DAWSON COUNTY BOARD OF COMMISSIONERS
WORK SESSION AGENDA - THURSDAY, AUGUST 9, 2018
DAWSON COUNTY GOVERNMENT CENTER ASSEMBLY ROOM
4:00 PM

NEW BUSINESS

1. Presentation of Request to Adopt Hazard Mitigation Plan- Emergency Services Director Danny Thompson / Katy Westbrook, Lux Mitigation and Planning Corporation
2. Presentation of Request to Apply for Georgia Firefighter Standards and Training Council Fireworks Tax Grant- Emergency Services Director Danny Thompson
3. Presentation of Options for the County's Multi-Functional Printers- Purchasing Manager Melissa Hawk
4. Presentation of Red Rider Road Traffic Change Request- Public Works Director David McKee
5. Presentation to Move Weekly Board of Commissioners Meetings from Thursday to Tuesday Beginning in 2019- Chairman Thurmond
6. County Manager Report
7. County Attorney Report

PUBLIC HEARING

1. 2018 Millage Rate and Property Tax *(2nd of 3 hearings. 1st hearing was held August 2, 2018. 3rd hearing will be held at 6 p.m. August 16, 2018.)*

Backup material for agenda item:

1. Presentation of Request to Adopt Hazard Mitigation Plan- Emergency Services Director Danny Thompson / Katy Westbrook, Lux Mitigation and Planning Corporation

DAWSON COUNTY BOARD OF COMMISSIONERS
AGENDA FORM

Department: **Emergency Services** Work Session **08.09.18**

Prepared By: **Danny Thompson** Voting Session: **08.16.18**

Presenter: **Danny Thompson & Katy Westbrook** Public Hearing: Yes _____ No **X**

Agenda Item Title: **Hazard Mitigation Plan Adoption**

Background Information:

In accordance with the Disaster Mitigation Act of 2000, meeting the regulations will allow Dawson County to maintain eligibility and qualify to secure federal funding from declared events. This includes public assistance that is made available through the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This plan has to be updated every 5 years.

Current Information:

This Hazard Mitigation Plan is a revision to the 2012 version and ensures Dawson County is in compliance. The Dawson County Hazard Plan Committee identified five goals during plan development. 1. Protect public health and safety 2. Reduce and eliminate exposure to natural/manmade hazard events 3. Reduce the loss and damage to private property/public infrastructure resulting from these various disasters 4. Maintain continuity of public/private sector operations during disasters 5. Respond promptly, appropriately and efficiently in the time of an event.

Budget Information: Applicable: _____ Not Applicable: X Budgeted: Yes X No _____

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Approve agenda item

Department Head Authorization: **DT** Date: **8.9.18**

Finance Dept. Authorization: Vickie Neikirk Date: 7/31/18

County Manager Authorization: DH Date: 7/31/2018

County Attorney Authorization: _____ Date: _____

Comments/Attachments:

See PowerPoint and document.

DAWSON COUNTY HAZARD MITIGATION PLAN UPDATE 2018 - 2023

Dawson County Emergency Management Agency

Director Danny Thompson

Lux Mitigation and Planning Corp.

Dawson County, Georgia

Hazard Mitigation Plan Update

2018 – 2023

Prepared for the Dawson County Board of Commissioners

25 Justice Way

Dawsonville, Georgia 30534

706.344.3501

www.Dawsoncounty.org

Dawson County's
Hazard Mitigation Plan Update 2018

This document was funded in part by the Hazard Mitigation Planning Grant awarded to the Dawson County Emergency Management Agency by the Georgia Emergency Management Agency to fulfill the requirements of the Federal Disaster Mitigation Act of 2000. Dawson County Hazard Mitigation Plan 2012 was updated by the Dawson County Hazard Mitigation Plan Update Committee and was prepared by Lux Mitigation and Planning Corporation. For additional information, please contact Dawson County Emergency Management Agency.

Director Danny Thompson
Dawson County Emergency Management Agency
393 Memory Lane
Dawson, Georgia 30534
dthompson@Dawsoncounty.org
706.344.3666

Resolution – Dawson County

WHEREAS, Dawson County and the City of Dawsonville recognize that it is threatened by a number of 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 Dawson County Hazard Mitigation Plan Update 2018 - 2023 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 Dawson County, Georgia and the Mayor and Council of the City of Dawsonville each meeting in respective session, that:

1) Dawson County, Georgia, the City of Dawsonville have adopted the Dawson County Hazard Mitigation Plan Update 2018 - 2023; 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 Dawson County and the City of Dawsonville.

PASSED, APPROVED AND ADOPTED by the Dawson County Board of Commissioners in regular session this _____ day of _____, 2018.

_____ _____

Chairperson County Manager

Resolution – Dawson County Municipality

Requirement §201.6(c)(5)

WHEREAS, Dawson County and the City of Dawsonville recognize that it is threatened by a number of 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

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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 Dawson County and the City of Dawsonville.

PASSED, APPROVED AND ADOPTED by the Mayor and City Council of Dawsonville in regular session this _____ day of _____, 2018.

_____ _____

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. For the prevention of disasters in communities, emergency management agencies that adopt mitigation practices in an effort to reduce, minimize, or eliminate hazards in their community have found, the vision for the future of emergency management. The Federal Disaster Mitigation Act of 2000 has set the benchmark and outlines the criteria for communities with the vision to implement hazard mitigation practices in their communities.

Dawson County and the City of Dawsonville realize the benefits achieved by the development of mitigation plans and implementation of mitigation strategies in our community. Dawson County's elected officials, public safety organizations, planners, and many others have proven these benefits by working together towards the development and implementation of this plan and have the vision to implement mitigation practices therefore reducing the loss of life and property in their communities.

The areas covered by this plan include:

Dawson County
City of Dawsonville

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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 Dawson County Hazard Mitigation Plan 2012.

Chapter 1 Section	Updates
Introduction	• Identification of Mitigation Goals
Authority	• New Section – Not in 2012 Mitigation Plan
Funding	• New Section – Not in 2012 Mitigation Plan
Scope	• New Section – Not in 2012 Mitigation Plan
Purpose	• Updated from 2012 Mitigation plan
Consistency with Federal Guidelines	• New Section – Not in 2012 Mitigation Plan
Plan Review	• New Section – Not in 2012 Mitigation Plan
Hazard Mitigation Plan Update Committee	• Updated committee list to match the 2018 planning participants
Public Participation	• New Section – Not in 2012 Mitigation Plan
Multi-Jurisdictional Considerations	• Updated with requirement descriptions
Incorporation of Existing Plans, Studies, and Resources	• New Section – Not in 2012 Mitigation Plan

Introduction

The Dawson 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 Disaster Mitigation Act of 2000. The Federal Disaster Mitigation Act of 2000 provides federal assistance to state and local emergency management agencies and other disaster response organizations in an effort to reduce damage from disasters. The Act is administered by the Georgia Emergency Management Agency (GEMA) and the Federal Emergency Management Agency (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. The Dawson County Hazard Mitigation Plan Update Committee identified the following goals during plan development:

GOAL 1 Protect the public health and safety

GOAL 2 Reduce and eliminate (to the extent possible) community exposure to natural and manmade hazard events

GOAL 3 Reduce loss and damage to private property and public infrastructure resulting from natural or manmade hazards

GOAL 4 Maintain continuity of public and private sector operations during and after hazard events

GOAL 5 Respond promptly, appropriately, and efficiently in the event of natural or manmade hazards

This plan complies with all requirements and scope of work as described in Dawson 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 Disaster Mitigation Act of 2000 is the latest legislation to improve the planning aspect of that process. The Act reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. The Act establishes a pre-disaster hazard mitigation program and designates new requirements for the national post-disaster Hazard Mitigation Grant Program (HMPG). Section 322 of the Act identifies the new requirements for planning activities and increases the amount of HMPG 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, the Federal Emergency Management Agency (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, Dawson County's Updated Hazard Mitigation Plan will be brought forth to each participating jurisdiction in Dawson 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

Dawson County was awarded a $24,000 Hazard Mitigation Planning Grant by the Georgia Emergency Management Agency for the update of Dawson County's 2012 Hazard Mitigation Plan. The grant requires a 25% match by Dawson County, which was fulfilled by utilizing "in-kind" services. In-kind service documentation is available upon request.

Scope

The scope of the Dawson County Hazard Mitigation Plan Update encompasses all areas of Dawson County, including the City of Dawsonville. The Plan identifies all natural and technological hazards that could threaten life and property in Dawson 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 Dawson County profile, including the demographics, municipality, and history of Dawson 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 CFFR 201.4(c)(2). Additionally, Chapter Three identifies and analyzes potential technological hazards faced by Dawson County.

Chapter Four identifies Dawson 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 plan maintenance and implementation strategies. 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 Dawson 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 Dawson County safer places to live, work, and play;
- Qualify for grant funding in both the pre-disaster and post-disaster environments;
- Speed recovery and redevelopment 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 a greater awareness for the public about the need for individual preparedness and for building 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.

The Federal Emergency Management Agency publishes many guidance documents for local governments for mitigating natural disasters. The updated Dawson County Hazard Mitigation Plan fully recognizes, adopts, incorporates and endorses the following principles:

- Develop a strategic mitigation plan for Dawson 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 disasters; and,

- Partner with businesses in an effort to communicate with customers about the hazards in our community and possible solutions.

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 in their community 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 Dawson County Hazard Mitigation Plan supports the following FEMA recommendations regarding individual citizens:

- Become educated on the hazards that citizens may encounter;

- 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 contracted planner, Lux Mitigation and Planning, had the primary responsibility for collecting updated information and presenting data to the committee. The approved 2012 Hazard Mitigation Plan was provided to each member of the Hazard Mitigation Plan Update Committee. Each chapter was reviewed with updated hazard, risk and vulnerability data; updated critical infrastructure information; and revised mitigation strategies based upon whether the strategy was completed, needed to be modified, is an ongoing strategy, or no longer applies. Irregularly attending participants were kept informed with emails containing the updated version of the plan.

Dawson County Hazard Mitigation Plan Update Meeting Dates:

Thursday, August 10, 2017	Kick-Off Meeting
Thursday, September 21, 2017	Hazard Identification and Prioritization; Risk Assessment Analysis
Thursday, October 19, 2017	Analysis of Hazard Profile Research; Review and Edit of Current Hazard Mitigation Strategies
Thursday, November 16, 2017	Identification of New Hazard Mitigation Strategies
Thursday, January 18, 2018	Update of Critical Facilities; Presentation of Dawson County Hazard Mitigation Plan Rough Draft
Thursday, February 15, 2018	Review and Edit of Dawson County Hazard Mitigation Plan Final Draft

Each section of Dawson County's 2012 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. Major plan changes include the following:

- Addition of Tropical Cyclone to Natural Hazards
- Addition of Transportation Incident to Technological Hazards
- Addition of Terrorism to Technological Hazards
- Addition of Communications Failure to Technological Hazards
- Addition of Emergent Infectious Diseases to Technological Hazards

Hazard Mitigation Plan Update Committee

Requirement §201.6(b)(2)

The following members, representing various jurisdictions, city and county departments, and community organizations and businesses, participated in the update of Dawson County's 2012 Hazard Mitigation Plan.

Dawson County Hazard Mitigation Plan Update Committee – 45 participants

Brooke Anderson
General Manager
Etowah Water and Sewer Authority

Kristan Bean
911 Assistant Director
Dawson County Sheriff's Office

Bob Bolz
City Manager
City of Dawsonville

Kenneth W. Brooks
Ranger II
Georgia Forestry Commission

Rickey Dean Brown
Chief Operations Officer
Dawson County School System

Jason Brownell
Director of Operations
Big Canoe Property Owners Association

Jason Dooley
Battalion Chief
Dawson County Emergency Services

Sharon R. Fausett
County Commissioner – District One

Dawson County Board of Commissioners

Kevin Gibbs
Park Manager
Amicalola Falls State Park

Trampas Hansard
Operations Manager
City of Dawsonville Public Works

David Headley
County Manager
Dawson County Public Administration

Lisa Hensa
Director
Dawson County Parks and Recreation

Richard Jordan
Public Safety Director
Big Canoe Property Owners Association

Tim Joy
Chief Ranger
Georgia Forestry Commission

Dorothy Jubon
Lead – External Affairs
American Red Cross – Northeast Georgia Chapter

Clark MacAllister
Extension Coordinator
University of Georgia Extension

Stephen Maddox
Lieutenant/Assistant Patrol Commander
Dawson County Sheriff's Office

Casey Majewski
Planning Director
City of Dawsonville Planning and Zoning

David McKee

Director
Dawson County Public Works

Dick McNeill
Business Consultant
Citizen Representative

Julie Hughes Nix
Commissioner, District 4
Dawson County Board of Commissioners

Dave Palmer
Public Information Officer
Georgia Department of Public Health, District 2

Dawn Pruett
Director
Dawson County Senior Services

Ricky Rexroat
Deputy Chief/Deputy EMA Director
Dawson County Emergency Services

Jim Rich
Director of Transportation
Dawson County Board of Education

Robin Roland
IT Coordinator
Dawson County Information Technology Department

Greg Rowan
Chief Deputy
Dawson County Sheriff's Office

Aleisha Rucker-Wright
Director
Dawson County E-911

Tim Satterfield
Deputy Chief

Dawson County Emergency Services

Danny Speaks
Assistant Chief
Dawson County Emergency Services

Jason Streetman
Planning Director
Dawson County Planning and Development

Lanier Swafford
Fire Chief; Director
Dawson County Emergency Services; Dawson County Emergency Management

Kurt Tangel
Chief Appraiser
Dawson County Tax Assessors Office

Billy Thurmond
Chairman
Dawson County Board of Commissioners

Jessica Whitmore
GIS Analyst/Appraiser
Dawson County Tax Assessors

Dawson County convened the Hazard Mitigation Plan Update Committee comprised of representatives from various participating jurisdictions. The Committee worked with Lux Mitigation and Planning and provided input at key stages of the process. Efforts were made to involve municipal, city, and county departments as well as community organizations which might have a role in the implementation of the mitigation actions or policies. These efforts included invitations to attend meetings, e-mail updates, and opportunities for input and comment on all draft deliverables.

In addition to the Dawson County Hazard Mitigation Plan Update Committee, all surrounding counties – Cherokee, Fannin, Forsyth, Gilmer, Hall, Lumpkin, and Pickens – will be provided a copy of this FEMA approved plan for their review. This plan will be provided to each County EMA office.

Public Participation

Requirement §201.6(b)(1)
State Requirement Element F2

Public awareness is a key component of any community's overall mitigation strategy aimed at making a home, neighborhood, school, business, or city safer from the potential effects of natural hazards. As citizens become more involved in decisions that affect their safety, they are more likely to gain a greater appreciation of the natural hazards present in their community and take the steps necessary to reduce their impact.

Participation from local organizations and businesses during the update process includes:

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

A list of public outreach initiatives can be found below:

- Prior to every meeting, an email invitation was sent to all committee members and other stakeholders encouraging their attendance and encouraging them to pass along the invitation to any additional personnel within their organization or other organization that may benefit the update of the Franklin County Hazard Mitigation Plan.
-

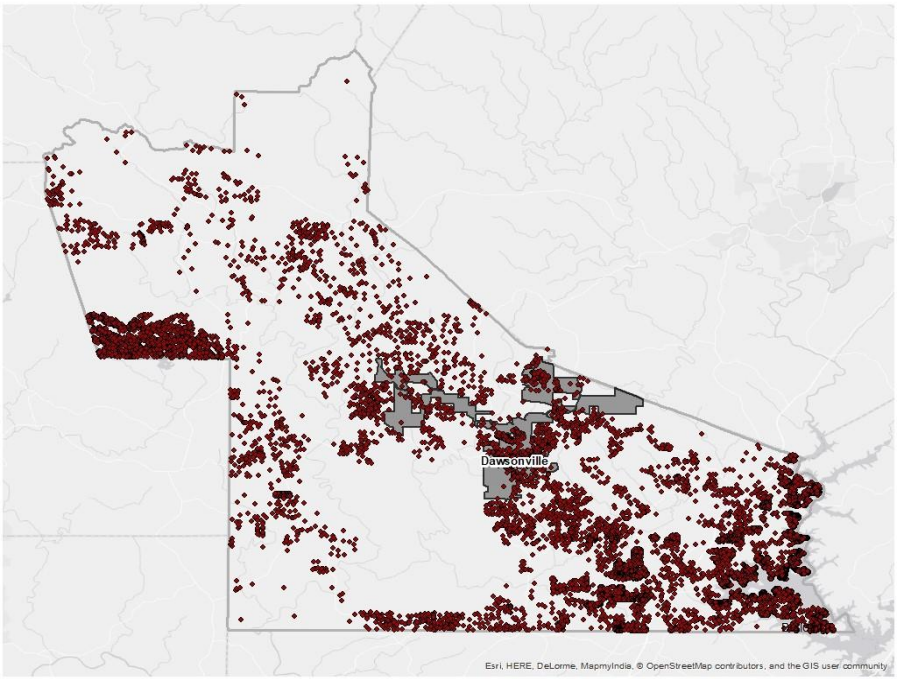
Documentation of Public Meeting Notice

Multi-Jurisdictional Considerations

While cities are not required by FEMA to adopt hazard mitigation plans, the Federal Disaster Mitigation Act of 2000 requires all municipalities that wish to be eligible to receive FEMA hazard mitigation grants to adopt a local multi-hazard mitigation plan and to update the plan every five years. Dawson County's Hazard Mitigation Plan was approved by FEMA in 2012, and the 2018 Plan Update provides the first five-year update. This approved Hazard Mitigation Plan makes Dawson County and its municipality 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. Dawson County is dedicated to work in the best interests of the County, as well as, the City of Dawsonville. During the creation and update of this Plan, Dawson County Emergency Management Agency solicited and received participation from the following Dawson County city: Dawsonville. Therefore, the result is a truly multi-jurisdictional plan. A few mitigation action steps identified in this plan update may apply to selected jurisdictions. These steps are identified in the appropriate sections. Unless specifically noted otherwise, most steps apply equally to all jurisdictions.

Distribution of Buildings in Dawson County



Source: 2018 Dawson County HAZUS Report

Incorporation of Existing Plans, Studies, and Resources

Requirement §201.6(b)(3)

State Requirement Element F3

Existing Plans

2012 Dawson County Pre-Disaster Hazard Mitigation Plan
2014 State of Georgia Hazard Mitigation Plan
Dawson County Local Emergency Operations Plan
Georgia Forestry Commission's Dawson Co. Community Wildfire Protection Plan
2013-2033 Dawson County Joint Comprehensive Plan
2018 Dawson County HAZUS Report

Studies

2012 United States Department of Agriculture Ag Census
2010 United States Census
2015 United States Census Estimates
2009 Dawson 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
Dawson County Tax Assessor's Data
Dawson County Website – www.Dawsoncountyga.gov
GMIS Database
City University of New York
Colorado State University
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

Application of Existing Plans and Studies

Existing Planning Mechanism	Reviewed?	Incorporation Into

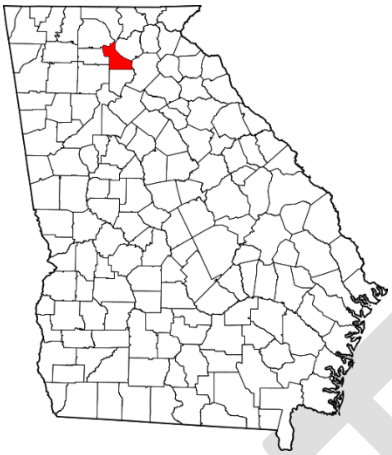
	Yes/No	Mitigation Plan
2012 Dawson County Hazard Mitigation Plan	Yes	Baseline for the 2018 Plan; updated mitigation strategies; updated hazards; updated Dawson County information
2014 State of Georgia Hazard Mitigation Plan	Yes	Hazard descriptions; potential hazards; mapping mechanisms; potential mitigation strategies that could be adopted on a local level
Dawson County Local Emergency Operations Plan (LEOP)	Yes	Identification of current resources; identification of current capabilities
Georgia Forestry's Dawson County Community Wildfire Protection Plan (CWPP)	Yes	Mitigation strategies for wildfire and drought; historical data
2012 USDA Agriculture Census	Yes	Agricultural data regarding potential losses for drought and wildfire
2010 United State Census and 2015 United States Census Estimates	Yes	To update Dawson County's profile information
2009 Dawson County Flood Insurance Study	Yes	Identify potential flood prone areas; prioritization of flood-related mitigation strategies
2013-2033 Dawson 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
2018 Dawson County HAZUS Report	Yes	To assist with risk and vulnerability assessment; Identify potential hazard impacts and damages
Dawson County Flood Mitigation Assistance Plan	No	No such plan exists

Chapter Two
-
Dawson 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 Dawson County Hazard Mitigation Plan 2012.

Chapter 2 Section	Updates
Past Hazards	• New Section – Not in 2012 Mitigation Plan. This information involved a review of the hazards listed in the previous plan. • Information was updated for the last 50 years
History	• Expanded and updated from previous plan
Past Events	• New Section – Not in 2012 Mitigation Plan. Some of these events were listed in the hazard profiles in the previous plan.
Demographics	• Updated data to the 2010 Census information and 2015 Census Estimates
Economy	• New Section – Not in 2012 Mitigation Plan
Government	• New Section – Not in 2012 Mitigation Plan
Municipalities	• New Section – Not in 2012 Mitigation Plan
Transportation	• New Section – Not in 2012 Mitigation Plan
Climate	• New Section – Not in 2012 Mitigation Plan
Utilities	• New Section – Not in 2012 Mitigation Plan
NFIP Compliance	• New Section – Not in 2012 Mitigation Plan as a standalone section



Past Hazards

Dawson County has faced many hazards in its long history. Severe Thunderstorms have been, perhaps, the most prevalent of these hazards. In the last 50 years, Dawson County has been subjected to 103 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 in Dawson County, although with much less frequency. There have been 2 documented tornadoes in the last fifty years in Dawson County.

Because of heavy rainfall either within or upstream from Dawson County, flooding has occurred in the past as well. Documentation of 13 flooding events exist within the National Climactic Data Center of the National Weather Service for Dawson County.

Winter storms and heavy snowfall have affected Dawson County infrequently in the last 50 years. These events are not a yearly occurrence and typically do not have the pre-planning in place when compared to Northern and Western states who see this type of weather phenomena regularly. The NCDC record 60 documented winter storm or heavy snow events for Dawson County with 13 of those having occurred in the last 5 years.

Dawson County has been plagued 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.

Dawson County has had 10 Federally Declared disasters. These events include tornadoes (1974), drought (1977), winter storms (1993, 2000, 2014, 2015), Tropical Cyclones (1995, 2004), and Storms/Flooding events (1998, 2009).

History

Dawson County was created by a legislative act on December 3, 1857, primarily out of Lumpkin County and smaller parts of Gilmer, Pickens and Forsyth counties. Georgia's 119th county, and the county seat of Dawsonville, were named for Judge William C. Dawson, a compiler of the laws of Georgia and commander of a brigade in the Creek Indian War of 1836. Dawson served in both houses of the Georgia state legislature, in Congress from 1836 to 1842 and in the U.S. Senate from 1849 until 1855.

Prior to the creation of Dawson County, the area enjoyed a rich history. Originally settled by the Cherokee Indians at about the time of the American Revolution, the river valleys were dotted with farms, orchards and numerous modern log structures. Native Americans thrived in the area until the discovery of gold in 1829. By 1832, prospectors had over run much of the area and Georgia claimed the region as a new territory. During 1838, those Native Americans who had not voluntarily moved west were forcibly removed to Oklahoma along the Trail of Tears. Although absent as a people from the area for more than 150 years, the legacy of the Cherokee remains in many names found throughout Dawson County: Amicalola, which means "tumbling waters", Etowah, Toto Creek - named for the Cherokee Toter family, and a host of other local names. Throughout the 1830's and 1840's the area that was to become Dawson County was in the midst of the first gold rush in America. Numerous mines and mining operations - some within the city limits of Dawsonville - were located throughout the area. Remnants of these mines and small mining projects can still be found within the county.

By April 28, 1858, all county officers had the books that were necessary for the records of the county, and these were placed in a log structure which had been built for the temporary use of the court and other officials of the county. The log courthouse was built by James Foster for the sum of $30.00 and the benches by James Jackson for an additional $1.25.

Plans for a permanent courthouse were not long postponed, and by May 1858 plans were accepted to have a building 50 by 30 feet, with four gables, and the window sills and steps were to be made of "good plant". The contract was made to Wesley McGuire, John Hockenhull and Anderson Wilson. In August of 1858 the plans were changed by the recommendation of the grand jury. The new plans for the structure called for an enlarged building of 54 by 38 feet, two gables, the use of good bricks or other materials "such as the [courthouse] in Gainesville" and window sills were to be made of granite, soapstone or marble.

Harrison Summerour, John McAfee and R. N. McClure secured a bond for $9,600.00 to erect the courthouse. As the money came in to the county treasurer, the contractors were to be paid, but a difficulty arose and $2,500.00 was borrowed from Mr.

Summerour to meet the deadline of a contract payment. N. H. Goss made chairs for the new building for $4.95. The bricks, which were purchased at $8.00 per thousand, were made by the slaves of John Hockenhull on a branch on the east side of Old Georgia 19 (now Highway 9), across the highway from the building that housed Standard Telephone Company in Dawsonville. It is thought that other bricks were made at John Hockenhull's for "paving and fixing the courthouse outside walls".

In February of 1860, the grand jury commented on the "abused and defaced condition of the building by persons unknown." The damage was repaired and as time passed, the building was kept in good condition through the efforts of the grand jury and its recommendations.

Some of the more interesting recommendations implemented by the grand jury: William Hollingshed ceiled the building, old shingles were removed (and sold for $5.00) and the building recovered, the lathing was removed, the northwest room (which had been rented for $10.00 per month) was fitted for the commissioners' office, the windows were glazed (paned with glass), and from time to time the building was painted. A fence was built around the courthouse and painted (there was no stock law in effect). A well, which had been dug earlier on the courthouse grounds, was included inside the fencing. Sawdust was kept on the floor until carpeting was installed, printed material was purchased for the making of curtains for the windows, and shutters were made and added to the windows. In a contract given to H. C. Thompson, the building was plastered, and later the plaster was removed and re-plastering done through a contract awarded to Mr. Finger. Throughout the years the building received many coats of whitewash to keep it "spic-and-span".

The county's original jail was destroyed by fire soon after it was completed during a failed escape attempt. The county was without a jail until 1881 when a new jail was completed. The old jail is located west of the courthouse and, along with the historic courthouse, is listed in the National Register of Historic Places. Both the jail and the courthouse have undergone extensive renovation to restore them to their original appearance. The Dawson County/Dawsonville Welcome Center was previously housed for several years in the historic jail. Today, the facility serves as the home for Ninth District Opportunity.

For the first hundred years of its existence Dawson County remained primarily an agricultural economy, largely due to the lack of railroads or major highways in the area. Dawson County was however a significant source of illegal corn whiskey (known as 'moonshine') for Atlanta during and after the prohibition era. During prohibition, many bootleggers would modify their cars for better speed and handling in order to evade police when delivering their illegal cargo. Even after prohibition the trend continued, as bootleggers were on the run from state revenue agents who sought to tax their illicit operations. Eventually these cars were raced for entertainment (and profit), leading to the birth of modern stock car racing and NASCAR.

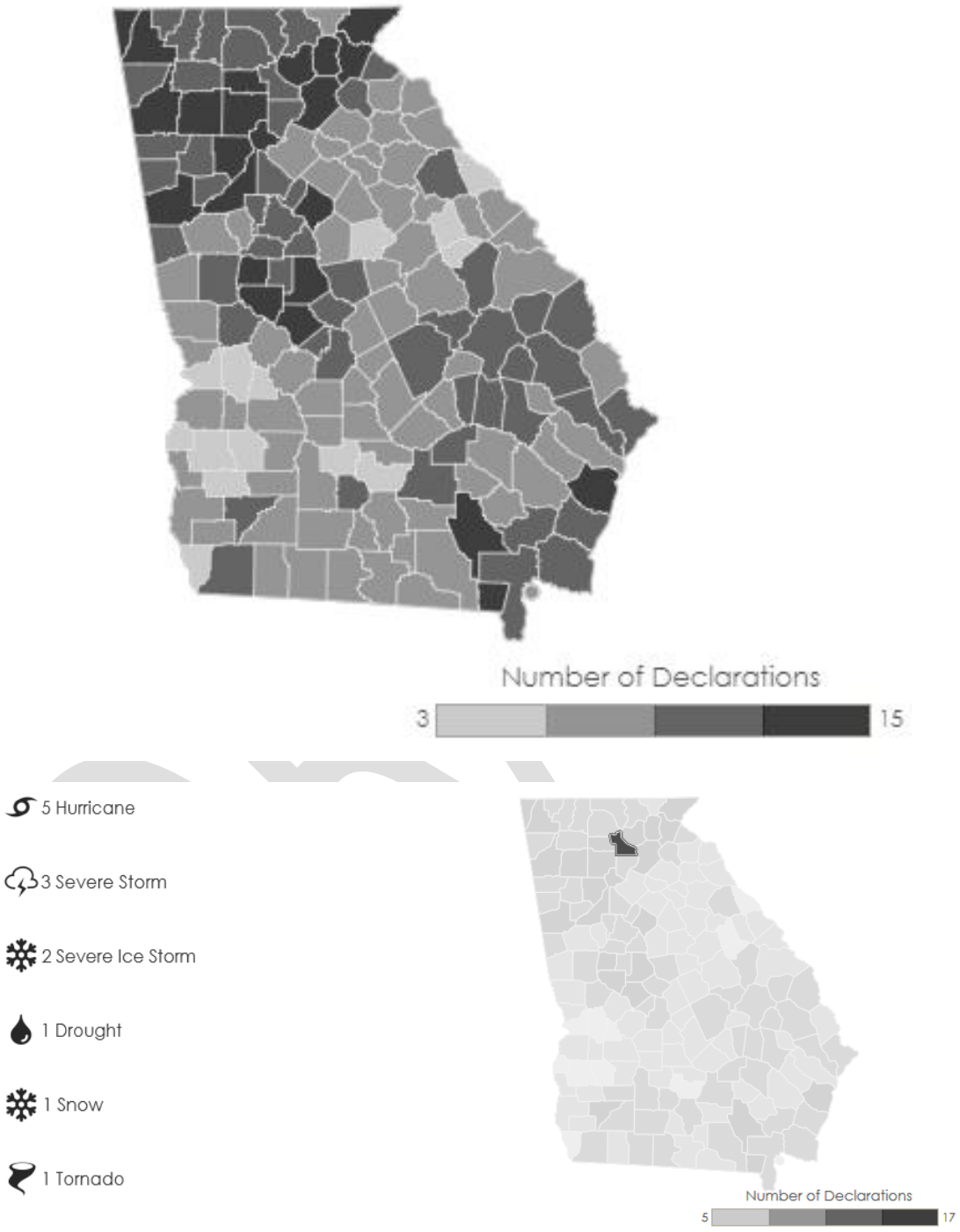
Bill Elliott, one of NASCAR's most successful drivers, was born in Dawsonville. "Awesome Bill from Dawsonville" won 44 races on the NASCAR circuit, including two Dayton 500 victories and the 1988 NASCAR Winston Cup championship. Elliott won NASCAR's Most Popular Driver Award a record 16 times between 1984 and 2002.

In 1957, the Appalachian Trail was re-routed to a new endpoint about 8 miles north of Amicalola Falls State Park, establishing the county as a major destination for hikers. At the same time, the flooding of the Chattahoochee River plain to form nearby Lake Lanier was completed, resulting in Georgia's largest lake at 39,000 acres. The lake forms the southern end of Dawson County.

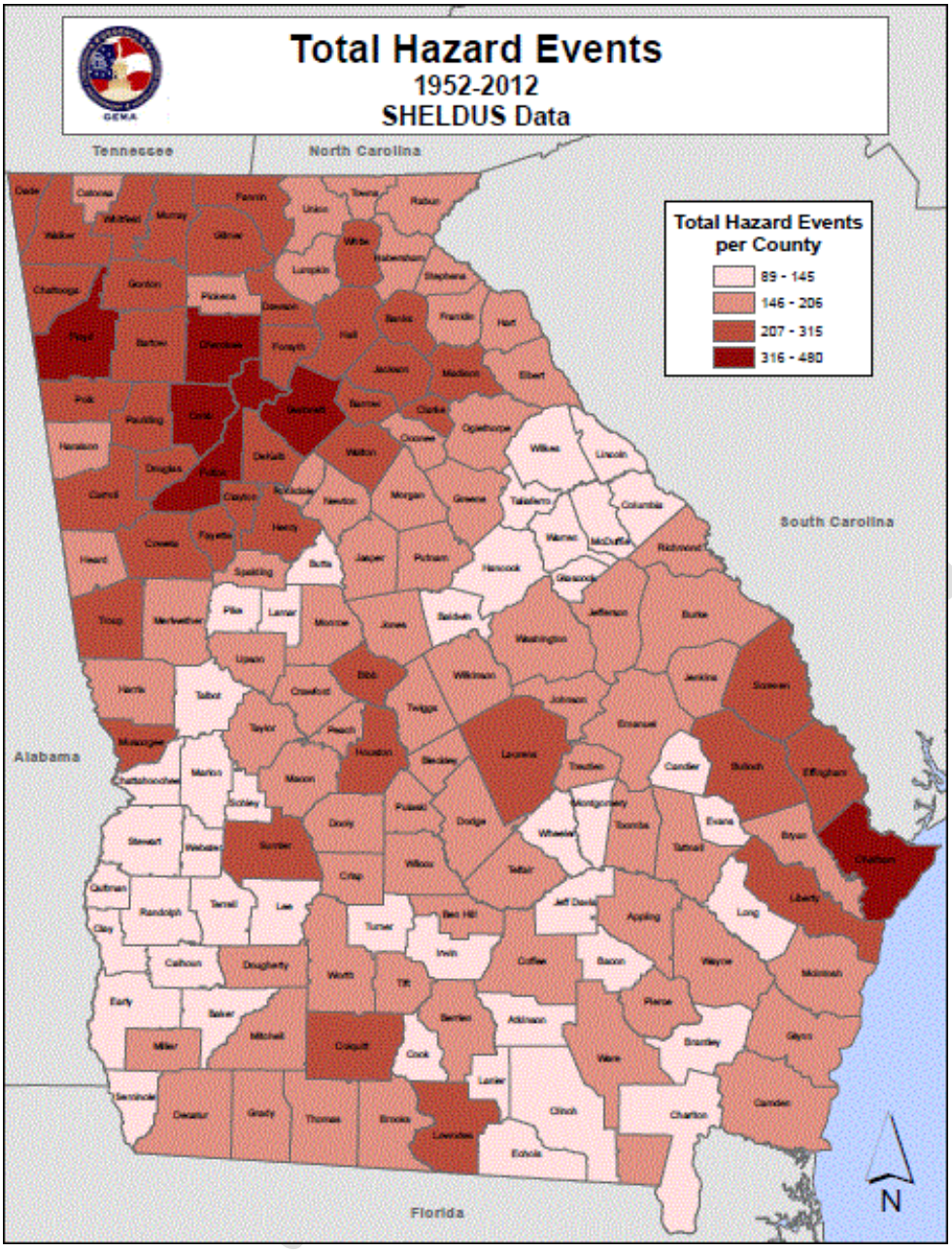
With the construction of the Georgia 400 highway to Atlanta in the 1980's, the county finally had the major highway that it had lacked for a hundred and twenty years. This transportation route, combined with Lake Lanier, Amicalola Falls and the recent development of the North Georgia Premium Outlets have helped Dawson County transition from a quiet mountain enclave to one of Georgia's fastest growing communities.

Past Events

- **2017, Hurricane Irma (Federal Declaration)**
- 2017, Thunderstorm Wind/Hail Event
- 2017, Winter Storm
- 2016, Heavy Rain/Flood Event
- 2015, Winter Storm
- **2015, Ice Storm (Federal Declaration)**
- 2014, Winter Storm
- **2014, Winter Storm/Ice Storm (Federal Declaration)**
- 2013, Heavy Rain/Flood Event (Etowah River Historic Crest)
- 2013, Flood Event
- 2013, Ice Storm
- 2010, Winter Storms (3)
- 2009, Heavy Rain/Flood Event
- **2009, Tropical Storm Ida/Heavy Rain/Flood Event (Federal Declaration)**
- 2008, Thunderstorm Hail Event
- 2008, Winter Storm
- 2005, Winter Storm
- **2004, Hurricane Ivan/Flash Flood Event (Federal Declaration)**
- 2002, Tornado (F2)
- **2000, Ice Storm (Federal Declaration)**
- **1998, Thunderstorms/Flood Event (Federal Declaration)**
- 1997, Thunderstorm Wind Event
- **1995, Hurricane Opal/Thunderstorm Wind Event (Federal Declaration)**
- **1993, Blizzard/Winter Storm (Federal Declaration)**
- **1977, Drought (Federal Declaration)**
- **1974, Tornado (F4) (Federal Declaration)**



Source: Federal Emergency Management Agency (FEMA) Disaster Declarations for State and Counties Data Visualization



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

Demographics

	2010 Census	2015 Estimation
Population	22,330	22,673
White	95.6%	95.0%
African-American	0.5%	0.6%
Hispanic/Latino	4.1%	3.9%
Asian	0.6%	0.5%
American Indian	0.4%	0.4%
Two or More Races	1.4%	1.9%
Median Age	40.6	----
Median Household Income	$56,943	----
Person Below Poverty Line	14.2%	----
Homeowners	80.3%	----

	2010 Census	2015 Estimation
Dawsonville	2,536	2,416

Economy

Dawson County's economy is primarily agricultural with some light industry. Dawson County's cost of living is 1.9% below the national average. The unemployment rate in Dawson County is 3.8%, which is below the State average of 4.7% and the National average of 4.1%. Dawson County has a median household income of $33,816, which is well below the national average of $56,943. Recent economic problems in Georgia and nationwide have affected these figures.

Dawson County's Largest Private Employers

North Georgia Premium Outlets = 1100 total employees (This is the seasonal average of all franchises combined. Simon Properties employs 15-20 people. Depending on the season most franchises employ 10 – 30 people.)

Gold Creek Foods LLC = 317 total employees; 317 full-time employees

Kroger = 303 total employees; 50-75 full-time employees; total employees varies seasonally

Wal-Mart = 300 total employees; 142 full time, 158 part-time; ~20 additional employees seasonally

BTD Manufacturing = 223 total employees; 223 full-time employees

Publix = 125 total employees; 75 part-time employees; 50-60 full-time employees; ~ 25 additional employees seasonally

Fort Dearborn = 125 total employees; 123 full-time employees; 2 part-time employees

Home Depot Inc. = 126 total employees; 63 full-time employees; 63 part-time employees

Premier Surplus = 70 total employees; 70 full-time employees

Atlanta Motorsports Park = 68 total employees; 20 full-time employees; 48 part-time employees

Ingles = 65 total employees; 20 full-time employees; 45 part-time employees

MESH Engineering = 65 total employees; 65 full-time employees

Worldwide Manufacturing Inc. = 53 total employees; 53 full-time employees

Five Star Architectural = 49 total employees; 47 full-time employees; 2 part-time employees

**All employment numbers were verified in August of 2017. This information is provided by Dawson County Chamber of Commerce.*

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 Commissioners, one from each of four geographic districts, who are elected in staggered four-year terms and a Chairman who is elected by the county at-large. Although each County Commissioner is elected as a representative from their respective districts, they represent the interests of the entire county and all of its citizens. The Board of Commissioners appoint a County Manager, who is responsible for the day-to-day administrative operation of the county government.

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; Parks and Recreation; Public Works; Dawson Transit; and agencies that service all of these such as Building Maintenance and Vehicle Maintenance. 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

Dawson County's transportation system consists primarily of state highways and county maintained roads. US Highway 19 (better known as Georgia 400), as well as State highways 9, 52, 53, 136, and 183are major transportation routes that carry the majority of passenger and commercial traffic in and out of Dawson County. Congestion in these transportation corridors create traffic problems, primarily because of population growth. This is particularly true along US Highway 19/ Georgia Highway 400.

In addition to the US and State Routes, Dawson Forest Road, Kelly Bridge Road, and Lumpkin Campground Road are major corridors that are county maintained.

Dawson County has one privately owned airport (Elliott Field). The City of Dawsonville is currently (2017) in negotiations to purchase this facility. There has never been a passenger or freight railroad located within Dawson County.

Climate

Dawson County, like much of Georgia, enjoys a temperate climate. As a result, Dawson County has 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. Dawson County's proximity to the Atlantic Ocean can affect the overall climate and create milder winters and warmer, wetter summers than other parts of the State of Georgia.

AVERARE MONTHLY TEMPERATURES IN GEORGIA (FAHRENHEIT)

Month	Georgia Average Temperature	Dawson County Average Temperatures
January	46	42
February	49	45
March	56	53
April	63	62
May	70	70
June	77	78
July	80	79
August	79	78
September	74	73
October	64	61
November	56	52
December	48	46

Utilities

Dawson County's utility needs are met by a variety of public and private entities.

Electrical power to Dawson County is provided by Amicalola EMC, Sawnee EMC, and Georgia Power.

Propane and natural gas is the primary source of heating and cooking fuel for Dawson County's residents. This fuel is delivered to residents and businesses by tank truck on an ongoing basis, especially during peak winter months. Atlanta Gas Light provides limited natural gas service in Dawson County. There are many propane distributors with large quantities of propane stored on site.

NFIP Compliance

Jurisdiction	Participating?	Participation Date
Dawson County	yes	12/15/1990
Dawsonville	Yes	5/21/1982

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 Dawson County Hazard Mitigation Plan 2012.

