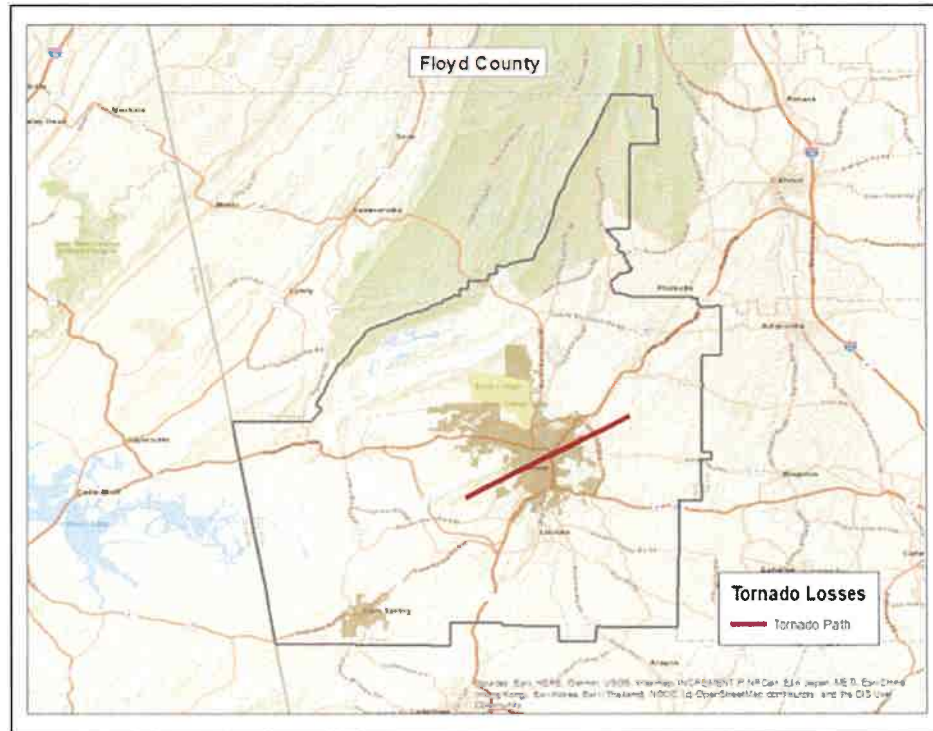


Figure 12: Hypothetical EF3 Tornado Path in Floyd County

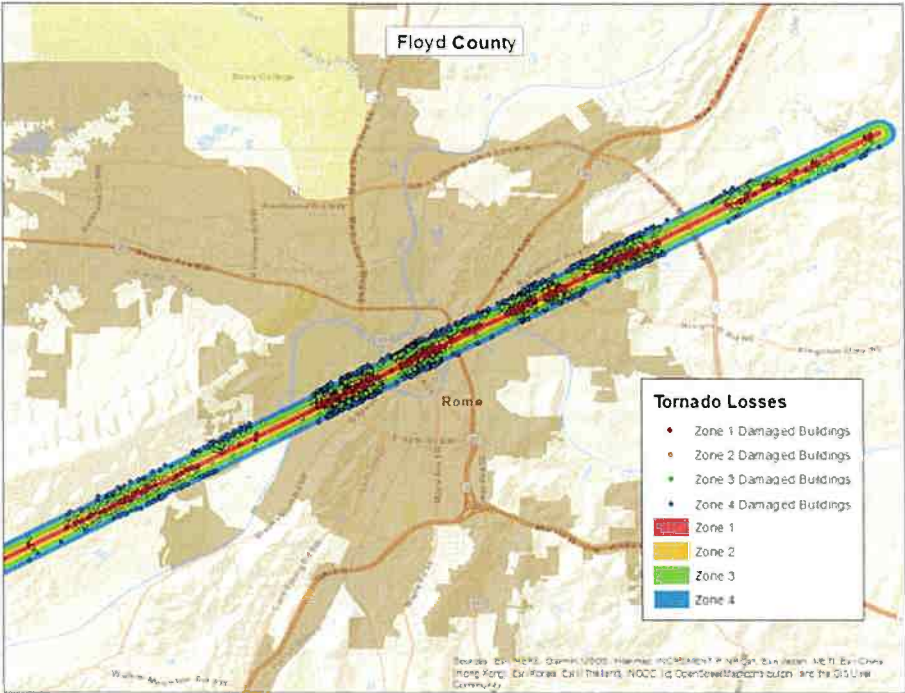


Figure 13: Modeled EF3 Tornado Damage Buffers in Floyd County

EF3 Tornado Building Damages

The analysis estimated that approximately 1,750 buildings could be damaged, with estimated building losses of \$89 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Floyd County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 14.

Table 14: Estimated Building Losses by Occupancy Type

Occupancy	Buildings Damaged	Building Losses
Residential	1,377	\$ 62,855,302
Commercial	249	\$ 9,087,531
Industrial	55	\$ 12,002,851
Religious	9	\$ 705,817
Government	60	\$ 4,343,905
Total	1,750	\$ 88,995,407

EF3 Tornado Essential Facility Damage

There were three essential facilities located in the tornado path – three schools. Table 15 outlines the specific facility and the amount of damage under the scenario.