Chapter 3 Section	Updates
Risk Assessment	• Expanded the explanation of the Risk Assessment • Added an explanation of each part of the Hazard Information
Natural Hazard Thunderstorms	• Updated hazard description to match Georgia State Hazard Mitigation Plan information • Updated and consolidated hazard profile with new data • Content revised
Natural Hazard Winter Storms	• Updated hazard description to match Georgia State Hazard Mitigation Plan information • Updated and consolidated hazard profile with new data • Content revised
Natural Hazard Flooding	• Updated hazard description to match Georgia State Hazard Mitigation Plan information • Updated and consolidated hazard profile with new data • Land Use and Development trends updated to include municipal NFIP information • Content revised
Natural Hazard Tornado	• Updated hazard description to match Georgia State Hazard Mitigation Plan information • Updated and consolidated hazard profile with new data • Content revised
Natural Hazard Drought	• Updated hazard description to match Georgia State Hazard Mitigation Plan information • Content revised

Natural Hazard Wildfire	• Updated hazard description to match information in the Georgia State Hazard Mitigation Plan • Updated and consolidated hazard profile data • Content revised
Natural Hazard Earthquake	• Updated hazard description to match information in the Georgia State Hazard Mitigation Plan • Updated and consolidated hazard profile data • Content revised
Natural Hazard Tropical Cyclone	• New Section – Not in 2012 Plan
Technological Hazard Hazardous Materials	• Updated hazard description • Updated and consolidated hazard profile data • Content revised
Technological Hazard Dam Failure	• Updated hazard description • Updated and consolidated hazard profile data • Content revised
Technological Hazard Transportation	• New Section – Not in 2012 Plan
Technological Hazard Terrorism	• New Section – Not in 2012 Plan
Technological Hazard Communications Failure	• New Section – Not in 2012 Plan
Technological Hazard Emergent Infectious Diseases	• New Section – Not in 2012 Plan

Risk Assessment

Requirement §201.6(c)(2)(i and ii)
Requirement §201.6(d)(3)

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

1. Hazard Identification: The Dawson County Hazard Mitigation Planning Committee identified seven natural hazards and four technological hazards for this Hazard Mitigation Plan. This is an increase of one natural hazard and four technological hazards from the previous iteration of the plan. Each hazard was identified by the use of 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 Dawson County.

3. Profile of Hazards: Each hazard was profiled as to how it could potentially impact Dawson 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 in regards to flooding and dam failure events.

7. Multi-Jurisdictional Concerns: Each jurisdiction was considered when determining the potential hazard impact.

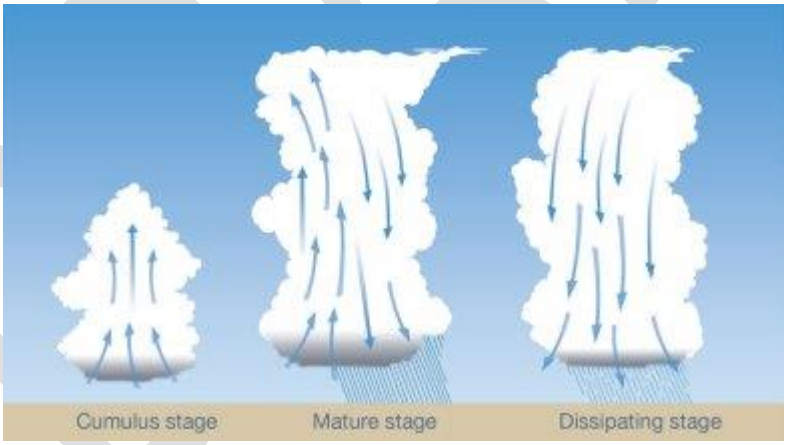
Natural Hazard: **Thunderstorms**

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 has the ability to 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.

Natural Hazard: **Thunderstorms**

(Hazard Description Continued)

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. 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.

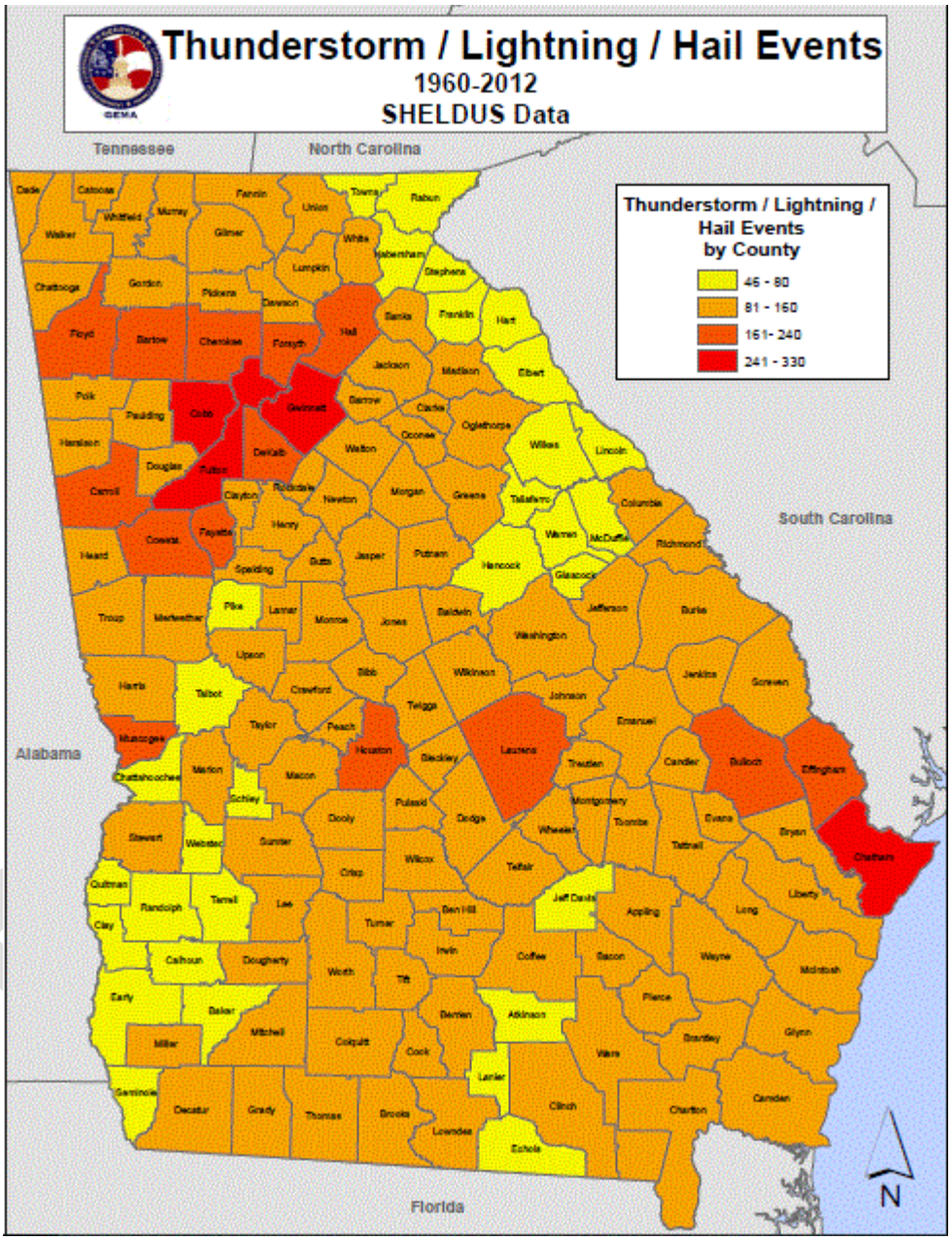
Natural Hazard: **Thunderstorms**

Hailstone 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 Dawson County. Severe thunderstorms are the most frequently occurring natural hazard in Dawson County. Many of these storms include high winds, lightning, and hail. Hail up to 2.75 inches was recorded in Dawson County on several occasions, most recently in 2008. While there have been dozens of documented thunderstorm events affecting Dawson 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 13 thunderstorm events were recorded between 1967 and 1990, likely a vast underestimation of actual events.

Natural Hazard: **Thunderstorms**



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

Natural Hazard: **Thunderstorms**

(Hazard Profile Continued)

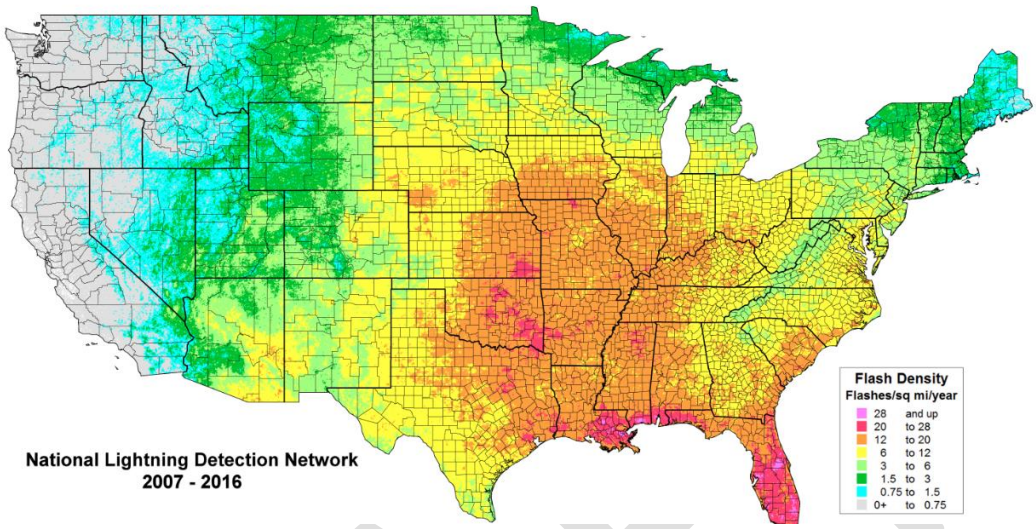
Most of the available information relating to severe thunderstorm events in Dawson County fails to describe damage estimates in any detail. With each thunderstorm event, there are likely unreported costs related to infrastructure costs, public safety response costs, utility repair costs, and personal home and business repair costs. Thunderstorms have occurred during all parts of the day and night and in every month in Dawson County.

The Dawson 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 Dawson County LEOP in researching severe thunderstorms and their potential impacts on the county.

During the last 50 years, 104 thunderstorm events were recorded in Dawson County, with 91 of those occurring in the last 25 years. This number includes 39 hail events and only 8 lightning reports. According to these records, Dawson County has a 0.6% chance daily of a thunderstorm event based upon data from the last 25 years. Over the last 10 years, Dawson County has averaged 3.4 thunderstorm events per year (34 events). This includes 1.6 hail events per year over the last 16 years. Due to improved record keeping protocols, the Dawson 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 Dawson 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.

As indicated by the below graphics, Dawson 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 Dawson 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 Dawson County.

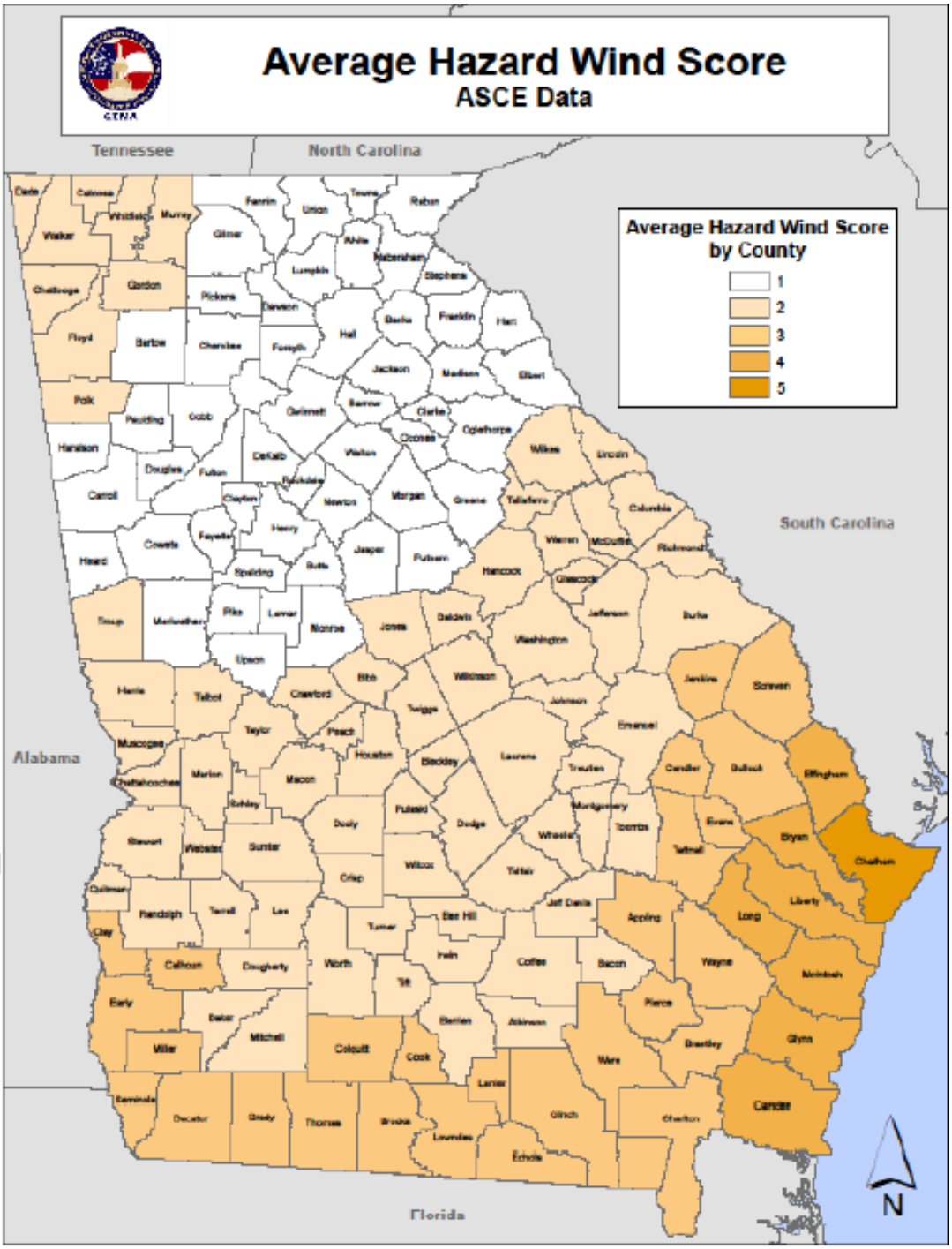
Natural Hazard: **Thunderstorms**



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 effected Dawson 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 Dawson County. The Hazard Wind Score maps uses the following scale:

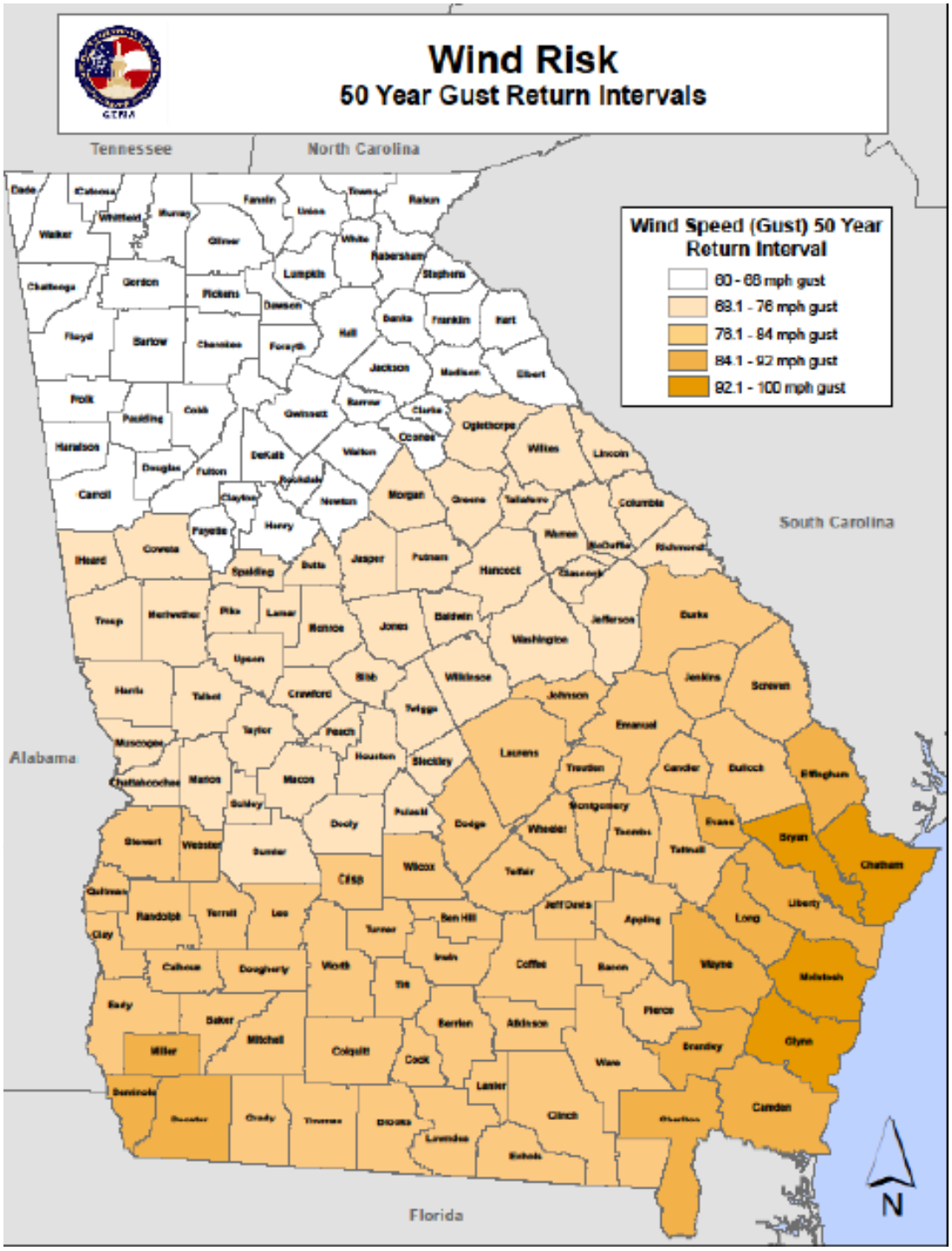
Hazard Score	Wind Speeds
1	<90 mph gust
2	91 – 100 mph gust
3	101 – 110 mph gust
4	111 – 120 mph gust
5	>120 mph gust

Natural Hazard: **Thunderstorms**



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

Natural Hazard: **Thunderstorms**



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

Natural Hazard: **Thunderstorms**

Assets Exposed to the Hazard

In evaluating assets that are susceptible to severe thunderstorms, the Dawson 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.

Estimated Potential Losses

Estimates of damage for the past events of the last 50 years are over $3.5 million, or $70,000 annually. These numbers are thought to be a gross underestimation of actual past damages.

Land Use & Development Trends

Dawson County currently has no land use trends related to Thunderstorms beyond continued population growth.

Multi-Jurisdictional Considerations

Thunderstorm events have occurred across all areas of Dawson County. Crop damage from thunderstorm events would likely have the greatest impact in the rural areas of Dawson County. However, property damage numbers would be highest in more heavily populated areas due to greater population density. Thunderstorms have the potential to impact all areas of Dawson County.

Hazard Summary

Thunderstorm events pose one of the greatest threats of property damage, injuries, and loss of life in Dawson County. Thunderstorm events are the most frequently occurring weather event that threatens Dawson County. As a result, the Dawson 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 Dawson County.

Natural Hazard: **Winter Storms**

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.

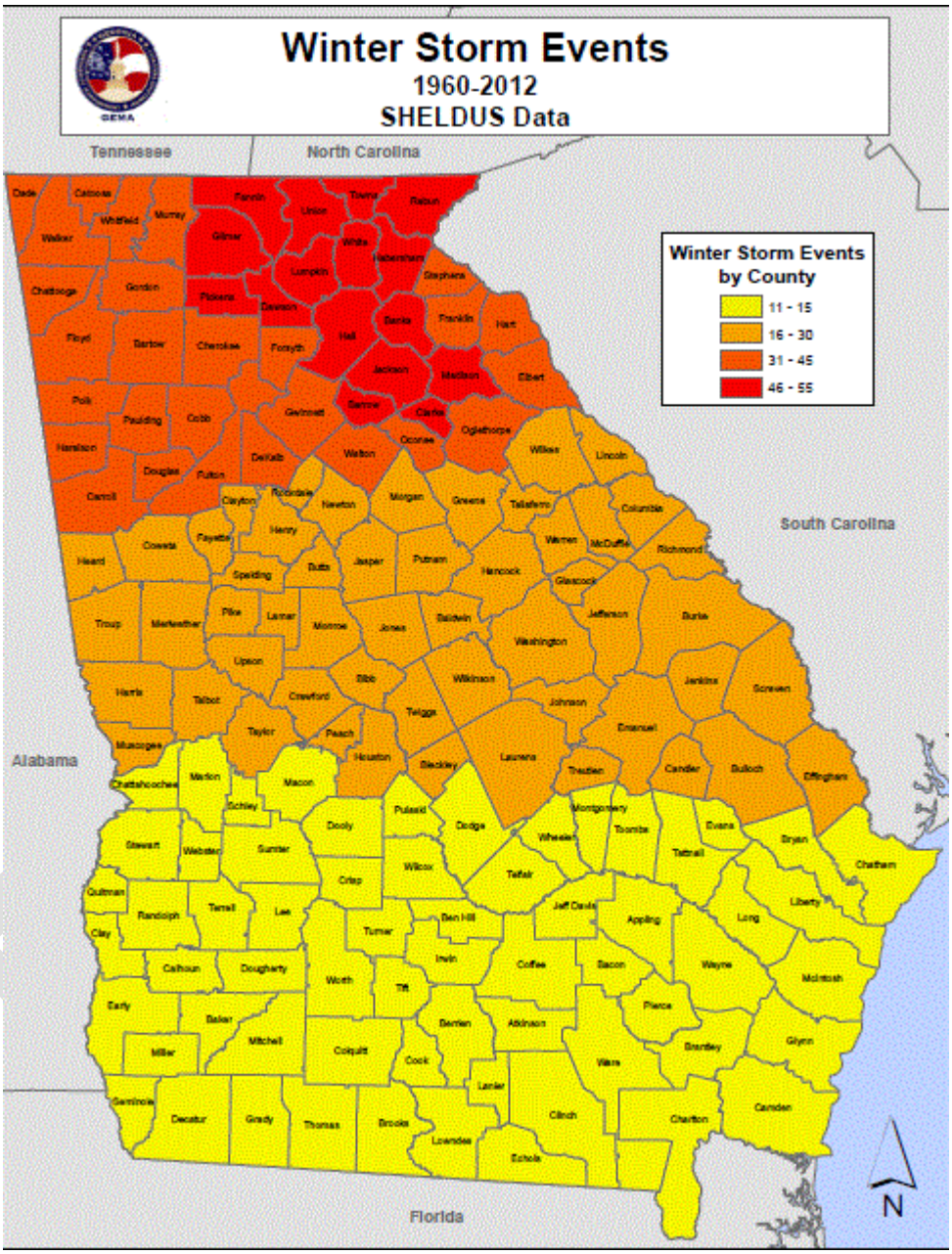
A heavy accumulation of ice, which is often accompanied by high winds, has the ability to devastate infrastructure and vegetation. Destructiveness in the southern states is often amplified due to the lack of preparedness and response measures. Also, the infrastructure was not designed to withstand certain 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 Dawson 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 Dawson 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. Due to the county's elevation changes, many highways have steep grades that can become dangerous during icy conditions. The large number of trees in Dawson 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 Storms**



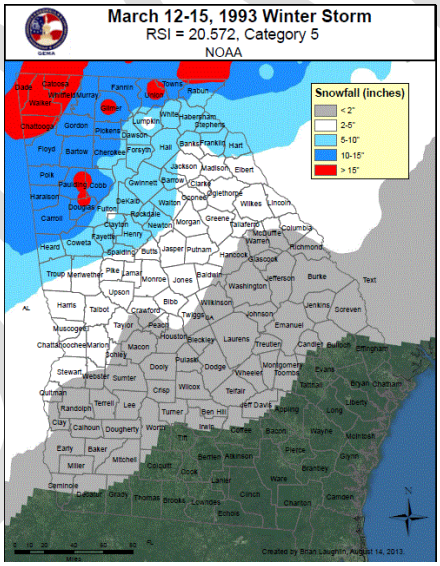
Source: 2014 State of Georgia Hazard Mitigation Strategy (most up-to-date version)

Natural Hazard: **Winter Storms**

(Hazard Profile Continued)

During the past twenty years, documentation exists for 60 winter storm events in Dawson County. No data can be located prior to this timeframe. On average, a winter storm has occurred in Dawson County on a nearly annual basis. A 100% chance exists of a winter storm occurring in any given year in Dawson County. Due to improved record keeping techniques, the HMPC believes that looking at the record for the last 20-year period provides a more accurate representation of the threat of winter storms for Dawson County. For additional historical data, please see Appendix D.

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, as happened with wind-blown snow during the March 1993 Winter Storm event. During this event, over a foot of snow was reported in multiple areas across Dawson County and most areas received at least 6 inches of snow.



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

Natural Hazard: **Winter Storms**

Assets Exposed to the Hazard

Since winter storms are indiscriminate with regard to location, the Dawson 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 $1.2 million in losses. Extrapolated over 50 years, this averages out to $25,940 per year. However, nearly all of the documented winter storms with loss information have occurred over the last 20 years. As such, the average loss per year for the last 20 years is $64,850 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 Dawson County.

Land Use & Development Trends

Dawson County currently has no land use trends related to Winter Storms.

Multi-Jurisdictional Considerations

All portions of Dawson 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 include the City of Dawsonville.

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 not equipped to handle winter storms due to their relative infrequent nature. Oftentimes, communities can face severe impact from these storms. The Dawson County HMPC recognizes the potential threats winter storms could have on the community and have identified specific mitigation actions as a result.

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 of these types.

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 Dawson County HMPC researched flooding information for the last fifty years. The main sources of information used by the Dawson County HMPC came from the National Climatic Data Center, the Dawson County Emergency Operations Plan, and news media sources. It was determined that flooding has caused

Natural Hazard: **Flooding**

(Hazard Profile Continued)

significant damage on a relatively small number of occasions over the last 20 years. One significant flooding event that affected Dawson County occurred in September of 2004. The flash flood event led to two bridges and multiple culverts being washed out, four mobile homes flooded, and one breached dam. This event caused nearly $500,000 in reported damages. While data was collected for the entire 50-year timeframe, little information was available regarding flood events over that period, possibly due to poor record keeping.

The Etowah River reaches major flood stage at 21 feet near Dawsonville and 31 feet near Landrum. At these levels, Georgia Highway 9 floods in low-lying areas and water levels reach the bottom of the Georgia Highway 136 bridge. Homes along Riverbend Road and Etowah River Road become inundated with 4-10 feet of water (flooding of homes begins at "Moderate" flood level near Landrum).

Flood events within Dawson County are typically associated with areas of special flood hazard as identified on Flood Rate Insurance Maps (FIRMs) published by the Federal Emergency Management Agency. 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 Dawson County's history appears to be related to roads and culverts washing out as a result of flood waters.

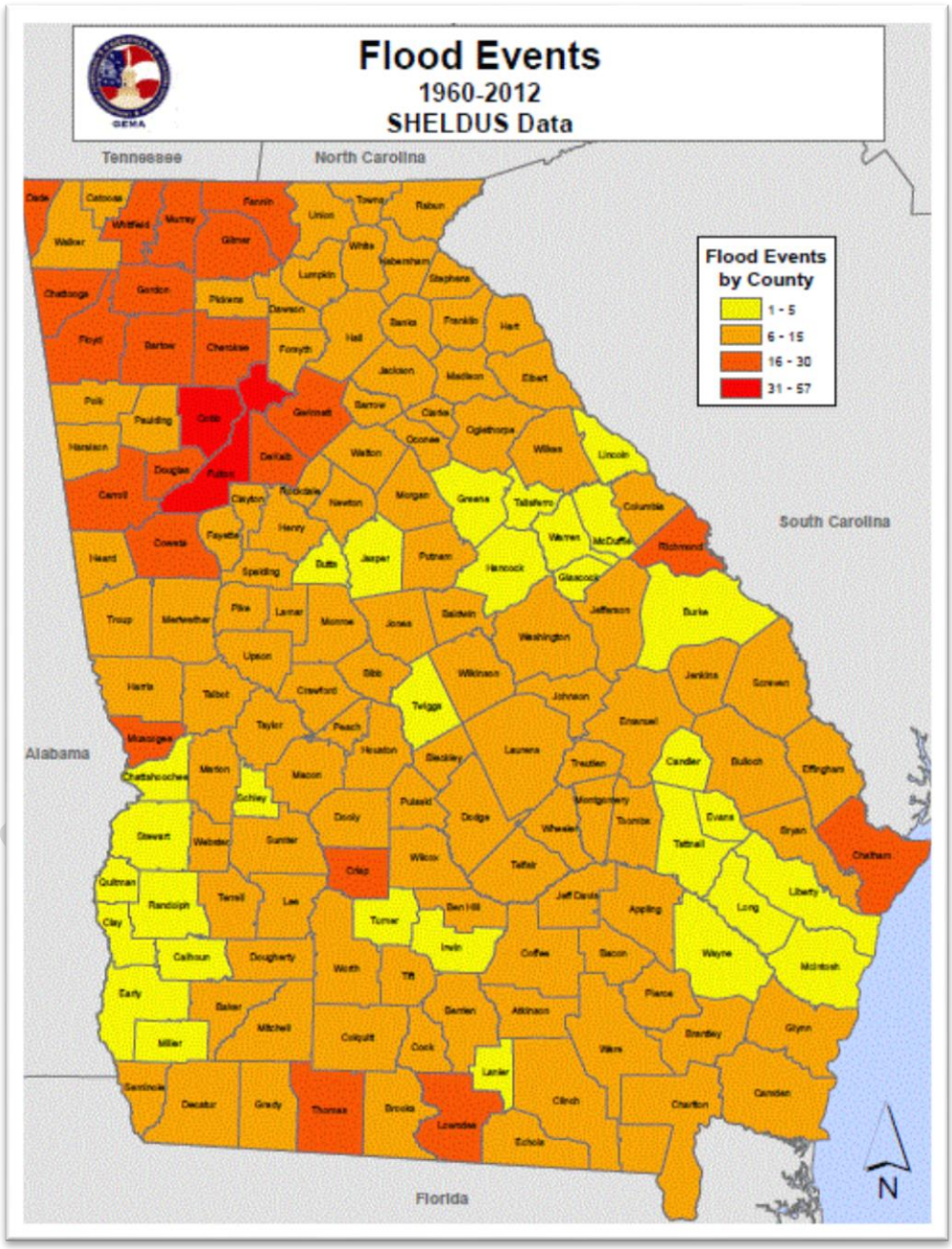
There are 13 documented flood events over the last 50 years. Based on the 50-year record, it can be inferred that such an event is likely to occur every 3.9 years in Dawson County. This relates to a 26% chance of a flood event occurring in a given year.

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 Dawson County HMPC attempted to identify known structures within, or close to, the 100-year floodplain.

Natural Hazard: **Flooding**

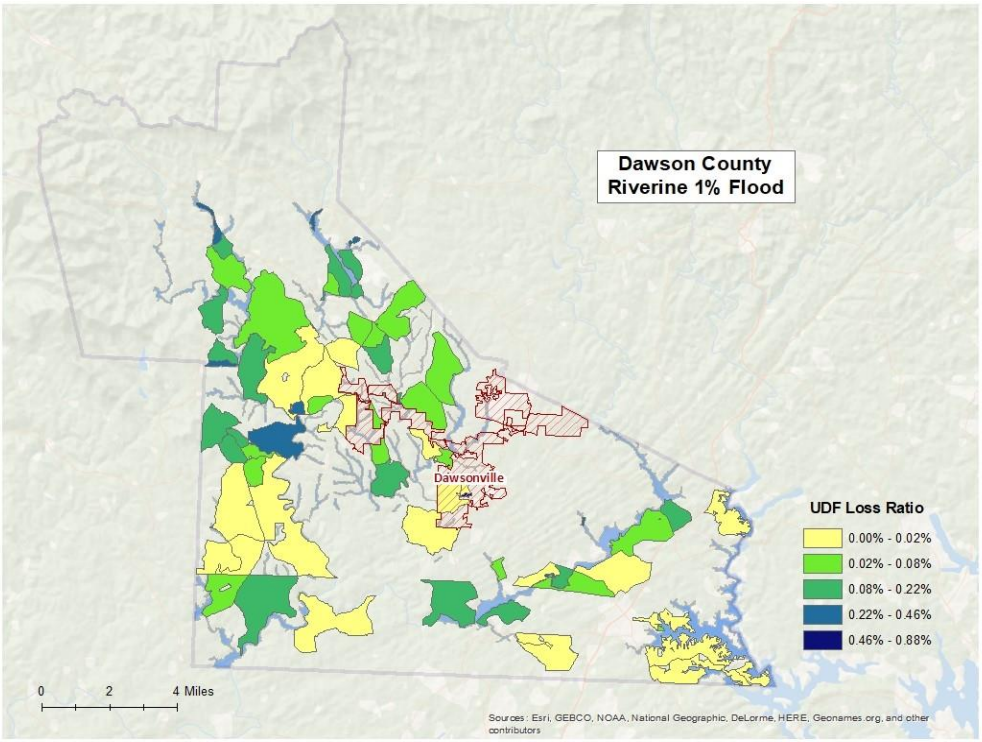


Source: 2014 State of Georgia Hazard Mitigation Strategy (most up-to-date version)

Natural Hazard: **Flooding**

Estimated Potential Losses

Based upon the 2018 Dawson County HAZUS report, a flood equivalent to the 1% riverine flood levels could result in losses in excess of $9 million. However, it is possible that some areas may not experience total losses while others may be inundated with flood waters who are not designated in the 1% riverine flood areas. Additionally, there are no critical facilities located in the 1% riverine flood areas.



Source: 2018 Dawson County HAZUS Report

Land Use & Development Trends

Dawson 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. 130304) first entered the NFIP on December 15, 1990. 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. Currently, the Dawson County municipality of Dawsonville also participate in NFIP.

There are no repetitive loss properties identified in Dawson County.

Multi-Jurisdictional Considerations

During a large-scale flood event, many portions of Dawson 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. All of Dawson County and the City of Dawsonville could potentially be impacted.

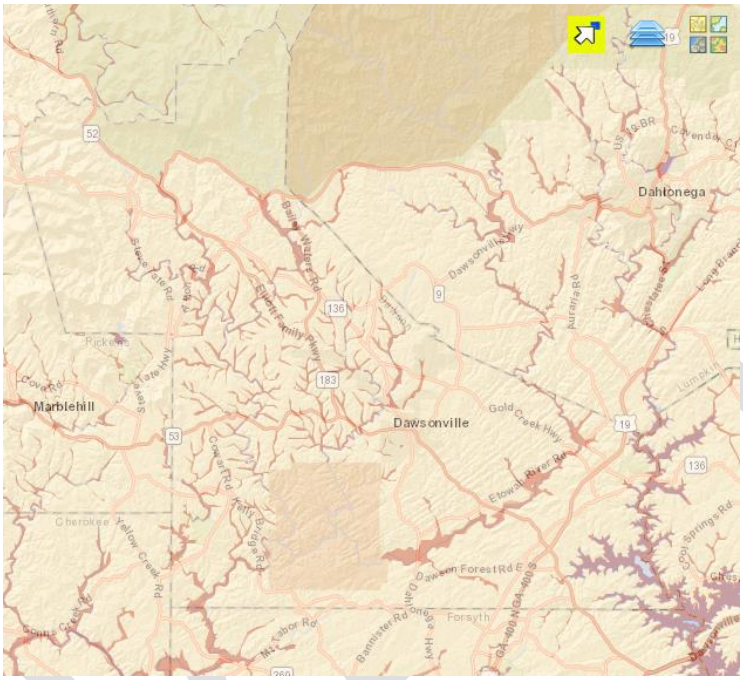
Hazard Summary

Flooding has the potential to inflict significant damage within Dawson County, particularly along Lake Lanier and its distributaries. Mitigation of flood damage requires the community to be aware of flood-prone areas, including roads, bridges, and critical facilities. The Dawson 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.

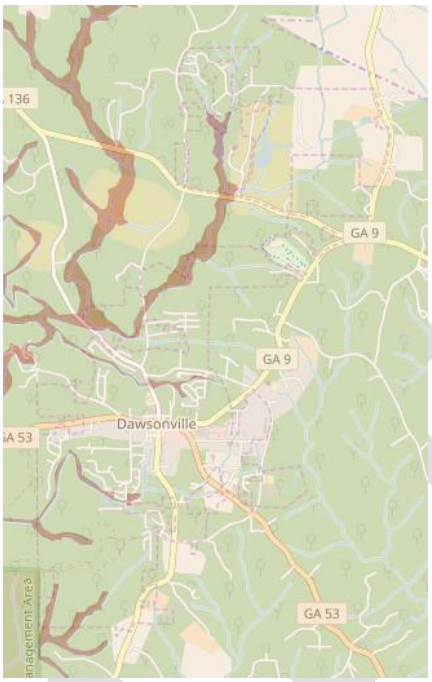
There are no repetitive loss properties identified in Dawson County.

Natural Hazard: **Flooding**

Dawson County



Dawsonville



All Flood Maps are from the GEMA Georgia Mitigation Information System (GMIS)

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 range 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**

The Enhanced Fujita Scale	
EF Rating	3 second gust (mph)
0	65-85
1	86-110
2	111-135
3	136-165
4	166-200
5	over 200

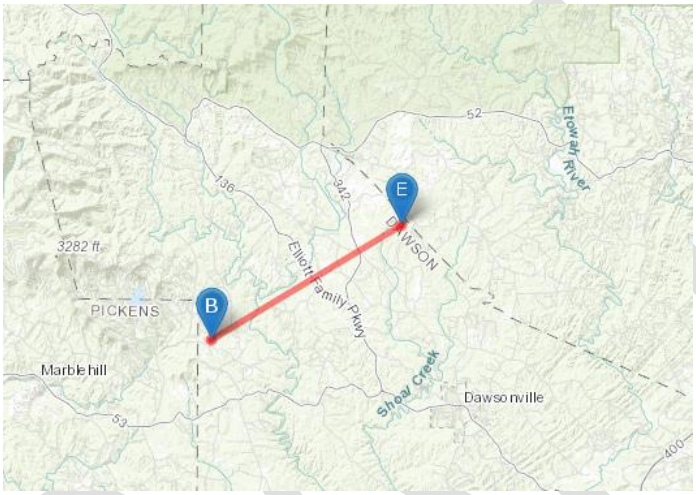
Hazard Profile

All areas within Dawson 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 has been only 2 documented tornadoes in the last 50 years in Dawson County. It is likely that other tornadoes have occurred within this timeframe, but available records are limited in nature.

Based on the 50-year information available for Dawson County, a tornado occurs every 50 years. On an annual basis, Dawson County has a 4% chance of being impacted from a tornado event. When only the last twenty years are considered, the

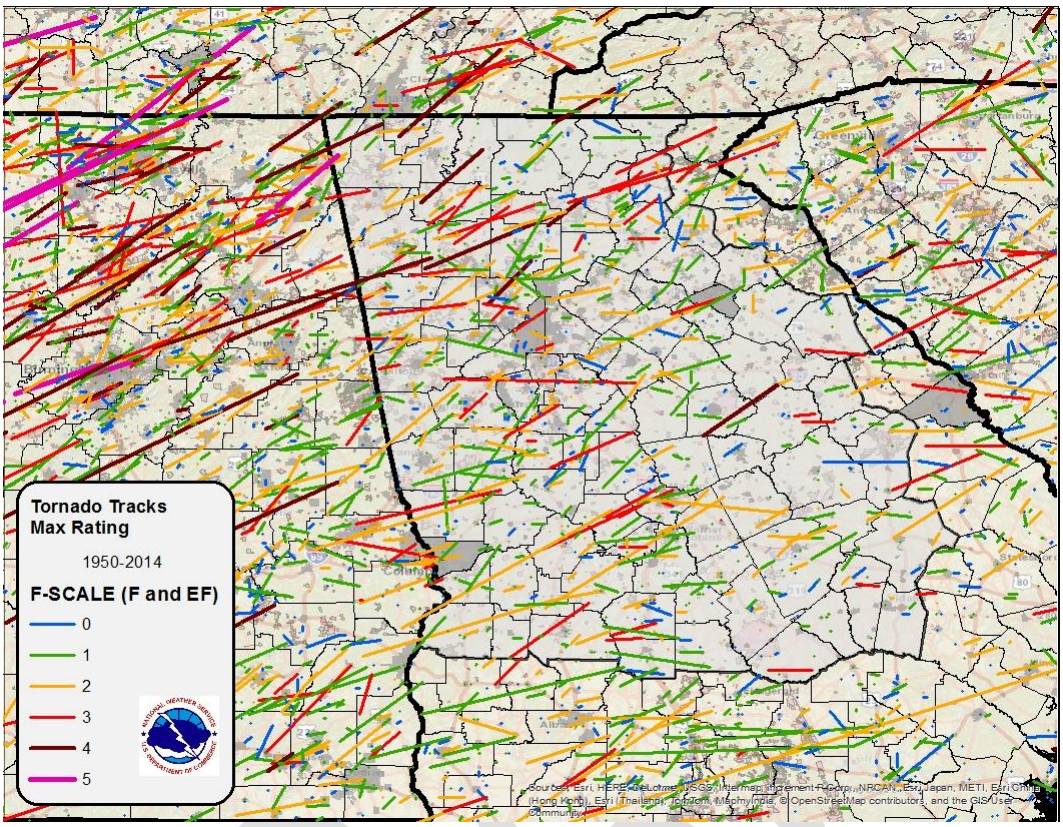
likelihood of a tornado affecting Dawson County increases to 5% (1 tornado since 1997).

Individual tornado events can cause extreme damage to an area. This holds true for Dawson County, as well. The strongest and costliest documented tornado to impact Dawson County was an F4 in 1974. This storm traveled through the community of Juno. The storm caused $2.5 million in damages and led to 15 injuries and 3 deaths in Dawson County. For additional historical data, please see Appendix D.



1974 F4 Tornado Track (National Climactic Data Center)

Natural Hazard: **Tornado**



Assets Exposed to the Hazard

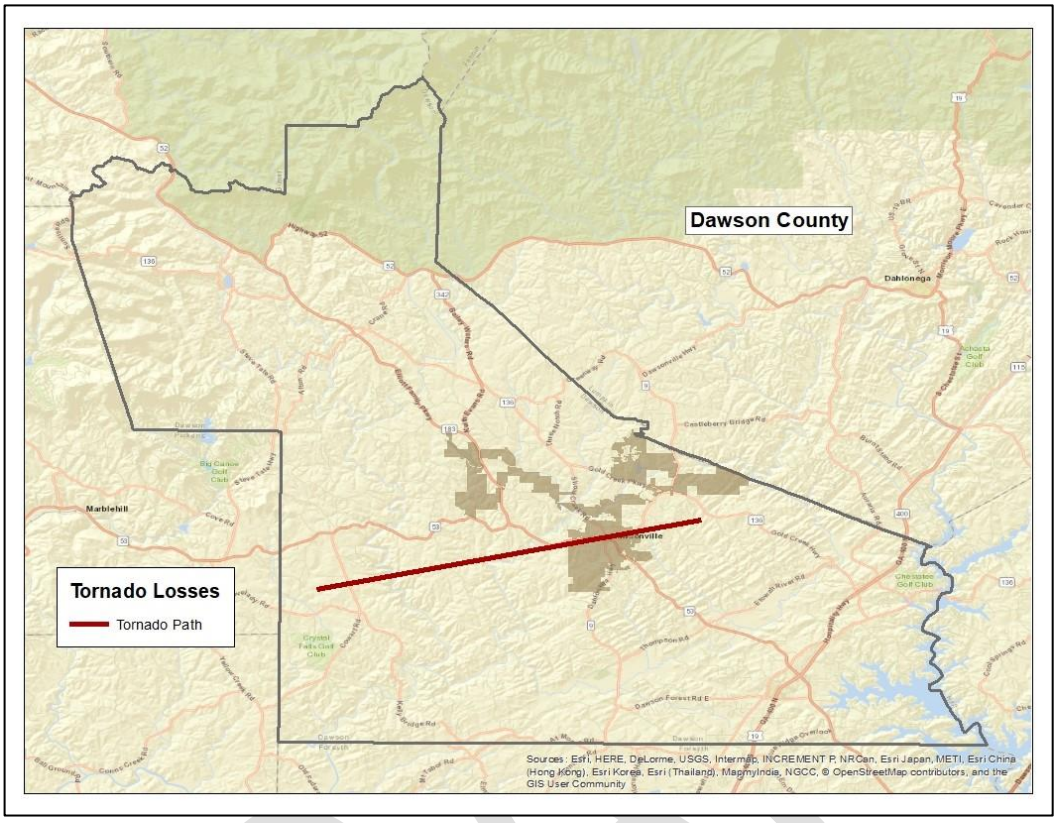
In evaluating assets that are susceptible to tornadoes, the Dawson County HMPC determined that all public and private property is threatened by tornadoes, including all critical facilities. This is due to the lack of spatial prejudice of tornadoes.

Estimated Potential Losses

Estimates of damage for the past events of the last 50 years are $2.7 million, or $54,000 annually. When only events of the last 20 years are considered, yearly estimations decrease dramatically to $10,000 annually.

Within the 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 257 buildings and result in losses in excess of $11 million with Dawsonville suffering the greatest economic impacts.

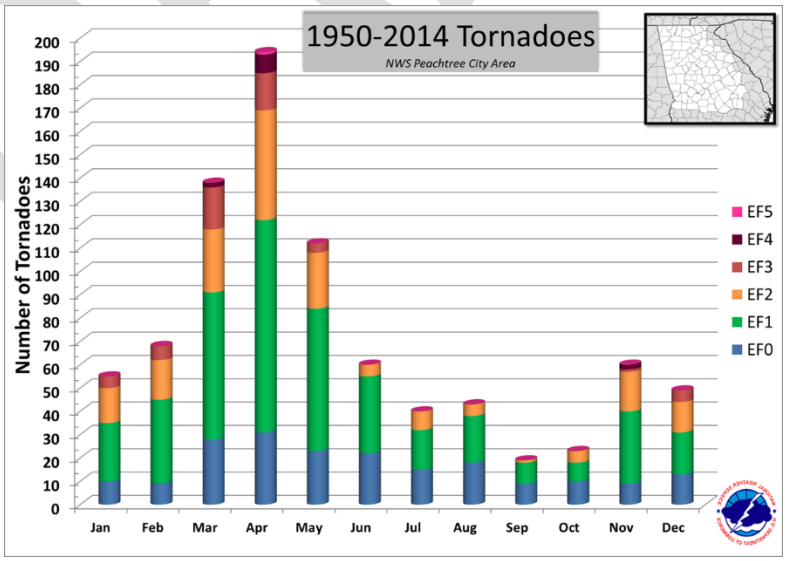
Natural Hazard: **Tornado**



Source: 2017 Dawson County HAZUS Report

Land Use & Development Trends

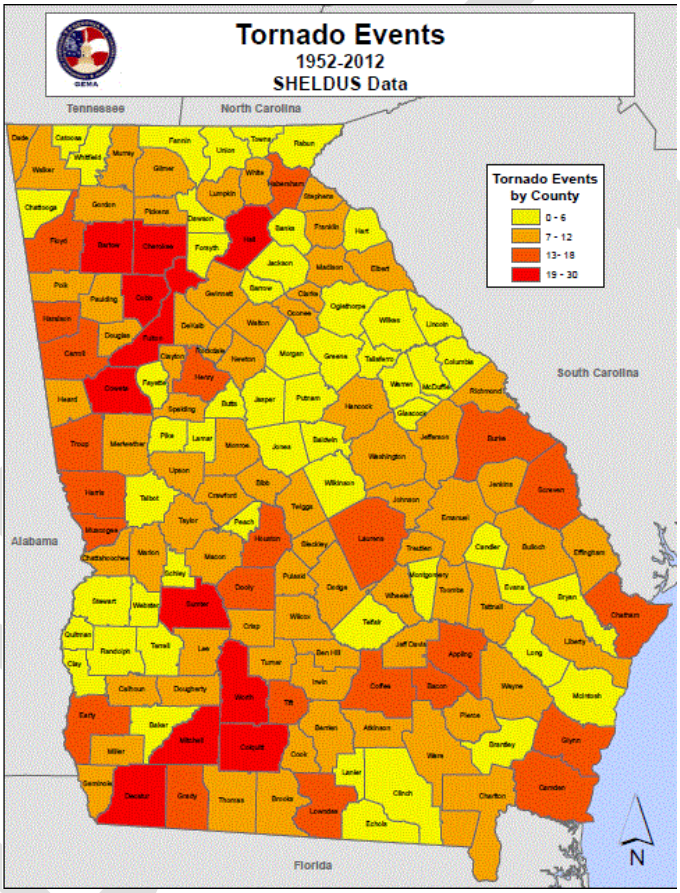
Dawson County currently has no land use trends related to Tornadoes.



Natural Hazard: **Tornado**

Multi-Jurisdictional Considerations

All portions of Dawson 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 include the City of Dawsonville.



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

Hazard Summary

Dawson County remains at risk to potential damage from tornadoes, especially considering the average of one tornado every 50 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 receive full consideration.

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 have to 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 in undetermined due to the fact that 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

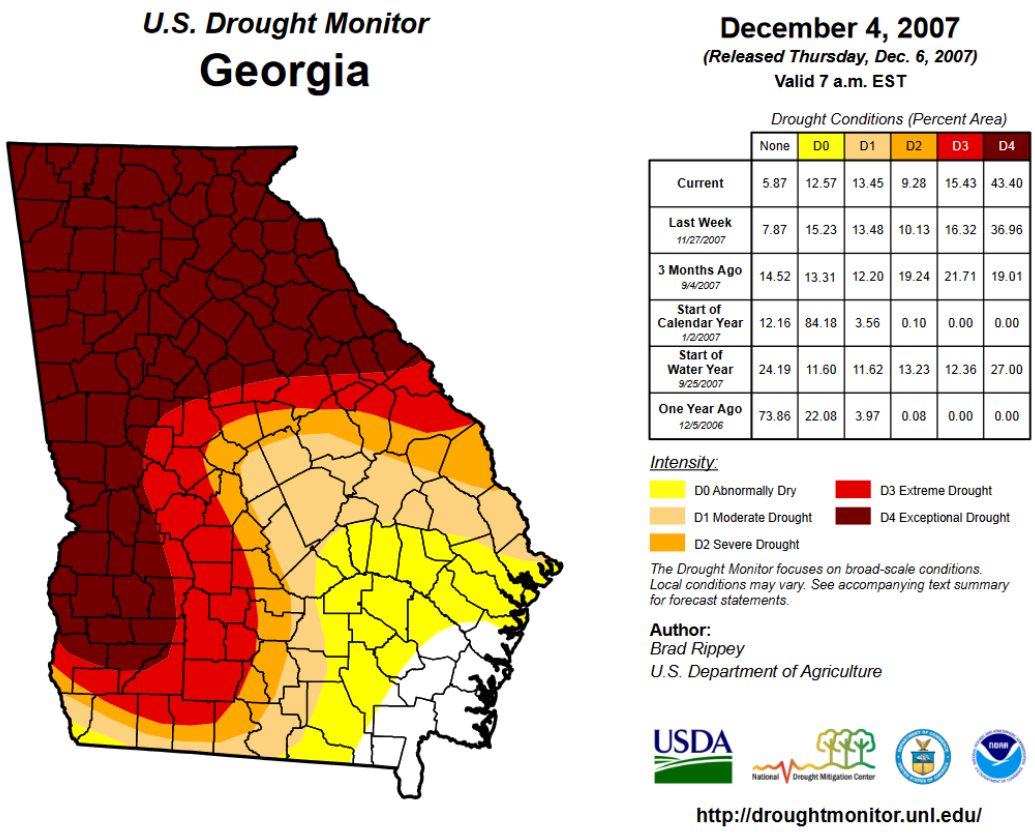
The Dawson County HMPC reviewed data for the last 50 years regarding drought conditions. Historically, agricultural losses have accounted for the vast amount of losses related to drought conditions.

Natural Hazard: **Drought**

(Hazard Profile Continued)

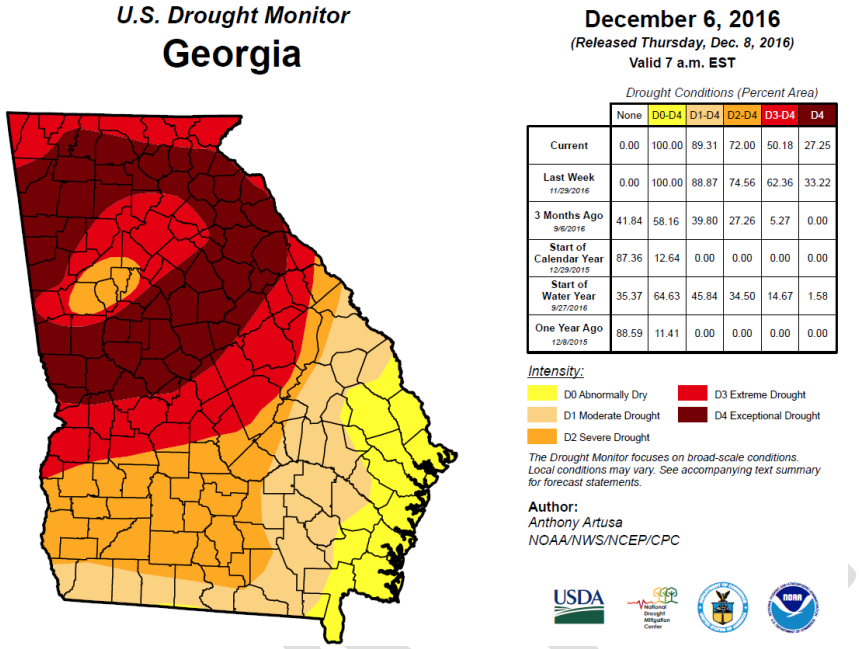
Due to poor record keeping and the unpredictable nature of drought conditions, reliability of historical data for the last 50 years is low. Dawson County has been impacted by 10 drought events in the last 20 years, according to data from the National Climatic Data Center. This amounts to a 50% chance of a drought for a given year over the last 20 years. The economic impact of these droughts, including crop damage, is not available.

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



Source: USDA Drought Monitor – University of Nebraska-Lincoln

Natural Hazard: **Drought**



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

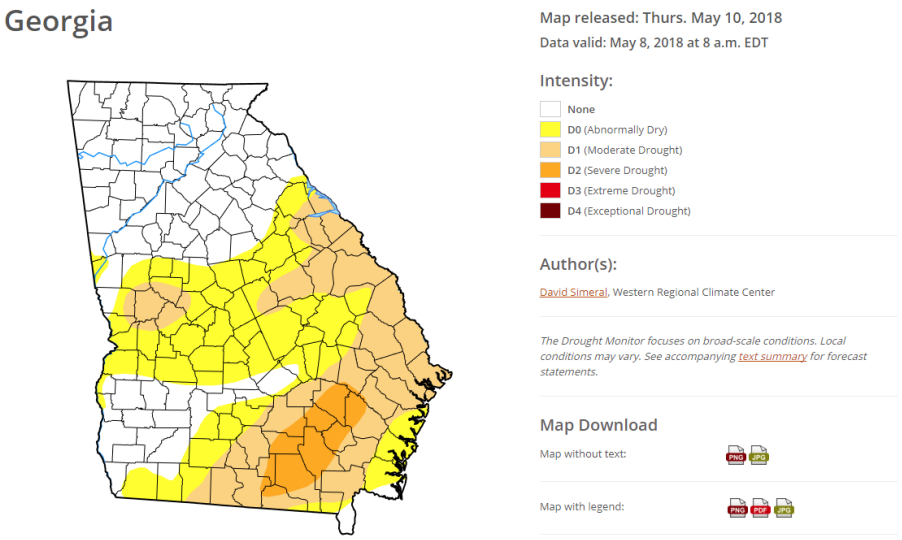
While drought conditions do not typically pose a direct threat to structures, secondary hazards from drought such as increased wildfire threat, does pose a significant threat to all public and private property in Dawson County, including all critical facilities. Water resources could also become scarce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

Estimated Potential Losses

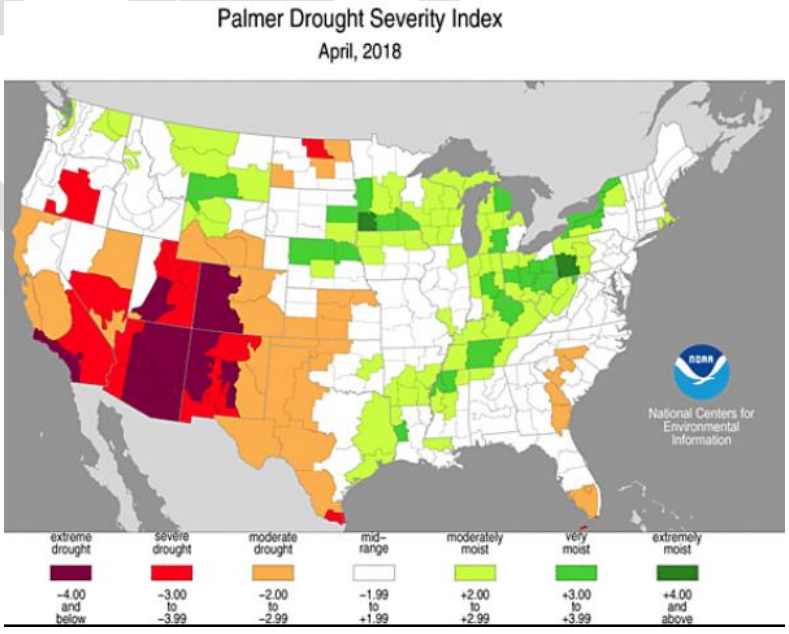
No damage to structures or critical facilities is expected as a direct result of drought conditions. However, crop damage and subsequent losses can be expected to occur as a result of drought conditions. The degree of losses would depend on the duration of the drought, severity of the drought, temperatures 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 2012 Agriculture Census data, Dawson County's market value of products sold was $54,312,000. $626,000 of that total represented crop sales, accounting for 1.2% of the total. Livestock sales accounted for 98.7%, or $53,686,000, of the total value.



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



Source: National Integrated Drought Information System

Natural Hazard: Drought

Land Use & Development Trends

As growth continues, drought can become a larger threat for Dawson County due to the increased reliance on water infrastructure and wells countywide. This increased pull on these resources in Dawson County could quicken or deepen the impacts of a drought for residential, commercial, and industrial areas.

Multi-Jurisdictional Considerations

All portions of Dawson 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 the City of Dawsonville.

Hazard Summary

Drought conditions can cause significant economic stress on the agriculture and forestry interests of Dawson 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 Dawson County HMPC recognizes the potential threats drought conditions could have on the community and have identified specific mitigation actions as a result.

Natural Hazard: **Wildfire**

Hazard Description

A wildfire is an uncontained fire that spreads through the environment. Wildfires have the ability to 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 emergency 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**

(Hazard Description Continued)

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.

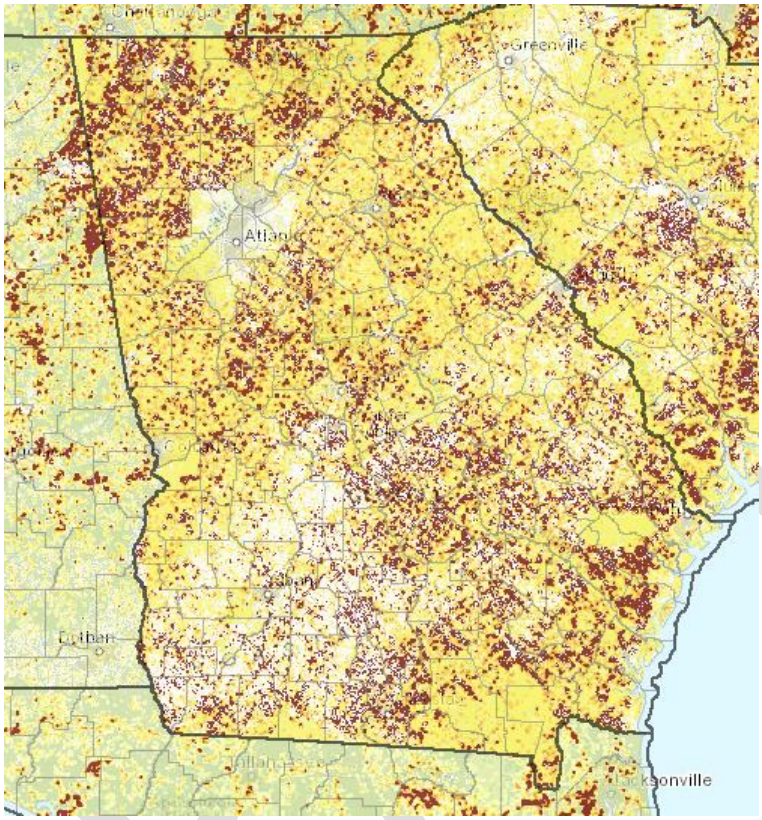
Hazard Profile

Wildfires pose a serious threat to Dawson 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 Dawson County, which is defined as areas where structures and other human development meets undeveloped wildland properties. 98% of Dawson County's population lives within the WUI.

Wildfire statistics were not available for the 50 year timeframe at the time of this profile. The Community Wildfire Protection Plan (CWPP) for Dawson County is currently under review and update by the Georgia Forestry Commission. This plan, once completed, will include statistics and mitigation strategies that can be incorporated into the Dawson County Hazard Mitigation Plan Update during annual reviews.

Natural Hazard: **Wildfire**

Georgia Wildfire Ignition Density



Source: Southern Group of State Foresters Wildfire Risk Assessment Portal

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 Dawson 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.

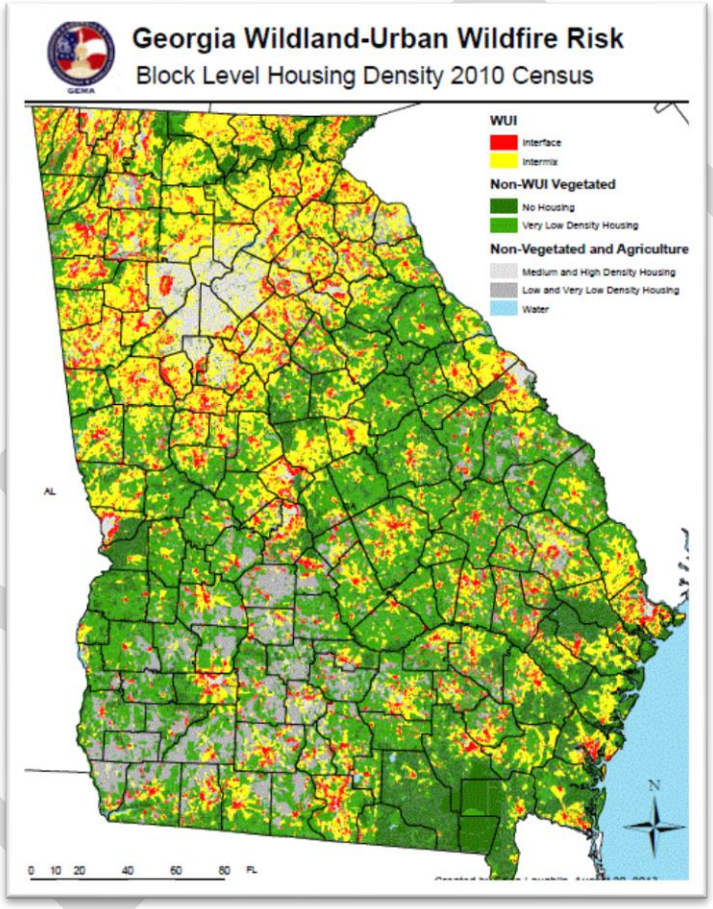
Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, for wildfire losses in Dawson County. According to the 2012 Ag Census by the USDA, Dawson County has $626,000 in annual crop sales. These areas would potentially be impacted by a wildfire event.

Natural Hazard: **Wildfire**

Land Use & Development Trends

With the continued increase in population, Wildland-Urban Interface (WUI) is increasing in Dawson 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 Dawson County complicated wildland fire management operations and planning initiatives. This development trend is expected to continue in the future.



Multi-Jurisdictional Considerations

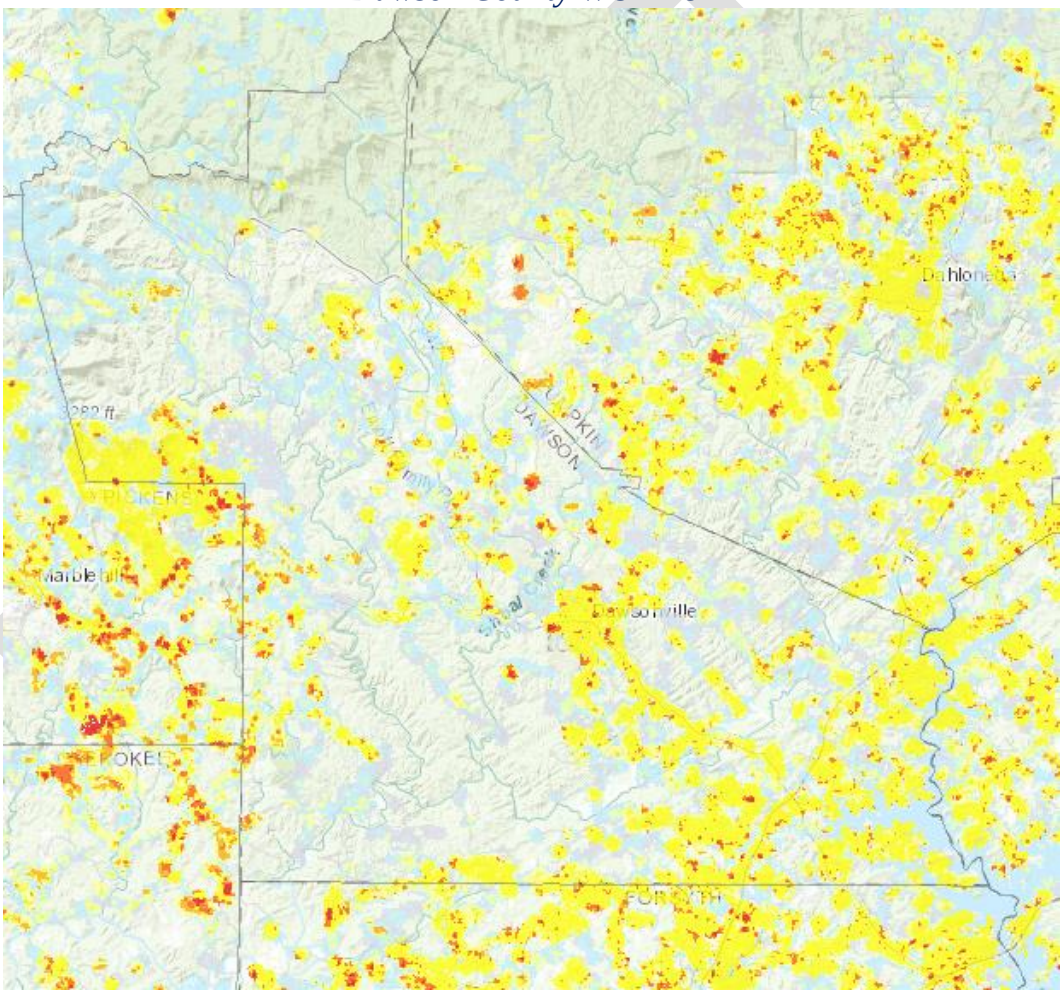
All portions of Dawson County, including the City of Dawsonville, could potentially be impacted by a wildfire due to the large amount of Wildland-Urban Interface, but the less developed areas of the county are more vulnerable. Therefore, all mitigation actions identified regarding wildfires should be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

Natural Hazard: **Wildfire**

Hazard Summary

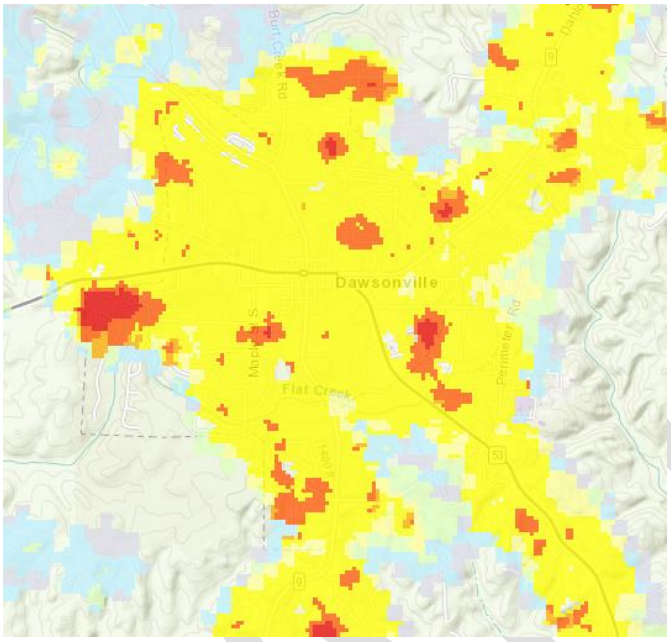
Wildfire is a significant threat to Dawson County due to the increased amount of Wildland-Urban Interface. The increasing amount of area where structures and other human development meets undeveloped, wildland property is where 98% of Dawson County's population lives. The mitigation measures identified 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 Dawson County.

Dawson County WUI Risk

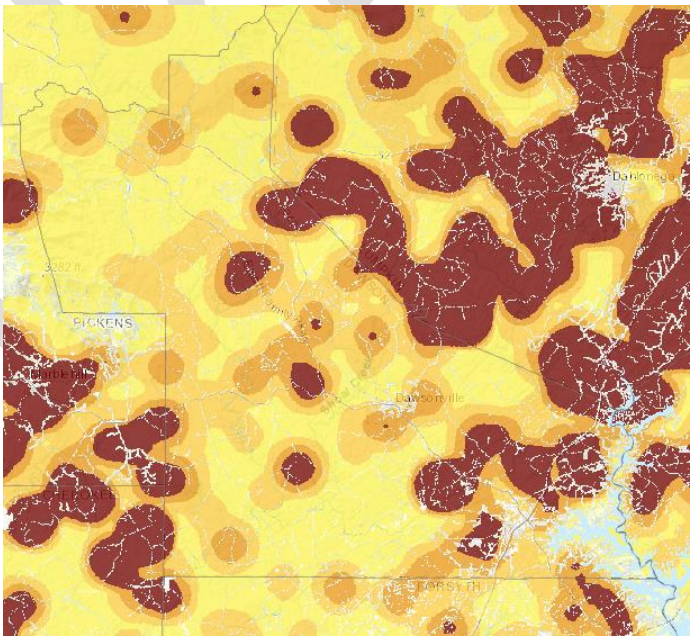


Natural Hazard: **Wildfire**

Dawsonville WUI Risk



Dawson County Wildfire Ignition Density



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

Natural Hazard: Earthquakes

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 that causes the majority of 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 or 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 or 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.

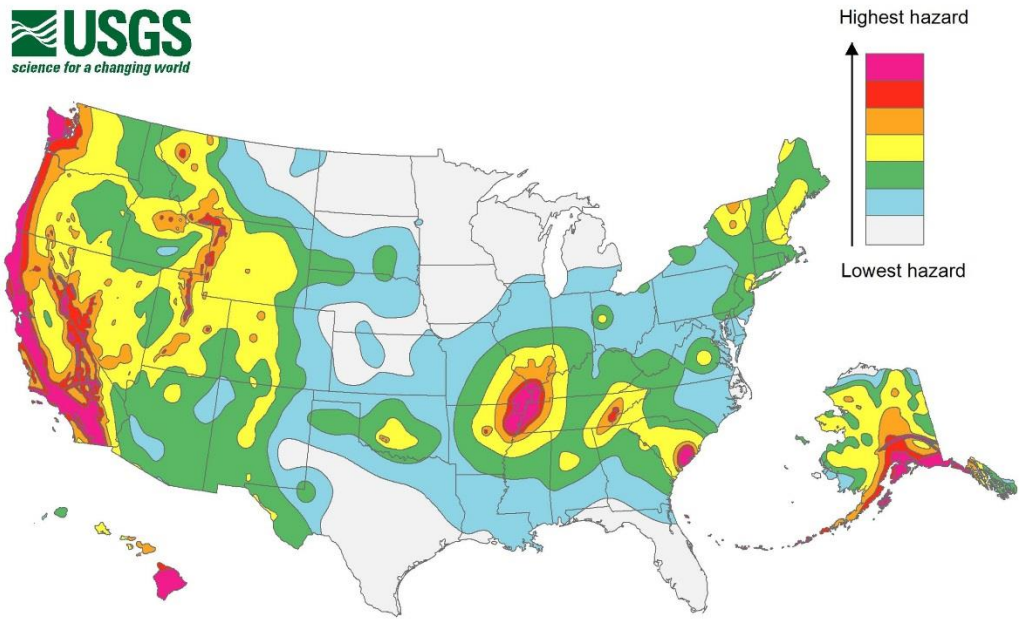
Natural Hazard: **Earthquakes**

(Hazard Description Continued)

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: United States Geological Survey (USGS)

Natural Hazard: **Earthquakes**

Hazard Profile

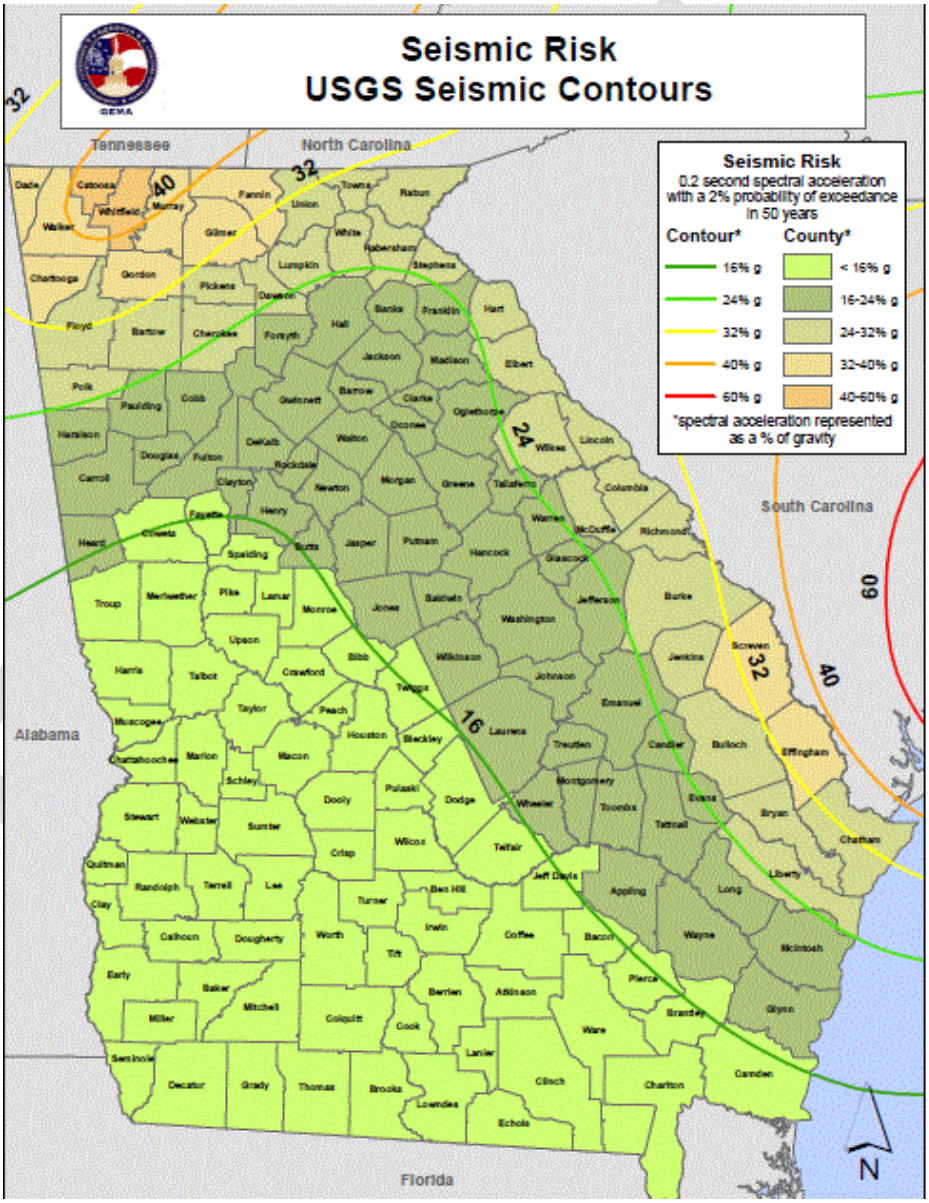
Dawson County is not one of the 37 Georgia counties with the highest earthquake risk, according to the Georgia Emergency Management Agency and Georgia Tech School of Earth and Atmospheric Sciences. In reviewing data of the last 50 years, no earthquakes have originated from within Dawson County. However, earthquakes with a magnitude of 2.0 or greater have occurred as close as McCaysville, GA. 7 earthquakes have originated within 50 miles of Dawsonville, GA in the last 50 years. The strongest earthquake to occur within this radius was a 3.2 that occurred in North Carolina, just north of McCaysville, GA. Historically, the 1886 Charleston, SC earthquake, estimated to be between 6.6 and 7.3 on the modern Richter Scale, likely caused impacts to Dawson County. Although no historical records exist exhibiting any damages, Dawson 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 Dawson County, significant damage could occur. Therefore, the Dawson County HMPC has determined the threat of earthquakes to be higher than the statistics would indicate.

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: **Earthquakes**

Assets Exposed to the Hazard

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



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

Natural Hazard: **Earthquakes**

Estimated Potential Losses

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

Land Use and Development Trends

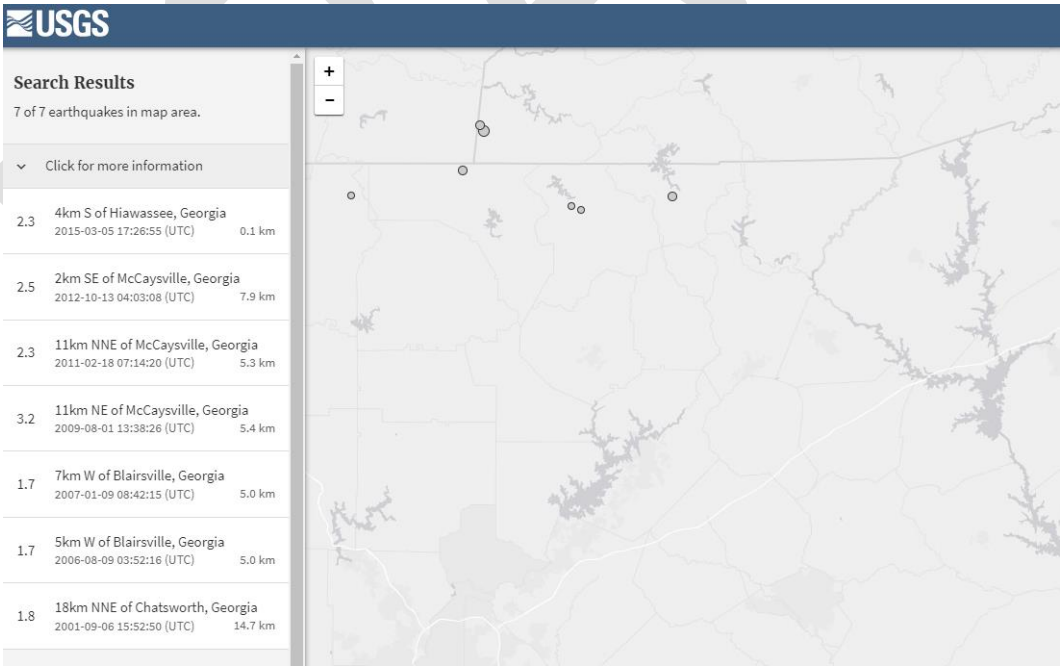
Dawson County currently has no land use trends related to Earthquakes.

Multi-Jurisdictional Considerations

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

Hazard Summary

Even with the infrequency of earthquake impacts in Dawson County, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of the County and the City of Dawsonville. 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 Dawson 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			

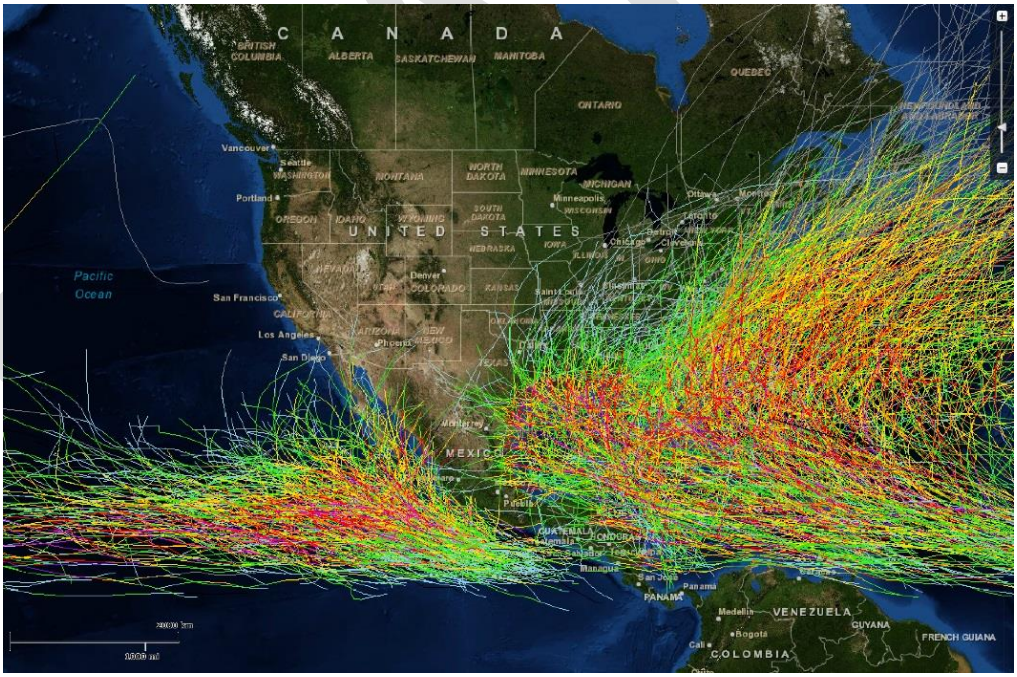
Natural Hazard: **Tropical Cyclone**

(Hazard Description Continued)

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.



Hazard Profile

Tropical cyclones have directly impacted Dawson 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 Dawson County is possible. There

Natural Hazard: **Tropical Cyclone**

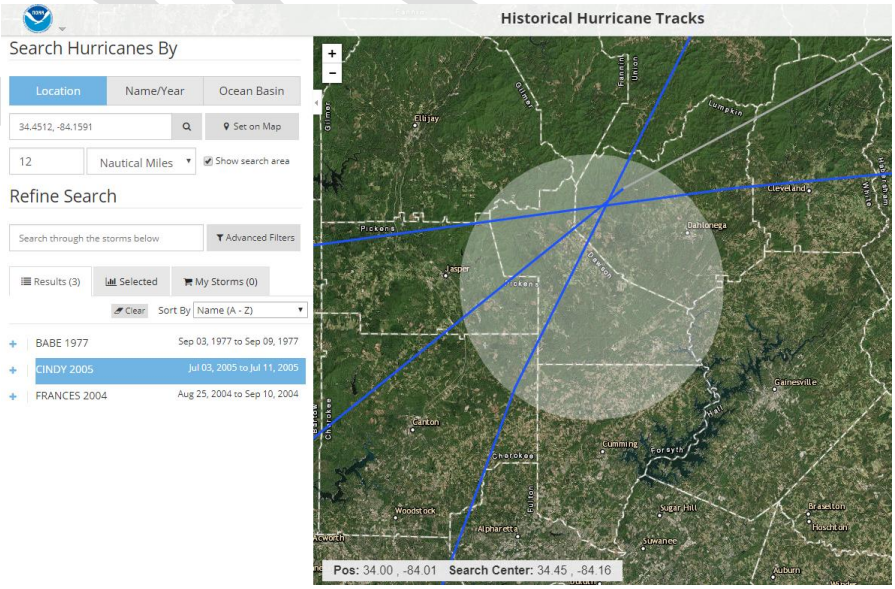
(Hazard Profile Continued)

have been fourteen documented impacts from Topical Cyclones in Dawson County. This equates to a 28% chance of a tropical cyclone impacting Dawson County in any given year. All of these impactful storms have occurred in the last 16 years, which equates to a 87% chance of a tropical cyclone impacting Dawson County in a given year. The Dawson County Hazard Mitigation Update Committee believes this percentage is more representative of the potential impact.