Table 15: Estimated Essential Facilities Damaged

Facility	Amount of Damage
Main Elementary School	Minor Damage
Rome Transitional Academy	Minor Damage

According to the Georgia Department of Education, Main Elementary School's enrollment was approximately 428 students as of October 2020. Rome Transitional Academy hosts students throughout the day. Depending on the time of day, a tornado strike as depicted in this scenario could result in significant injury and loss of life. In addition, arrangements would have to be made for the continued education of the students in another location.

The location of the damaged Essential Facility is mapped in Figure 14.

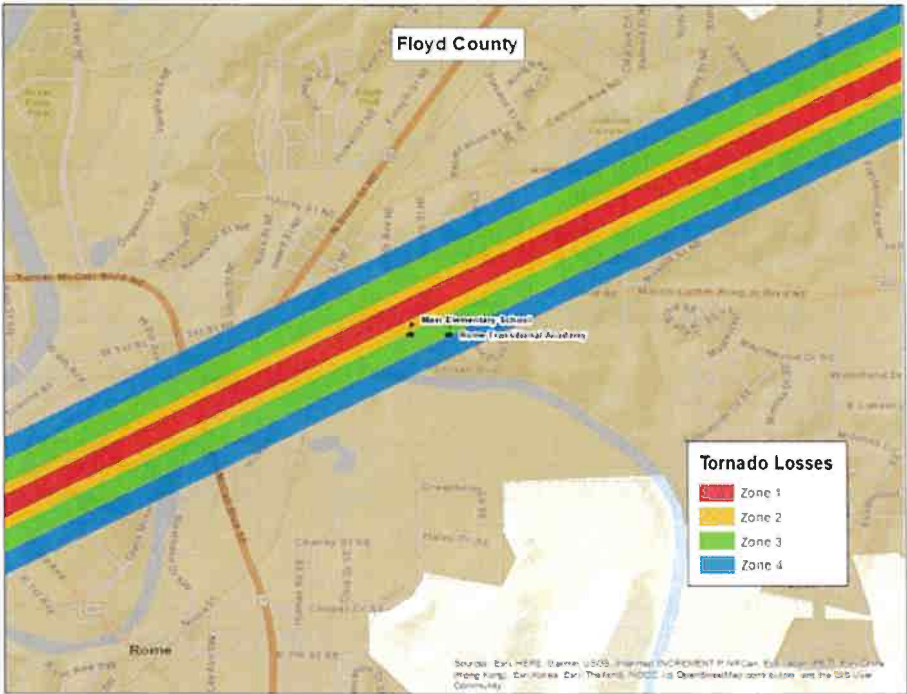


Figure 14: Modeled Essential Facility Damage in Floyd County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Floyd County, Georgia. Changes made to the default Hazus-MH inventory and the modeling parameters used to setup the hazard scenarios are described within this document.