Three tropical cyclones – Hurricane Babe in 1977, Hurricane Cindy in 2005, and Hurricane Frances in 2004 – had a track that directly dissected Dawson County in the last 50 years. All 3 storms were below Tropical Storm strength at the time they entered Dawson County. Hurricane Frances brought strong winds across north Georgia with sustained speeds of 25 mph in the Dawson County area.

Within the HAZUS report, a theoretical Tropical Cyclone impact was identified that matches the expected extent of a 100-year storm. This theoretical storm would maintain Tropical Storm force into Dawson County with maximum winds of 64 mph. HAZUS estimated that this theoretical storm would cause extensive damage to approximately 1 building and result in losses in excess of $280,000 and a total loss ratio of 0.02%.

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



Source: Office of Coastal Management (NOAA)

Natural Hazard: **Tropical Cyclone**

Assets Exposed to the Hazard

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

Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, is available for tropical cyclone losses in Dawson County. Most losses for these events have been labeled under other impacts, such as tornadoes and flooding.

Land Use and Development Trends

Dawson County currently has no land use trends related to Landslides.

Multi-Jurisdictional Considerations

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

Hazard Summary

Even with the relative infrequency of tropical cyclone impacts in Dawson County in the recent past, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of the County and the City of Dawsonville. Dawson County's proximity to the Atlantic coast increases the likelihood of a tropical cyclone impacting the area. 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 Dawson County. Dawson County has had four Federally Declared Disaster related to Tropical Cyclones, most recently in 2017 (Hurricane Irma).

Dawson County Tropical Storm Impacts

Location	County/Zone	St.	Date	Type	Dth	Inj	PrD
Totals:					0	0	600.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/14/2002	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	07/01/2003	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/06/2004	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/16/2004	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/26/2004	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	06/12/2005	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	07/06/2005	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	07/10/2005	Hurricane (typhoon)	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	08/29/2005	Hurricane (typhoon)	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	10/05/2005	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/14/2007	Hurricane (typhoon)	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	08/21/2008	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/10/2009	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/04/2011	Tropical Storm	0	0	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/11/2017	Tropical Storm	0	0	600.00K
Totals:					0	0	600.00K

Technological Hazard: **Hazardous Materials**

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 Dawson County. Data is available from 1982 to 2016 and all available data was reviewed. There were 5 NRC reported hazardous materials spills or releases in Dawson County over a 25 year period. It is anticipated that many more hazardous materials incidents have occurred over the last 25 years, but have not been reported. According to the NRC data, Dawson County averages 0.2 hazardous materials incidents of a reportable amount in any given year or one incident every 5 years. The greatest threat for a hazardous materials spill comes from the transportation of materials through Dawson County. This is particularly true for the US Highway 19 corridor that runs 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 Dawson County's growing industrial footprint. 40% of reported hazardous materials incidents have occurred at fixed facilities.

Technological Hazard: **Hazardous Materials**

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 Dawson County HMPC. Public and private property located near fixed hazardous materials facilities are also a greater risk than the general population of Dawson County.

Estimated Potential Losses

Estimation of potential losses is difficult with regard to 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 Dawson 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

Dawson County currently has no land use trends related to Hazardous Materials.

Multi-Jurisdictional Considerations

All of Dawson County, including the City of Dawsonville, are vulnerable to both fixed facility and transportation-related hazardous materials releases.

Hazard Summary

Hazardous materials incidents pose a significant threat to the citizens, infrastructure, and critical facilities of Dawson County. Unknown quantities of hazardous materials are transported daily through Dawson County and the City of Dawsonville. These materials are transported via highways, with US Highway 19 being of greatest concern. Water contamination as a result of a hazardous materials spill is of significant concern to the Dawson County HMPC. As a result of the threat posed by hazardous materials, the Dawson 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 6 category I and 18 category II dams located within Dawson 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 Dawson 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.

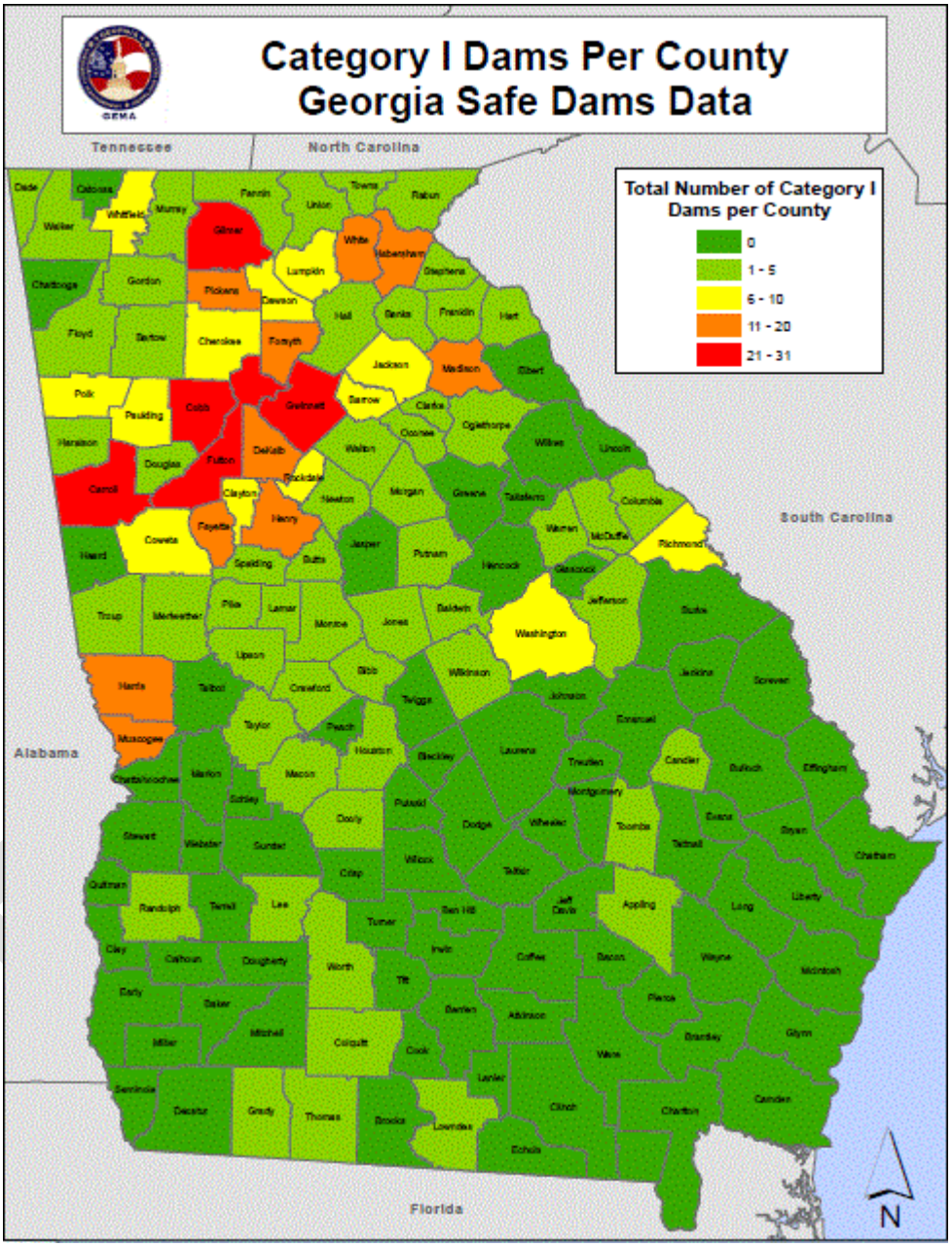
Assets Exposed to Hazard

To evaluate the assets that would potentially be impacted by a dam failure, the Dawson County HMPC attempted to identify known structures within, or close to, the 100-year floodplain. The City of Dawsonville 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**



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

Technological Hazard: **Dam Failure**

Land Use and Development Trends

Dawson 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. 130304) first entered the NFIP on December 15, 1990. 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. Currently, the Dawson County municipality of Dawsonville also participate in NFIP.

Multi-Jurisdictional Considerations

During a dam failure event, many portions of Dawson 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 Dawson 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 six Category I dams located in Dawson 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 transportations hazards. Transportation can occur via roadways, highways, interstates, railways, air or navigable waterways. Each transportation type poses their own unique hazard issues and consequences.

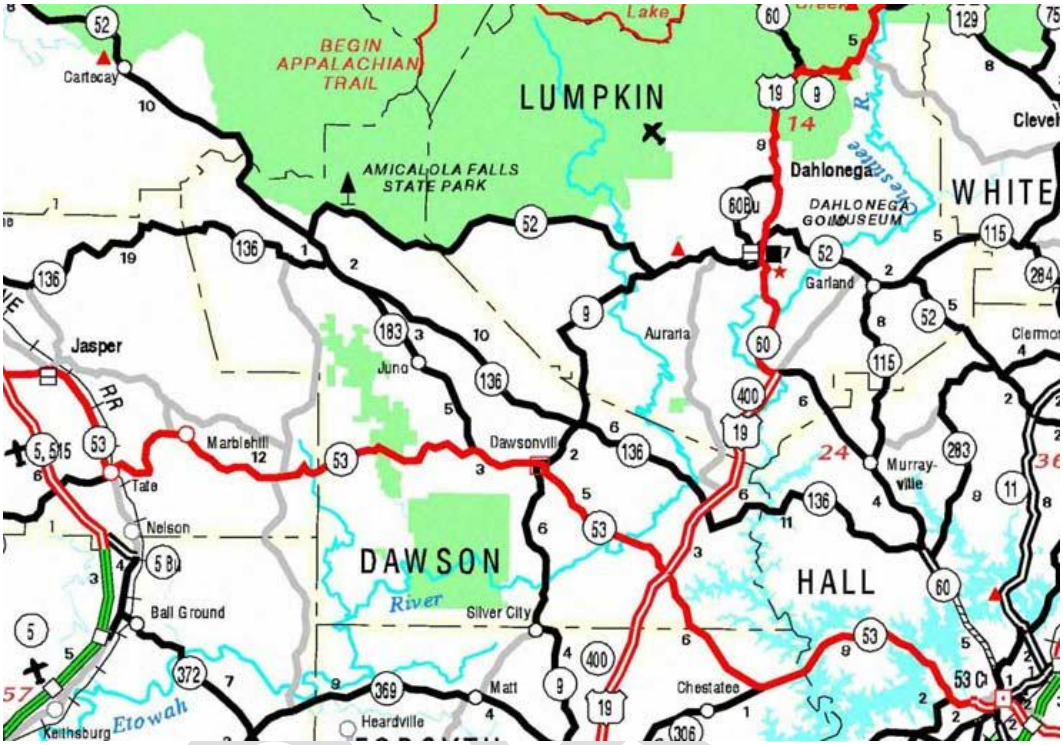
Roadway hazards are most likely to be caused by a motor vehicle accident involving one or more cars, trucks, vans, or transport vehicles. These incidents can have injuries as a result of the impact of the MVA or a hazardous materials release into the local environment, including waterways. Railway incidents 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 Dawson County. Passing through Dawson County are US Highway 19, and Georgia Highways 9, 52, 53, 136, 183, and 400.

Technological Hazard: **Transportation Incident**



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 Dawson County that are not located along or near a transportation route could still face residual impacts.

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

Dawson 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.

Multi-Jurisdictional Considerations

Dawson County as well as the City of Dawsonville could potentially be impacted by a transportation incident. However, areas along US Highway 19 are the greatest at risk.

Technological Hazard: **Transportation Incident**

Hazard Summary

The Dawson 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 Dawson 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 Dawson 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 of agriculture in Dawson County, agro-terrorism could be of particular concern. Additionally, a terrorist contamination of Dawson County's water supply is also of particular concern.

Technological Hazard: **Terrorism**

While active shooter situations are not always classified as terrorism, for this plan, the Dawson 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 Dawson County but would have devastating impacts if they were to occur. To help mitigate some of these impacts, Dawson County has exercised an active shooter response in the past to better prepare for any such event.

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

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

Multi-Jurisdictional Considerations

All of Dawson County, including the City of Dawsonville, 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 Dawson County and the City of Dawsonville. These impacts would be immediate and long-lasting and could be potentially economically crippling. Because of these considerations, the Dawson County HMPC has developed mitigation actions with terrorism in mind.

Technological Hazard: **Communications Failure**

Hazard Description

Communications infrastructures are particularly vulnerable to both natural and manmade hazards. While a communications failure would most likely be a secondary hazard of one of the other hazards identified in this plan, a communications failure could be a solo incident itself.

A lack of communication 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 communications infrastructure, general communication 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 Dawson County's emergency response agencies to a communications failure.

Assets Exposed to Hazard

All assets and critical facilities within Dawson County could potentially be impacted by a transportation incident.

Estimated Potential Losses

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

Land Use and Development Trends

Dawson County currently has no land use trends related to communications failures.

Multi-Jurisdictional Considerations

Dawson County as well as the City of Dawsonville could potentially be impacted by a communications failure. However, the City of Hiawassee is particularly vulnerable due to population density and higher reliability on technological communications.

Hazard Summary

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

Technological Hazard: **Emergent Infectious Diseases**

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 have the ability to 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 one infectious diseases – seasonal influenza and pneumonia – ranks 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 of these.

Emergent infectious diseases are those that are appearing in a population for the first time. Re-emergent 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: **Emergent Infectious Diseases**

During the last 25 years, emergent and re-emergent 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 Emergent Diseases
Agent-Related Factors
• Evolution of pathogenic infectious agents • Development of resistance to drugs • Resistance of disease carriers to pesticides
Host-Related Factors
• Human demographic changes (humans inhabiting new areas) • Human behavior (sexual practices and drug use) • Human susceptibility to infection
Environment-Related Factors
• 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, emergent and re-emergent infectious diseases are much more likely to escalate to pandemic levels rapidly.

CDC-Identified Emergent and Re-emergent 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 Syndrom
Hepatitis C	Hendra Virus Infection
Histoplasmosis	HIV/AIDS
Influenza	Lassa Fever
Leggionnaires' Disease and Pontiac Fever	Leptospirosis
Listeriosis	Lyme Disease
Malaria	Marbug Hemorrhagic Fever
Measles	Meningitis
Monkeypox	MRSA
Nipha Virus Infection	Norovirus Infection
Pertussis	Plague
Polio	Rabies
Rift Valley Fever	Rotavirus Infection
Salmonellosis	SARS
Shigellosis	Smallpox
Sleeing Sickness (Trypanosomiasis)	Tuberculosis
Tularemia	Valley Fever (Coccidioidomycosis)
VISA/VRSA	Staphylococcus Aureus
West Nile Virus Infection	Yellow Fever

Technological Hazard: **Emergent Infectious Diseases**

Hazard Profile

Emergent Infectious diseases are of significant concern to the Dawson County HMPC, particularly those that would have an impact on the human population or animal population of Dawson County. Dawson 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 $50 million in annual sales). The lack of current vaccines and preparatory activities for these diseases has created a situation where the potential impact to Dawson 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 1286 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.

Over the last 25 years, emergent 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 emergent infectious diseases, all public and private structures are threatened by the hazard. This includes all critical facilities.

Estimated Potential Losses

Losses due to emergent infectious diseases are difficult to estimate due to the unpredictable nature of the hazard. The type of emergent 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.

Technological Hazard: **Emergent Infectious Diseases**

Land Use and Development Trends

Dawson County currently has no land use trends directly related to emergent infectious diseases.

Multi-Jurisdictional Considerations

All of Dawson County, including the City of Dawsonville, are vulnerable to emergent infectious diseases. However, livestock and other farm animals are considered to be the greatest at risk, along with areas with large, concentrated populations, such as schools.

Hazard Summary

An emergent infectious disease would have devastating effects on Dawson County and the City of Dawsonville. These impacts would be immediate and long-lasting and could be potentially economically crippling. Of particular concern to the Dawson County HMPC is impacts to Dawson County's large agricultural business population (over $50 million in annual sales). Because of these considerations, the Dawson County HMPC has developed mitigation actions with emergent 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 Dawson County Hazard Mitigation Plan 2012.

Chapter 4 Section	Updates
Goals and Objectives	• Updated goals to match the needs of Dawson County and the City of Dawsonville
Identification and Analysis of Mitigation Techniques	• The beginning of this section includes new information regarding rating the mitigation strategies based upon the EMAP Standard Hazard Mitigation Section • The Mitigation Strategies have been updated, reorganized by objective, and new strategies have been added • A chart of completed Mitigation Strategies has been added
Multi-Jurisdictional Considerations	• Revised • Multi-Jurisdictional considerations listed for each identified hazard

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 Dawson County have changed slightly in the last five years (since 2012) due to specific threat events, such as the snow and ice storms of 2014 and Hurricane Irma in 2017. The 2014 Ice Storms, in particular, led to changes at the State and local levels regarding the importance of winter weather preparedness, both for the general public and the response ability of local jurisdictions, including Dawson County. 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 Dawson County Hazard Mitigation plan update – Dawson County and the City of Dawsonville – 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 sufficient revenue to pursue many of these actions. All jurisdictions lack the needed financial strength and staffing to implement all of 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, Dawson 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 Dawson 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.

OBJECTIVE1	Reduce damage to property and loss of life from flooding
OBJECTIVE 2	Minimize the damage to property and loss of life resulting from high wind events
OBJECTIVE 3	Provide advanced severe weather warning
OBJECTIVE 4	Provide educational awareness to citizens regarding the dangers of natural hazards
OBJECTIVE 5	Implement initiatives for water conservation and wildfire protection
OBJECTIVE 6	Increase the ability of Dawson County, the City of Dawsonville, and its citizens to respond to natural and manmade hazards
OBJECTIVE 7	Maintain continuity of critical operations during and after hazard events
OBJECTIVE 8	Minimize damage to property and loss of life resulting from winter storm events
OBJECTIVE 9	Minimize the impacts on local citizens, industry, and infrastructure of a dam breach
OBJECTIVE 10	Implement additional protective measures and capabilities in response to manmade incidents
OBJECTIVE 11	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 Dawson County's mitigation strategy, a wide range of activities were considered in order 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 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 Description	Strategies within

Priority		this priority
LOW	Low priority strategies are those strategies that will have less direct impact on mitigating Dawson County's hazards, are in the early stages of strategy development, or score poorly on a preliminary cost-benefit analysis	**1.c; 1.d; 2.g; 2.h; 3.h; 6.m;**
MEDIUM	Medium priority strategies are those strategies that will have a direct impact on mitigation Dawson 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 Dawson County. These strategies may be in the earlier stages of development or score mediocre on a preliminary cost-benefit analysis	**1.h; 1.i; 1.j; 1.k; 1.l; 2.a; 2.b; 2.c; 2.e; 2.f; 2.i; 3.b; 3.c; 3.g; 3.i; 4.a; 4.b; 4.c; 4.d; 4.j; 4.k; 5.a; 5.b; 5.d; 5.f; 5.g; 5.h; 5.i; 5.j; 5.k; 6.c; 6.d; 6.e; 6.f; 6.g; 6.h; 6.i; 6.j; 6.k; 6.l; 6.n; 6.o; 6.p; 6.t; 6.u; 6.v; 8.a; 8.d; 9.b; 10.a; 11.c**
HIGH	High priority strategies are those strategies that would have a direct, large impact on mitigation Dawson County's hazards. These strategies are oftentimes well-established needs of Dawson County and/or the City of Dawsonville and have score high on a preliminary cost-benefit analysis	**1.a; 1.b; 1.e; 1.f; 1.g; 2.d; 3.a; 3.d; 3.e; 3.f; 3.j; 4.e; 4.f; 4.g; 4.h; 4.i; 5.c; 5.e; 5.l; 6.a; 6.b; 6.q; 6.r; 6.s; 7.a; 7.b; 7.c; 7.d; 7.e; 7.f; 8.b; 8.c; 9.a; 10.b; 10.c;10.d; 10.e; 11.a; 11.b;**

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 Dawson 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.

All mitigation strategies considered by the Dawson County Hazard Mitigation Plan Update Committee can be classified under one of the following six (6) broad categories of mitigation techniques:

Prevention

Requirement §201.6(c)(3)(ii)

Preventative activities are intended to keep hazard problems from getting worse and are typically administered through government programs or regulatory actions that influence the way land is developed and buildings are built. They are particularly effective in reducing a community's future vulnerability, especially in areas where development has not occurred or capital improvements have not been substantial. Examples of preventative activities in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	5.c; 5.d
Earthquake	7.a
Flood	1.a; 1.b; 1.c; 1.d; 1.e; 1.f; 1.g; 1.h; 1.i; 7.a
Thunderstorms	1.a; 1.i; 2.g; 7.a
Tornadoes	2.c; 2.g; 7.a
Tropical Cyclone	1.a; 1.i; 2.c; 2.g; 7.a
Wildfire	5.c; 7.a
Winter Storms	7.a
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	9.a; 9.b
Emergent Inf. Disease	10.a
Hazardous Materials	10.a
Terrorism	9.a; 9.b; 10.a
Transportation	10.a

Property Protection

Property protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard, or involve the removal of the structures from hazardous locations. Examples of property protection in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	
Earthquake	
Flood	
Thunderstorms	2.a; 2.d; 2.e; 2.f; 2.i
Tornadoes	2.a; 2.d; 2.e; 2.f; 2.i
Tropical Cyclone	2.d; 2.e; 2.f; 2.i
Wildfire	
Winter Storms	
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	
Emergent Inf. Disease	
Hazardous Materials	
Terrorism	
Transportation	

Natural Resource Protection

Natural resource protection activities reduce the impact of natural hazards by preserving or restoring natural areas (ex: floodplains, wetlands, steep slopes, sand dunes) and their protective functions. Parks, recreation, or conservation agencies and organizations often implement these protective measures. Examples of natural resource protection in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	
Earthquake	5.b
Flood	
Thunderstorms	5.b
Tornadoes	5.b
Tropical Cyclone	5.b
Wildfire	5.b
Winter Storms	5.b
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	
Emergent Inf. Disease	
Hazardous Materials	
Terrorism	
Transportation	

Structural Projects

Structural mitigation projects are intended to lessen the impact of a hazard by modifying the environmental natural progression of the hazard event through construction. They are usually designed by engineers and managed or maintained by public works staff. Examples of structural projects in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	5.l; 6.p; 7.d; 7.e; 7.f
Earthquake	6.n; 6.o; 6.p; 7.d; 7.e; 7.f
Flood	1.j; 1.k; 1.l; 6.p
Thunderstorms	1.j; 1.k; 1.l; 2.b; 2.h; 6.n; 6.o; 6.p; 7.d; 7.e; 7.f
Tornadoes	2.b; 2.h; 6.n; 6.o; 6.p; 7.d; 7.e; 7.f
Tropical Cyclone	1.j; 1.k; 1.l; 2.b; 2.h; 6.n; 6.o; 6.p
Wildfire	5.l; 6.n; 6.o; 6.p; 7.d; 7.e; 7.f
Winter Storms	6.n; 6.o; 6.p
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	
Emergent Inf. Disease	
Hazardous Materials	
Terrorism	
Transportation	

Emergency Services

Although not typically considered a "mitigation" technique, emergency service measures do minimize the impact of a hazard event on people and property. These commonly are actions taken immediately prior to, during, or in response to a hazard event. Examples of emergency services in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	5.e; 5.f; 5.g; 6.c; 6.q; 7.c
Earthquake	5.g; 5.i; 6.a; 6.b; 6.c; 6.e; 6.f; 6.g; 6.h; 6.i; 6.j; 6.k; 6.l; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.c
Flood	5.g; 6.c; 6.d; 6.e; 6.f; 6.g; 6.l; 6.m; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.c
Thunderstorms	3.a; 3.b; 3.c; 3.d; 3.e; 3.f; 3.g; 3.h; 3.i; 3.j; 5.g; 5.i; 6.a; 6.b; 6.c; 6.d; 6.e; 6.f; 6.g; 6.h; 6.i; 6.j; 6.k; 6.l; 6.m; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.b; 7.c
Tornadoes	3.a; 3.b; 3.c; 3.g; 3.h; 3.i; 3.j; 5.i; 6.a; 6.b; 6.c; 6.d; 6.e; 6.f; 6.g; 6.h; 6.i; 6.j; 6.k; 6.l; 6.m; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.b; 7.c
Tropical Cyclone	3.d; 3.e; 3.f; 3.h; 3.i; 3.j; 5.i; 6.a; 6.b; 6.c; 6.d; 6.g; 6.l; 6.m; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.c
Wildfire	3.j; 5.g; 5.h; 5.i; 5.j; 5.k; 6.a; 6.b; 6.c; 6.e; 6.f; 6.l; 6.m; 6.q; 6.s; 6.t; 6.u; 6.v; 7.c
Winter Storms	3.a; 3.g; 3.h; 3.i; 3.j; 6.a; 6.b; 6.c; 6.e; 6.f; 6.g; 6.h; 6.i; 6.j; 6.k; 6.l; 6.m; 6.q; 6.r; 6.s; 6.t; 6.u; 6.v; 7.c; 8.a; 8.b; 8.c; 8.d
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	
Emergent Inf. Disease	10.b; 10.c; 10.d; 10.e; 11.b
Hazardous Materials	10.b; 10.c; 10.d; 10.e; 11.b
Terrorism	10.b; 10.c; 10.d; 10.e; 11.b
Transportation	10.b; 10.c; 10.d; 10.e

Public Education and Awareness

Public education and awareness activities are used to advise residents, elected officials, business owners, potential property buyers, and visitors about hazards, hazardous areas, and mitigation techniques that they can use to protect themselves and their property. Examples of public education and awareness strategies in this updated plan are listed in the following table:

Natural Hazards	Mitigation Strategies
Drought	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.k; 5.a
Earthquake	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.k
Flood	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.g; 4.h; 4.i; 4.k
Thunderstorms	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.g; 4.h; 4.i; 4.k
Tornadoes	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.g; 4.h; 4.i; 4.j; 4.k
Tropical Cyclone	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.g; 4.h; 4.i; 4.k
Wildfire	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.k; 5.a
Winter Storms	4.a; 4.b; 4.c; 4.d; 4.e; 4.f; 4.g; 4.h; 4.i; 4.k
Technological Hazards	**Mitigation Strategies**
Communications Failure	
Dam Failure	11.c
Emergent Inf. Disease	11.c
Hazardous Materials	11.a; 11.c
Terrorism	11.a; 11.c
Transportation	11.a; 11.c

Overall

Mitigation Technique	Percentage
Prevention	17.7%
Property Protection	5.2%
Natural Resource Protection	1.0%
Structural Projects	12.5%
Emergency Services	49.0%
Public Education and Awareness	14.6%

The following Mitigation Charts meet:
Requirement §201.6(c)(3)(ii)
Requirement §201.6(d)(3)

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
OBJECTIVE ONE: Reduce damage to property and loss of life from flooding																	
1.a	Review flood ordinances every 3-5 years to include new flood zones, as necessary, and utilize most updated FEMA Flood Maps (2015-2016)	Planning and Development *Dawson County and City of Dawsonville*	**X**		**X**		**X**				local budgets	Staff time	3-5 years	**Ongoing**	**High**	**2012 Plan**	**Flood 1(a) modified**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.b	Continue to employ the latest in recommended development regulations that manage land disturbances and constructions throughout the community, especially within environmentally sensitive areas	Planning and Development *Dawson County and City of Dawsonville*	**X**								Local Budgets	Staff time	12 months	**Ongoing**	**High**	**2012 Plan**	**Flood 1 (b)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.c	Adopt building design standards to have residential structures elevated to a certain height above the floodplain	Planning and Development *Dawson County and City of Dawsonville*	**X**								Local budgets	Staff time	36 months	**NEW**	**Low**	**NEW**	**NEW**
1.d	Adopt building design standards to have non-residential structures elevated above the floodplain and flood-proofed	Planning and Development *Dawson County and City of Dawsonville*	**X**								Local Budgets	Staff Time	48 months	**NEW**	**Low**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.e	Maintain NFIP Compliance	City of Dawsonville *City of Dawsonville*	**X**								Local budgets	Staff time	12 months	**Ongoing**	**High**	**NEW**	**NEW**
1.f	Maintain NFIP Compliance	Dawson County *Dawson County*	**X**								Local budgets	Staff time	12 months	**Ongoing**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.g	Notify owners of structures on the National Historic Registry that are located in flood-prone areas to ensure they are protected from flooding	Dawson County EMA and Planning and Development *Dawson County and City of Dawsonville*	**X**								Local budgets	Staff time	18 months	**NEW**	**High**	**NEW**	**NEW**
1.h	Participate in NFIP Community Rating System	Planning and Development *Dawson County and City of Dawsonville*	**X**								Public and private grants and/or local budgets	Staff time	36 months	**Ongoing**	**Med**	**2012 Plan**	**Flood 3**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.i	Determine level of risk to Dawson County's historic resources from flooding and identify viable measures that can be implemented to mitigate those risks	Dawson County and City of Dawsonville *Dawson County and City of Dawsonville*	**X**		**X**		**X**				Public and private grants and/or local budgets	$15,000	48 months	**Ongoing**	**Med**	**2012 Plan**	**Flood 6 (c)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.j	Develop a culvert plan to maintain information on all culverts in the county, including location, size, and type	Public Works *Dawson County and City of Dawsonville*	**X**		**X**		**X**				Local budgets	Staff time	60 months	**NEW**	**Med**	**NEW**	**NEW**
1.k	Continue to collaborate on a project to expand the data maintained for each culvert in the areas, including age, features, susceptibility to flooding, and improvement schedule	Public Works and GIS *Dawson County and City of Dawsonville*	**X**		**X**		**X**				Local budgets	Staff time	60 months	**Ongoing**	**Med**	**2012 Plan**	**Flood 7(a)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
1.l	Upgrade and repair culverts in Dawson County and Dawsonville, as necessary	Public Works *Dawson County and City of Dawsonville*	**X**		**X**		**X**				Public and private grants and/or local budgets	TBD by data project listed in 1.k	60+ months	**NEW**	**Med**	**NEW**	**NEW**
OBJECTIVE TWO: Minimize the damage to property and loss of life resulting from high wind events																	
2.a	Create safe rooms within existing structures for vulnerable populations, including the elderly, children, and the sick	Dawson County EMA and facility owners/ operators *Dawson County and City of Dawsonville*			**X**	**X**					Public and private grants and/or local budgets	$ 5,000,000	60 months	**Areas need to be identified**	**Med**	**2012 Plan**	**T'Storm 2(a)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
2.b	Construct separate storm shelters in areas not conducive to safe rooms for vulnerable populations, including the elderly, children, and the sick	Dawson County EMA and facility owners/ operators *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Public and private grants and/or local budgets	$ 5,000,000	60 months	**Locations to be determined**	**Med**	**2012 Plan**	**T'Storm 2(b)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
2.c	Continue to adopt the latest revision of building codes and require builders/developers to maintain standards and safe construction practices for the public	Planning and Development *Dawson County and City of Dawsonville*			**X**	**X**					Local budgets	Staff time	12 months	**Ongoing**	**Med**	**2012 Plan**	**T'Storm 3 (mod)**
2.d	Include a safe room into any fire department during rebuilds and new builds	Fire Department *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Public and Private grants and/or local budgets	$75,000 each	36 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
2,e	Build a safe room in new EOC building that is available to the public	EMA *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Public and private grants and/or local budgets	$100,000	60 months	**NEW**	**Med**	**NEW**	**NEW**
2.f	Install a safe room capable of housing at least 25 people in any new government building accessible by the public	Dawsonville and Dawson County Governments *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Public and private grants and/or local budgets	$75,000 each	48 months	**NEW**	**Med**	**NEW**	**NEW**
2.g	Consider an ordinance that requires all new construction to include a safe room	Planning and Development *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Local budgets	Staff time	30 months	**NEW**	**Low**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
2.h	Build a storm shelter as part of any large (50+ residences) residential communities, particularly if locations include slab homes	Property owners/ operators *Dawson County and City of Dawsonville*			**X**	**X**	**X**				Private budgets	$100,000 each	60 months	**NEW**	**Low**	**NEW**	**NEW**
2.i	Build safe rooms at local fire stations and police stations	EMA, Fire Department, and Law enforcement			**X**	**X**	**X**				Public and private grants and/or local budgets	$75,000 each	60 months	**NEW**	**Med**	**NEW**	**NEW**
OBJECTIVE THREE: Provide advanced severe weather warning																	

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
3.a	Ensure that all Schools, the courthouse, jail, fire stations, water plant, elderly living facilities, medical facilities, major employers, and other critical facilities and purchase NOAA radios for those areas identified above that do not have one	Dawson County EMA *Dawson County and City of Dawsonville*		**X**	**X**	**X**					Public and private grants and/or local budgets	$20,000	36 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
3.b	Continue to install weather sirens with the goal of obtaining 100% coverage of highly populated areas in Dawson County	Dawson County EMA *Dawson County and City of Dawsonville*			**X**	**X**					Public and Private grants and/or Local budgets	$200,000	48 months	**Ongoing**	**Med**	**2012 Plan**	**T'Storm 4**
3.c	Install Outdoor Warning Siren at Paradise Valley Resort	EMA *Dawson County and City of Dawsonville*			**X**	**X**					Public and Private grants and/or Local budgets	$40,000	48 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
3.d	Install lightning detection systems at Veterans Memorial Park, Rock Creek Park, school athletic fields, and Amicalola Falls State Park	EMA and property owner/ operators *Dawson County and City of Dawsonville*			**X**		**X**				Public and Private grants and/or Local budgets	$20,000 each	48 months	**NEW**	**High**	**NEW**	**NEW**
3.e	Install lightning detection systems in other areas where large crowds gather for outdoor events	Property owners/ operators *Dawson County and City of Dawsonville*			**X**		**X**				Public and private grants and/or local budgets	$20,000 each	48 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
3.f	Promote weather apps for outdoor event locations without lightning detection systems	EMA *Dawson County and City of Dawsonville*			**X**		**X**				Local budgets	Staff time	12 months	**NEW**	**High**	**NEW**	**NEW**
3.g	Purchase and distribute NOAA Weather Radios at County and municipal critical facilities	Dawson County EMA *Dawson County and the City of Dawsonville*		**X**	**X**	**X**					Public and private grants and/or local budgets	$5,000	24 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
3.h	Continue to check senior's NOAA weather radios annually to ensure correct FIPS Codes and working batteries	Senior Services *Dawson County and City of Dawsonville*		X	**X**	**X**	**X**				Local budgets	Staff time	18 months	**NEW**	**Low**	**NEW**	**NEW**
3.i	Create a replacement plan for outdoor warning sirens and update, as necessary	EMA *Dawson County and City of Dawsonville*		X	**X**	**X**	**X**				Local budgets	Staff time	18 months	**NEW**	**Med**	**NEW**	**NEW**
3.j	Continue to encourage citizens to sign up for Swift 911 utilizing their mobile phone numbers	EMA *Dawson County and City of Dawsonville*		X	**X**	**X**	**X**		X		Local budgets	$2,000	12 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
OBJECTIVE FOUR: Provide educational awareness to citizens regarding the dangers of natural hazards																	
4.a	Encourage all Dawson County Schools personnel to take the online FEMA Multi-Hazard Emergency Planning for Schools course	EMA and Dawson County Schools *Dawson County and the City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	local budgets	Staff time	30 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.b	Encourage non-emergency employees of Dawson County and Dawsonville to participate in FIRST Program	Dawson County and Dawsonville governments *Dawson County and the City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	Staff time	24 months	**NEW**	**Med**	**NEW**	**NEW (Mod from All-Hazards 6)**
4.c	Encourage all elected officials and department heads to take ICS 100, 200, 700, and 800 courses	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	Staff time	36 months	**New**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.d	Encourage all elected officials to take ICS 402 course	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local Budgets	Staff Time	24 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.e	Implement a public awareness campaign, in conjunction with Dawson County's StormReady efforts and the American Red Cross, including public service announcements, community forums, flyers, mailers, and social media	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Public and private grants and/or local budgets	$25,000	24 months	**Ongoing**	**High**	**2012 Plan**	**Winter Weather 2**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.f	Promote severe weather awareness vial social media, the county website, and newsletter, including the promotion of NOAA radio usage	EMA and Dawson County *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	Staff time	18 months	**NEW**	**High**	**NEW**	**NEW**
4.g	Promote severe weather awareness to clients of North Georgia assisted living facility	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**				Local budgets	Staff time	24 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.h	Promote severe weather awareness to clients of Senior Center	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**				Local budgets	Staff time	24 months	**NEW**	**High**	**NEW**	**NEW**
4.i	Promote severe weather awareness to clients of DFCS	EMA *Dawson County and City of Dawsonville*	**X**	**X**	**X**	**X**	**X**				Local budgets	Staff time	24 months	**NEW**	**High**	**NEW**	**NEW**
4.j	Utilize social media to ensure sirens are working each month by asking citizens to report whether they heard the sirens or not	EMA *Dawson County and City of Dawsonville*				**X**					Local budgets	Staff time	12 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
4.k	Participate in National PrepareAthon/ National Preparedness Month	EMA *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	$5,000	12 months	**NEW**	**Med**	**NEW**	**NEW**
OBJECTIVE FIVE: Implement initiatives for water conservation and wildfire protection																	
5.a	Promote FireWise Community information in communities with a large number of residences in the Wildland-Urban Interface (WUI)	Fire Department *Dawson County and Dawsonville*						**X**	**X**		Local and State budgets	Staff Time	12 months	**Ongoing**	**Med**	**2012 Plan**	**Wildfire 2 (mod)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.b	Perform proper tree maintenance around power lines to prevent power outages	Local power companies and Georgia Forestry Commission *Dawson County and City of Dawsonville*		**X**	**X**	**X**	**X**		**X**	**X**	Private and State budgets	$100,000	36 months	**Ongoing**	**Med**	**2012 Plan**	**Wildfire 3**
5.c	Continue to follow state water use ordinances for time of drought and consider stricter guidelines, when necessary	Dawson County and Dawsonville governments *Dawson County and Dawsonville*						**X**	**X**		Local budgets	Staff Time	18 months	**Ongoing**	**High**	**2012 Plan**	**Drought 2 (mod)**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.d	Routinely review and update the Water Conservation Plan, as needed	Dawson County government *Dawson County and Dawsonville*						**X**			Local budgets	Staff Time	36 months	**Ongoing**	**Med**	**2012 Plan**	**Drought 3 (b)**
5.e	Exercise and review components of the Water Conservation Plan, including water points of dispensing, annually	Dawson County EMA *Dawson County and Dawsonville*						**X**			Public and private grants and/or local budgets	$5,000	12 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.f	Purchase portable electronic signage and pallet jack for point of dispensing	EMA *Dawson County and Dawsonville*						**X**			Public and private grants and/or local budgets	$12,000	30 months	**New**	**Med**	**NEW**	**NEW**
5.g	Purchase barricades for points of dispensing traffic flow, evacuations, and other activities	EMA, Public Works, Dawsonville PD, and Dawson County Sheriff's Office *Dawson County and Dawsonville*	**X**			**X**		**X**	**X**	**X**	Public and private grants and/or local budgets	$20,000	48 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.h	Purchase brush trucks	Fire Department *Dawson County and Dawsonville*							**X**		Public and private grants and/or local budgets	$62,500	48 months	**NEW**	**Med**	**NEW**	**NEW**
5.i	Purchase ATV for wildland firefighting and search and rescue operations	Fire Department and EMA *Dawson County and Dawsonville*			**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$20,000	24 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.j	Purchase wildland firefighting gear	Fire Department *Dawson County and Dawsonville*							**X**		Public and private grants and/or local budgets	$8,000	18 months	**NEW**	**Med**	**NEW**	**NEW**
5.k	Perform wildland firefighting training for personnel	Fire Department *Dawson County and Dawsonville*							**X**		Public and private grants and/or local budgets	$5,000	18 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
5.l	Build a drought contingency reservoir (aka Russell Creek Reservoir)	Etowah Water and Sewer Authority *Dawson County and Dawsonville*						**X**	**X**		Public and private grants and/or local budgets	$ 4,000,000	60 months	**NEW**	**High**	**NEW**	**NEW**
OBJECTIVE SIX: Increase the ability of Dawson County, the City of Dawsonville, and its citizens to respond to natural hazards																	
6.a	Create chainsaw strike teams by equipping and training personnel	EMA and Public Works *Dawson County and Dawsonville*		**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$10,000	36 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.b	Equip chainsaw strike team with chainsaws necessary for debris removal assistance	EMA and Public Works *Dawson County and Dawsonville*		**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$15,000	36 months	**NEW**	**High**	**NEW**	**NEW**
6.c	Hold annual exercise with Dawson County schools to test school safety plan	EMA and Dawson County Schools *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	$2,500	12 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.d	Train and equip a Swift Water Rescue Team	Fire Department and EMA *Dawson County and Dawsonville*	**X**		**X**	**X**	**X**				Public and private grants and/or local budgets	$50,000	48 months	**NEW**	**Med**	**NEW**	**NEW**
6.e	Purchase the most updated landland phone list from Windstream every 2-3 years	Dawson County 911 *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**			**X**	**X**	Public and private grants and/or local budgets	TBD	24 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.f	Build a database of pre-recorded and pre-written mass notification messages for hazard events	EMA and 911 *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**			**X**	**X**	Local budgets	Staff Time	24 months	**NEW**	**Med**	**NEW**	**NEW**
6.g	An accurate accounting of existing generators should be maintained followed by recommendation for adding generators to critical facilities	Critical facility operators and EMA *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**			**X**	Local budgets	Staff time	24 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.h	Increase the number of American Red Cross identified and approved shelters	American Red Cross *Dawson County and Dawsonville*		**X**	**X**	**X**				**X**	Local budgets	Staff time	24 months	**NEW**	**Med**	**NEW**	**NEW**
6.i	Purchase cots, trailers, mats, household products, and hygiene products for shelter operations	EMA *Dawson County and Dawsonville*		**X**	**X**	**X**				**X**	Public and private grants and/or local budgets	$70,000	60 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.j	Purchase portable cooking shelters and portable showers	EMA *Dawson County and Dawsonville*		**X**	**X**	**X**				**X**	Public and private grants and/or local budgets	$150,000	60 months	**NEW**	**Med**	**NEW**	**NEW**
6.k	Identify local Good Samaritan shelter locations	EMA and Red Cross *Dawson County and Dawsonville*		**X**	**X**	**X**				**X**	Local budgets	Staff time	18 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.l	Purchase two electronic signs	Fire Department, Police Department, Sheriff's Office, and EMA *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$60,000	30 months	**NEW**	**Med**	**NEW**	**NEW (Mod from All-Hazards 7)**
6.m	Purchase equipment for an alternate 911 Center	911 *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$100,000	60 months	**NEW**	**Low**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.n	Build an EOC and 911 Center in a hardened building for Dawson County and Dawsonville	EMA and 911 *Dawson County and Dawsonville*		**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$ 2,500,000	60 months	**NEW**	**Med**	**NEW**	**NEW**
6.o	Build an alternate EOC and 911 with a safe room (or underground location)	EMA and 911 *Dawson County and Dawsonville*		**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$ 1,000,000	60 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.p	Build redundant fiber rings for 911 lines in conjunction with surrounding jurisdictions	911 and surrounding jurisdictions *Dawson County, Dawsonville, and surrounding jurisdictions*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Public and private grants and/or local budgets	TBD	60 months	**NEW**	**Med**	**NEW**	**NEW**
6.q	Acquire VoIP at 911 to ensure lines continue to be answered	911 *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Public and private grants and/or local budgets	$100,000	30 months	**NEW**	**High**	**NEW**	**NEW**
6.r	Purchase a wheeled loader to move tree debris	Public Works *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**			**X**	Public and private grants and/or local budgets	$75,000	24 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.s	Replace county radio system	EMA, 911, and all public safety agencies *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$ 8,000,000	60 months	**NEW**	**High**	**NEW**	**NEW**
6.t	Purchase a Mobile Command Vehicle	EMA and 911	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$200,000	48 months	**NEW**	**Med**	**NEW**	**NEW**
6.u	Equip a Mobile Command Vehicle	EMA and 911 *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$100,000	48 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
6.v	Purchase mobile light units/ lighting system for disaster sites and large events	EMA *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Public and private grants and/or local budgets	$30,000	30 months	**NEW**	**Med**	**NEW**	**NEW**
OBJECTIVE SEVEN: Maintain continuity of critical operations during and after hazard events																	
7.a	Inventory Dawson County's historic resources and archive them on backup servers	Dawson County *Dawson County*	**X**	**X**	**X**	**X**	**X**		**X**	**X**	Local budgets	$8,000	30 months	**NEW**	**High**	**NEW**	**Flood 6(b) (mod)**
7.b	Purchase a digital system to continuously monitor sirens to ensure proper functioning	EMA *Dawson County and Dawsonville*			**X**	**X**					Public and private grants and/or local budgets	$50,000	30 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
7.c	Cross-train staff across multiple departments to serve in emergency-related positions that would be outside their normal job functions	Dawson County and Dawsonville governments *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	Local budgets	Staff time	60 months	**NEW**	**High**	**NEW**	**NEW**
7.d	Provide additional interconnection points between the City of Dawsonville and Etowah Water and Sewer Authority water systems	Etowah WSA and City of Dawsonville *Dawson County and Dawsonville*			**X**	**X**		**X**	**X**	**X**	Public and private grants and/or local budgets	$150,000	36 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
7.e	Provide additional interconnection points between the Forsyth County and Etowah Water and Sewer Authority water systems	Etowah WSA and Forsyth County *Dawson County and Dawsonville*			**X**	**X**		**X**	**X**	**X**	Public and private grants and/or local budgets	$ 1,500,000	60 months	**NEW**	**High**	**NEW**	**NEW**
7.f	Provide interconnection points between the City of Gainesville and Etowah Water and Sewer Authority water systems	Etowah WSA and City of Gainesville *Dawson County and Dawsonville*			**X**	**X**		**X**	**X**	**X**	Public and private grants and/or local budgets	$ 1,750,000	60 months	**NEW**	**High**	**NEW**	**NEW**
OBJECTIVE EIGHT: Minimize damage to property and loss of life resulting from winter storm events																	

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
8.a	Purchase a brine truck	Public Works *Dawson County and Dawsonville*		**X**							Public and private grants and/or local budgets	$70,000	30 months	**NEW**	**Med**	**NEW**	**NEW**
8.b	Purchase spreaders for salt/brine	Public Works *Dawson County and Dawsonville*		**X**							Public and private grants and/or local budgets	$25,000	24 months	**NEW**	**High**	**NEW**	**NEW**
8.c	Purchase snow plow for the front of trucks	Public Works *Dawson County and Dawsonville*		**X**							Public and private grants and/or local budgets	$15,000	24 months	**NEW**	**High**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
8.d	Purchase 4-wheel drive for staff vehicles during winter weather hazardous weather response	Dawsonville and Dawson County Governments *Dawson County and Dawsonville*		**X**							Public and private grant sand/or local budgets	$45,000	30 months	**NEW**	**Med**	**NEW**	**NEW**

#	Mitigation Action	Lead Agency or Department *Jurisdiction*	Communications Fail	Emer. Infect. Disease	Hazardous Materials	Terrorism	Dam Failure	Transportation	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Priority	Source	Previous Strategy Number
OBJECTIVE NINE: Minimize the impacts on local citizens, industry, and infrastructure of a dam breach															
9.a	Continue to support participation in the Georgia Safe Dams Program	EMA and Planning and Development *Dawson County and Dawsonville*				**X**	**X**		Local budgets	Staff Time	12 months	**NEW**	**High**	**NEW**	**NEW**
9.b	Establish a comprehensive inspection, maintenance, and enforcement program for dam structures	Georgia Department of Natural Resources *Dawson County and Dawsonville*				**X**	**X**		Public and private grants and/or local Budget	$8,000	42 months	**Ongoing**	**Med**	**2012 Plan**	**Dam Failure 2**

OBJECTIVE TEN: Implement additional protective measures and capabilities in response to manmade incidents															
10. a	Continue to enforce zoning ordinances that create separation and buffering between industrial areas and other land uses, including schools, nursing facilities, hospitals, and other facilities with large, vulnerable populations	Planning and Development *Dawson County and Dawsonville*		**X**	**X**	**X**		**X**	Local budgets	Staff time	12 months	**Ongoing**	**Med**	**2012 Plan**	**HazMat 1**
10. b	Train a HazMat Response Team to Technician level	Fire Department and EMA *Dawson County and Dawsonville*		**X**	**X**	**X**		**X**	Public and private grants and/or local budgets	$10,000	30 months	**NEW**	**High**	**NEW**	**NEW**
10. c	Equip a HazMat Response Team	Fire Department and EMA Dawson		**X**	**X**	**X**		**X**	Public and private grants and/or local	$75,000	30 months	**NEW**	**High**	**NEW**	**NEW**

		County and Dawsonville							budgets						
10. d	Hold an annual refresher HazMat training session for all Fire, EMS, and law enforcement personnel	Fire Department, EMA, EMS, and law enforcement agencies *Dawson County and Dawsonville*		**X**	**X**	**X**		**X**	Local budgets	Staff time	12 months	**NEW**	**High**	**NEW**	**NEW**
10. e	Develop a plan for a short-term contamination of the raw water supply	Etowah WSA and City of Dawsonville *Dawson County and Dawsonville*		**X**	**X**	**X**		**X**	Public and private grants and/or local budgets	$10,000	24 months	**NEW**	**High**	**NEW**	**NEW**
OBJECTIVE ELEVEN: Increase public awareness of local manmade hazards and proper response to those hazards															
11. a	Encourage employers to communicate the hazards of workplace chemicals and	EMA and Fire Department *Dawson County and Dawsonville*			**X**	**X**		**X**	Local budgets	Staff time	12 months	**Ongoing**	**High**	**2012 Plan**	**HazMat 2(b)**

	ensure that workers receive proper training, in accordance with the Right To Know Act														
11. b	Ensure the labeling and placarding for identifying the types of hazardous materials at fixed facilities	Fire Department and EMA *Dawson County and Dawsonville*		**X**	**X**	**X**			Local budgets	Staff time	12 months	**Ongoing**	**High**	**2012 Plan**	**HazMat 2(c)**
11. c	Establish a Local Emergency Planning Committee (LEPC)	EMA *Dawson County and Dawsonville*	**X**	**X**	**X**	**X**	**X**	**X**	Public and private grants and/or local budgets	$5,000	24 months	**Ongoing**	**Med**	**2012 Plan**	**HazMat 3**

Completed Strategies

Previous Strategy #	Strategy Description	Status
T'Storms 1	Weather Radios	COMPLETE
T'Storms 2	Access to shelters for vulnerable populations	COMPLETE prior to 2012 plan
T'Storms 3	Construction Standards and Techniques	COMPLETE; changed to "continue"
Winter Storms 4	Winter Storm Road Plan	COMPLETE prior to 2012 plan
Flood 2	Building Design Standards	COMPLETE
Flood 4	Update Floodplain Mapping	COMPLETE
Flood 5	Flat Creek Area	COMPLETE prior to 2012 plan
Flood 6	National Historic Registry	COMPLETE prior to 2012 plan
Tornado 2	Manufactured Homes adequate installation	COMPLETE
Wildfire 1	Defensible Space and Slopes	COMPLETE
Earthquake 2	School Survey Procedures	COMPLETE prior to 2012 plan
All Hazards 4	Water System Security	COMPLETE

Deleted Strategies

Previous Strategy #	Strategy Description	Reason
T'Storms 5	Lightning Detectors	Replaced by more specific strategies (3.d and 3.e)
Winter Storms 1	Road Maintenance	Replaced by more specific strategies (8.a, 8.b, 8.c, and 8.d)
Winter Storms 3	Snow and Ice Loads	Strategy is no longer relevant
Earthquake 3	Overlay Study	Strategy is no longer relevant
Dam Failure 1	Sound Design and Planning	Strategy is the responsibility of the Georgia Safe Dams Program (State)
All Hazards 2	Generators	Replaced by assessment strategy to determine generator needs (6.g)
All Hazards 3	Designated Shelters	Replaced by more specific strategies (6.h, 6.i, 6.j, and 6.k)
All Hazards 5	Multi-Hazard Emergency Planning for School Course	School Safety plans are updated annually and submitted to Dawson County; course no longer needed

Multi-Jurisdictional Considerations

Thunderstorms

Thunderstorm events have occurred across all areas of Dawson County. Crop damage from thunderstorm events would likely have the greatest impact in the rural areas of Dawson County. However, property damage numbers would be highest in more heavily populated areas due to greater population density. Thunderstorms have the potential to impact all areas of Dawson County.

Winter Storms

All portions of Dawson 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 include the City of Dawsonville.

Flooding

During a large-scale flood event, many portions of Dawson County would potentially be impacted by flooding. However, the areas most prone to flooding have historically been those areas located within the 100-year floodplain. All of Dawson County and the City of Dawsonville could potentially be impacted.

Tornado

All portions of Dawson 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 include the City of Dawsonville.

Drought

All portions of Dawson 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 the City of Dawsonville.

Wildfire

All portions of Dawson County, including the City of Dawsonville, 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 the City of Dawsonville.

Earthquakes

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

Tropical Cyclone

All of Dawson County and the City of Dawsonville could potentially be impacted by a tropical cyclone event. However, areas within the 100-year floodplain are at the greatest risk.

Hazardous Materials Incidents

All of Dawson County, including the City of Dawsonville, are vulnerable to both fixed facility and transportation-related hazardous materials releases.

Dam Failure

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

Transportation Incidents

Dawson County, as well as the City of Dawsonville, could potentially be impacted by a transportation incident.

Terrorism

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

Communications Failure

Dawson County, as well as the City of Dawsonville, could potentially be impacted by a communications failure.

Emergent Infectious Diseases

Dawson County, as well as the City of Dawsonville, are vulnerable to emergent infectious diseases.

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 Dawson County Hazard Mitigation Plan 2012.

Chapter 5 Section	Updates
Maintenance	• Content Revised
Plan Distribution	• New Section – Not in 2012 Plan
Implementation	• Content expanded and revised from 2012 Plan
Evaluation	• Content Revised from Monitoring, Evaluating, and Updating the Mitigation Plan Section
Peer Review	• New Section – Not in 2012 Plan
Plan Update	• Content Revised
Conclusion	• Content Revised

Maintenance

Requirement §201.6(c)(4)(iii)

In order to adhere to best practices, state and federal guidelines, and lessons learned, the Dawson 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 2012 Dawson County Hazard Mitigation Plan was followed, to the best abilities of Dawson County. This most importantly included an increased attempt for public participation and inclusion in the planning process. The Dawson County Hazard Mitigation Plan Update Committee will reconvene annually in February to monitor and evaluate the progress of the mitigation strategies in the Plan. Dawson County's Emergency Management Director, Lanier Swafford, 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?
- How successful was the coordination of efforts?
- Are there any suggestions for revision of any strategies?

Dawson County's Emergency Management Director will send the minutes from this annual meeting to Dawson County Commissioners and City and Town Councils for review.

If there are any updates or modifications to the Dawson 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 Dawson 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

Plan Distribution

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

Dawson County Board of Commissioners
Dawson County Fire Department
Dawson County Emergency Management Agency
Dawson County Sheriff's Office
Dawson County Public Works
Dawson County Planning and Development
Dawson County Board of Education
City of Dawsonville

A printed copy of the approved Plan will be available for viewing at the Dawson County Emergency Management Agency located at 393 Memory Lane, Dawsonville, GA 30534. A printed copy of the approved Plan will also be available for viewing at the Chestatee Regional Public Library located at 342 Allen Street in Dawsonville. The existence and location of these copies will be publicized in the County's local newspaper, the Dawson County New.

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

Implementation

Requirement §201.6(c)(4)(ii)

Each jurisdiction participating in the Dawson 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 in order 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 in order to assess whether identified mitigation strategies are being implemented in a timely fashion.

Dawson County and the City of Dawsonville 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 Dawson County Hazard Mitigation Plan.

This plan, as a joint effort between Dawson County and the City of Dawsonville, 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 Dawson 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. In particular, aspects of this plan will be integrated into the Dawson County Comprehensive Plan during the next planning cycle.

Identified hazards and mitigation strategies of the 2012 Dawson 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. Dawson County will integrate mitigation strategies identified in this plan into the Dawson 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 Dawson County and the City of Dawsonville. 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.

Regulatory Tools/Plans	Regulatory Type: Ordinance, Resolution, Codes, Plans, Etc.	Local Authority	State Prohibited	Higher Authority
Building Codes	County/Municipal Code	Yes	No	No
Capital Improvements Plan	2008-2028 Dawson County Comprehensive Plan	Yes	No	No
Comprehensive Plan	2008-2028 Dawson County Comprehensive Plan	Yes	No	No
Economic Development Plan	2008-2028 Dawson County Comprehensive Plan	Yes	No	Yes
Emergency Management Accreditation Program		No	No	Yes
Emergency Response Plan	Dawson County Local Emergency Operations Plan (LEOP)	Yes	No	Yes
Flood Management Plan	Dawson County Code Chapter 38, Article V (Flood Damage Prevention)	Yes	No	No
Historic Preservation		Yes	No	No
National Flood Insurance Program Participation	Dawson County Code Chapter 38, Article V, Division 2, Section 38-506	Yes	No	Yes
Continuity of		No	No	No

Government/ Operations Plan				
Post-Disaster Ordinance	Dawson County Code Chapter 22, Article III	Yes	No	No
Zoning Ordinances	County and Municipal Codes	Yes	No	No

The City of Dawsonville offers many administrative and technical services to the community. City departments include: Administrative, Public Works, Utilities, and Planning and Zoning.

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 Dawson County Hazard Mitigation Planning Committee to be the most effective and appropriate method to implement local hazard mitigation actions at this time.

Evaluation

Requirement §201.6(c)(4)(i)

Periodic revisions and updates of the Dawson 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 take into account any potential changes in the hazard vulnerability and mitigation priorities of Dawson County.

The Dawson County Hazard Mitigation Plan Update Committee will meet annually to review the Dawson 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 Dawson 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 Dawson County Hazard Mitigation Plan is continuously updated to allow for changes in hazard vulnerabilities and identified mitigation strategies.

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

Peer Review

State Requirement Element F1

In order to maintain standards of quality, improve performance, and provide credibility to the Dawson County Hazard Mitigation Plan Update, representatives of local emergency management agencies bordering Dawson 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.

Dawson County Hazard Mitigation Plan Update was peer reviewed by:

Renee Cornelison Date
Director
Cherokee County Emergency Management Agency

John Nicholson Date
Director
Pickens County Emergency Management Agency

Chris Grimes Date
Deputy Director
Forsyth County Emergency Management Agency

David Wimpy Date
Director
Lumpkin 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 Dawson County Emergency Management Agency is the department responsible with ensuring this requirement is met. The Dawson County Hazard Mitigation Plan Update Committee will be involved in this future process and will aid the Dawson 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 2022; therefore, the approval and adoption of the next plan update must be completed before that time.

In the fourth quarter of 2021, Dawson 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 Dawson County Hazard Mitigation Plan Update. This process will be headed up by the Dawson County Emergency Management Agency. The Dawson 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 2022 to meet all identified planning deadlines.

Conclusion

As a result of the hazard mitigation planning process, Dawson County, and the City of Dawsonville, as well as additional participating organizations have obtained a great deal of information and knowledge regarding Dawson 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 Dawson 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 Dawson 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 Dawson County Hazard Mitigation Plan Update Committee to adopt strategies that will have the greatest positive effect on the greatest amount of the population.

The Dawson County Hazard Mitigation Planning Committee adopted strategies in all six of the major mitigation categories: Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, and Public Education and Awareness. Prevention and Emergency Services comprised the greatest number (over 66%) of the mitigation strategies identified by Dawson County.

Appendix A – Dawson County Inventory of Dams

Dawson County Category I Dams

Name	Latitude	Longitude	Height (feet)	Storage (acres)
Amicalola Creek Watershed Structure # 1	34.546389	-84.264280	44.00	349.00
Amicalola Creek Watershed Structure # 3	34.543056	-84.198611	56.00	1294.00
Etowah River Reach Sub Watershed Structure # 12	34.393980	-84.074620	63.00	1047.00
Etowah River Reach Watershed Structure # 22	34.460650	-84.161840	43.00	307.00
Etowah River Reach Watershed Structure # 23	34.470570	-84.145030	29.00	225.00
Yellow Creek Reservoir Dam	34.357778	-84.253333	114.00	13587.00

Dawson County Category II Dams

Name	Latitude	Longitude	Height (feet)	Storage (acres)
Amicalola Creek Watershed Structure # 2	34.531944	-84.245000	65.00	941.00
Amicalola Creek Watershed Structure # 4	34.521944	-84.183889	48.00	592.00
Etowah River Watershed Structure # 10	34.384722	-84.106111	54.00	521.00
Etowah River Watershed Structure # 13	34.401620	-84.058800	51.00	654.00
Etowah River Watershed Structure # 24	34.485833	-84.159722	32.00	167.00
Etowah River Watershed Structure # 9	34.362500	-84.081111	31.00	427.00
Fausett Lake Dam	34.528333	-84.280278	31.00	576.00
Gilleland Lake Dam	34.473056	-84.163611	24.00	124.00
Gold Creek Golf Club Lake Dam # 2	34.450278	-84.110833	43.00	350.00
Gold Creek Golf Club Lake Dam #1	34.449167	-84.105278	38.00	464.00
Howington Lake Dam	34.396389	-84.069444	32.00	64.00
Rainbow Lake Dam	34.440556	-84.197500	32.00	250.00
Running Pine Lake Dam	34.362500	-84.204167	29.00	33.00
Strickland Lake Dam	34.396111	-84.219722	26.00	6.00

Thomas Lake Dam	34.337222	-84.109167	30.00	66.00
Toto Estates Lake Dam (Lower)	34.391944	-83.991389	31.00	36.00
Toto Estates Lake Dam (Upper)	34.390556	-83.993056	29.40	36.00
Wood Lake Dam (East)	34.572500	-84.311111	31.00	33.00

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

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, August 10, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
David Headley	[illegible]	dheadley@dawsoncounty.org	DC.
Lisa Henson Parks Director	[illegible]	lhenson@dawsoncounty.org	DCPR
Rick Brown/Chief Op. Officer	[illegible]	rbrown@dawson.k12.ga.us	Dawson Co. Schools
Dawn Pruett, Director	[illegible]	dpruett@dawsoncounty.org	Senior Services
Tim Satterfield Deputy Chief	[illegible]	tsatterfield@dawsoncounty.org	ES
Kristan Bean/911 Asst. dir.	[illegible]	kbean@dawsoncountysheriff.org	DCSO 911
Trampas Hansard City of Dawsonville	[illegible]	ROADS(H)@dawsonville-ga.gov	Operation Manager
Breanna Rogers HazMit Planner	[illegible]	breanna.rogers@gema.ga.gov	GEMA/HS
Kevin Gibbs	[illegible]	kgibbs@amicalolafallslodge.com	AFSP
Kurt Angel	[illegible]	kangel@dawsoncounty.org	Tax Assessor
Dave Palmer	[illegible]	dave.palmer@dph.ga.gov	District 2 Public Health

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Lux Mitigation and Planning Corp.

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Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, August 10, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Allie Dean, Reporter	[illegible]	adean@dawsonnews.com	Dawson County News
Clark MacAllister	[illegible]	clarkmac@uga.edu	Dawson Co. Extension
Jason Streetman	[illegible]	jstreetman@dawsoncounty...	Dawson Co. P&P
Billy Thurmond	[illegible]	chairman@dawsoncounty.org	Dawson Co. Comm.
David McKee	[illegible]	dmckee@dawsoncounty.org	Dawson Co.
Brooke Anderson	[illegible]	banderson@etowahwater...	Etowah Water
Danny Speaks	[illegible]	dspeaks@dawsoncounty.org	Dawson Co. Fire
Julie Nix	[illegible]	julington@windstream.net	Dawson Co. [illegible]
DICK MCNEILL	[illegible]	RRMCNEILL4@GMAIL.COM	SUNRISE HGA
Jason Brownell	[illegible]	jbrownell@bigcanoepoa.org	Big Canoe POA
Richard Jordan	[illegible]	rjordan@bigcanoepoa.org	Big Canoe POA

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Lux Mitigation and Planning Corp.

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, August 10, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Greg Rowan / Major		rowan@dawsoncountysheriff.org	D.C. Sheriff office
Lauren Swafford - EMA Director		lswafford@dawsoncountyga.us	DCES

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, September 21, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
KEN BROOKS / RANGER		KBROOKS@GFC.STATE.GA.US	GA. FORESTRY COMMISSION
Jessica Whitmore		JWhitmore@dawsoncounty.org	Dawson County TA
Dawn Pruett		dpruett@dawsoncounty.org	Sen Secr
Bob Bolz City Manager Dawsonville		citymanager@dawsonville-ga.gov	City of Dawsonville
Lanier Swafford		lswafford@dawsoncounty.org	DCES
Jason Streetman		jstreetman@dawsoncounty.org	P&D
David Headley		dheadley@dawsoncounty.org	County Mgr.
Dorothy Jubon		dorothy@jubon.net	Red Cross
David McKee		dmckee@dawsoncounty.org	Dawson Co.
Allison Ruvalcaba-Wright		awright@dawsoncountysheriff.org	Dawson 911
Jim Rich		JRich@DawsonKings	BOE

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, September 21, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Billy Thurmond Chairman		chairman@dawsoncounty.org	Dawson Co.
Jason Dooley / Batt. Chief		jdooley@dawsoncounty.org	DCES
Rick Brown / Ch. Op. Officer		rbrown@dawson.k12.ga.us	Dawson Co. Schools
Kevin Gibbs / Park Mgr.		kgibbs@amicalolafalls.com	AFSP
TRAM DAS HANSARD City of Dawsonville		ROADS1@dawsonville-ga.gov	City of Dawsonville
Lisa Henson Park + Rec		lhenson@dawsoncounty.org	Park + Rec.
Sharon Fausett Co. Commissioner		fausettfarms@windstream.net	Dawson County
Stephen Maddox / Lt. Asst. Patrol Command		smaddox@dawsoncountysheriff.org	Dawson County Sheriff's Office
Robin Roland / IT Dept Dawson Co.		rroland@dawsoncountyga.org	Dawson Co.
Ricky Rexroat Deputy Chief		rexroat@dawsoncountyga.org	DCES

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, September 21, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Brooke Anderson / General Manager	[illegible]	banderson@[illegible]water.com	EWSA
Clark MacAllister	[illegible]	clarkmac@[illegible].edu	Extension

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

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Thursday, October 19, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Jessi Henson Director		lhenson@dawsoncounty.org	DCPR
TRAVIS HANSARD	OPERATION MANAGER Public Works	ROADS(A)dawsonville-ga.GOV	City OF Dawsonville
Bob Bolz		city manager@dawsonville-ga.org	City of Dawsonv.
Lanier Swafford		lswafford@dawsoncounty.org	Dawson County Emgn Svcs
DANNY SPEAKS		dspeaks@dawsoncounty.org	DAWSON Co. Emgn. Servs.
Ricky Rexroat		rrexroat@dawsoncounty.org	Dawson County Emergency Ser

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, October 19, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Robin Roland IT	R Roland	rroland@dawsoncounty.or	Dawson BOC
Julie Nix/BC	Julie Nix	julington@windstream.net	Dawson Comm.
David Headley	[illegible]	dheadley@dawsoncounty.org	Dawson County
Rick Brown	[illegible]	rbrown@dawson.k12.ga.us	Dawson Co. Schools
Clark MacAllister	[illegible]	clarkmac@uga.edu	UGA Extension
Sharon Fausett	Sharon Fausett		Dawson Co. Commission
Billy Thurmond	Billy Thurmond		Dawson Co Commission Chairman
Alexyna Nucker-Wright	ANW	anucker-wright@dawsoncountysheriff	DCSO
Jessica Whitmore	[illegible]	jwhitmore@dawsoncounty.us	Dawson County TA

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Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, October 19, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Casey Majewski / Planning		planning@dawsonville-ga.gov	Dawsonville
Brooke Anderson / General Manager		banderson@etowahwater.org	Etowah Water & Sewer Auth.
Dawn Pruett / Sr. Services		dpruett@dawsoncounty.org	Dawson Co.
Kurt Yarger / Chief Appraiser		kyarger@dawsoncounty.org	Dawson Co.

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, November 16, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Lanier Swafford	[signature]	lswafford@dawsoncounty.org	DCES
Brooke Anderson	[signature]	banderson@[illegible]	EWSA
Clark MacAllister	[signature]	clarkmac@uga.edu	Extension
David McKee	[signature]	dmckee@dawsoncounty.org	Dawson Co.
Sharon Fausett	Sharon Fausett	fausettfarms@windstream.net	Dawson Co.
Billy Thurmond	[signature]	billythurmond@icloud.com	Dawson Co.
David Headley	[signature]	dheadley@dawsoncounty.org	Dawson County
Dawn Pruett	[signature]	dpruett@dawsoncounty.org	Dawson
Kurt Hansel	[signature]	khansel@dawsoncounty.org	BOA
Jessica Whitmore	[signature]	jwhitmore@dawsoncounty.org	BOA
Jason Streetman	[signature]	jstreetman@dawsoncounty.org	BOC/Planning

Lux Mitigation and Planning Corp.

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, November 16, 2017

Name/Title	Signature	E-mail Address	Agency/Organization
Robin Roland IT	Roland	rroland@dawsoncounty.us	IT-BOC
Casey Majewski		planning@dawsonville-ga.gov	CITY
Rick Brown		rbrown@dawson.k12.ga.us	D.C. Schools
Alesha Tucker-Wright	ATW	awright@dawsoncountysheriff.org	911
Ricky Rexroat		rrexroat@dawsoncounty.org	DCES

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, January 18, 2018

Name/Title	Signature	E-mail Address	Agency/Organization
Dawn Pruett, Sr Ctr Director		dpruett@dawsoncounty.org	Sr Ctr
Jason Streetman P.D.		jstreetman@dawsoncounty.org	P&D
Casey Majewski		planning@dawsonville-ga.gov	City
Brooke Anderson		banderson@etowahwater.com	EWSA
Lisa Hansen		lhansen@dawsoncounty.org	ACYR
Kurt Gansel		kgansel@dawsoncounty.org	Tax Assessor

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Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, January 18, 2018

Name/Title	Signature	E-mail Address	Agency/Organization
Lanier Swafford		lswafford@dawsoncounty.org	Dawson Co ES
Billy Thurmond		chairman@dawsoncountyga.org	DC BOC
Danny Speaks		dspeaks@dawsoncountyga.org	Dawson Co. FS.
David Headley		dheadley@dawsoncounty.org	Dawson Cnty
David McKee		dmckee@dawsoncounty.org	Dawson County
Robin Roland		rroland@dawsoncounty.org	Dawson County
Rick Brown		rbrown@dawson.k12.ga.us	Dawson Co. Schools
Tramplas Hancock		Tramplas.Hancock@gmail.com	City of Dawsonville
Bob Bolz		bob.bolz@dawsonville-ga.gov	City of Dawsonville
Sharon Fausett		fausettfarms@windstream.net	Dawson County
Greg Rowe		rowe@dawsoncountyga.org	D.C. Sheriff

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, February 15, 2018

Name/Title	Signature	E-mail Address	Agency/Organization
Lanier Swafford Fire Chief/EMA Dir.	[signature]	lswafford@dawsoncounty...	Dawson County Emergency Services
Rick Brown/Chief Op. Officer DCS	[signature]	rbrown@dawson.k12.ga.us	Dawson County School
Danny Speaks/Deputy Chief	[signature]	dspeaks@dawsoncounty.org	Dawson County Emergency Services
Jessica Whitmore/GIS Analyst	[signature]	jwhitmore@dawsoncounty.org	Dawson County IT
Sharon Fausett, Commissioner	[signature]	faussettfarms@windstream.net	Dawson County
Robin Roland, IT	[signature]	rroland@dawsoncounty.org	IT - County
Kurt Angel/Chief Appraiser	[signature]	kangel@dawsoncounty.org	Tax Assessor Office
David McKee PW Director	[signature]	dmckee@dawsoncounty.org	Dawson County
Trampas Hansard	[signature]	roads@dawsonville-ga.gov	City of Dawsonville
Bob Bolz	[signature]	bob.bolz@dawsonville-ga.gov	City of Dawsonville
Dawn Pruett	[signature]	dpruett@dawsoncounty.org	SR Ctr.

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Lux Mitigation and Planning Corp.

Dawson County Hazard Mitigation Plan Update Committee Meeting

Sign-In Sheet

Thursday, February 15, 2018

Name/Title	Signature	E-mail Address	Agency/Organization
Julie Hughes Nye	[signature]	julington@windstream.net	Dawson Co Bd. Comm
Jason Streetman	[signature]	jstreetman@dawsoncounty.org	Dawson Co BOC

Lux Mitigation and Planning Corp.

Appendix C – Dawson County Critical Facilities

Facility	Jurisdiction	Facility Type
Dawson County Middle School	*Dawson County*	Education, K - 12
Robinson Elementary School	*Dawson County*	Education, K - 12
Black's Mill Elementary School	*Dawson County*	Education, K - 12
DAWSON CO-SHOAL HOLE RD (SL)	*Dawson County*	Government, Water/Sewer
Dawson County Jail	*Dawsonville town*	Law Enforcement, Jails
Dawson County Fire Department Station 02	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Fire Department Station 04	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Fire Department Station 05	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Fire Department Station 03	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Volunteer Fire/Rescue Department Station 01	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Courthouse	*Dawsonville town*	Law Enforcement, Court House
Dawson County Magistrate	*Dawson County*	Law Enforcement, Court House
Dawsonville Pond	*Dawson County*	Government, Water/Sewer
Etowah Water and Sewer Authority	*Dawsonville town*	Government, Water/Sewer
Dawsonville City Hall	*Dawson County*	Government, Private
Dawson County High	*Dawson County*	Education, K - 12
Dawson County Public Library	*Dawson County*	Education, Library
Dawson County Sheriff's Office	*Dawson County*	Law Enforcement, Sheriff
Big Canoe Fire Dept 2	*Dawson County*	Emergency Services, Fire Fighters
Vet.Treatment Center Mills Brandon K DVM	*Dawsonville town*	Emergency Services, Fire Fighters
Vet. Treatment Center Dawson Forest Animal	*Dawsonville town*	Emergency Services, Fire Fighters
Vet.Treatment Center Jordan John F	*Dawsonville town*	Emergency Services, Fire Fighters
Veteriarian Treatment Center Steve Landreth G	*Dawsonville town*	Emergency Services, Fire Fighters
Dawsonville Post Office	*Dawsonville town*	Emergency Services, Fire Fighters
Shoal Creek Building Supply	*Dawsonville town*	Emergency Services, Fire Fighters

ACCG Rock Creek Park	*Dawson County*	Law Enforcement, Court House
Dawson County Historic Courthouse	*Dawson County*	Law Enforcement, Court House
Chelsea GCA Realty Partnership Limited LP	*Dawson County*	Medical, Hospital
NEGA Primary Care Inc.	*Dawsonville town*	Medical, Hospital
Eden's & Avant Financing (Kroger)	*Dawsonville town*	Medical, Hospital
Kilough Elementary	*Dawsonville town*	Medical, Hospital
Ingles Market Inc	*Dawsonville town*	Education, Jr Colleges
Home Depot USA	*Dawsonville town*	Emergency Services, Fire Fighters
City of Atlanta Dept (Lockheed)	*Dawsonville town*	Emergency Services, Fire Fighters
State of Ga Forestry Dept	*Dawsonville town*	Emergency Services, Fire Fighters
State of Ga HWY Dept	*Dawsonville town*	Emergency Services, Fire Fighters
Etowah Water & Sewer Athority	*Dawsonville town*	Emergency Services, Fire Fighters
Etowah water & Wastewater Treatment Sewer Athority	*Dawsonville town*	Emergency Services, Fire Fighters
Fire Station#6 Big Canoe	*Dawsonville town*	Emergency Services, Fire Fighters
Liberty Fire Station	*Dawsonville town*	Emergency Services, Fire Fighters
ACCG Fire Dept Headquarters	*Dawson County*	Emergency Services, Fire Fighters
Annex&Public Works	*Dawson County*	Education, Library
Senior Center Park	*Dawsonville town*	Education, Library
Library	*Dawsonville town*	Education, Library
Board of Education 2	*Dawsonville town*	Medical, Hospital
Health Dept.	*Dawsonville town*	Medical, Hospital
Board of Education	*Dawsonville town*	Medical, Hospital
DEFACS	*Dawsonville town*	Medical, Hospital
Daycare CE	*Dawsonville town*	Medical, Hospital
Foothills Vet. Associates PC	*Dawsonville town*	Emergency Services, Fire Fighters
Dawson County Admin Offices (Future)	*Dawson County*	Emergency Services, Fire Fighters
Dawson County Agriculture Center	*Dawson County*	Emergency Services, Fire Fighters
ST of GA DNR Falls Lodge	*Dawson County*	Emergency Services, Fire Fighters

Vaughters Albert & Ted BE Bearden Funeral Home	*Dawson County*	Emergency Services, Fire Fighters
Chestatee Emergency Center	*Dawson County*	Emergency Services, EMS
Antioch Church	*Dawson County*	Emergency Services, Fire Fighters
Bethel Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
Calvary Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
Crosspoint Church	*Dawson County*	Emergency Services, Fire Fighters
Dawsonville Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
First Baptist Church of Dawsonville GA INC	*Dawson County*	Emergency Services, Fire Fighters
Old First Baptist	*Dawson County*	Emergency Services, Fire Fighters
Faith Baptist Church of Dawsonville	*Dawson County*	Emergency Services, Fire Fighters
Gateway Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
Goshen Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
Harmony Baptist Church	*Dawson County*	Emergency Services, Fire Fighters
Juno Baptist Church	*Dawsonville town*	Government, Water/Sewer
Kilough Baptist Church	*Dawsonville town*	Government, Water/Sewer
Lebanon Baptist Church	*Dawsonville town*	Government, Water/Sewer
Liberty Baptist Church	*Dawsonville town*	Government, Water/Sewer
Liberty Baptist Church	*Dawsonville town*	Government, Water/Sewer
Mt Vernon Baptist Church	*Dawsonville town*	Government, Water/Sewer
New Bethel Church	*Dawsonville town*	Government, Water/Sewer
New Hope Baptist Church	*Dawsonville town*	Government, Water/Sewer
Pleasant Union Church	*Dawsonville town*	Government, Water/Sewer
Sweetwater Baptist Church	*Dawsonville town*	Government, Water/Sewer
TrinityBaptist Church	*Dawsonville town*	Government, Water/Sewer
Cornerstone Christian	*Dawsonville town*	Government, Water/Sewer
New Life Church of God	*Dawsonville town*	Government, Water/Sewer
Church of God of Prophecy	*Dawsonville town*	Government, Water/Sewer
New Life Church of God	*Dawsonville town*	Government, Water/Sewer
Bethel Methodist	*Dawsonville town*	Government, Water/Sewer
Dawsonville Methodist Church	*Dawsonville town*	Government, Water/Sewer

Mckees Chapel United Methodist Church	*Dawsonville town*	Government, Water/Sewer
Salem Methodist Church	*Dawsonville town*	Government, Water/Sewer
Salem Methodist Church	*Dawsonville town*	Government, Water/Sewer
Martin Allen Sr Jehovah Witness	*Dawsonville town*	Government, Water/Sewer
Christ Fellowship Church of Dawson County	*Dawsonville town*	Government, Water/Sewer
Grace & Truth Revival Center	*Dawsonville town*	Government, Water/Sewer
Jesus Name Apostlic Church Inc	*Dawsonville town*	Government, Water/Sewer
North Georgia Bible Chapel	*Dawsonville town*	Government, Water/Sewer
Pleasant Hill Church	*Dawsonville town*	Government, Water/Sewer
War Hill Fellowship	*Dawsonville town*	Government, Water/Sewer
Swan Center Star RT	*Dawsonville town*	Government, Water/Sewer
Winds of Peace Fellowship	*Dawsonville town*	Government, Water/Sewer
Etowah River W/S Str No. 26	*Dawsonville town*	Government, Water/Sewer
Fausett Lake Dam	*Dawson County*	Government, Water/Sewer
Etowah River Reach W/S Str #22	*Dawson County*	Government, Water/Sewer
Etowah River W/S Str #22	*Dawson County*	Government, Water/Sewer
Etowah River W/S Str #9	*Dawson County*	Government, Water/Sewer
Etowah W/S Str #10	*Dawson County*	Government, Water/Sewer
Etowah River Reach Sub W/S Str #12	*Dawson County*	Government, Water/Sewer
Etowah River W/S Str #13	*Dawson County*	Government, Water/Sewer
Amicalola Creek W/S Str #1	*Dawson County*	Government, Water/Sewer
Amicalola Creek W/S Str #2	*Dawson County*	Government, Water/Sewer
Amicalola Creek W/S Str #3	*Dawson County*	Government, Water/Sewer
Amicalola Creek W/S Str #4	*Dawson County*	Government, Water/Sewer
Etowah River Reach W/S Str #23	*Dawson County*	Government, Water/Sewer
Etowah River W/S Str #24	*Dawson County*	Government, Water/Sewer
Rainbow Lake Dam	*Dawson County*	Government, Water/Sewer
Thomas Lake Dam	*Dawson County*	Government, Water/Sewer
Southmark Dam	*Dawson County*	Government, Water/Sewer
Toto Estates (lower)	*Dawson County*	Government, Water/Sewer
Toto Estates (upper)	*Dawson County*	Government, Water/Sewer
Yellow Creek Reservoir Dam	*Dawson County*	Government, Water/Sewer
Scott Lake Dam	*Dawson County*	Government, Water/Sewer

Appendix D – Hazard Data Tables

Thunderstorms

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								1	1	3.534M	15.00K
DAWSON CO.	DAWSON CO.	GA	04/01/1974	23:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/08/1974	13:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	09/13/1979	16:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/26/1982	18:27	CST	Hail	1.75 in.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	05/18/1982	12:45	CST	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	07/01/1983	13:25	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	03/28/1984	12:40	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	05/07/1984	20:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	05/07/1984	20:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/05/1985	19:20	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/05/1985	19:30	CST	Hail	1.50 in.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	06/06/1985	16:44	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

DAWSON CO.	DAWSON CO.	GA	05/26/1986	23:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	05/26/1986	23:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/15/1987	01:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/04/1989	14:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/28/1990	12:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	04/29/1991	11:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	07/02/1992	07:00	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Dawsonville	DAWSON CO.	GA	04/15/1993	19:55	EST	Thunderstorm Wind	0 kts.	0	0	0.50K	0.00K
Dawsonville	DAWSON CO.	GA	05/21/1994	15:00	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Dawsonville	DAWSON CO.	GA	06/27/1994	01:00	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Dawsonville	DAWSON CO.	GA	01/19/1995	15:55	EST	Thunderstorm Wind	0 kts.	0	0	500.00K	0.00K
DAWSON CO.	DAWSON CO.	GA	06/11/1995	19:05	EST	Hail	0.75 in.	0	0	0.00K	0.00K
Dawsonville	DAWSON CO.	GA	08/19/1995	17:27	EST	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/27/1996	21:00	EST	Thunderstorm Wind		0	0	2.50K	0.00K
COUNTYWIDE	DAWSON CO.	GA	01/24/1997	23:47	EST	Hail	0.75 in.	0	0	0.00K	0.00K