Reported losses reflect the updated data sets. Steps, algorithms and assumptions used during the data update process are documented in the project workflow named PDM_GA_Workflow.doc.

Statewide Inventory Changes

The default Hazus-MH Essential Facility inventory was updated for the entire state prior to running the hazard scenarios for Floyd County.

Updates to the Critical Facility data used in GMIS were provided by Floyd County in November 2020. These updates were applied by The Carl Vinson Institute of Government at the University of Georgia. Table 16 summarizes the difference between the original Hazus-MH default data and the updated data for Floyd County.

Table 16: Essential Facility Updates

Site Class	Feature Class	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
EF	Care	\$1,191,355,000	22	\$190,834,000	14
EF	EOC	\$880,000	1	\$884,000	1
EF	Fire	\$6,677,000	11	\$7,542,000	19
EF	Police	\$7,855,000	1	\$43,593,000	5
EF	School	\$423,524,000	52	\$464,326,000	52

County Inventory Changes

The GBS records for Floyd County were replaced with data derived from parcel and property assessment data obtained from Floyd County. The county provided property assessment data was current as of December 2020 and the parcel data current as of December 2020.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Floyd County. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary. Each parcel point was linked to an assessor record based upon matching parcel numbers. The generated Building Inventory represents the approximate locations (within a parcel) of building exposure. The Building Inventory was aggregated by Census Block and imported into

Hazus-MH using the Hazus-MH Comprehensive Data Management System (CDMS). Both the 2010 Census Tract and Census Block tables were updated.

The match between parcel records and assessor records was based upon a common Parcel ID. For this type of project, unless the hit rate is better than 85%, the records are not used to update the default aggregate inventory in Hazus-MH. The Parcel-Assessor hit rate for Floyd County was 99.7%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 17 outlines the adjustments made to Floyd County records.

Table 17: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	3,435	8%
Construction Unknown	5,926	14%
Condition Unknown	917	2%
Foundation Unknown	6,017	15%
Year Built Unknown	1,935	5%
Total Buildings	41,369	9%

Approximately 9% of the CAMA values were either missing (<Null> or '0'), did not match CAMA domains or were unusable ('Unknown', 'Other', 'Pending'). These were replaced with 'best available' values. Missing YearBuilt values were populated from average values per Census Block. Missing Condition, Construction and Foundation values were populated with the highest-frequency CAMA values per Occupancy Class. Missing Area values were populated with the average CAMA values per Occupancy Class.

The resulting Building Inventory was used to populate the Hazus-MH General Building Stock and User Defined Facility tables. The updated General Building Stock was used to calculate flood and tornado losses. Changes to the building counts and exposure that were modeled in Floyd County are sorted by General Occupancy in Table 1 at the beginning of this report. If replacements cost or building value were not present for a given record in the Assessor data, replacement costs were calculated from the Building Area (sqft) multiplied by the Hazus-MH RS Means (\$/sqft) values for each Occupancy Class.

Differences between the default and updated data are due to various factors. The Assessor records often do not distinguish parcels by occupancy class when the parcels are not taxable; therefore, the total number of buildings and the building replacement costs for government, religious/non-profit, and education may be underestimated.

User Defined Facilities

Building Inventory was used to create Hazus-MH User Defined Facility (UDF) inventory for flood modeling. Hazus-MH flood loss estimates are based upon the UDF point data. Buildings within the flood boundary were imported into Hazus-MH as User Defined Facilities and modeled as points.

Table 18: User Defined Facility Exposure

Class	Hazus-MH Feature	Counts	Exposure
BI	Building Exposure	40,618	\$7,600,976,915
Riverine UDF	Structures Inside 1% Annual Chance Riverine Flood Area	1,609	\$303,691,465

Assumptions

- Flood analysis was performed on Building Inventory. Building inventory within the flood boundary was imported as User Defined Facilities. The point locations are parcel centroid accuracy.
- The analysis is restricted to the county boundary. Events that occur near the county boundary do not contain loss estimates from adjacent counties.
- The following attributes were defaulted or calculated:
 First Floor Height was set from Foundation Type
 Content Cost was calculated from Building Cost