DAWSONVILLE	DAWSON CO.	GA	03/05/1997	18:36	EST	Thunderstorm Wind		0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/03/1997	02:24	EST	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/04/1997	18:45	EST	Thunderstorm Wind		0	0	2.00K	0.00K
JUNO	DAWSON CO.	GA	07/28/1997	22:30	EST	Thunderstorm Wind	50 kts. EG	0	0	125.00K	15.00K
JUNO	DAWSON CO.	GA	04/17/1998	00:50	EST	Thunderstorm Wind		0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/07/1998	15:28	EST	Hail	0.75 in.	0	0	0.00K	0.00K
JUNO	DAWSON CO.	GA	05/07/1998	16:30	EST	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/07/1998	16:45	EST	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/20/1998	13:44	EST	Thunderstorm Wind		0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/07/1999	18:00	EST	Thunderstorm Wind		0	0	0.50K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/13/1999	19:58	EST	Hail	0.88 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/22/1999	14:42	EST	Hail	0.88 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/23/1999	18:30	EST	Thunderstorm Wind		0	0	0.50K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/21/1999	15:30	EST	Thunderstorm Wind		0	0	0.20K	0.00K
JUNO	DAWSON	GA	07/22/1999	16:35	EST	Thunderstorm		0	0	1.00K	0.00K

	CO.					Wind					
DAWSONVILLE	DAWSON CO.	GA	05/25/2000	16:23	EST	Thunderstorm Wind		0	0	0.50K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/23/2000	12:26	EST	Thunderstorm Wind		0	0	70.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/23/2000	12:26	EST	Hail	1.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	08/10/2000	23:01	EST	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	02/16/2001	19:00	EST	Thunderstorm Wind		0	0	5.00K	0.00K
LANDRUM	DAWSON CO.	GA	05/24/2001	18:10	EST	Hail	1.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/04/2001	20:30	EST	Lightning		0	0	15.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/04/2001	20:30	EST	Lightning		0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/04/2001	20:30	EST	Thunderstorm Wind		0	0	5.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/13/2002	14:49	EST	Thunderstorm Wind		0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/01/2002	17:50	EST	Thunderstorm Wind		0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/01/2002	18:12	EST	Lightning		0	0	1.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/02/2002	14:05	EST	Hail	1.00 in.	0	0	0.00K	0.00K
EMMA	DAWSON CO.	GA	07/03/2002	13:45	EST	Hail	0.75 in.	0	0	0.00K	0.00K

DAWSONVILLE	DAWSON CO.	GA	11/11/2002	02:15	EST	Lightning		0	0	250.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/07/2003	02:17	EST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
COUNTYWIDE	DAWSON CO.	GA	07/10/2003	10:00	EST	Lightning		0	0	150.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/22/2003	13:00	EST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/22/2004	15:25	EST	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/14/2004	00:41	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/14/2004	16:38	EST	Hail	0.75 in.	0	0	0.00K	0.00K
LANDRUM	DAWSON CO.	GA	07/14/2004	16:45	EST	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
COUNTYWIDE	DAWSON CO.	GA	11/24/2004	10:27	EST	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	12/09/2004	06:30	EST	Thunderstorm Wind	35 kts. EG	0	0	0.25K	0.00K
AMICALOLA	DAWSON CO.	GA	01/13/2005	16:50	EST	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	02/21/2005	12:15	EST	Lightning		0	0	600.00K	0.00K
DAWSONVILLE	DAWSON	GA	02/21/2005	17:30	EST	Hail	1.00	0	0	0.00K	0.00K

	CO.						in.				
DAWSONVILLE	DAWSON CO.	GA	03/27/2005	15:08	EST	Hail	1.75 in.	0	0	0.00K	0.00K
AMICALOLA	DAWSON CO.	GA	03/27/2005	16:24	EST	Hail	1.75 in.	0	0	0.00K	0.00K
AMICALOLA	DAWSON CO.	GA	04/22/2005	12:10	EST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/02/2005	14:15	EST	Lightning		0	0	8.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/02/2005	14:21	EST	Thunderstorm Wind	56 kts. EG	0	0	60.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/20/2006	15:29	EST	Hail	0.75 in.	0	0	0.00K	0.00K
AMICALOLA	DAWSON CO.	GA	05/20/2006	16:25	EST	Hail	1.00 in.	0	0	0.00K	0.00K
LUMPKIN	DAWSON CO.	GA	05/27/2006	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
JUNO	DAWSON CO.	GA	06/25/2006	10:01	EST	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	08/04/2006	18:20	EST	Thunderstorm Wind	35 kts. EG	0	0	0.75K	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/03/2007	16:48	EST-5	Hail	1.25 in.	0	0	0.00K	0.00K
AMICALOLA	DAWSON CO.	GA	04/04/2007	00:45	EST-5	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
JUNO	DAWSON	GA	05/12/2007	13:58	EST-	Thunderstorm	50 kts.	0	0	6.00K	0.00K

	CO.				5	Wind	EG				
DAWSONVILLE	DAWSON CO.	GA	06/11/2007	15:24	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/11/2007	15:30	EST-5	Thunderstorm Wind	36 kts. EG	0	0	1.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/12/2007	16:00	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/01/2007	12:20	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/01/2007	12:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	03/15/2008	12:25	EST-5	Hail	1.75 in.	0	0	300.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	03/15/2008	14:43	EST-5	Hail	2.75 in.	0	0	1.000M	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/11/2008	18:39	EST-5	Thunderstorm Wind	56 kts. EG	0	0	100.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/11/2008	18:51	EST-5	Lightning		0	0	10.00K	0.00K
LUMPKIN	DAWSON CO.	GA	08/07/2008	14:29	EST-5	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	02/11/2009	17:30	EST-5	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
JUNO	DAWSON CO.	GA	04/10/2009	17:20	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON	GA	09/09/2009	15:50	EST-	Hail	0.88	0	0	0.00K	0.00K

	CO.				5		in.				
MC KEE	DAWSON CO.	GA	09/09/2009	16:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/15/2010	17:34	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	06/28/2010	19:51	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
BRIGHT	DAWSON CO.	GA	07/26/2010	13:59	EST-5	Thunderstorm Wind	39 kts. EG	0	1	25.00K	0.00K
JUNO	DAWSON CO.	GA	02/28/2011	16:44	EST-5	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
JUNO	DAWSON CO.	GA	03/26/2011	22:35	EST-5	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/25/2011	13:15	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	04/27/2011	22:49	EST-5	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
AMICALOLA	DAWSON CO.	GA	05/26/2011	15:23	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/26/2011	16:40	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
LUMPKIN	DAWSON CO.	GA	05/26/2011	16:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
JOHNTOWN	DAWSON CO.	GA	06/18/2011	16:31	EST-5	Thunderstorm Wind	51 kts.	0	0	15.00K	0.00K

							EG				
AMICALOLA	DAWSON CO.	GA	08/07/2011	17:05	EST-5	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
BARRETTSVILLE	DAWSON CO.	GA	04/17/2012	17:00	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
BRIGHT	DAWSON CO.	GA	05/17/2012	20:20	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
LUMPKIN	DAWSON CO.	GA	06/04/2012	01:15	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
LUMPKIN	DAWSON CO.	GA	08/10/2012	21:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
HUBBARDSVILLE	DAWSON CO.	GA	08/10/2012	21:05	EST-5	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	03/18/2013	17:25	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	01/11/2014	07:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
DAWSONVILLE	DAWSON CO.	GA	05/14/2014	19:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/11/2014	18:25	EST-5	Lightning		1	0	0.00K	0.00K
LUMPKIN	DAWSON CO.	GA	08/20/2014	12:54	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
MC KEE	DAWSON CO.	GA	10/14/2014	05:40	EST-5	Thunderstorm Wind	55 kts. EG	0	0	5.00K	0.00K

DAWSONVILLE	DAWSON CO.	GA	04/20/2015	11:51	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
SILVER CITY	DAWSON CO.	GA	06/24/2015	17:15	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
AMICALOLA	DAWSON CO.	GA	06/24/2015	17:45	EST-5	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
AFTON	DAWSON CO.	GA	06/26/2015	16:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	6.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	07/13/2015	14:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
JUNO	DAWSON CO.	GA	08/10/2015	15:36	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
JUNO	DAWSON CO.	GA	03/21/2017	19:14	EST-5	Thunderstorm Wind	60 kts. EG	0	0	40.00K	0.00K
JOHNTOWN	DAWSON CO.	GA	06/23/2017	18:06	EST-5	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	09/05/2017	17:40	EST-5	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
Totals:								1	1	3.534M	15.00K

Winter Storms

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	1.297M	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/06/1996	15:00	EST	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/11/1996	16:00	EST	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/02/1996	10:00	EST	Winter Storm		0	0	5.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/20/1996	16:00	EST	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/08/1997	19:00	EST	Ice Storm		0	0	1.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/23/1998	12:00	EST	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/23/1998	12:00	EST	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/02/1999	18:00	EST	Ice Storm		0	0	3.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/31/1999	15:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/01/1999	00:00	EST	Sleet		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/23/1999	11:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/22/2000	13:00	EST	Ice Storm		0	0	980.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/28/2000	19:00	EST	Ice Storm		0	0	32.79K	0.00K

DAWSON (ZONE)	DAWSON (ZONE)	GA	12/03/2000	05:00	EST	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/17/2000	07:30	EST	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/19/2000	00:00	EST	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/20/2001	12:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/02/2002	06:00	EST	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/04/2002	14:00	EST	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/23/2003	00:00	EST	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/06/2003	15:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/25/2004	05:00	EST	Ice Storm		0	0	10.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/26/2004	00:00	EST	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/19/2004	17:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/28/2005	20:00	EST	Winter Storm		0	0	250.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	04/02/2005	10:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/15/2005	00:00	EST	Ice Storm		0	0	15.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/06/2006	04:00	EST	Winter Weather		0	0	0.00K	0.00K

DAWSON (ZONE)	DAWSON (ZONE)	GA	02/12/2006	00:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/18/2006	12:00	EST	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/01/2007	04:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/16/2008	21:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/19/2008	12:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/22/2008	09:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/08/2008	06:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/01/2008	06:30	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/07/2010	16:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/29/2010	21:00	EST-5	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/04/2010	13:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/12/2010	14:30	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/02/2010	06:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/12/2010	12:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/15/2010	19:25	EST-5	Winter Weather		0	0	0.00K	0.00K

DAWSON (ZONE)	DAWSON (ZONE)	GA	12/25/2010	12:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/09/2011	21:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/03/2011	16:30	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/09/2011	22:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/29/2011	06:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/25/2013	07:00	EST-5	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/06/2013	03:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/28/2014	12:00	EST-5	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/11/2014	07:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/01/2014	00:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/16/2015	14:00	EST-5	Ice Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/20/2015	15:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/25/2015	14:00	EST-5	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/20/2016	06:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/22/2016	00:00	EST-5	Winter Storm		0	0	0.00K	0.00K

DAWSON (ZONE)	DAWSON (ZONE)	GA	02/15/2016	02:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/03/2016	13:30	EST-5	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/06/2017	17:00	EST-5	Winter Weather		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/08/2017	10:00	EST-5	Winter Storm		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/16/2018	18:00	EST-5	Winter Weather		0	0	0.00K	0.00K
Totals:								0	0	1.297M	0.00K

Tornadoes

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								5	16	2.700M	0.00K
DAWSON CO.	DAWSON CO.	GA	04/03/1974	18:45	CST	Tornado	F4	5	13	2.500M	0.00K
JUNO	DAWSON CO.	GA	11/11/2002	02:20	EST	Tornado	F2	0	3	200.00K	0.00K
Totals:								5	16	2.700M	0.00K

Drought

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	1.260M
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/01/1997	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	05/01/1999	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	08/01/1999	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	05/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	06/01/2000	00:00	EST	Drought		0	0	0.00K	1.260M
DAWSON (ZONE)	DAWSON (ZONE)	GA	07/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	10/01/2000	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	10/01/2001	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/01/2001	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/01/2001	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	04/01/2002	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	08/01/2002	00:00	EST	Drought		0	0	0.00K	0.00K

DAWSON (ZONE)	DAWSON (ZONE)	GA	01/01/2003	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/01/2004	00:00	EST	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	05/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	10/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/01/2007	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	06/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	07/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	08/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	09/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	10/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	11/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	12/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K

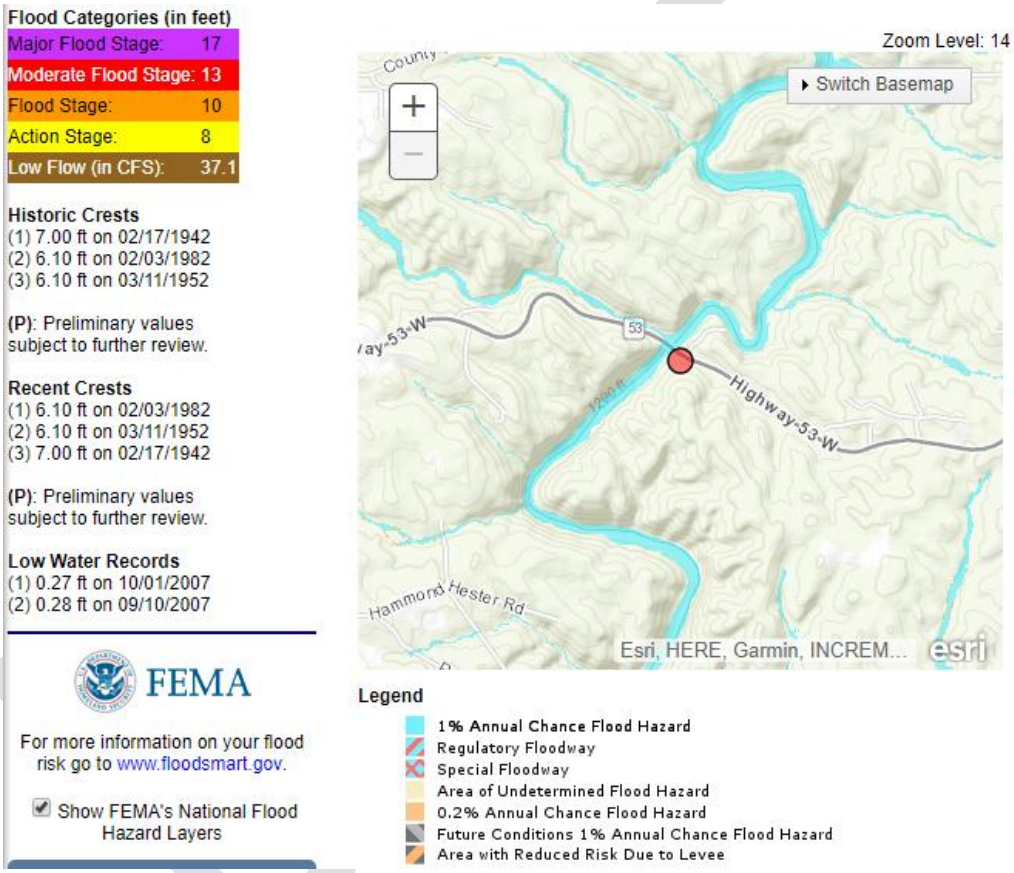
DAWSON (ZONE)	DAWSON (ZONE)	GA	01/01/2017	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/01/2017	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	03/01/2017	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	04/01/2017	00:00	EST-5	Drought		0	0	0.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	05/01/2017	00:00	EST-5	Drought		0	0	0.00K	0.00K
Totals:								0	0	0.00K	1.260M

Flooding

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	447.00K	1.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/27/1997	22:00	EST	Flood		0	0	0.00K	0.00K
JUNO	DAWSON CO.	GA	04/17/1998	03:00	EST	Flash Flood		0	0	10.00K	0.00K
DAWSONVILLE	DAWSON CO.	GA	09/21/2002	15:30	EST	Flash Flood		0	0	50.00K	0.00K
WEST PORTION	DAWSON CO.	GA	07/10/2003	08:30	EST	Flash Flood		0	0	25.00K	0.00K
WEST PORTION	DAWSON CO.	GA	07/10/2003	14:00	EST	Flash Flood		0	0	0.00K	1.00K
COUNTYWIDE	DAWSON CO.	GA	09/16/2004	18:45	EST	Flash Flood		0	0	250.00K	0.00K
DAWSON (ZONE)	DAWSON (ZONE)	GA	02/21/2005	17:30	EST	Flood		0	0	5.00K	0.00K
NORTHEAST PORTION	DAWSON CO.	GA	06/25/2006	11:30	EST	Flash Flood		0	0	2.00K	0.00K
AFTON	DAWSON CO.	GA	07/09/2008	02:00	EST-5	Flash Flood		0	0	5.00K	0.00K
HUBBARDSVILLE	DAWSON CO.	GA	09/21/2009	13:55	EST-5	Flood		0	0	10.00K	0.00K
LUMPKIN	DAWSON CO.	GA	05/19/2013	04:00	EST-5	Flash Flood		0	0	50.00K	0.00K
AMICALOLA	DAWSON CO.	GA	07/03/2013	14:45	EST-5	Flash Flood		0	0	5.00K	0.00K
BRIGHT	DAWSON CO.	GA	08/07/2013	04:10	EST-5	Flash Flood		0	0	5.00K	0.00K

HUBBARDSVILLE	DAWSON CO.	GA	08/07/2013	06:36	EST-5	Flash Flood		0	0	5.00K	0.00K
JUNO	DAWSON CO.	GA	08/22/2013	16:30	EST-5	Flash Flood		0	0	25.00K	0.00K
Totals:								0	0	447.00K	1.00K

Amicalola Creek near Dawsonville



Etowah River near Dawsonville

Flood Categories (in feet)

Major Flood Stage:	21
Moderate Flood Stage:	16
Flood Stage:	13
Action Stage:	11
Low Stage (in feet):	0

Historic Crests
(1) 16.20 ft on 01/07/1946
(2) 16.03 ft on 01/16/1954
(3) 15.90 ft on 05/19/2013
(4) 15.78 ft on 09/17/2004
(5) 15.72 ft on 03/11/1952
Show More Historic Crests

(P): Preliminary values subject to further review.

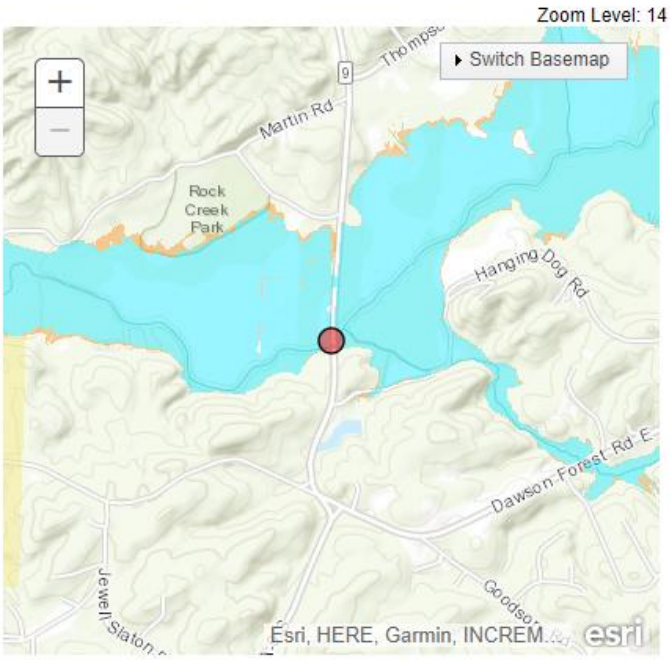
Recent Crests
(1) 13.78 ft on 12/24/2015
(2) 14.12 ft on 01/04/2015
(3) 13.06 ft on 04/07/2014
(4) 15.41 ft on 08/07/2013
(5) 15.90 ft on 05/19/2013
Show More Recent Crests

(P): Preliminary values subject to further review.

Low Water Records
(1) 2.92 ft on 09/13/2002
(2) 3.01 ft on 10/01/2007

FEMA

For more information on your flood risk go to www.floodsmart.gov.



Legend

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

FEMA Layer

Appendix E – Dawson County Worksheet 3As

GEMA Worksheet #3a **Inventory of Assets**
Jurisdiction: Dawson 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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	11,189	11,189	100.000%	1,589,852,442	1,589,852,442	100.000%	22,673	22,673	100%
Commercial	1,953	1,953	100.000%	279,640,570	279,640,570	100.000%	0	0	#DIV/0!
Industrial	70	70	100.000%	17,135,175	17,135,175	100.000%	0	0	#DIV/0!
Agricultural	1,035	1,035	100.000%	131,392,765	131,392,765	100.000%	0	0	#DIV/0!
Religious/ Non-profit	321	321	100.000%	38,007,633	38,007,633	100.000%	0	0	#DIV/0!
Government	352	352	100.000%	160,129,223	160,129,223	100.000%	0	0	#DIV/0!
Education	179	179	100.000%	59,801,053	59,801,053	100.000%	0	0	#DIV/0!
Utilities	22	22	100.000%	69,145,300	69,145,300	100.000%	0	0	#DIV/0!
Total	15,121	15,121	100.000%	2,345,104,161	2,345,104,161	100.000%	22,673	22,673	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: Dawson 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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	11,189	10,421	93.136%	1,589,852,442	1,480,726,812	93.136%	22,673	21,117	93%
Commercial	1,953	1,578	80.799%	279,640,570	225,946,144	80.799%	0	0	#DIV/0!
Industrial	70	64	91.429%	17,135,175	15,666,446	91.429%	0	0	#DIV/0!
Agricultural	1,035	998	96.425%	131,392,765	126,695,632	96.425%	0	0	#DIV/0!
Religious/ Non-profit	321	295	91.900%	38,007,633	34,929,133	91.900%	0	0	#DIV/0!
Government	352	305	86.648%	160,129,223	138,746,332	86.648%	0	0	#DIV/0!
Education	179	166	92.737%	59,801,053	55,457,960	92.737%	0	0	#DIV/0!
Utilities	22	21	95.455%	69,145,300	66,002,332	95.455%	0	0	#DIV/0!
Total	15,121	13,848	91.581%	2,345,104,161	2,144,172,791	91.432%	22,673	21,117	93%

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: Dawson 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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	11,189	132	1.180%	1,589,852,442	18,755,968	1.180%	22,673	267	1%
Commercial	1,953	0	0.000%	279,640,570	0	0.000%	0	0	#DIV/0!
Industrial	70	3	4.286%	17,135,175	734,365	4.286%	0	0	#DIV/0!
Agricultural	1,035	0	0.000%	131,392,765	0	0.000%	0	0	#DIV/0!
Religious / Non-profit	321	0	0.000%	38,007,633	0	0.000%	0	0	#DIV/0!
Government	352	0	0.000%	160,129,223	0	0.000%	0	0	#DIV/0!
Education	179	0	0.000%	59,801,053	0	0.000%	0	0	#DIV/0!
Utilities	22	0	0.000%	69,145,300	0	0.000%	0	0	#DIV/0!
Total	15,121	135	0.893%	2,345,104,161	19,490,332	0.831%	22,673	267	1%

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: Dawsonville
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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	1,173	1,173	100.000%	119,904,233	119,904,233	100.000%	2,416	2,416	100%
Commercial	466	466	100.000%	41,051,885	41,051,885	100.000%	0	0	#DIV/0!
Industrial	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Agricultural	26	26	100.000%	4,238,003	4,238,003	100.000%	0	0	#DIV/0!
Religious / Non-profit	74	74	100.000%	8,671,763	8,671,763	100.000%	0	0	#DIV/0!
Government	99	99	100.000%	48,778,078	48,778,078	100.000%	0	0	#DIV/0!
Education	70	70	100.000%	30,033,598	30,033,598	100.000%	0	0	#DIV/0!
Utilities	9	9	100.000%	5,977,250	5,977,250	100.000%	0	0	#DIV/0!
Total	1,917	1,917	100.000%	258,654,810	#DIV/0!	#DIV/0!	2,416	#DIV/0!	#DIV/0!

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: Dawsonville
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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	1,173	1,085	92.498%	119,904,233	110,908,880	92.498%	2,416	2,235	92%
Commercial	466	425	91.202%	41,051,885	37,440,024	91.202%	0	0	#DIV/0!
Industrial	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Agricultural	26	24	92.308%	4,238,003	3,912,003	92.308%	0	0	#DIV/0!
Religious/ Non-profit	74	71	95.946%	8,671,763	8,320,205	95.946%	0	0	#DIV/0!
Government	99	92	92.929%	48,778,078	45,329,123	92.929%	0	0	#DIV/0!
Education	70	66	94.286%	30,033,598	28,317,392	94.286%	0	0	#DIV/0!
Utilities	9	9	100.000%	5,977,250	5,977,250	100.000%	0	0	#DIV/0!
Total	1,917	1,772	92.436%	258,654,810	#DIV/0!	#DIV/0!	2,416	#DIV/0!	#DIV/0!

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?	Y	
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?	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: Dawsonville
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.

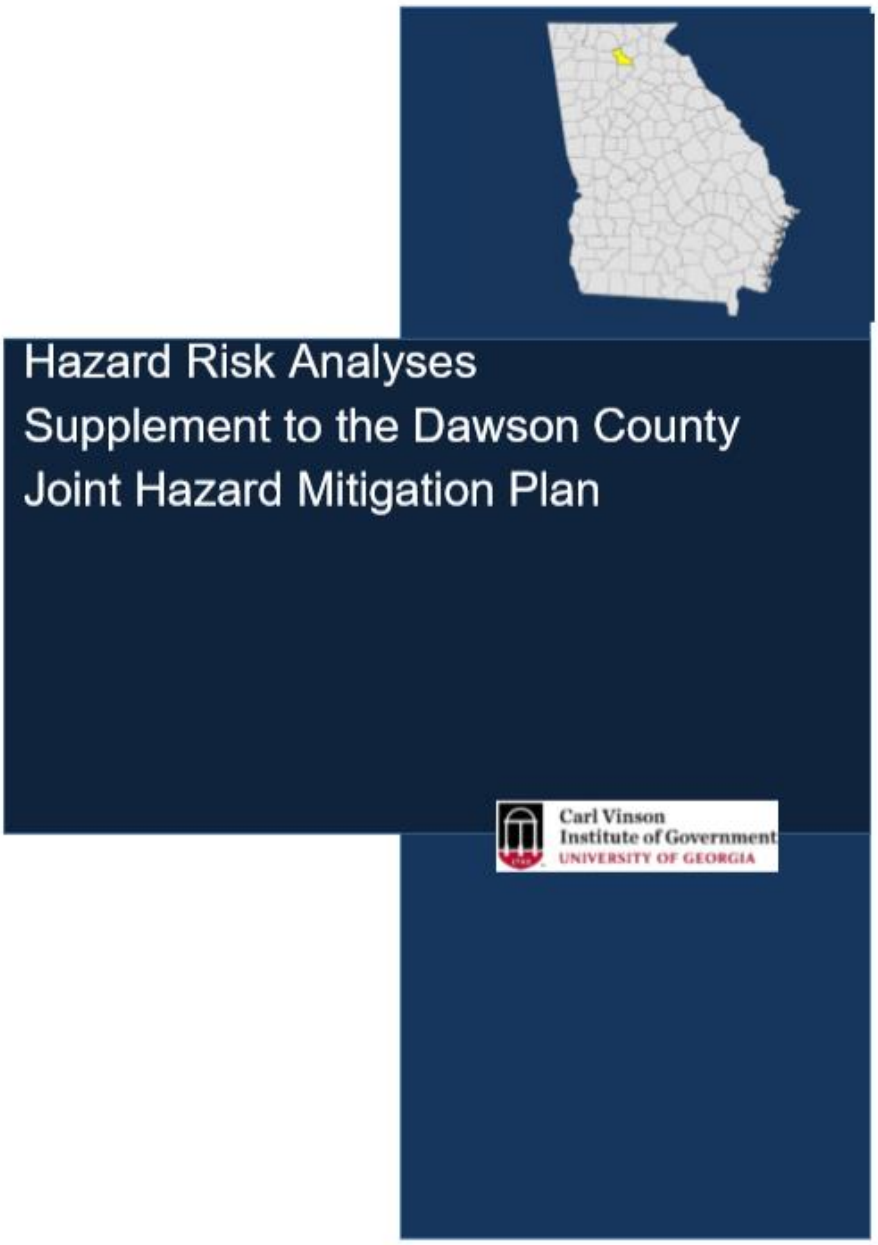
	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	1,173	13	1.108%	119,904,233	1,328,862	1.108%	2,416	27	1%
Commercial	466	425	91.202%	41,051,865	37,440,024	91.202%	0	0	#DIV/0!
Industrial	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Agricultural	26	24	92.308%	4,238,003	3,912,003	92.308%	0	0	#DIV/0!
Religious / Non-profit	74	71	95.946%	8,671,763	8,320,205	95.946%	0	0	#DIV/0!
Government	99	92	92.929%	48,778,078	45,329,123	92.929%	0	0	#DIV/0!
Education	70	66	94.286%	30,033,598	28,317,392	94.286%	0	0	#DIV/0!
Utilities	9	9	100.000%	5,977,250	5,977,250	100.000%	0	0	#DIV/0!
Total	1,917	700	36.515%	258,654,810	#DIV/0!	#DIV/0!	2,416	#DIV/0!	#DIV/0!

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

Appendix G – Dawson County HAZUS Report



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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 created 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 2017, 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 Dawson 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 Dawson 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. Dawson 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 Dawson County were replaced with data derived from parcel and property assessment data obtained from Dawson County. The county provided property assessment data was current as of November 2015 and the parcel data current as of September 2015. 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 Dawson County is 84.3%. 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	40	0	$12,296,000	$0
Commercial	474	331	$272,489,000	$78,044,000
Education	21	12	$14,849,000	$37,983,000
Government	12	15	$7,389,000	$9,058,000
Industrial	166	131	$94,421,000	$35,183,000
Religious	44	25	$21,251,000	$14,761,000
Residential	10,163	9,041	$2,238,756,000	$1,463,597,000
Total	10,920	9,555	$2,661,451,000	$1,638,626,000

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

For Dawson 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

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

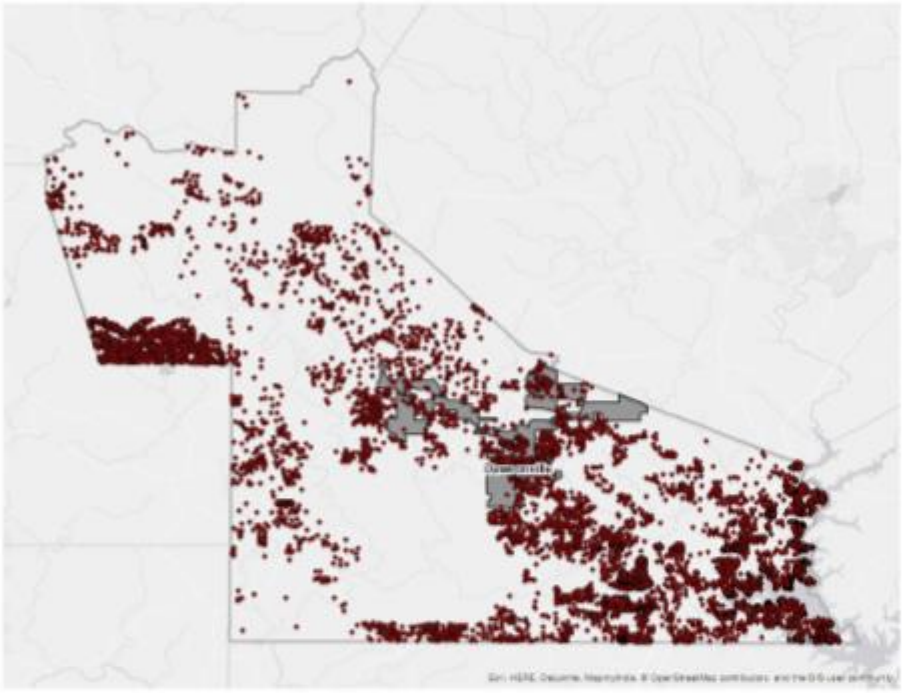

Figure 1: Dawson County Overview

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 April 12th, 2017. 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

[1] 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
Dawsonville		
EOC	1	$880,000
Care	1	$268,000
Fire	1	$171,000
Police	1	$708,000
School	3	$22,332,000
Total	7	$24,359,000
Unincorporated Areas of Dawson County		
EOC	0	$0
Care	2	$1,609,000
Fire	6	$1,646,000
Police	0	$0
School	4	$25,690,000
Total	12	$28,945,000

Assumptions and Exceptions

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

- The Dawson 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:

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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.
- Typically, Hazus analysis uses the default GBS if the match rate between a county's CAMA and parcel data is not at least 85%. For Dawson County, the match rate was 84.3%. While this falls below the 85% threshold it was decided that since it was so close to the threshold, being able to use the local data albeit in a lessened state of completeness was preferable to using the Federally supplied data.

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.

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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 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 Dawson County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Dawson County but impacted the county. Since 1902, Dawson County has had 15 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Dawson County[3]

YEAR	MONTH	DAY	NAME	LAT	LONG	WIND(Knots)	PRESSURE	CAT
1902	October	11	NOTNAMED	33.700	-84.800	35	0	E
1907	September	23	NOTNAMED	33.800	-84.700	35	0	E
1911	August	30	NOTNAMED	34.000	-84.000	30	0	E

[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	MONTH	DAY	NAME	LAT	LONG	WIND(Knots)	PRESSURE	CAT
1928	August	15	NOTNAMED	34.400	-84.800	30	0	TD
1939	August	18	NOTNAMED	34.400	-85.300	20	0	TD
1939	August	18	NOTNAMED	34.700	-84.600	25	0	TD
1977	September	8	BABE	34.500	-84.800	25	1010	TD
1977	September	8	BABE	34.600	-83.900	25	0	TD
1997	July	23	DANNY	34.100	-85.200	20	1012	TD
1997	July	23	DANNY	34.200	-84.500	20	1012	TD
1997	July	23	DANNY	34.300	-83.700	20	1012	TD
2004	September	8	FRANCES	33.400	-84.700	25	998	TD
2004	September	8	FRANCES	34.300	-84.300	25	1000	TD
2005	July	7	CINDY	33.200	-86.200	20	1008	TD
2005	July	7	CINDY	34.600	-84.100	20	1009	E

Category Definitions:

TS – Tropical storm

TD – Tropical depression

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

E – Extra-tropical cyclone

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Figure 2: Continental United States Hurricane Strikes: 1950 to 2011[4]

[4] Source: NOAA National Climatic Data Center

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Probabilistic Hurricane Scenario

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

Wind Damage Assessment

This section describes the wind-based losses to Dawson 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.

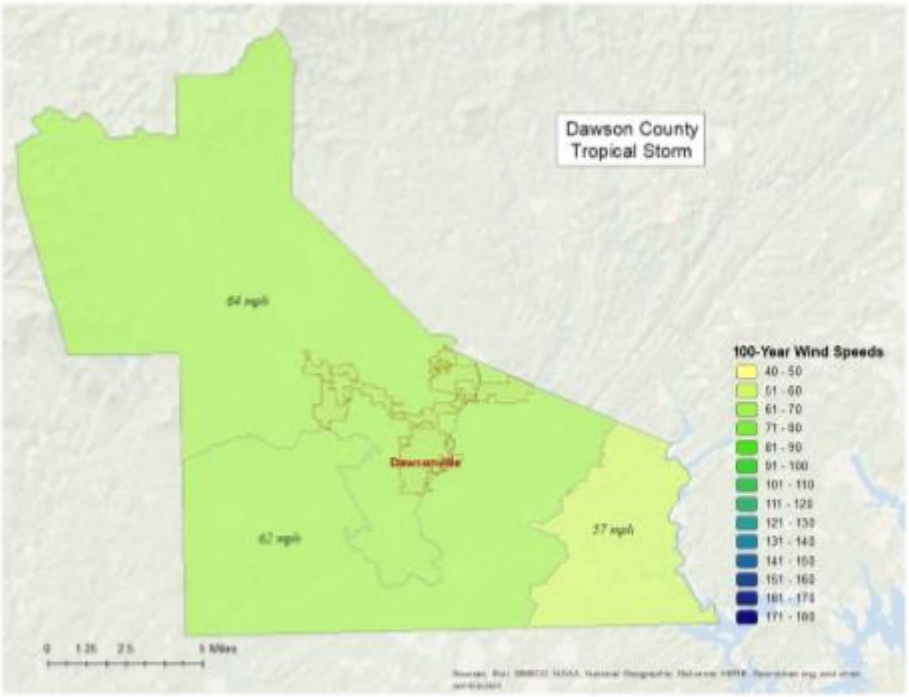

Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Dawson 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 Dawson 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	1	$280,170	$280,860	0.02%

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.

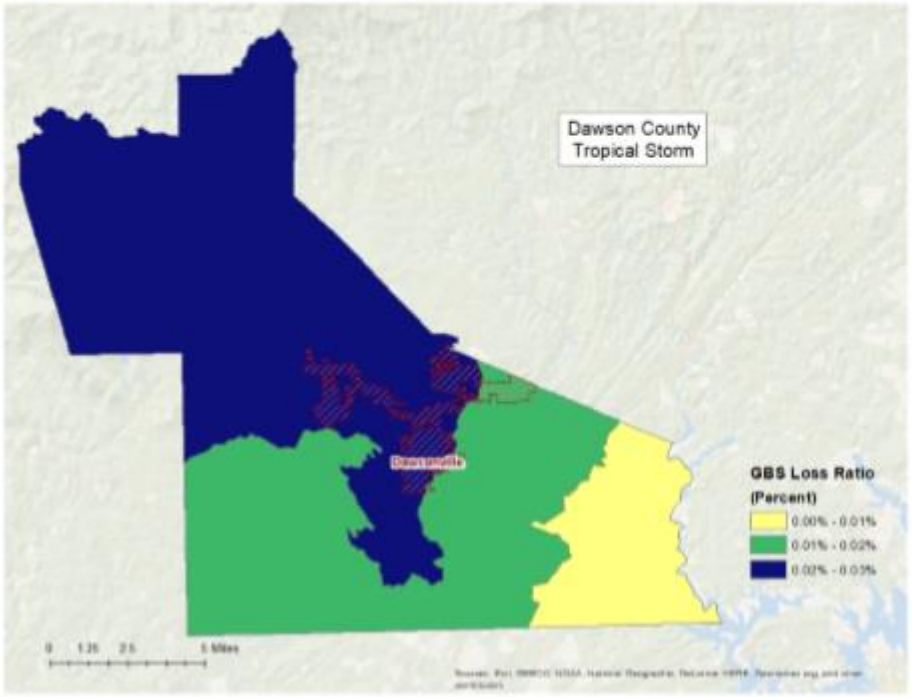

Figure 4: Hurricane Wind Building Loss Ratios

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

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 19 essential facilities in Dawson County.

Classification	Number
EOCs	1
Fire Stations	7
Care Facilities	3
Police Stations	1
Schools	7

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	19

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 Dawson 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	19	0	0	0	19

Figure 5 shows the distribution of all wind related debris resulting from a Tropical Storm. Each dot represents 10 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.

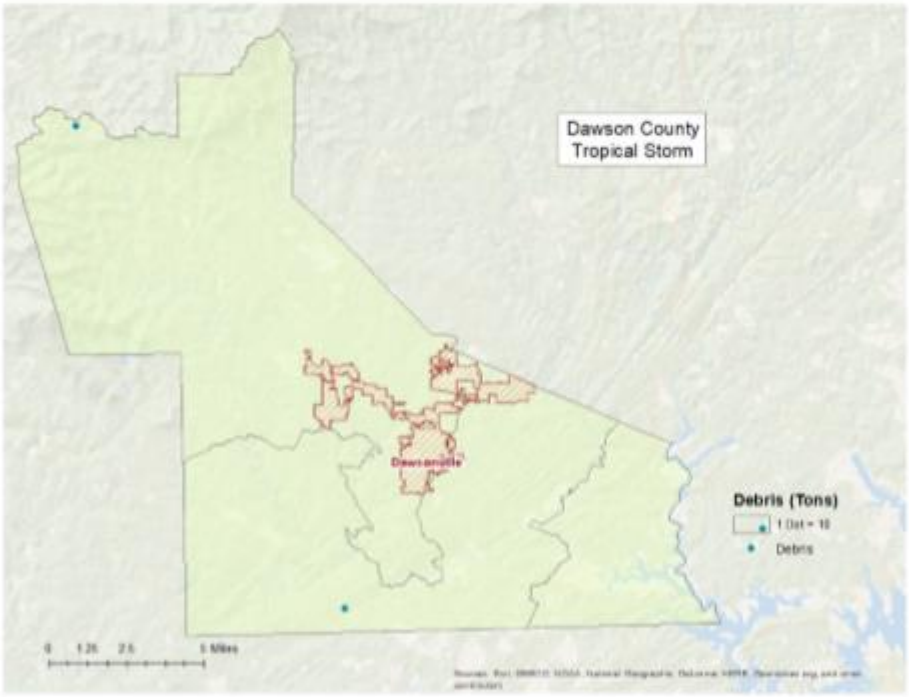

Figure 5: Wind-Related Debris Weight (Tons)

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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 Dawson 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.

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in May 2017. 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.

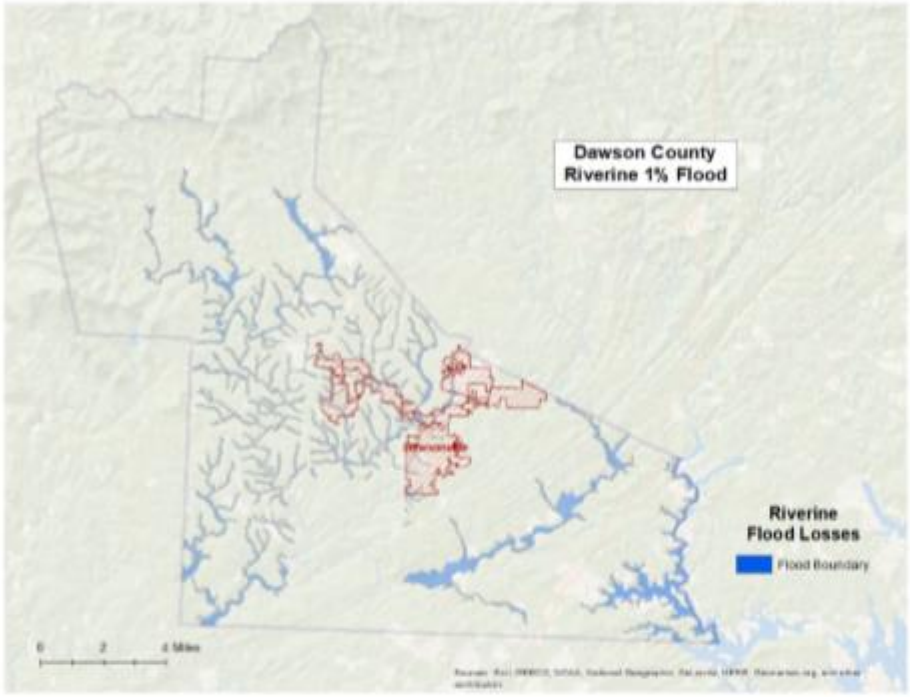

Figure 6: Riverine 1% Flood Inundation

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Riverine 1% Flood Building Damages

Buildings in Dawson 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 Dawson 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: Dawson 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
Dawsonville					
Residential	628	13	$98,335,212	$433,825	0.44%
Unincorporated					
Residential	8,413	132	$1,365,268,787	$8,346,202	0.61%
Industrial	100	3	$31,247,872	$249,259	0.80%
County Total					
	9,141	**148**	**$1,494,851,871**	**$9,029,286**	

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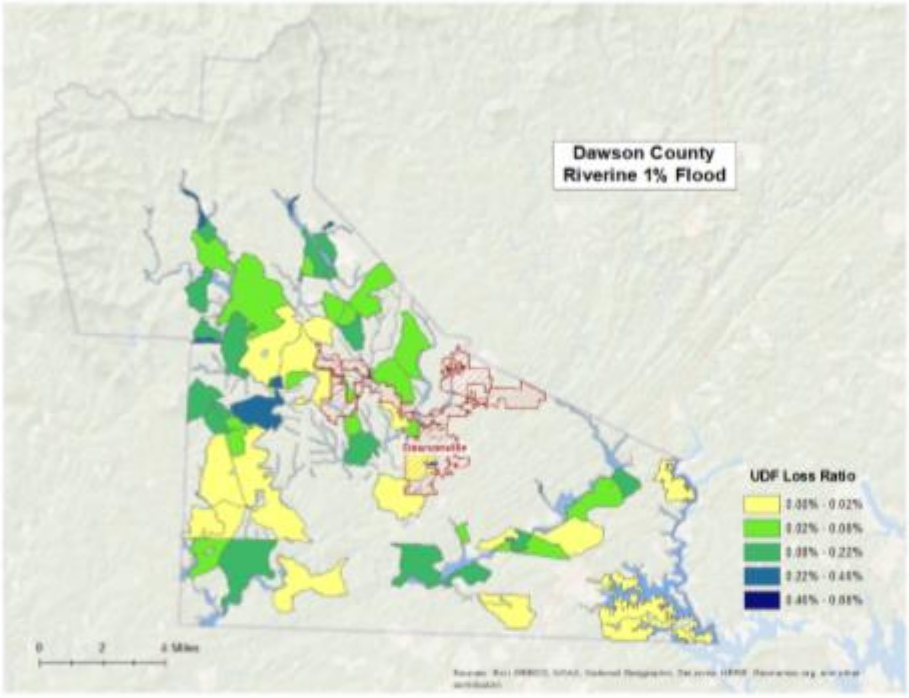

Figure 7: Dawson County Potential Loss Ratios of Total Building Exposure to Losses Sustained to Buildings from the 1% Riverine Flood by 2010 Census Block

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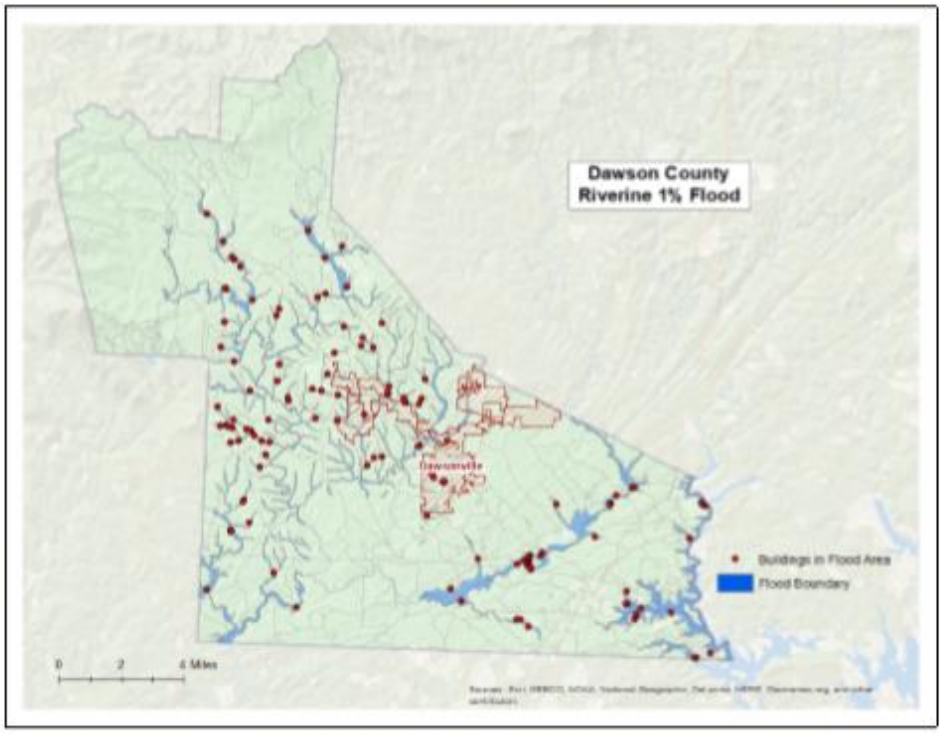

Figure 8: Dawson County Damaged Buildings in Riverine Floodplain (1% Flood)

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 no essential facilities that were subject to damage in the Dawson County riverine 1% probability floodplain.

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Riverine 1% Flood Shelter Requirements

Hazus-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 297 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 892 individuals, of which 279 may require short term publicly provided shelter. The results are mapped in Figure 9.

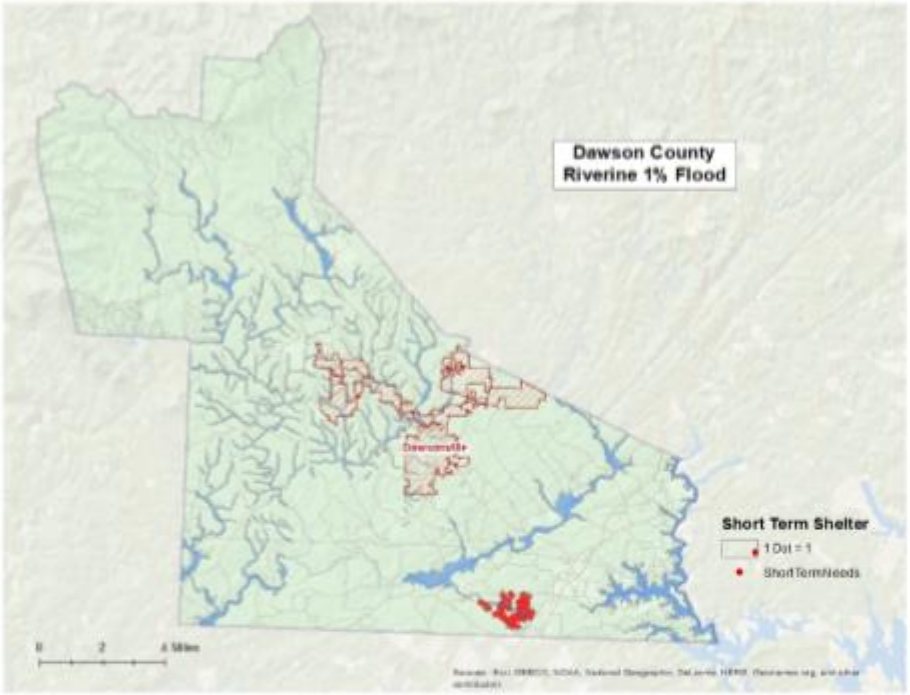

Figure 9: Riverine 1% Estimated Flood Shelter Requirements

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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 6,594 tons of debris might be generated: 1) Finishes- 1,591 tons; 2) Structural – 2,331 tons; and 3) Foundations- 2,672 tons. The results are mapped in Figure 10.

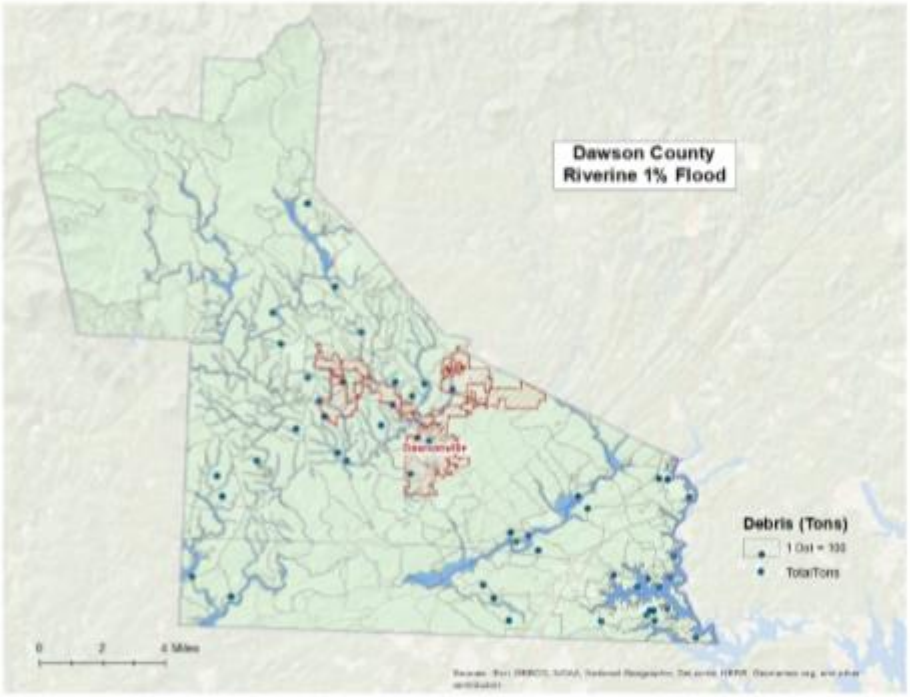

Figure 10: Riverine 1% Flood Debris Weight (Tons)

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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 10.

Table 10: 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

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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 Dawsonville. 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 11 depicts tornado path widths and expected damage.

Table 11: 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.

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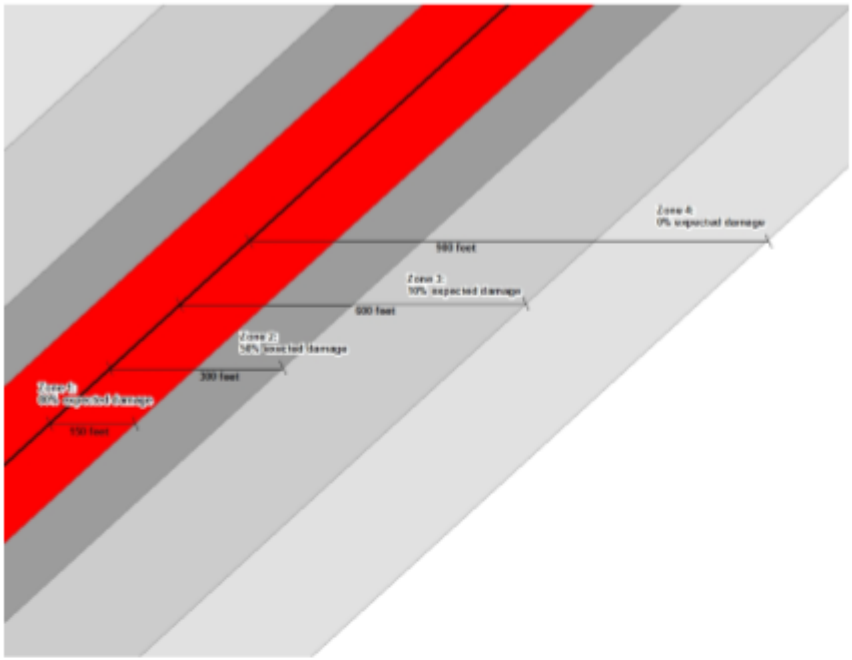

Figure 11: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 12. 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 12: 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%

25

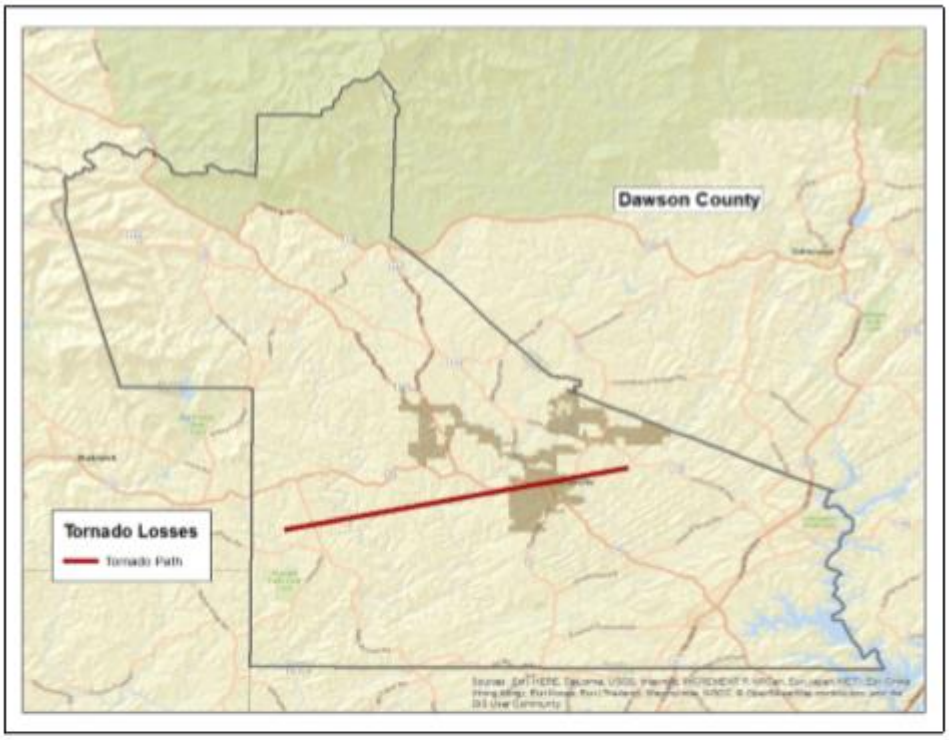

Figure 12: Hypothetical EF3 Tornado Path in Dawson County

26

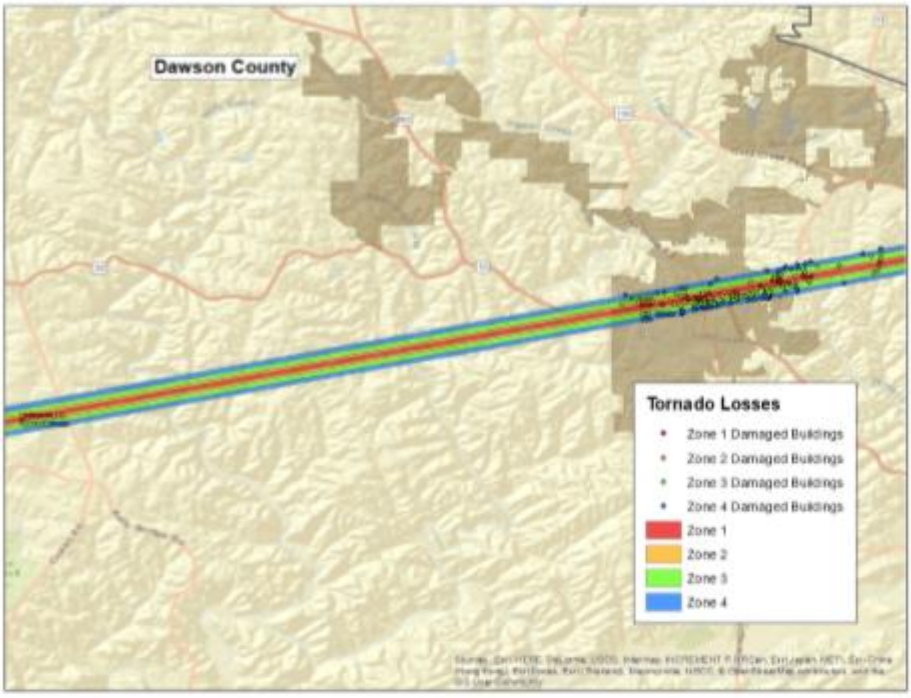

Figure 13: Modeled EF3 Tornado Damage Buffers in Dawson County

EF3 Tornado Building Damages

The analysis estimated that approximately 257 buildings could be damaged, with estimated building losses of $11 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 Dawson 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 13.

27

Table 13: Estimated Building Losses by Occupancy Type

Occupancy	Buildings Damaged	Building Losses
Residential	185	$5,646,199
Commercial	56	$1,427,447
Government	6	$3,309,247
Industrial	7	$66,110
Religious	3	$708,075
Total	257	$11,157,077

EF3 Tornado Essential Facility Damage

There were two essential facilities located in the tornado path – one police station and one care facility. Table 14 outlines the specific facilities and the amount of damage under the scenario.

Table 14: Estimated Essential Facilities Damaged

Facility	Amount of Damage
Dawson County Sheriff's Office/Jail	Major Damage
Dawson County Health Dept.	Minor Damage

28

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

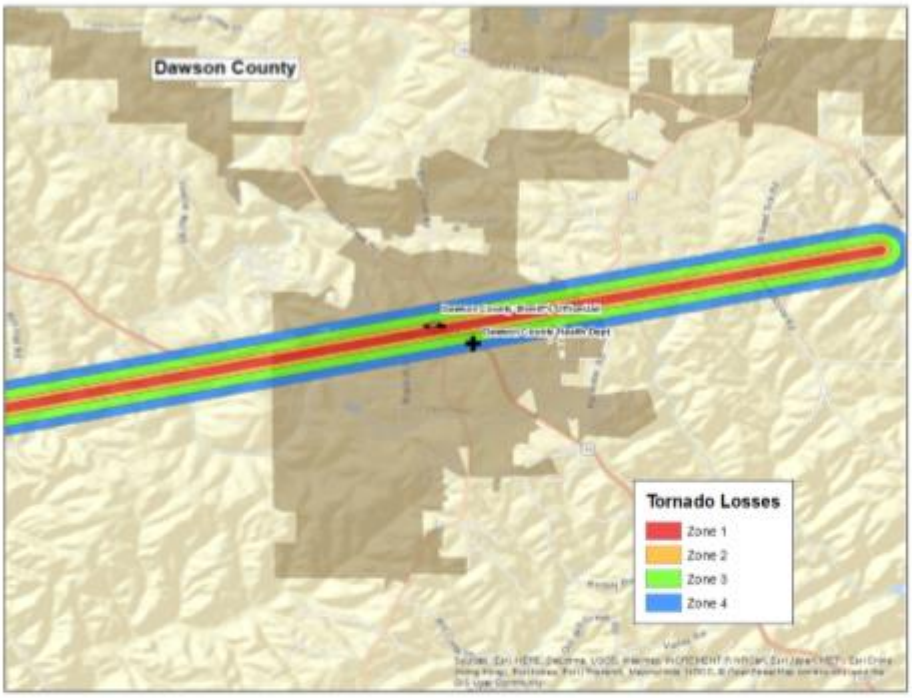

Figure 14: Modeled Essential Facility Damage in Dawson County

29

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Dawson 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 Dawson County.

In addition, Dawson County provided the Carl Vinson Institute of Government updated Critical Facility information in April of 2017. Table 15 summarizes the difference between the original Hazus-MH default data and the updated data for Dawson County.

Table 15: Essential Facility Updates

Site Class	Feature Class	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
EF	Care	$0	0	$1,877,000	3
EF	EOC	$880,000	1	$880,000	1
EF	Fire	N/A	6	$1,817,000	7
EF	Police	$1,232,000	1	$708,000	1
EF	School	$51,019,000	6	48,022,000	7

County Inventory Changes

The GBS records for Dawson County were replaced with data derived from parcel and property assessment data obtained from Dawson County. The county provided property assessment data was current as of November 2015 and the parcel data current as of September 2015.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Dawson 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.

30

The match between parcel records and assessor records was based upon a common Parcel ID. The Parcel-Assessor hit rate for Dawson County was 84.3%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 16 outlines the adjustments made to Dawson County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	448	5%
Construction Unknown	539	6%
Condition Unknown	217	2%
Foundation Unknown	530	6%
Year Built Unknown	65	1%
Total Buildings	9,568	4%

Approximately 4% 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 Dawson 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 17: User Defined Facility Exposure

Class	Hazus-MH Feature	Counts	Exposure
BI	Building Exposure	9,555	$1,638,653,103
Riverine UDF	Structures Inside 1% Annual Chance Riverine Flood Area	158	$23,661,618

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

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Dawson County Hazard Mitigation Plan Update

Overview

- 45 Participants in the planning process
  - Over 20 local and state agencies, private entities, and non-profit organizations
- Six meetings
- Committee-driven Process

Meetings

- August 10, 2017 – Kick-Off Meeting with GEMA
- September 21, 2017 – Hazard Identification and Prioritization; Risk Assessment Analysis
- October 19, 2017 – Analysis of Hazard Profile Research; Review and Edit of Current Hazard Mitigation Strategies
- November 16, 2017 – Identification of New Hazard Mitigation Strategies
- January 18, 2018– Presentation of Rough Draft
- February 15, 2018 – Review and Edit of Final Draft (Public Meeting)

Plan Layout

- Chapter One: Introduction
  - Scope and Purpose, Committee Members, Federal and State Mitigation guidelines, etc.
- Chapter Two: Dawson County Profile
  - Past Hazards and Events, Demographics, Economy, Climate, NFIP Compliance Information

Plan Layout (cont.)

- Chapter Three: Hazard Profiles

Natural Hazards	Technological Hazards
Thunderstorms	Hazardous Materials Incident
Winter Storms	Dam Failure
Flooding	Transportation Incident *
Tornado	Terrorism *
Drought	Emergency Infectious Diseases *
Wildfire	Communications Failure *
Earthquake	
Tropical Cyclone *	* - *Hazard was not included in previous plan*

Plan Layout

- Chapter Four: Hazard Mitigation Strategies
  - Updates of previous strategies and identification of new strategies for natural and technological hazards
- Chapter Five: Plan Implementation and Maintenance
  - Evaluation, Peer Review, Plan Update timelines, and Conclusion

The Process

- Plan sent to GEMA for their Review and Approval in May
  - **GEMA is supposed to have the plan reviewed in 30 business days*
- After GEMA has approved the plan, it will be sent for FEMA's Review and Approval (Up to 45 business days)
  - **GEMA/FEMA Approval processes can take from two weeks to six months depending on their work load*

Up Next . . .

- Adoption of the Plan by Dawson County and City of Dawsonville
- GEMA Approval
- FEMA Approval
- Financial Closeout Paperwork
- Grant Close Out

Summary

- The Plan is currently at GEMA for Review and Approval and will be submitted to FEMA after GEMA completes their process
- Dawson County is nearing the finish line for this project!

Backup material for agenda item:

2. Presentation of Request to Apply for Georgia Firefighter Standards and Training Council Fireworks Tax Grant- Emergency Services Director Danny Thompson

DAWSON COUNTY BOARD OF COMMISSIONERS
AGENDA FORM

Department: **Emergency Services** Work Session: **08.09.18**

Prepared By: **Danny Thompson** Voting Session: **08.16.18**

Presenter: **Danny Thompson** Public Hearing: Yes _____ No **X**

Agenda Item Title: **Fireworks Tax Grants**

Background Information:

The Georgia Fireworks Tax Monies Grant is to provide Georgia fire departments, with current certificates of compliance, funding to maintain compliance or to improve the ISO ratings. These grants are funded through monies collected from taxes levied on the sale of fireworks in Georgia.

Current Information:

This grant is a 10% match grant that goes to Georgia Firefighter Standards and Training Council. It is to be used for equipment-related items for fire departments in Georgia that are in compliance. Dawson County Emergency Services would like to purchase ten sets of firefighter personal protective ensemble (PPE). This will enable us to update some older PPE and provide state-of-the-art PPE. The current cost of a set of PPE is approximately $3,000, with a total request from the grant of $30,000. The 10% match obligation for the county would be $3,000.

Budget Information: Applicable: **X** Not Applicable**:** Budgeted: Yes _____ No **X**

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Approve agenda item

Department Head Authorization: **DT** Date: **7.31.18**

Finance Dept. Authorization: Vickie Neikirk Date: 8/2/18

County Manager Authorization: DH Date: 8/2/18

County Attorney Authorization: _____ Date: _____

Comments/Attachments:

Request to move needed monies from contingency.

Backup material for agenda item:

3. Presentation of Options for the County's Multi-Functional Printers- Purchasing Manager Melissa Hawk

DAWSON COUNTY BOARD OF COMMISSIONERS
AGENDA FORM

Department: Multiple

Work Session: 08/09/2018

Prepared By: Melissa Hawk

Voting Session: 08/16/2018

Presenter: Melissa Hawk

Public Hearing: Yes x No _____

Agenda Item Title: Multi-functional Printers Presentation

Background Information:

In 2011, the county contracted with Standard Office Systems for the purchase and service/maintenance of 30 copiers. Contract's five (5)-year term expired December 31, 2017, with one (1) extension that expires on December 31, 2018.

Current Information:

Extensive research shows the GA DOAS Statewide Contract is the best avenue for replacements, cost per copy, supplies and service/maintenance for the county. BOC will need to approve one of the following options: replace all copiers, replace only those recommended or replace only those requested to be replaced and the provider to deliver equipment and services.

Budget Information: Applicable: x Not Applicable: _____ Budgeted: Yes No x

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
TBD	Multiple		TBD			

Recommendation/Motion: To utilize the GA DOAS Statewide MFPs contract for service/maintenance, supplies and cost per copy for county copiers, to determine the option the county will pursue and to choose the provider to deliver equipment and services.

Department Head Authorization: Vickie Neikirk

Date: 7.31.18

Finance Dept. Authorization: _____

Date: _____

County Manager Authorization: DH

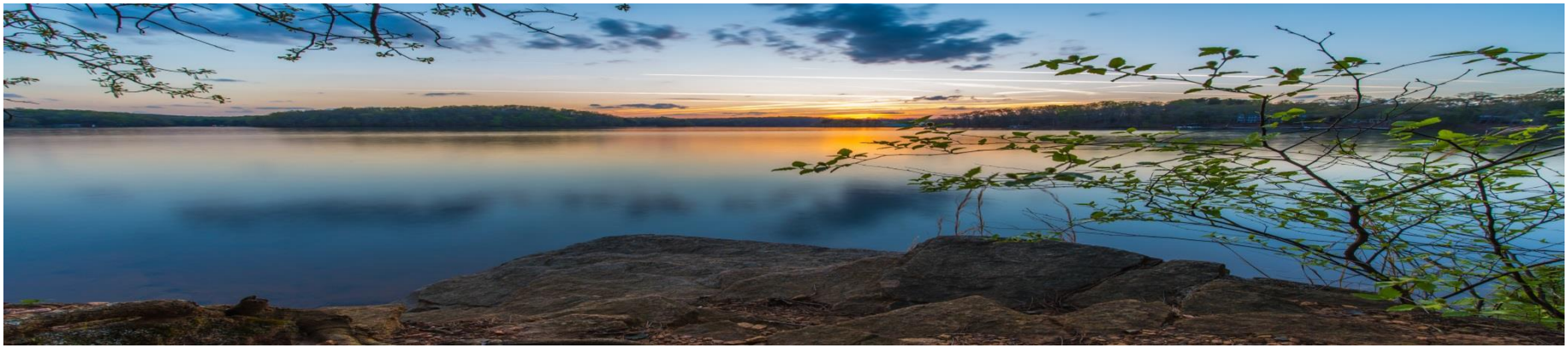
Date: 7/31/2018

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

Presentation



War Hill Park

Photo by: Michelle Wittmer Grabowski

MULTI-FUNCTIONAL PRINTERS

COUNTY BID VS GA STATEWIDE CONTRACT

LEASE VS PURCHASE

WORK SESSION – AUGUST 9, 2018

Background – Current Copier Contract

- The County released a RFP for photocopiers on May 25, 2011 for the following options:
  1. Purchase Option
  2. Lease Option
  3. Split Option (purchase & lease combined)

- An award was made to Standard Office Solutions of Duluth for the purchase of 30 machines over 3 fiscal years with a cost per copy (CPC) including toner/staples and service/maintenance. Some additions and replacements have been made throughout the contract. All County copiers are Canon.

- The current service/maintenance contract exhausted all renewal options in 2017 (effective 01/01/2012 – 12/31/2017).

- The County opted to extend the contract for one fiscal year, at same terms, conditions and pricing. A second extension is not an option for this contract.

Internal Study Approach/Results

- Purchasing reviewed the following avenues for products and services:
  - Georgia DOAS Statewide Contract
  - National Joint Purchasing Association (NJPA) Contract
  - Other County-released IFBs/RFPs Results within the last year

- Results proved the best recourse was to pursue pricing from the DOAS Statewide Contract due to the following:
  - The NJPA contract was for equipment only. This contract does not include CPC or service/maintenance.
  - Other County-released IFBs/RFPs documented:
    - Xerox lease costs were $50.00 to $90.00 more per month than DOAS
    - Xerox CPC costs were approximately $.020 more for color copies
    - Canon lease costs were $39.00 to $41.00 more per month than DOAS
    - Canon CPC costs were approximately $.010 more for color copies

  - No outright purchase contract information found where award was later than 2014.

Internal Study Approach

- The GA DOAS Statewide Contract has agreements with Canon, Ricoh, Sharp, Toshiba and Xerox.
  - Each manufacturer has a list of approved providers assigned to our area.
    - Duplicating Products (Gainesville) is approved by Canon and Ricoh.
    - McGarity Business Products (Gainesville) is approved by Xerox.
    - Standard Office Systems (Duluth) is approved by both Canon and Sharp.
- The contract covers purchases and leases/CPC and service/maintenance agreements with or without supplies.
- Discussions between IT and Purchasing lead to requests for options for Canon and Xerox.

Points of Interest

- Sixteen out of the thirty-four County owned Canon copiers are in immediate need of replacement.
- Superior Court requested an additional copier.
- GA DOAS Printers, MFP and Related Technologies contract is effective through June 30, 2019 with the potential of four (4) annual renewals.
- Any increase in pricing, if any, will be nominal.
- Poll taken from neighboring counties revealed that City of Dawsonville, Dawson County Board of Education, Hall County BOC and Lumpkin County BOC were contracted with Duplicating Products. Conversations with all stated that the service was phenomenal and all were very satisfied with the account representative.
- Xerox authorized provider does not have on-site technicians. If chosen, service would be coordinated from the Xerox Corporation Office in Atlanta.
- Dawson County IT and other departments are very satisfied with the service provided by SOS as well as with our account representative, our current Contractor.

Results Summary

Recommended Copiers Replacement List

The copiers recommended for replacement due to age, total copy count or number of service calls are listed below:

Public Defender's Office
Detention Center 911
Patrol Dept. Administration
Magistrate Court
DA's Office
Tax Assessor's Office
Extension Office
Parks (Rock Creek)
BOC Suite

Drug Court
Detention Center Jail Booking
Clerk of Court, Room 1325
Clerk of Court, Room 1307.2
Planning
County Administration
EMS Station 1
Additional Copier for Superior Court

Results Summary (Continued)

REPLACE ALL COPIERS (34 plus one additional)

Manufacturer & Provider	Equipment Cost	Lease Cost	Extra Maintenance Cost	B/W Copy Service & Maintenance Cost	Color Copy Service & Maintenance Cost	Total Purchase Annual Cost	Total Lease Annual Cost	Total Five Year Purchase Cost	Total Five Year Lease Cost
Standard Office Solution - Canon	$172,621.00	$42,879.60	$0.00	$5,491.62	$4,639.11	$182,751.73	$53,010.33	$223,274.65	$265,051.65
Duplicating Products - Canon	$165,451.00	$41,046.84	$0.00	$5,533.55	$4,731.27	$175,715.82	$51,311.66	$216,775.10	$256,558.30
McGarity Business Products - Xerox	$147,857.00	$37,001.28	$240.00	$6,781.82	$5,683.15	$160,321.97	$49,706.25	$211,381.85	$248,531.25

REPLACE RECOMMENDED AND ADDITIONAL ONE COPIERS (17)

Manufacturer & Provider	Equipment Cost	Lease Cost	Extra Maintenance Cost	B/W Copy Service & Maintenance Cost	Color Copy Service & Maintenance Cost	Total Purchase Annual Cost	Total Lease Annual Cost	Total Five Year Purchase Cost	Total Five Year Lease Cost
Standard Office Solution - Canon	$101,763.00	$25,278.48	$0.00	$5,491.62	$4,639.11	$111,893.73	$35,409.21	$152,416.65	$177,046.05
Duplicating Products - Canon	$94,593.00	$23,445.72	$0.00	$5,533.55	$4,731.27	$104,857.82	$33,710.54	$145,917.10	$168,552.70

Difference between SOS and Duplicating Products is due to the higher costs of service maintenance for new Superior Court Copier: Duplicating Products is $3.97 more monthly for b/w and $7.68 more monthly for color service maintenance.

Staff Recommendation

Staff recommends that the Board utilize the GA DOAS Statewide MFP contract for service/maintenance, supplies and cost per copy for the County copiers AND for the Board to determine whether the County will replace all copiers, only those recommended or the two replacements plus the one additional copier requested during initial budget meetings to allow for costs to be added to the 2019 budget hearings process.

NOTE: The cost will not be known until such time that Board determines which option it will take for equipment and services.

THANK YOU

Backup material for agenda item:

4. Presentation of Red Rider Road Traffic Change Request- Public Works Director David McKee

DAWSON COUNTY BOARD OF COMMISSIONERS
AGENDA FORM

Department: Public Works — Work Session: 8/09/18

Prepared By: D. McKee — Voting Session: 8/16/18

Presenter: David McKee — Public Hearing: Yes _____ No x

Agenda Item Title: Red Rider Road Traffic Change Request

Background Information:

Red Rider Road has become a safety concern. New development along Red Rider Road and commercial development along Whitmire have created an increase in traffic along the roadway. Red Rider Road is very narrow and pavement edges are significantly worn from the heavy thru truck traffic. Current ROW on Red Rider Road is 30' prescriptive. Staff has received several complaints.

Current Information:

Red Rider road does not have sufficient ROW to widen the road to accommodate two traffic lanes. Staff continues to work through resolutions both long and short term for this challenge. Heavy truck traffic, and thru traffic continues to degrade the crumbling roadway. Staff requests to close the road to thru traffic from the intersection of Lumpkin Campground and Red Rider to a point approximately 1300' from the intersection. Long term, staff will work with local property owners on a solution for widening, closing, turn around, and intersection improvements.

Budget Information: Applicable: x Not Applicable: _____ Budgeted: Yes x No _____

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
	Public Works					

Recommendation/Motion: Approve the traffic change request to thru traffic and sign appropriately.

Department Head Authorization: David McKee — Date: 8/1/2018

Finance Dept. Authorization: Vickie Neikirk — Date: 7/18/18

County Manager Authorization: DH — Date: 7/31/2018

County Attorney Authorization: _____ — Date: _____

Comments/Attachments:

All work for the proposed improvements will be performed in house and can be completed with proper signage notice, and will be covered within the limits of my current operating budget.

0 100 200 400 600 800 Feet

1 inch = 100 feet

Red Rider Road

296

Legend

Parcels

County Line

N W E S

Backup material for agenda item:

6. County Manager Report

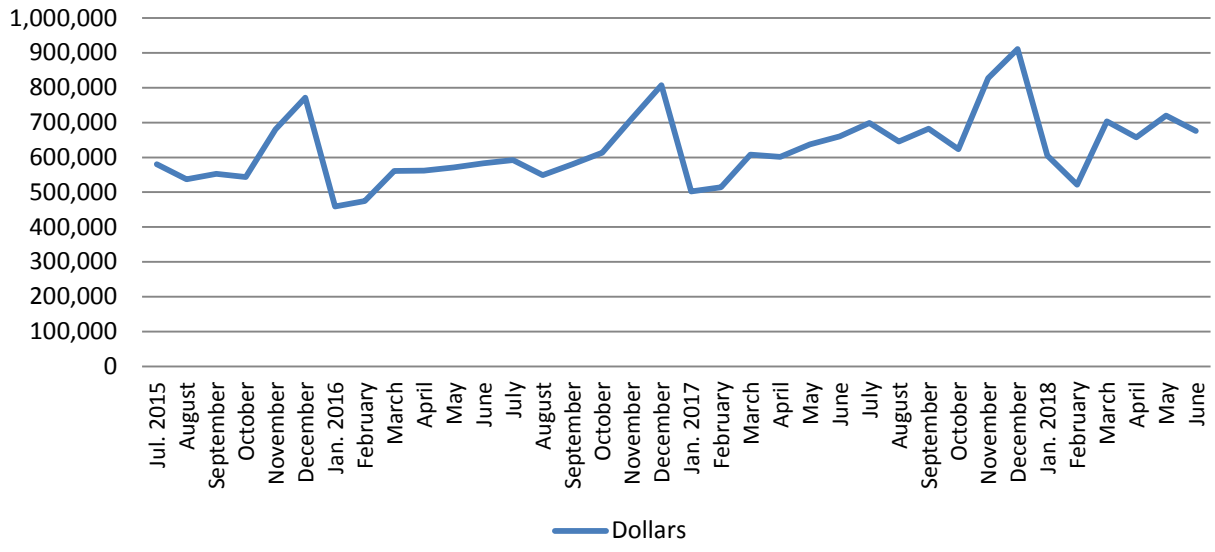
Key Indicator Report

July 2018

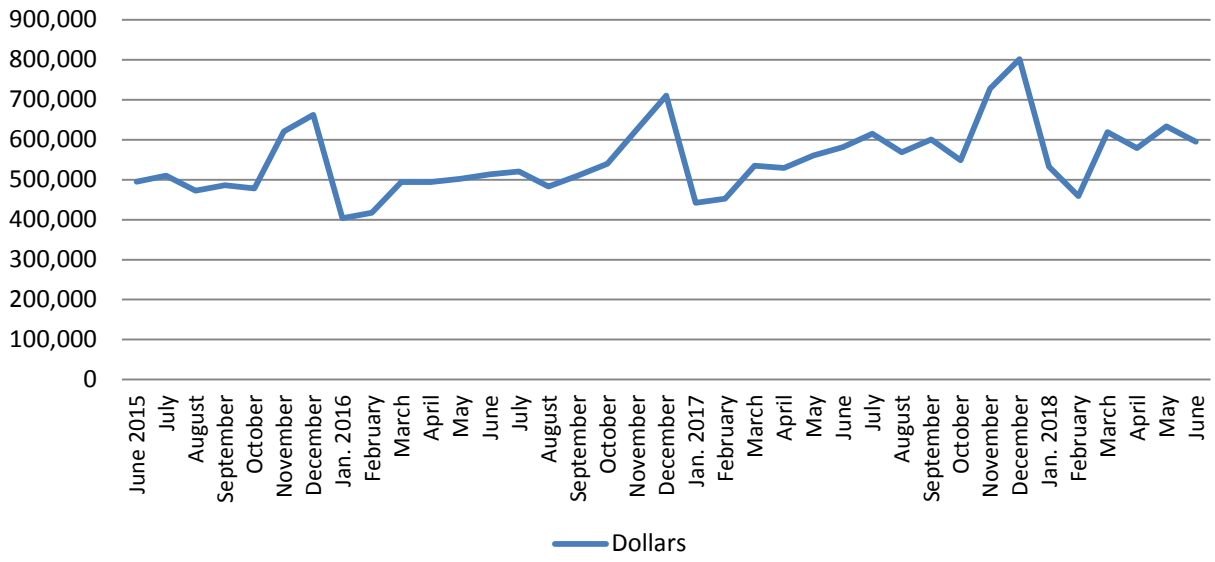
Dawson County Monthly Report Card

July 2018

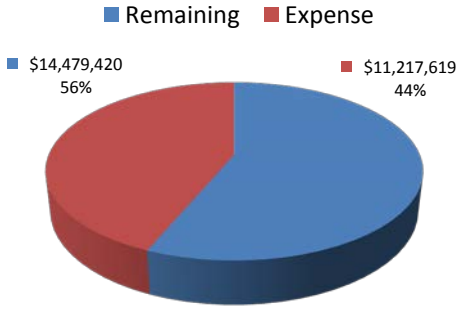
SPLOST VI COLLECTION CHART



LOST COLLECTION CHART

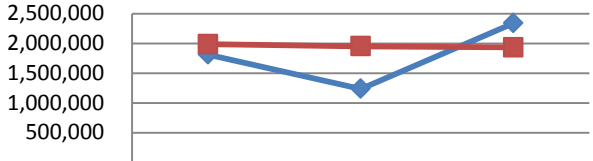


Budget

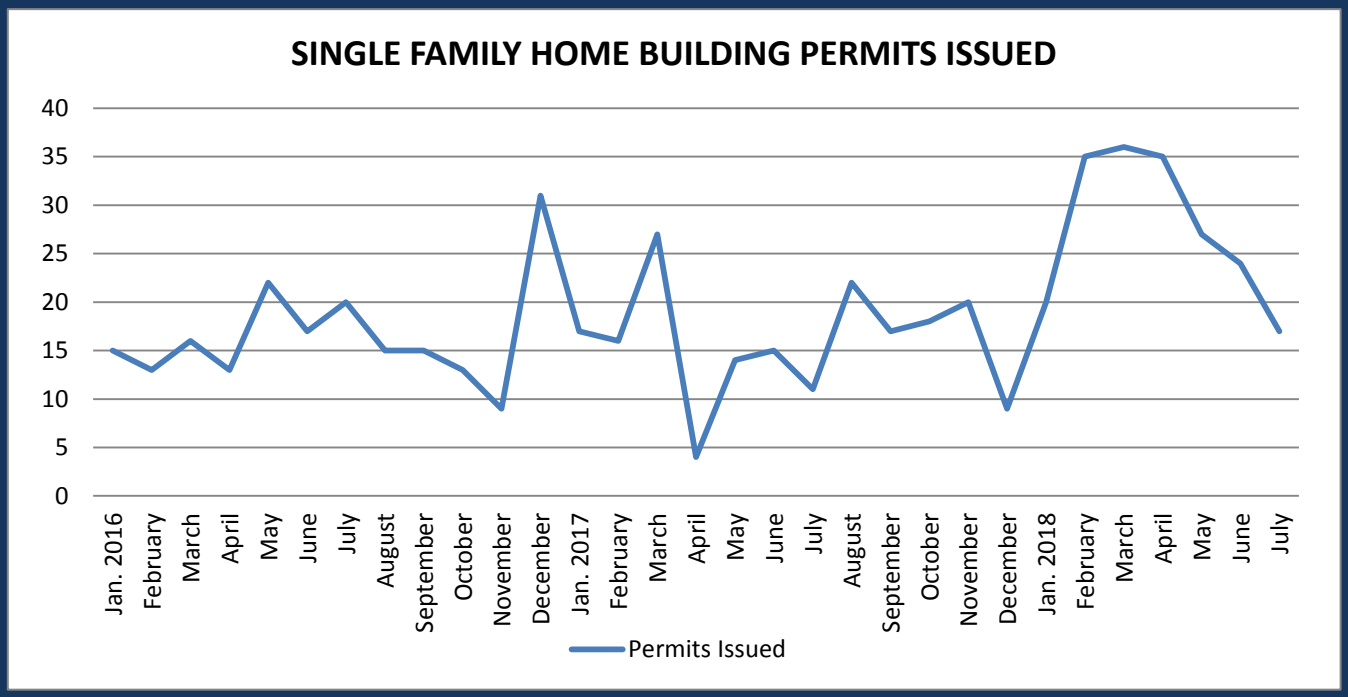


Through 6/30/18

All Revenue Per Month



	April	May	June
2017	1,814,854	1,240,246	2,340,570
2018	1,990,077	1,954,853	1,936,557


SINGLE FAMILY HOME BUILDING PERMITS ISSUED
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30
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May
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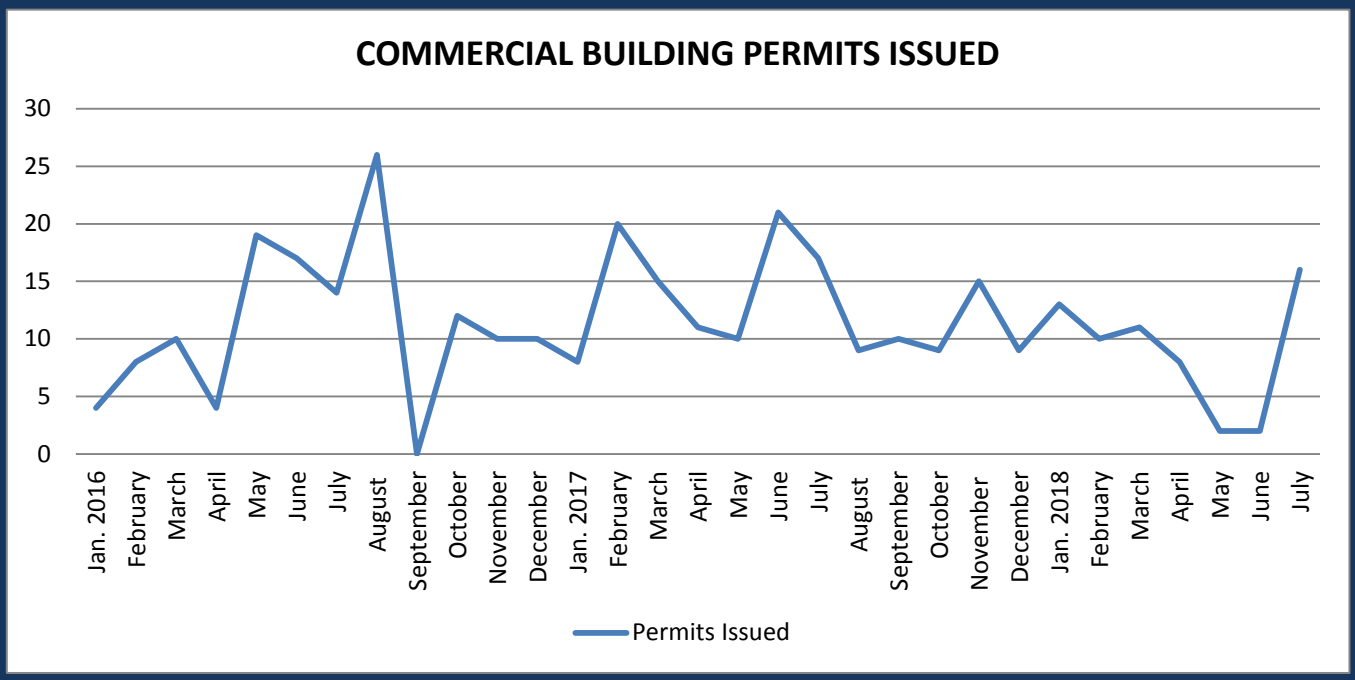
Permits Issued


COMMERCIAL BUILDING PERMITS ISSUED
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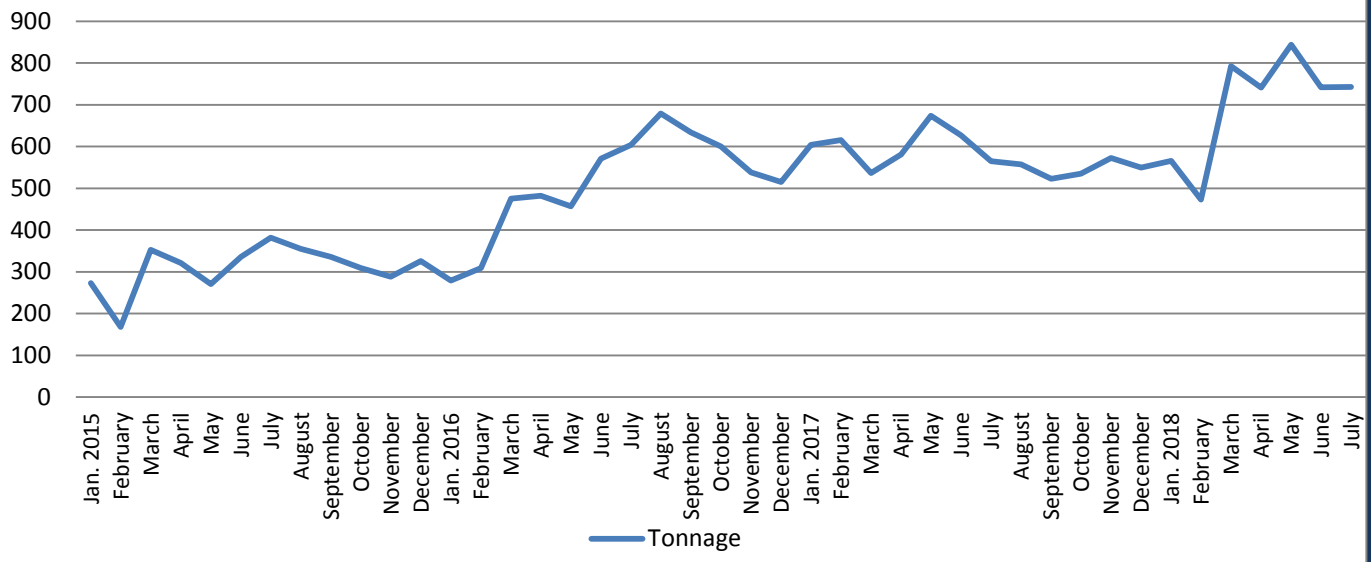
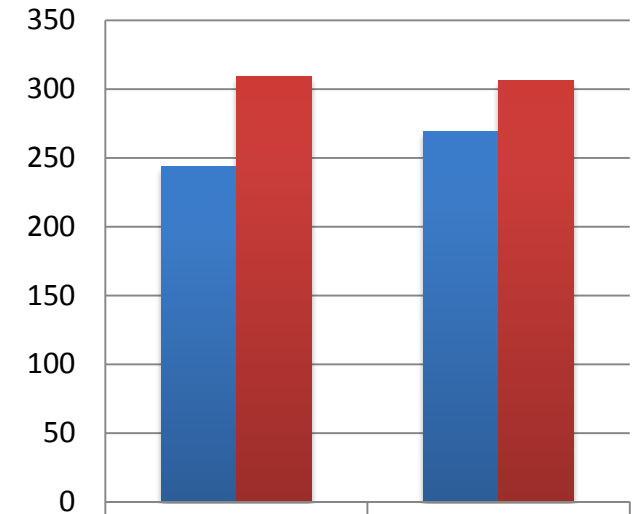
Permits Issued

TRANSFER STATION TONNAGE COLLECTION

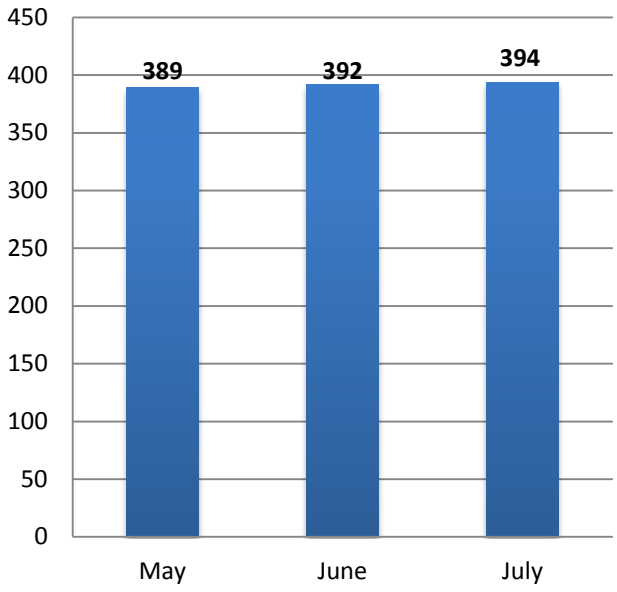


EMS/Fire Calls for Service



	July 2018	July 2017
EMS	244	269
Fire	309	306

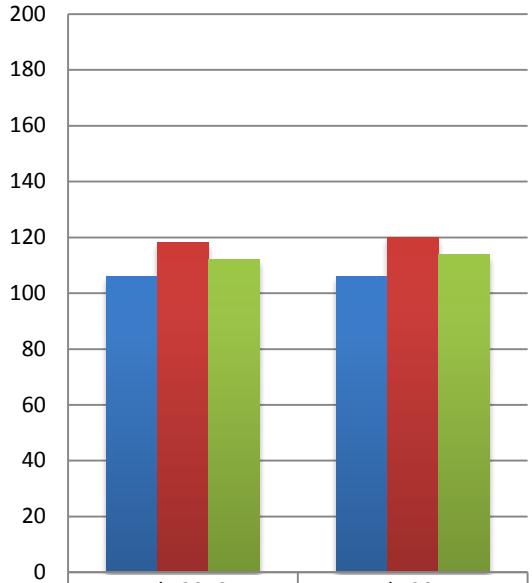
Number of County Employees



Dawson County Monthly Report Card

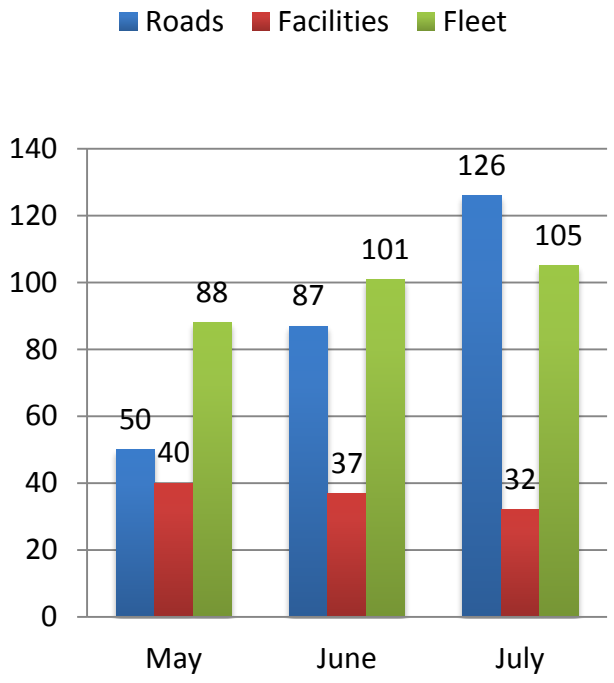
July 2018

Inmate Population



	July 2018	July 2017
Lowest Daily Count	106	106
Highest Daily Count	118	120
Daily Average	112	114

Repair Requests



Dawson County Board of Commissioners

Elections/Registrar Monthly Report – July 2018

- **New Applications/Transfers In: 107** (New Voters; other apps are held until Runoff certification)
- **Changes/Duplicates: 1594** (Increased changes = credit for Day of Election voting)
- **Cancelled/Transferred Out: 15** (No cancelled or transferred out until Runoff certification)
- **Total Processed: 1716**

HIGHLIGHTS

Voter Registration Projects:

- Pre and post Express Poll Advance Voting & Election Day preparation & finalization.
- Absentee ballot by mail daily requests & processing.
- Daily updates; voter registration scanning, records retention.

Elections Projects:

- General Primary Election – May 22, 2018 20% turnout
- General Primary Runoff – July 24, 2018 18.22% turnout
- General Election – November 6, 2018
  - Voter Registration Cutoff: October 9, 2018 ~ Federal (only if Runoff) December 10, 2018
  - Advance Voting: October 15 – November 2, 2018 ~ M-F 8am – 5pm
    Saturday voting October 27, 2018 , 9am-4pm

- November task list is being worked daily.
- Ballot information has been forwarded for November 6, 2018 General Election ballot build.

Highlights of plans for upcoming month:

- Finalize July Primary Runoff election certification tasks.
- November General Election pre-election preparation.
- Department Budget Presentation.

Dawson County Board of Commissioners

Dawson County Emergency Services Monthly Report – July 2018

Fire Responses:	May	June	July
2016	259	256	287
2017	263	279	306
2018	307	305	309

EMS Responses:	May	June	July
2016	259	194	216
2017	215	229	269
2018	251	255	244

EMS Revenue:

June 2017 - $ 54,152.32
June 2018 - $ 47,969.60

- 11.4% Decrease

Plan Review and Inspection Revenue Total: $

- County: $ 2,200.00
- City: $ 500.00

Business Inspections Total:

- County Final Inspection: 5
- City Final Inspection: 5
- County Annual Inspections/County Follow up: 7
- City Annual Inspections/City Follow up: 4

HIGHLIGHTS

Dawson County Emergency Services Projects:

- Training hours completed by staff: 1,097 hours
- PR Details: 2
- Smoke detector installations: 0
- Search and Rescue: 1
- Fire investigation: 2
- Individuals trained in CPR: 8
- Individuals trained in Stop the Bleed: 0
- Child Safety Seat Installations: 2
- Total water usage: 128,875 gallons
- EWSA: 53,850 gallons
- City: 75,000 gallons
- Pickens: 0 gallons
- Big Canoe: 25 gallons
- Fires: 14 total
    - Building – 6
    - Structures other than Building - 1
    - Brush/Grass – 3
    - Vehicle – 2
    - Road Freight/Transport Vehicle - 0
    - Outside Rubbish – 2
    - Trash/Waste – 0
    - Dumpster - 0

Dawson County Board of Commissioners

Facilities Monthly Report – July 2018

- **Total Work Orders: Thirty two (32)**
- **Community Service Workers: (0)**

HIGHLIGHTS:

*Preventative Maintenance preformed on HVAC units @Government Center
*Checked all back flow valves @ Government
*Removed 7 large trees that fell during 7/24 storm @ War Hill Park
*Met with Architect/Contractor for Public Works Building
*Met with Splost Coordinator on upcoming projects
*Painted Railing on front of Government Center-second floor area
*Worked on 2019 budget for Parks and Rec
*Tennis Courts resurfaced @ Rock Creek
*Met with new pool cleaning company for Veterans Memorial Park

DAWSON COUNTY, GA
Where Quality of Life Matters

MONTHLY REPORT

For Period Covering the Month of July 2018

SN	TASKS/ WORK DONE	LOCATION/S of Service
1	Repaired outside lights	Library
2	Repaired AC unit	Library
3	Installed 30 AMP breaker for Host	War Hill Park
4	Repaired windows	Historical Jail
5	Cleaned floors	Historical Jail
6	Weeded flower beds (in front)	Government Center
7	Working on fixing issues	Historical Jail
8	Met with Architect/Contractor new Public Works Building	Public Works Building
9	Met with Splost Coordinator on upcoming projects	
10	Repaired water leak	Adult Learning Center
11	Painted railing outside on second floor (in front)	Government Center
12	Repaired lights in fire escape stairwell	Government Center
13	Washed all county trucks (Facilities/IT)	Facilities
14	Removed 7 large trees due to 7/21/18 storm	War Hill Park
15	Installed temporary a/c for voting 7/24/18	Fire Station #6
16	Replaced sliding window	Environmental Health
17	Preventative Maintenance on HVAC preformed	Government Center
18	Checked all back flow valves	Government Center
19		
20		
21		
22		
23		
24		
25		
26	Total Work Orders for the month = (32)	Facilities
27	Total Community Service for the month = (0)	Facilities

<u>These numbers do not reflect daily/ weekly routine duties to include:</u>

Cutting of grass and landscape maintenance on all county properties

Cutting of grass and landscape maintenance on all five (5) parks on the west side of county

Cleaning of the new government center and other county owned buildings, offices and facilities

Emptying outside trash receptacles at county owned buildings

Collecting and recycling of all county buildings, offices and facilities

Noted By: _____

JAMES TOLBERT, Facilities Director

Dawson County Board of Commissioners

Finance Monthly Report – July 2018

FINANCE HIGHLIGHTS

- **LOST Collections:** $594,658 – up 2.31% compared to 2017
- **SPLOST Collections:** $675,757 – up 2.31% compared to 2017; 23.98% over projections for June 2018; Total SPLOST VI collections: $22,528,685
    - $574.393– County Portion (85%)
    - $101.364 – City Portion (15%)
- **TAVT:** $105,578 – down 11.8% compared to 2017
- **See attached Revenue and Expenditure Comparison**
- **Total County Debt:** $4,225,945 (See attached Debt Summary)
- **Audit Status:** The 2017 audit is complete.
- **EMS Billing Collections:** Reports not yet available
- **Budget Status:** Budget hearings are being held August 6 – 16.
- **Monthly Donations/Budget Increases:** $100,071
    - Budget Increases for 2 new SROs and School Traffic Management - $90,071
    - Developer Contribution for 400 Center Lane - $10,000

PURCHASING HIGHLIGHTS

Formal Solicitations

- Fire Suppression Water Tank – Fire
- Inmate Food Service – Sheriff's Office

Informal Solicitations

- 2018 Dodge Charger Upfitting – Sheriff's Office
- Christmas Décor (Material/Labor) - Facilities

Quotes for less than $25,000 this month

- Gasoline – Fuel Center
- Diesel – Fuel Center
- Repairs to Patrol Vehicle – Fleet
- Storage Building – Park & Rec
- Youth/Adult Baseball, Softball & T-Ball Uniforms – Park & Rec

Purchases for less than $25,000 that did not get required quotes this month

- None

Pending Projects

- Dump Work Truck – Public Works
- Other 2018 Projects

Work in Progress

- Vehicles – Sheriff's Office
- Natural Gas Service - Facilities
- Hazard Mitigation Plan Update – Fire
- Property Revaluation & Equalization Project – Tax Assessor
- Design of Senior Center Expansion – Senior Svcs
- Replace 4 Gas Units – Detention Center

Future Bids

- New Senior Services Center Construction
- Fire Station 9 Construction
- Other 2018 Bids

Future Bids – SPLOST VI

- Pothole Patching Machine – Roads
- Water Filtration System for DCGC & DCSO – Facilities
- 2018 SPLOST Projects

Purchases for more than $25,000 that did not get required sealed bids this month

- None

Budget to Actual

	Actual at 6/30/2018	Percent of Budget Actually Collected/ Expended	2018 BOC (2) Approved Budget	Over(Under) Approved Budget	Percentage Over(Under) Approved Budget
Revenue	$ 10,675,069	41.54%	$ 25,697,039	$ (15,021,970)	-58.46%
Expenditures	11,217,619	43.65%	25,697,039	(14,479,420)	-56.35%
	$ (542,551)	-2.11%	$ -	$ (542,551)	-2.11%

***NOTE:** Adjustments will be made during the year-end close out. The actual revenue and expenditure totals are subject to change pending normal year-end adjustments such as accruals and results of the audit.

(1) Reporting actuals as of 6/30/2018 because revenue collections are 30 days behind. The LOST revenues for the month of June were received in July.

(2) Change in total budget due to account adjustments:

$ 25,516,312	Original Budget
$ 54,638	Donation Carryover Balances
$ 5,518	January
$ 4,634	February
$ 8,938	March
$ 106,999	April
$ 4,433	May
$ 100,071	June
$ 25,697,039	Revised Budget

Dawson County Board of Commissioners

Fleet Maintenance and Fuel Center Monthly Report – July 2018

FLEET

- **Preventative Maintenance Performed: 35**
- **Tires Mounted: 29**
- **Repair Orders Completed: 105**
- **Labor Hours: 247.20**
- **Labor Cost Savings: $10,634.54**
- (Comparison of the Fleet Maintenance rate of $43.02 per labor hour to outsourced vendors rate of $80.00 per labor hour)
- **Parts Cost Savings: $ 3,182.84**
  (Comparison of Dawson County's parts discounts to outsourced markup; average 20%)
- **Total Cost Savings for July: $ 13,817.38**

FUEL CENTER

- **Average fuel center price per gallon:**
  Gasoline: $ 2.30
  Diesel: $ 2.52

Fuel Center Usage - Dawson County and Board of Education

Gasoline: 10,898.09 gallons; 833 transactions
Diesel: 4,245.00 gallons; 127 transactions

- **Fuel Center Usage - Etowah Water and City of Dawsonville**
  Gasoline: 1,393.05 gallons; 66 transactions
  Diesel: 472.07 gallons; 16 transactions
- **Revenue from Etowah Water and City of Dawsonville: $ 93.31**

HIGHLIGHTS

- We are moving forward with the Fleet building and are looking forward to the finish product.
- All 2019 Budget Reports are completed and turned in.

Dawson County Board of Commissioners

Human Resources Department Monthly Report – July 2018

POSITION CONTROL

- Positions approved by BOC: 460
- # of filled F/R Positions: 274
- # of filled F/T Positions: 0
- # of filled Grant Funded Positions: 16
- # of filled P/R Positions: 39
- # of filled P/T Seasonal Positions: 11
- # of Supplemental Positions: 54
- # of Vacant Positions: 39
- #of Frozen Positions: 27
- % of Budgeted/Actual Positions: 86%

ADDITIONAL INFORMATION

FMLA/LOA tracking: 7
WC and/or P & L Claims filed: 7
Unemployment Claims received: 1
Performance Evaluations received: 9

HIGHLIGHTS

Positions Advertised/ Posted: 4

- Finance- Payroll & Revenue Technician
- Public Works- Operator I
- Public Works- Project Manager
- Public Works- Transfer Station Refuse Hauler

Applications Received: 31

New Hires added into system: 10

- Robert Richards- Emergency Services
- Matthew Payne- Parks & Rec.
- Adam Outz- Public Works
- Bryan Cantrell (Rehire)- Sheriff's Office
- Jared Hardigree- Sheriff's Office
- Elizabeth Huey- Sheriff's Office
- Anna Seabolt- Sheriff's Office
- Bailey Vaughn- Sheriff's Office
- Heather Parker- Tax Commissioner's Office
- Stanton Rogers- Parks & Rec.

Terminations Processed: 7

- Brandon Carey- Emergency Services
- Michael Payne- Emergency Services
- Eric Watkins- Emergency Services
- Robbie Irvin- Planning & Development
- James Warr- Public Works
- Casey Creel- Sheriff's Office
- Morgan Voyles- Sheriff's Office

Additional Highlights for July

- Updated County Exposure Schedules for ACCG
- Processed all changes from Open Enrollment
- Completed U.S. Census Bureau- Health Insurance Cost Study
- Revised and implemented new Employee Evaluation Form

Dawson County Board of Commissioners

Information Technology – July 2018

- **Calls for Service: 166**
- **Service Calls Completed: 166**

Highlights

- Replaced Tax Commissioner computers and peripherals with help of facilities
- Replaced point to point wireless devices at Veterans park

Dawson County Board of Commissioners

Code Enforcement/Animal Control Monthly Report – July 2018

- **Alcohol License Establishment Inspections: 0**
- **Alcohol Pouring Permits Issued: 37**
- **Animal Control Calls Handled: 92**
- **Animal Bites to Human investigated: 6**
    - **0 Quarantined –**
- **Animals Taken to DC Humane Society: 53**
- **Dangerous Dog Classification: 0**
- **Citations Issued: 0**
- **Code Enf. Complaint Calls/In Field Visits: 61 calls / 42 field visits**
- **After hour calls: 5**
- **Erosion Site Visits: 25**
- **E-911 Addresses Issued: 0**
- **Non-conforming Signs Removed: 4**

Dawson County Board of Commissioners

Planning and Development Monthly Report – July 2018

- **Total Building permits Issued**
    - July 2018: 93
    - YTD 2018: 429
    - Single Family New Homes: 17
    - Commercial Buildings: 16
- **Business Licenses Issued:**
    - July 2018: 152
    - YTD 2018: 1251
- **Total Building Inspections Completed:**
    - July 2018: 592
    - YTD 2018: 3589
- **Variances/Zonings Processed:**
    - July 2018: 1
    - YTD 2018: 12
- **Plats Reviewed:**
    - July 2018: 9
    - YTD 2018: 94
- **Total Civil Plan Review Meetings: 2**
- **Total Building Plan Review Meetings: 10**

Dawson County Board of Commissioners

Parks and Recreation Monthly Report – July 2018

- **Youth Sports Participants**
    - July 2018: 1,191 - up 17% compared to same month last year.
    - YTD 2018: 9,023 - up 2.7% compared to last year
- **Facility Rentals/Bookings/Scheduled Uses:**
    - July 2018: 4,009 - up 2.5% compared to same month last year
    - YTD 2018: 14,418 - up 7.8% compared to last year
- **Adult and Youth Wellness and Specialty Program Participation:**
    - July 2018: 629 - up 403% compared to same month last year
    - YTD 2018: 13,904 - up 25.2% compared to last year
- **Total Customers Served:**
    - July 2018: 5,829 - up 15.3% compared to same month last year
    - YTD 2018: 37,343 - up 12.2% compared to last year

**The 2017 total was calculated by the number of registered participants, rather than the number of participants per date. The 2018 total was calculated by the number of participants per date.*

HIGHLIGHTS

Park Special Events:

- Kona Ice visits at Rock Creek ended on July 17th
    - Smile Doctors by Wilson Orthodontics sponsored 166 snow cones for camp participants

Park Projects:

- Tennis courts at Rock Creek were repaired and repainted on July 27th
- Pool pump quit and is being replaced.
- New elliptical was installed in the Weight Room at Rock Creek.

Athletic and Program Summary:

- Additional specialty programs for the month included swim lessons, dance classes, volleyball camp, cheer camp, adult boot camp, senior SilverSplash, adult Tai Chi, adult Water Aerobics and adult Yoga.
- Travel Team registration was July 1-15

    - 7 teams (baseball & softball) were awarded field space by July 31st in preparation for August 1st start date.
- SilverSplash began July 2nd at Veterans Memorial Park pool.
- Swim lessons ended July 6th.
- Football & Cheerleading practices began July 16.
- The final summer camp for the year ended July 18th.
- The school system's Summer Feeding Program ended July 20th.
- Online registration for fall baseball, softball, t-ball continued online all month. Walk-in registration at Rock Creek began July 30th.
- DCPR Racers swim team finished up for the season on July 31st.
- Late registration for UFA Fall Soccer continued throughout the month.
- Water Aerobics Session 2 got cancelled a few times due to weather and pool pump issues and is carrying over into August.
- Silver Splash continues at the pool.

On the Horizon:

- Beginner Tennis Apprentice begins August 2nd.
- Fall baseball, softball, t-ball registration ends August 6th.
- Beginner Tai Chi classes begin August 6th.
- Water Aerobics Session 3 begins August 7th.
- Movies in the Park #2 is August 10th at Veterans Memorial Park.
- New dance season at Rock Creek begins August 13th.
- Fall baseball, softball, t-ball evaluations/drafts are August 17-23.
- Football games begin August 25th.
- Fall baseball, softball, t-ball practices begin August 25th.
- Pool remains open on weekends only through Labor Day.
- Pool at Veterans and Splash Pad at Rock Creek close after Labor Day.
- Winter Sports online registration begins September 10th.
- Fall baseball, softball, t-ball games begin September 15th.

MONTHLY REPORT

For Period Covering the Month of July 2018

SN	TASKS/ WORK DONE	LOCATION/S of Service
	PARKS and REC	
1	Repaired golf cart	War Hill Park
2	Cut grass	Rock Creek
3	Worked on budget and splost	Parks
4	Looking for someone to clean pool	Veterans
5	Met with pool company 7/6/18	Veterans
6	Went to War Hill to check on little boy that accidentally fell into	
	fire pit (Camp site # 9 7/5/18 @ 5 pm	War Hill Park
7	Had pool cleaned 7/8/18	Veterans
8	Had tennis court resurfaced	Rock Creek

Dawson County Board of Commissioners

Public Works Monthly Report –July 2018

ROADS:

- Work Orders: 126
- Mowing: 112.25 road miles
- Limbing: 7.8 road miles
- Gravel: 3,879 tons
- Added calcium chloride to 14 miles of gravel roads.
- LMIG repaving work is 75% completed.

ENGINEERING/GIS:

- Assisted Other Departments with GIS needs
- Assisted pubic with maps and GIS requests
- Completed and Submitted 2020 Census
- Attended Georgia Floodplain Management Conference
- Continued working Culvert analysis
- North Georgia Intern started-started culvert analysis in the field

TRANSFER STATION:

- Solid Waste: 742.9 Tons
- Recycling: 23.11 Tons
- Recycling scrap metal: 3.04 Tons

Dawson County Board of Commissioners

Dawson County Senior Services Monthly Report – July 2018

SENIOR CENTER

- **Home Delivered Meals Served**
  - July 2018: 1,512 up 19% compared to same month last year
  - YTD 2018: 9,822 up 5% compared to last year
- **Congregate Meals Served**
  - July 2018: 585 up 11% compared to same month last year
  - YTD 2018: 3,771 down 6% compared to last year
- **Physical Activity Participation**(Tai Chi, Silver Sneakers, individual fitness)
  - July 2018: 605 up 4% compared to same month last year
  - YTD 2018: 3,638 up 6% compared to last year
- **Lifestyle Management Participation**(art, bridge, bingo, awareness, prevention**)**
  - July 2018: 316 up 40% compared to same month last year
  - YTD 2018: 2,006 up 14% compared to last year

TRANSIT

- **DOT Trips Provided**
  - July 2018: 438 up 48% compared to same month last year
  - YTD 2018: 2,135 up 21% compared to last year
- **Senior Trips Provided**
  - July 2018: 733 down 4% compared to same month last year
  - YTD 2018: 5,768 up 20% compared to last year
- **# of Miles**
  - July 2018: 8,093 up 9% compared to same month last year
  - YTD 2018: 54,649 up 6% compared to last year
- **Gallons of Fuel**
  - July 2018: 966 up 11% compared to same month last year
  - YTD 2018: 6,460 no change compared to last year

HIGHLIGHTS

July Meetings & Events:

- July 2– Senior Center Clients enjoyed a trip to Jaemore Farms for fresh fruit and vegetables.
- July 2 – Community Development Block Grant turned in for review.
- July 3 – Independence Day Cookout
- July 16, 17: Lee Adkins, Transit Coordinator attended GDOT Training in Macon.
- July 24: Dawn Pruett, Director attended quarterly meeting in Oakwood at Legacy Link.
- July 25: Legacy Link hosted Farmer's Market for Home Delivery Clients at the center.

Special Dates Coming Soon:

- August 6,13,20,27: Bingo
- August 1: Dollar General
- August 15: UNG Planetarium Trip
- August 28: Nutrition Education with Michelle
- August 21: USDA Home Repairs
- August 8, 22: Wal-Mart
- August 21: Legacy Link Farmer's Market (Center Clients)
- August 7: Health Education with Dedri
- August 24: Assistance Technology Lab by Legacy Link
- August 14: Today's Seniors with Dawn & Krista
- August 14: Dollar Tree
- August: Silver Sneakers
- August: Sit and Stretch and Tai Chi
- August: Bible Study
- August: Special Music, Art, and Yoga

Backup material for agenda item:

1. 2018 Millage Rate and Property Tax *(2nd of 3 hearings. 1st hearing was held August 2, 2018. 3rd hearing will be held at 6 p.m. August 16, 2018.)*

DAWSON COUNTY BOARD OF COMMISSIONERS
AGENDA FORM

Department: Finance

WorkSession:

Prepared By: Vickie Neikirk

Voting Session: 8.2.18

Presenter: Chairman Billy Thurmond

Public Hearing: YesXX No _____

Agenda Item Title: First (of 3) Public Hearings for setting the County government millage rate for Tax year 2018

Background Information:

First required millage rate hearing for 2018 tax digest. Because of growth in the tax digest due to reevaluation, the rollback rate would be 7.393. The proposed millage rate of 8.138 is the same rate as the last 10 years. There will be 3 public hearings.

Current Information:

The Board of Commissioners is responsible for setting the millage rate for the County Government. The next 2 hearings will be Aug 9, at 4 pm and Aug 16 at 6 pm

Budget Information: Applicable:__ Not Applicable: _____ Budgeted: Yes No _____

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
100						

Recommendation/Motion:

Department Head Authorization: _____ Date: _____

Finance Dept. Authorization: Vickie Neikirk Date: 7.24.18

County Manager Authorization: [signature] Date: 7/26/18

County Attorney Authorization: _____ Date: _____

Comments/Attachments:

NOTICE OF PROPERTY TAX INCREASE

The **Dawson County Board of Commissioners** has tentatively adopted a millage rate which will require an increase in property taxes by **10.08** percent.

All concerned citizens are invited to the public hearing on this tax increase to be held in the Commissioners Meeting Room at the Dawson County Courthouse/Administration Building located at 25 Justice Way, Dawsonville, Georgia on **August 2, 2018 at 6:00 pm.**

Times and places of additional public hearings on this tax increase will be held in the Commissioners Meeting Room at the Dawson County Courthouse/Administration Building located at 25 Justice Way, Dawsonville, Georgia on **August 9, 2018 at 4:00 pm, and August 16, 2018 at 6:00 pm.**

The tentative increase will result in a millage rate of **8.138 mills**, an increase of **0.745 mills**. Without this tentative tax increase, the millage rate will be no more than **7.393 mills**. The proposed tax increase for a home with a fair market value of **$250,000** is approximately **$74.50** and the proposed tax increase for non-homestead property with a fair market value of **$200,000** is approximately **$59.60**.

Publish on July 25, August 1, and August 8, 2018 as a display ad. Not in legal section.

Notice not to be less than 30 square inches

NOTICE

The Dawson County Board of Commissioners will be setting the millage rate for 2018 for Dawson County's purposes during a meeting in the Commissioners Meeting Room in the Dawson County Courthouse/Administration Building located at 25 Justice Way, Dawsonville, Georgia during a regularly scheduled meeting on August 16, 2018 that begins at 6:00 p.m. and pursuant to the requirements of O.C.G.A. Section 48-5-32, the Dawson County Board of Commissioners hereby publishes the current year's tax digest and levy, along with the history of the tax digest and levy for the past five (5) years. (ad publish 07/25/18, 08/01/18 & 08/08/18)

CURRENT 2018 TAX DIGEST AND 5 YEAR HISTORY OF LEVY

INCORPORATED	2013	2014	2015	2016	2017	2018
Real & Personal	72,497,801	79,404,687	83,214,836	91,187,440	102,426,129	122,042,206
Motor Vehicles	207,450	169,780	2,938	66,180	54,600	49,200
Mobile Homes	2,410	1,340	1,340			
Timber - 100%						
Heavy Duty Equipment						
Gross Digest	72,707,661	79,575,807	83,219,114	91,253,620	102,480,729	122,091,406
Less M& O Exemptions	8,859,483	9,629,715	10,462,211	12,671,621	13,990,679	17,519,295
Net M & O Digest	63,848,178	69,946,092	72,756,903	78,581,999	88,490,050	104,572,111
State Forest Land Assistance Grant Value						
Adjusted Net M&O Digest	**63,848,178**	**69,946,092**	**72,756,903**	**78,581,999**	**88,490,050**	**104,572,111**
Gross M&O Millage	13.618	13.194	13.009	12.896	14.425	14.599
Less Rollbacks	5.480	5.056	4.871	4.758	6.287	6.461
Net M&O Millage	8.138	8.138	8.138	8.138	8.138	8.138
Net Taxes Levied	$519,596	$569,221	$592,096	$639,500	$720,132	$851,008

UNINCORPORATED	2013	2014	2015	2016	2017	2017
Real & Personal	1,056,707,249	1,155,744,349	1,250,703,031	1,315,990,411	1,394,032,646	1,572,997,915
Motor Vehicles	72,598,180	61,251,430	46,193,350	35,695,240	28,320,790	22,736,970
Mobile Homes	940,069	892,818	889,289	955,649	952,109	1,493,910
Timber - 100%	385,486	146,332	5,272	88,593	96,561	190,449
Heavy Duty Equipment	0	0	0	0	0	
Gross Digest	1,130,630,984	1,218,034,929	1,297,790,942	1,352,729,893	1,423,402,106	1,597,419,244
Less M& O Exemptions	169,116,969	176,050,212	186,124,433	193,872,574	201,405,457	222,450,006
Net M & O Digest	$961,514,015	$1,041,984,717	$1,111,666,509	$1,158,857,319	$1,221,996,649	$1,374,969,238
State Forest Land Assistance Grant Value	**1,156,348**	**1,262,801**	**1,285,254**	**1,302,253**	**1,316,604**	**895,860**
Adjusted Net M&O Digest	**962,670,363**	**1,043,247,518**	**1,112,951,763**	**1,160,159,572**	**1,223,313,253**	**1,375,865,098**
Gross M&O Millage	13.618	13.194	13.009	12.896	14.425	14.599
Less Rollbacks	5.480	5.056	4.871	4.758	6.287	6.461
Net M&O Millage	8.138	8.138	8.138	8.138	8.138	8.138
Net Taxes Levied	$7,834,211	$8,489,948	$9,057,201	$9,441,379	$9,955,323	$11,196,790

TOTAL COUNTY	2013	2014	2015	2016	2017	2017
Total County Value	1,026,518,541	1,113,193,610	1,185,708,666	1,238,741,571	1,311,803,303	1,480,437,209
Total County Taxes Levied	$8,353,808	$9,059,170	$9,649,297	$10,080,879	$10,675,455	$12,047,798
Net Taxes $ Increase	-$533,372	$705,362	$590,128	$431,582	$594,576	$1,372,343
Net Taxes % Increase	-6.00%	8.44%	6.51%	4.47%	5.90%	12.86%

PRESS RELEASE ANNOUNCING A PROPOSED PROPERTY TAX INCREASE

The Dawson County Board of Commissioners today announces its intention to leave the current millage rate of 8.138 unchanged, which would increase the 2018 property taxes it will levy this year by 10.08 percent over the rollback millage rate.

All concerned citizens are invited to the public hearings on this matter to be held in the Commissioners Meeting Room at the Dawson County Courthouse/Administration Building located at 25 Justice Way, Dawsonville, Georgia at the following times:

Hearing 1: August 2, 2018 at 6:00 p.m.

Hearing 2: August 9, 2018 at 4:00 p.m.

Hearing 3: August 16, 2018 at 6:00 p.m.

Each year, the Board of Tax Assessors is required to review the assessed value for property tax purposes of taxable property in the County. When the trend of prices on properties that have recently sold in the County indicate there has been an increase in the fair market value of any specific property, the Board of Tax Assessors is required by law to re-determine the value of such property and adjust the assessment. This is called a reassessment.

When the total digest of taxable property is prepared, Georgia law requires that a rollback millage rate must be computed that will produce the same total revenue on the current year's digest that last year's millage rate would have produced had no reassessments occurred.

The FY 2019 budget tentatively adopted by the Dawson County Board of Commissioners requires a millage rate higher than the rollback millage rate to be able to maintain and continue to provide much needed services to the citizens of the County. Therefore, before the Dawson County Board of Commissioners may finalize the tentative budget and set a final millage rate, Georgia law requires three public hearings to be held to allow the public an opportunity to express their opinions on the increase.